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[SPLASH IMAGE 8 ½ x 11] (Cover Art)

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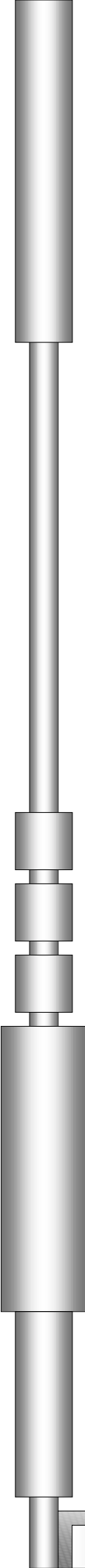
~~Frontier Horizons~~

(COMPLETE CHARACTER RULES)
ROLE PLAYING GAME

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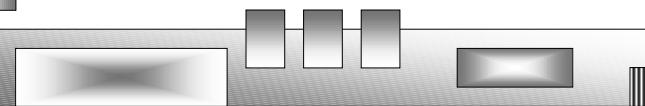


Table of Contents

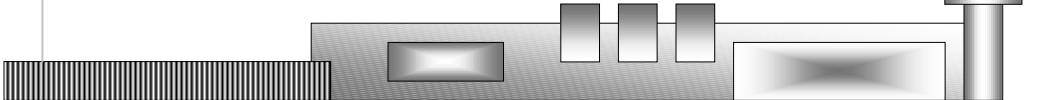
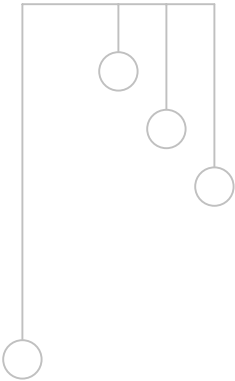
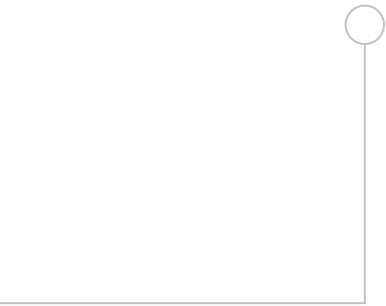
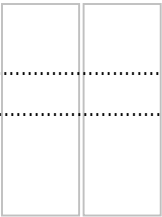
Table of Contents	5
Table of Art	9
Introduction	10
Die Rolls	10
Races	12
Humans	12
Lyandithates	15
Ferrites	19
Slen Boraka	22
A'Ghuu	27
Graff	31
Voix	34
Meylor	37
Creating Characters	40
Ability Scores	40
Character Generation	44
Drawbacks and Special Abilities	50
Demographics	53
Appearance	54
History	57
Personality	63
Initial Training	64
Occupation	65
Skills	72
Skill Descriptions	75
Skill Focus	79
Skill Checks and Ability Checks	80
Luck	81
Character Improvement	81
Character Level	84
Alternate Improvement System	84
Psionics	85
Learning	85
Psionic Devotions	86
Psionic Talents	87
Movement	91
Encumbrance	93
Combat	95
Ranged Combat	95
Grenade Combat	105

Melee Combat	106
Underwater Combat	116
Weightless Combat	118
Hit Locations.....	119
Taking Damage	120
Recovery	121
Weapons	124
Ranged Weapons	124
Ranged Weapon Accessories and Modifications	135
Ammunition	141
Special Munitions	143
Melee Weapons.....	144
Melee Weapon Accessories and Modifications.....	148
Exotic Weapons.....	149
Grenades	152
Grenades Varieties	155
Defenses.....	156
Body Armor	156
Armor Modifications.....	159
Defensive Screens.....	160
Energy Melee Shields	161
Power Systems	164
Robots	168
Design	168
Maintenance & Repair	175
Robots as Characters.....	176
Robot Combat	178
Computers.....	179
Computer Accessories & Modifications.....	180
Computer Software	181
Equipment.....	184
Equipment List	184
Equipment Descriptions.....	186
Duty Gear	198
Micro Bots.....	203
Kits.....	204
Scanners, Jammers and Goggles	206
Explosives.....	208
Poisons.....	211
Space Equipment	213
Civilian and Paramilitary Vehicles.....	216
Vehicle Statistics.....	217
Impulse Types	219

Vehicle Movement	220
Vehicle Combat	221
Vehicle Equipment	222
Special Vehicles	228
Engaging Bots and Military Vehicles	230
Repair And Jury-Rigging	231
Repair	231
Jury-rigging	232
Research	233
Cybernetics and Genetics	236
Cybernetic Interference with Psionics	237
Skins	237
Replacements	238
Senses	240
Boosters	240
Options	241
Armor	245
Other	246
Alien Cybernetics and Genetics	250
Alien Attitudes	250
Ferronetics	251
Cyberbotany	253
Allobotany	253
Non-Player Characters (NPCs)	257
General NPC Attitudes Towards Aliens	257
NPC Reactions	258
Morale and Loyalty Checks	259
Living in the Future	262
Services	262
Public Transportation	263
Housing	264
Getting Large Sums of Money	265
Availability	268
News and Life Events	271
News Events	271
Life Events	273
Animals and Alien Creatures	274
Appendix A, Von Neuman Architecture Robots	285
Appendix B, Military Robots	289
Appendix C, Sample Robots	293
Appendix D, Sample Animals and Creatures	305
Common Animals	305
Alien Creatures	307



Appendix E, Game Tables.....	311
Index.....	324



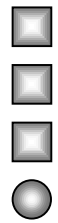


Table of Art

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Introduction



[Ed stepped into the spaceport walkway and saw several security robots heading his way. He was in a bad mood and security had already ruffled his leaves once about his weapons. If they stopped him again, he swore he was going to blast one of them into its component atoms. To his relief, the robots continued on past him. Across the wide tunnel, he saw Neb walking toward him and his nerves relaxed a little. Something about the human's presence always seemed to calm the hot-tempered agoraphobic plant. Neb had been speaking into a throat mike as he approached. Now he looked eager. "Sherina is at the gate now and K9 is with her. Mollius has moved into the dining area and has six body guards with him. Sloro is on the balcony in the dining area and in contact with the central computer. The authorities are going to be of no help. Looks like we're doing this on our own." Ed hefted the large hilt of his fusion great sword and nodded.]

Frontier Horizons is a science fiction role playing game. In depth character creation rules allow players to be any one of many races and generate rich full personalities and backgrounds for those characters so they are more than mere lists of numbers.

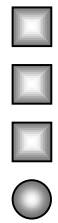
This game is set in any environment imaginable. From high tech militaries with cybernetic soldiers, to dark futures where clones are hidden and illegal, to a technological Wild West, to spies and intrigue. Adventures can take place in anything from an unexplored planet or region, huge space stations or interstellar craft, the hearts of futuristic cities, etc. The impetus for adventure comes from any number of sources and is left to the discretion of the referee. Usually, the characters are contracted to perform some sort of task. The task might be to hunt space pirates, explore a planet, map a region, recover an object or person, hijack or steel something, destroy an object, installation or region, solve a mystery, assassination, etc. If you can imagine it, it can happen.

Die Rolls

Basic

Notation	Method
d4	roll a 4 sided die
d6	roll a 6 sided die
d8	roll an 8 sided die
d10	roll a 10 sided die
d12	roll a 12 sided die
d20	roll a 20 sided die
d30	roll a 30 sided die or use the alternate method below
d100	roll a 100 sided die or use the alternate method below
4d6	roll four 6 sided dice and add the result; this notation may vary, e.g., 2d10, 3d4, etc.
2d8 x10	roll two 8 sided dice, add the result and multiply by 10.

"What do I gotta roll? Does it matter what size die?"



Advanced

Notation	Method

d2	roll a d4, divide the result by 2 and round up
d3	roll a d6, divide the result by 2 and round up
d5	roll a d10, divide the result by 2 and round up
d100	roll d10 for the "tens" digit; roll d10 for the "ones" digit; read the result consecutively and treat a roll of "00" as a 100.

Bizarre

Notation	Method

d25	roll d100, divide the result by 4 and round up
d30	roll d3 -1 for the "tens" digit; roll d10 for the "ones" digit; read the result consecutively and treat a roll of "00" as a 30.
d40	roll d4 -1 for the "tens" digit; roll d10 for the "ones" digit; read the result consecutively and treat a roll of "00" as a 40.
d50	roll d100, divide the result by 2 and round up
d60	roll d6 -1 for the "tens" digit; roll d10 for the "ones" digit; read the result consecutively and treat a roll of "00" as a 60.
d80	roll d8 -1 for the "tens" digit; roll d10 for the "ones" digit; read the result consecutively and treat a roll of "00" as a 80.
2d6d10	Roll 2d6 and the result is the number of d10 to roll, e.g., if the 2d6 roll was 7, then roll 7d10; if the 2d6 roll was 3, then roll 3d10.
!	The "!" symbol may be located after an indicated die roll, e.g., 2d4! This indicates an open roll. Any time a die rolls a maximum value, roll again and add the result. For example, the notation 2d4! indicates 2d4 are rolled and added together. If either die comes up a 4, then add 4 and roll that die again. Continue until the die does not roll it's maximum value.

[IMAGE 6 x 3] (die rolls) Various sized dice scattered about.



Races

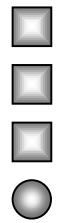
[IMAGE 6 x 4] (Humans) Man sitting on the front of a car, probably a hover car, that has landed. He appears relaxed, perhaps he is checking a pager, making a phone call, or waiting for someone. He is in the heart of a city, behind him can be seen a large expanse of elevated highway in the distance. Framing him on the right side is the curb he has parked against, along with a street light and building fronts. Perhaps he is in the bar district? There may or may not be other people in the background moving around. His car is very nice, equivalent to a Lamborghini or other extremely expensive vehicle.

[As the ship’s engines whined down to a whisper, a large hatch opened up and descended to the ground at a snail’s pace. A stiff breeze gusted up the ramp from nowhere. Down the extended ramp crawled a huge slow moving robot, behind it could be seen bipedal creatures of various sizes. Each wore a variety of materials and equipment of unknown function. The robot exited the ramp and parked off to one side as the largest of the group took several steps forward to the awaiting group. The creature’s right sensory organ had a mechanical replacement that glowed an eerie red. The device seemed to dilate and shrink at intervals, as if it were scanning them. There were small traces of metal imbedded in and running the full length of the creature’s left appendage. It offered the other appendages forward and said in excellent Standard, “Greetings from Humanity. I am captain Jack Montgomery and this is my crew.” The Humans had arrived.]

Humans

Height: 1.7
Mass: 85 kg
Life Span: 140 years
Walk / Jog / Run / Sprint: MOV meters/turn, 2x MOV meters/turn, 3x MOV, 3.7x MOV
Sex: male / female

Us. Humans are unpredictable, adventurous and energetic. They are the most outgoing of all the races.



Unique Abilities

Genetic Engineering

Designed to fill a perceived gap in human capabilities. Gene mapped or genetically engineered humans are perfect in nearly every way. They look perfect, have perfect faces & complexions, have perfect bodies, act perfect, think perfect, have perfect personalities, etc. Of course, perfection is defined by the occupation they were built for and the engineer who designed them. There is no easy way to detect a GM human, except that they tend to be above average at everything and frequently exceptional at several things. GM humans don't always know they are GM humans. Those that do know tend to remain quiet about it because there is a great deal of prejudice against them in the human communities. Other races have difficulty understanding or telling the difference.

Cybernetics

Ordinary humans that have had parts of their bodies replaced for one reason or another. Originally, cybernetics were used to replace functionality to maimed individuals. But, as technology improved, people with cybernetics acquired functionality far beyond the realm of normal humans. Most cybernetic humans receive their cybernetics after traumatic experiences. Cybernetic humans tend to be quiet about the parts of their past that relate to their cybernetics and frequently don't like to talk about their past before they received their cybernetics.

[IMAGE SPLASH 8 ½ x 11] (Lyandithates) Image of Lyandithate. Use black and white painting in RL art folder. This image will be used opposite the discussion of the Lyandithate race. Is intended to give new players and idea of what the race looks like.

[The ship bumped again in the turbulent jovian atmosphere. At times, the ship lurched so abruptly the crew thought she might break up, but the captain held the course steady. After an inexorably long time, the captain commanded the number two outer airlock hatch opened. A few minutes later, the light above the inner hatch blinked green and it began to cycle. With a soft pop, the inner hatch opened and in floated three spheres all roughly the same size. They floated on barely visible magnetic beams and seemed to orient based on a bulge near the top of the spheres. The center sphere drifted forward with a faint hum and stopped in front of the waiting captain. A panel unlatched itself from the side of the sphere and unfolded into a robotic manipulator. The sphere moved forward to clasp hands with the captain. They shook. The sphere then dropped back a few meters and settled to the ground. With a faint hissing sound, a crack appeared in the sphere and spread over the top and toward its back. A second later, the entire top and back portion of the sphere blossomed open and a medium size creature with jelly fish tendrils hanging from the bottom and all sorts of cilia type fur coating it drifted up and out of the sphere. The Lyandithates had arrived.]

Lyandithates

Height: 1.1 meters

Mass: 35 kg

Life span: 640 years

Walk / Jog / Run / Sprint: ½x MOV meter/ turn, MOV meters/turn, 1.2x MOV meters/ turn

Sex: male / female

Physiology

Lyandithate skin color is pearly pink, white and sky blue. They are small and have a low body mass. These creatures resemble large man-o-war jelly fish. Their body is roughly football shaped, being wider and more circular. Around the edge of their bodies are many thin tendrils, which they call “feelers.” These are used for touching and feeling things. Every other touch tendril is about three times as long and can be used to manipulate objects. Lyandithates call these their “holders.” On top of their bodies is a tall spine / tendril, called their “mover.” It is flimsy and very sensitive to changes in the weather. They use this tendril to determine weather conditions which they use to aide in moving about. Sprouting from on top of their bodies, half way between the edge and their central axis, and also from underneath are a dozen or so sensing tendrils. The ends of the tendrils are large nerve clusters which are sensitive to light and radiation. These are the Lyandithate's eyes, called “seers.” They can see in all directions at one. The bottom of the Lyandithate drops down significantly. Long, barbed tendrils hang from this section of their bodies. These tendrils contain stingers. To move around, Lyandithates float in the air. They can pull themselves along the ground using their manipulative tendrils, or they can adjust their ballast and allow air currents to move them. Movement is nearly effortless for them. The creatures have a front and a back, i.e., they will face a creature when talking with it, but none of the other races can tell which is which.

Lyandithate speech is musical in sound. Sounding somewhere between whistling and electric guitar music (without the distortion). Standard is impossible for Lyandithates to articulate. However, with the addition of a small synthesizer, they can manage to speak Standard. In this case, their speech is very distorted, almost robotic in sound, but still with the musical quality. As if someone had run normal speech through a music distortion pedal.

These creatures evolved on a gas giant planet. Once they evolved to the point where they had extremely tough outer skin they were able to descend to their planet's depths where they gained access to minerals and metals and finally developed tools and technology.

Lyandithates do not eat or drink. They derive all sustenance from the atmosphere. They absorb moisture from the air through their tendrils and skin. Very small tendrils underneath their bodies, on the sunken portion, catch microscopic organisms in the air, which they digest.

Culture

Lyandithates spend about half their lives inside "envirosuits." These suits serve to protect them from the atmospheres of other planets.

Unique Abilities

High Pressure Resistant

Lyandithates are quite comfortable in extremely high pressure atmospheres. They can survive in atmospheric pressures up to 500 ATM (500 times earth normal atmospheric pressure).

Low Pressure Vulnerable

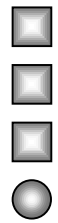
Lyandithates can survive in low pressure atmospheres (what the other races consider "normal") for a number of minutes equal to its END score. After this duration is up, it will begin to take damage at a rate of 5 hits of damage per turn (to its torso) until it dies or returns to a high pressure environment.

Lyandithate Envirosuit

Since Lyandithates will suffer decompression when not in high pressure atmospheres, they normally travel inside special environmental suits. All Lyandithate characters will start the game with a Lyandithate Envirosuit. The Envirosuit has all physical abilities of 5.

Hit Location	d20	Hits
Lev Pods	1 – 6	50 each, there are three
Arms	7 – 9	40 each, there are two
Torso	10 – 17	90
Sensor Blister	18, 19	25
Lifepod	20	40

The Lyandithate Envirosuit resembles a large metallic ball. The suit has a large "lump" on top, towards the front. This is the sensor blister. It has room for 2 sensors (select two bandwidths from the *Scanners and Jammers* section). If this is destroyed, the Lyandithate is blind until it leaves the protection of the suit or they are repaired. There are three small lumps located equidistant from each other on the lower half of the ball. These are the levitation pods (Lev Pods). They enable the suit to move around. The envirosuits also feature two extendible arms. When not in use, they retract and fold into the body (but can still be hit by gunfire). These arms are capable of performing all normal functions, including firing weapons and melee combat. The Lyandithate resides inside a "lifepod" which provides life support for the character. Damage that penetrates the lifepod is applied to the Lyandithate. After the lifepod is reduced by 50%, its integrity is compromised and the creature is subject to the effects of the environment.



Modifications to the Envirosuit are not possible due to the nature of its design. The Envirosuit is space worthy and has mounts on the back for an LSU and EVA maneuver unit. The suit consumes 360 PU per hour and has an integral Thermo power pack. A Lyandithate suit is very expensive, costing 375,000 credits. Repairing damage to an Envirosuit costs 500 credits per point and 2,000 credits per sensor.

Lyandithates would never swap suits with another person. When questioned why, a Lyandithate ambassador replied "would you humans swap underwear with each other?"

Stingers

Lyandithates have stingers on their central tendrils. Damage is d10. They can make up to 6 melee attacks per turn with their stingers.



[IMAGE SPLASH 8 ½ x 11] (Ferrites) Image of Ferrite in various stages of change. This image will be used opposite the discussion of the Ferrite race. Is intended to give new players and idea of what the race looks like.

[The expedition had arrived at the designated location a day early and there had been no sign of the emissaries as of yet. They had examined the peculiar blocks of black steel-stone they'd found in the clearing upon arriving and been unable to determine their composition or function. The hour of the meeting was now approaching and their leader was beginning to get anxious. Suddenly, one of the expedition members yelled and leaped up from where he had been sitting on one of the steel-stones. The whole expedition watched in marvel as the steel-stone appeared to liquefy into a puddle and then draw up into a two meter tall column. As they watched, the other steel-stones began to mimic the first. The tall column towered for a moment then began to shrink down to the size of the explorers, splitting at the bottom and sprouting two shoots near the top. Finally, the steel-stones began to take on recognizable features as legs, arms and a head became obvious on the steel-stones. There was complete silence for a minute as the explorers looked about them. Every steel-stone had taken the shape of a man. The nearest steel-stone man took a step toward the expedition leader and spoke. The Ferrites had arrived.]

Ferrites

Height: 1.6 meters

Mass: 230 kg

Life span: 310 years

Walk / Jog / Run / Sprint: 1/3 MOV meter/ turn, MOV meters/turn, 2x MOV meters/ turn, 2.5x MOV meters/turn

Sex: None

Physiology

Ferrites see the electromagnetic spectrum from X-ray down to blue wavelengths. When interacting with other races they often wear special goggles that shift light to their level. They can feel radar waves in the same manner that humans feel heat. They see magnetic fields and sense the fluctuation in magnetic fields caused by ferrous metals.

A typical Ferrite appears to be a lump of metal a little shorter than the average human. Ferrites have no visible sense organs. They are made of graphite, iron, silicon, carbon and various exotic metals along with trace elements of radioactive isotopes. Skin color is black and gray marble with streaks of gold, silver and bronze. Ferrites do not breathe. They can survive in a vacuum.

Ferrites are unisexual. They sleep for 4 hours out of 20. They heal 1 Hit every 20 days.

Culture

They love to design and build things. Anything from houses to spaceships. They have produced some of the most innovative spaceship designs in existence. Ferrites are extremely friendly and charismatic. They get along with each of the races well.

Ferrites tend to make excellent diplomats due to their ability to change into a similar shape as other the races.



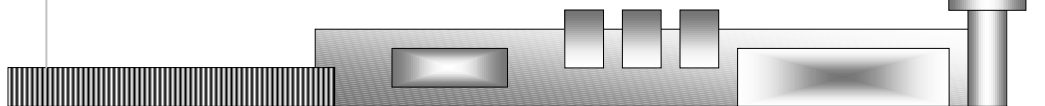
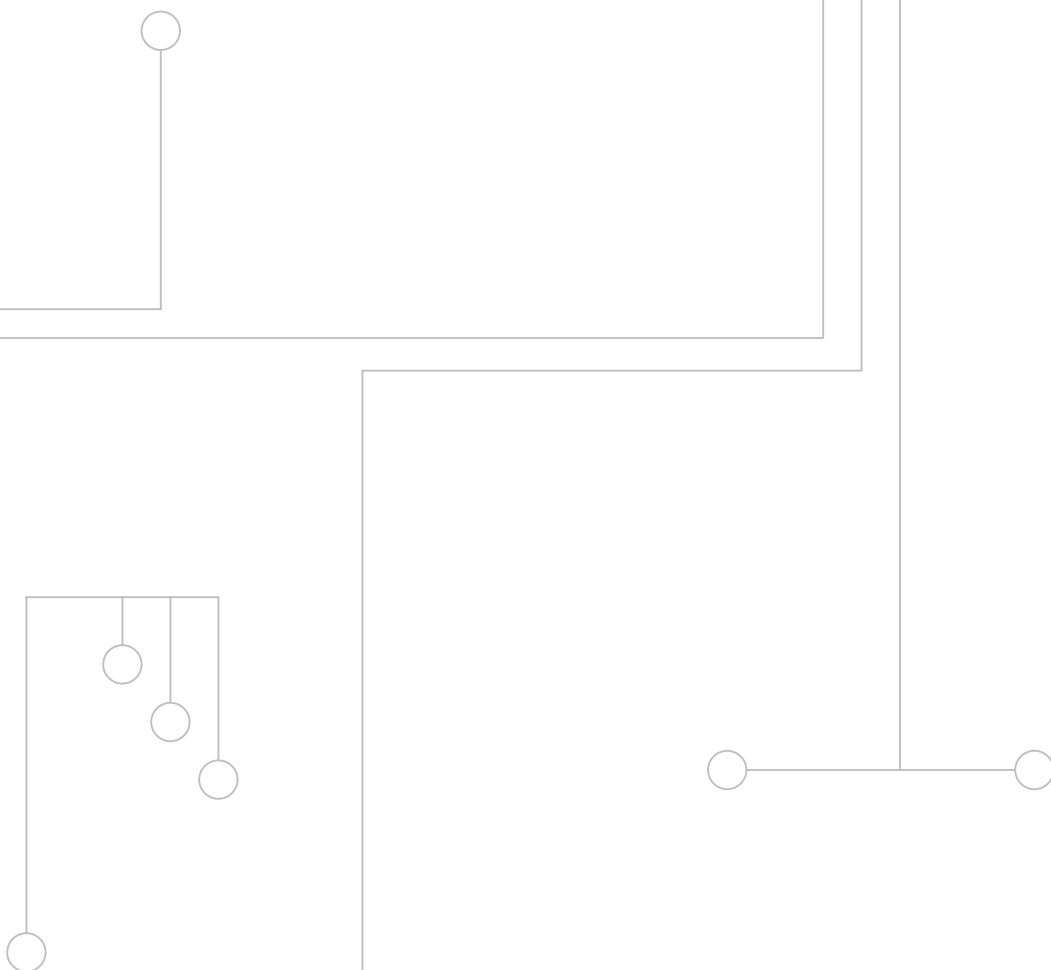
Unique Abilities

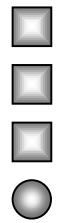
Semi Amorphous

Ferrites can change their shape at will. They use this ability to allow a more easy interaction with members of other races. This ability changes their shape only, their color and body texture do not change. When a Ferrite is in the shape of another character race, the Ferrite may use any equipment designed for that race, e.g., spacesuits, body armor, etc. The ends of each limb can be formed into a manipulative hand. The shape changing process is slow and requires concentration, taking $(10 - \text{FLX})$ minutes to complete a transformation. For FLX scores above 9, use a base time of 1 minute and deduct 10 seconds from this per point over 9. A Ferrite may have at most $(\text{FLX} / 2) + 1$ limbs.

Metal Bodies

Take 1/2 damage from ballistic and kinetic energy damage. HTH attacks against Ferrites do $\frac{1}{2}$ damage and the attacker takes the full damage the attack would have inflicted. Ferrite versus Ferrite HTH combat is handled normally.





[IMAGE SPLASH 8 ½ x 11] (Slen Boraka) Montage of Slen Boraka. Base on sketches in RL art folder. Include image of Slen Boraka slithering toward camera with the symbiotic coil, the image of the dissected Slen Boraka, and any other reasonably small images in the folder. This image will be used opposite the discussion of the Slen Boraka race. Is intended to give new players and idea of what the race looks like.

[The huge jungle trees began shaking and all around powerful gusts of wind kicked up dirt and dead leaves. Without warning, the jungle parted with a crash of falling timber and a mechanical monstrosity lumbered forward on a howling cushion of air. The massive hovertank settled to the ground with a groan and its lift system began powering down. The tank appeared to be a patchwork of metals, held together with huge fist and head sized rivets. The looming cannon in the turret remained motionless as the turret traversed. Way up on top of the highest point of the tank, a hatch clanked open and a figure stuck its helmeted head out. It was too bright in the morning to make out any details of the figure, but the party didn't have to. As they peered intently at the hovertank and its occupant, a group of long, slender creatures slithered up from the vehicle's rear. All were armed with menacing looking weapons and wore crisscrossing belts and straps to support their gear. One creature was not carrying anything, but rather had its weapon secured in a holster. Without a sound, the creature slithered up to the group. The Slen Boraka had arrived.]

Slen Boraka

Height: 3.6 meters

Mass: 85 kg

Life span: 160 years

Walk / Jog / Run / Sprint: 1.5xMOV meters/turn, 2.5xMOV meters/turn, 4 x MOV, 4.5x MOV

Sex: Female

Physiology

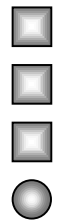
Slen Boraka come from a very young super terrestrial planet with a blue-white star (spectral class F5). The oxygen content on their home planet's atmosphere is a higher percentage than Earth normal, and as a consequence, Slen Boraka tend to get winded easily when in Earth normal environments. Their home planet also has salt rich oceans.

Slén Boraka are 3 to 4 meter long snakes. They have four arms or tentacles. The first set is just above their mid point, the second set is about $\frac{1}{4}$ the length of their body from their head. They usually sit with $\frac{1}{3}$ to $\frac{1}{2}$ their body length held vertical, like a striking snake. Their tentacles taper at the end to about 3 centimeters in diameter and about 30 centimeters in length. This section is particularly sensitive to touch. They occasionally coil this “finger” on their lower two arms to create a sort of “foot” and use these two arms for support, especially when lifting heavy objects. The end of their tails have vestigial rattles, almost like a beak. Their high priests have full rattles.

Skin color is black with wide bands of color, like a coral snake.

They have two heat sensing organs, one on either side of their nose region. These allow the Slen Boraka to see in IR for a 360 arc out to about 30 meters. Their eyesight is that of a predator. They have vision similar to an eagle's, but only when staring nearly straight ahead (forward 30 degree arc). Their peripheral vision is capable of detecting only movement and only within a 35 meter range.

They smell with their forked tongues, similar to an earth snake. Their sense of smell is supreme. It is so good they can use their sense of smell to maneuver and fight enemies in complete darkness. Using their sense of smell, they can accurately detect people and most objects up to 150 meters away. It also allows them to track, like a dog.



Culture

All Slen Boraka are female normally. About 1/3 of all Slen Boraka can become male when they feel it is time to mate. This change is voluntary and takes about a month to effect. During this time they tend to be either very cranky and snappy or very mellow and apathetic about everything. This is due to the changing amounts of hormones in their systems and their bodies adapting to this change. When a Slen Boraka changes from female to male, the color bands on their skin occasionally get a little brighter.

Slen Boraka writing implements are squat and fat, like giant oversized crayons. They write on tablets that form impressions when used. Their written language resembles a kind of "inverted" Braille (it is composed of scratches and grooves instead of bumps and ridges).

Slen Boraka never wear body armor. Although, there has been a changing trend in this attitude of late. With the advent of new alloys and flexible metals, the Coif and Breast Plate have come into vogue. More and more, Slen Boraka in positions of extreme danger are wearing the Coif and Plate combination, although they lose their ability to move perfectly silently when it is worn.

History

Slen Boraka are fairly clever mechanically. They developed the necessary robotic technology to produce walking vehicles during their first industrial revolution. The mechanical and robotic devices produced during this era were neither sleek nor efficient, but they worked. Slen Borakan technology has matured phenomenally since then. Their machines still bear an essence of slow lumbering hulks, but this is deceptive as they are anything but.

Slen Borakan society is a strange sort of communism. The local community is commonly referred to as "the nest." All citizens of the nest receive what they need from the government. The standard of living for any given individual is determined by their position within the government and their job. There are no "civilian" jobs, per se, as all employment is provided by, or a part of, the government. Excess resources brought in by any given nest are typically divided among a number of priorities, but a significant fraction is always returned to the citizens of the nest either in the form of bonuses, holidays, parks, recreation facilities, or other government funded niceties.

The Slen Borakan military places a huge emphasis on what they call "Battle Games." These games are held once a year and are a cross between normal training and recreation. In Human terms, the Battle Games can be thought of as Olympics for the military. Often, units will move great distances to compete in the Battle Games. The Battle Games also serve additional purposes. This is where new military hardware is initially debuted to the public. They are also a show of force, or "Saber Rattling," to belligerent countries. For this reason, Battle Games are often held near Slen Borakan borders or near tactically advantageous locations.

Slen Borakan military vehicles typically fall into three types: tank, Bot and truck. Their hovertanks use electric fuel cell technology (occasionally higher technology will be used depending on availability of resources). Slen Borakan hover tanks are commonly fitted with heavy plows and reinforced front prows for forcing their way through forests and wooded areas. On the open ground, they are fairly quick. They mount two large turrets, one on top of the other, each of which carries a large caliber projectile weapon. These hovertanks are often very large, typically about two to three stories tall.



Their Bots are serpentine and feature four weapon pods about where a Slen Boraka's tentacles would be. Each weapon pod typically carries a multitude of rockets and missiles. The nose of Slen Borakan Bots mount several medium caliber vulcan cannon.

Their vehicular controls are pressure sensitive plates that are manipulated by sliding their tentacles over the surface. It is difficult to learn to drive a Slen Borakan vehicle, but once a character gets used to it, he can adapt relatively easily.

Although Slen Boraka were originally thought to not wear armor, this has proven to be false. Slen Borakan armor is symbiotic and bonds with their skin when donned. They can wear the Coif and Breast Plate listed under Slen Boraka Armor in the Defenses section and, if it has the Symbiotic modification, it will not interfere with any of their special abilities.

Unique Abilities

Poisonous fangs

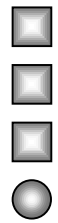
Slen Boraka retain the fangs and venom sacks of their ancestors. Their venom is a powerful tranquilizer that occasionally can overwhelm the target's system and kill him. On any successful bite attack, a Slen Boraka may opt to inject venom into its target. Slen Boraka may use their venom up to three times per day. The ability check to resist the poison is Simple (END). The check is modified more difficult by the Slen Boraka's STR score. So a character bitten by a Slen Boraka with a STR score of 8 would have a target of $(7 + 8) 15$. If the check is failed, the target is rendered unconscious (duration of 1 minute x END of the Slen Boraka) and the target must make an additional ability check against END. The second check is Simple and modified more difficult by the Slen Boraka's STR. If the target fails this check as well, the target dies after a number of hours equal to $\frac{1}{2} \times$ the target's END.

Lightning Strike

Slen Boraka can forgo all melee attacks in a turn in order to make a Lightning Strike. Lightning Strike is a melee maneuver. Slen Boraka receive a bonus to their melee attack equal to their SPD score. If successful, the Slen Boraka delivers a powerful bite to the target (damage is $3 \times$ STR). If the attack fails, the Slen Boraka suffers a -3 DEF penalty during the following turn. Regardless of whether the attack succeeds or fails, any characters within 10 meters of a Slen Boraka that uses this attack must make a Simple (FOC) check to avoid being surprised (including the target). If they fail, they are considered distracted during the following turn. A lightning strike can be used to deliver poison via their fangs.

Nerve Numbing Secretion

Slen Boraka are capable of secreting a nerve numbing fluid which coats their entire skin. This fluid acts as a local anesthetic upon contact with skin. The result is a drastic (-3) reduction in COR, SPD and REF upon contact (effects: -18% ranged to hit, -12% unskilled ranged to hit, -2 from Strike / Kick damage, -6 melee Attack, -9 melee Defense, -15 m grenade throw range). The anesthetic wears off in an hour. All Slen Boraka are immune to this secretion.



Coil

Slen Boraka can coil around and strangle an opponent during melee combat. Coil is a melee maneuver. Slen Boraka receive a +3 bonus to their melee attack when attempting to coil an opponent. If successful, the target will strangle to death in a number of minutes equal to the target's END, minus the attacker's STR (minimum of 1 minute). Slen Boraka also receive a +1 bonus (above and beyond martial arts bonuses) for the following maneuvers: Escape, Control, Lock, Kill or Knockout. The Slen Boraka is unable to engage in melee combat while strangling an opponent. The coil may be released at anytime, if desired.

Tracking

This is an ability all Slen Boraka have due to their excellent sense of smell. The chance to determine which way a target went, based on smell, is a Simple (FOC) check, with a +1 penalty per 10 minutes of elapsed time since the target passed through the area.

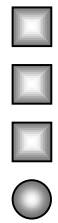
Move Silently

Slen Boraka are perfectly quiet when they move. An Impossible (Awareness) check is required to hear a moving Slen Boraka.

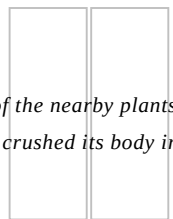
Ambidextrous (Limited)

Slen Boraka can use all four hands equally well, although not at the same time.

[IMAGE SPLASH 8 ½ x 11] (A'Ghuu) An A'Ghuu warrior stomping through the jungle. He is heavily armed with some sort of two handed cannon which is powered via a large cable running to his backpack. He has leather straps about one of his arms and equipment strapped to his thighs and body. His head is lunging forward with a menacing look to his jaws. His third arm carries a long nasty looking plasma knife. He wears some strange device on his head. This image will be used opposite the discussion of the A'Ghuu race. Is intended to give new players and idea of what the race looks like.



[There was a blood curdling scream and sickening crunch as one of the nearby plants suddenly snapped at a large field rodent, flipped it into the air and then snatched it from the air and crushed its body in it's cavernous jaws. The A'Ghuu had arrived.]



A'Ghuu

Height: 2.1 meters

Mass: 80 kg

Walk / Jog / Run / Sprint: 1.2xMOV meters/turn, 2.3xMOV meters/turn, 2.8xMOV, 3.3xMOV

Life Span: 150 years

Sex: cyclic: neuter / male / female / neuter

Physiology

A'Ghuu are a race of intelligent mobile plants, descended from carnivorous vines. They love a good meal, preferably live. Their main diet was just about anything living. Only when they discovered the character races were intelligent did they stop trying to eat them. They have no desire to eat intelligent races, but other races remember the fact that this is only a recent development. Because of this they can be very difficult to get along with.

A'Ghuu are almost stone deaf. A'Ghuu nearly always shout when they talk to each other because of this, which is quite disconcerting to the other races. Speaking at a normal volume for the rest of the races is uncomfortable and requires an effort commensurate to a human shouting all the time.

A'Ghuu average life span is about 150 years. However, most don't last that long, they tend to be killed by about 45 years. It is undocumented as to how the A'Ghuu reproduce. For Humans, their greatest scientific challenge was unraveling the mysteries of their own brains, for A'Ghuu, it is what exactly is necessary to cause new A'Ghuu to sprout. It is known that when a pollinated A'Ghuu dies, if it is properly planted, fertilized and taken care of, 2 to 3 A'Ghuu will sprout from it's remains. An A'Ghuu can carry pollen for up to 10 years before it deteriorates. How exactly an A'Ghuu gets pollinated is uncertain. A'Ghuu can carry up to three distinct genetic strains of pollen, thus the offspring may each carry a separate genetic code. It is this unusual fact that allows genetic diversity to thrive among the A'Ghuu. Since the birth of an A'Ghuu requires the death of another, the birthing occasion is a big event. Once a young A'Ghuu sprouts, it will spend about 10 years rooted to the earth while it's brain and nervous systems develop. During this time it becomes self aware and cognizant of its surroundings. Since A'Ghuu don't mate, it is unclear the exact function of their sex. The only noticeable difference is the tone with which they speak. Gender for the A'Ghuu rotates through four, one month long, cycles. The cycles are Neuter, Male, Female and Neuter again (they spend two consecutive cycles as Neuter).

Their body is roughly spherical in shape, about a meter in diameter and resembles a ball of vines. Sprouting from their body are seven limbs. Three are "arms" and three are "legs," each sprouting evenly around their body. Each of their limbs is made of 5-9 thick vines twisted in a braid like manner. This allows a mobility and flexibility unmatched by any of the other races. The largest of these vines has large thorns running its length, giving the appearance of the A'Ghuu wearing spikes. A'Ghuu curl the ends of their leg vines into a ball, which serves them as feet. For hands they have six long thin vines (the ends of the vines without the spikes). These finger vines are evenly spaced.



The seventh limb is attached at the top of their body. At the end of this limb is a second roughly spherical ball of vines. This is their head. Their mouths have very large jaws, spanning the entire width of their heads, and can open up 180 degrees. A'Ghuu can make an extra melee attack with their jaws. The attack does 2xSTR. On top of their head are either two lumps of plant matter or a single ridge of the same plant matter. This difference is meaningless except as an identifying feature. A'Ghuu are extremely sensitive to radiation, allowing them to see from UV down to IR and microwaves. Their head and body each contain a brain, the two working in conjunction with each other in much the same way as some ancient dinosaurs. A'Ghuu are still, however, generally below average in intelligence.

As plants, A'Ghuu are considered semi-cold blooded. Although they have the ability to maintain their own body temperature, their body is strongly influenced by the surrounding atmosphere. A'Ghuu are capable of functioning at a wide range of temperatures, and consequently their body temperature is typically very near that of their surroundings. A'Ghuu heal 1 Hit per two weeks.

Culture

A'Ghuu are not generally regarded as being particularly bright, and with good reason. Most A'Ghuu find that the best solution to a problem is to eat it. They are not any more belligerent than any of the other races but they can be very irritable.

All A'Ghuu suffer from an acute phobia of being physically touched. Hence, the phrase "Stop touching me!" is usually one of the first phrases they learn in other languages.

A'Ghuu militaries are arranged in a pyramidal hierarchy of warriors and are run similar to a medieval knighthood. Every faction or clan has a signature banner and leather band. These leather bands serve to identify the A'Ghuu to fellow members of the clan. The bands are worn around the limbs, the exact placement being dictated by the clan. Some clans require a single band and some require several. A'Ghuu warriors tend to be very goal oriented and focused, often to the exclusion of all non-goal related events, and they will frequently adopt an "ends justifies the means" attitude. A'Ghuu never wear body armor.

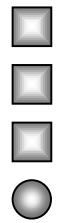
Unique Abilities

Ambidexterity (full)

Because of their multiple brains, they can use all three "hand" vines simultaneously without penalty.

Bioelectric Shock

A'Ghuu have banks of cells in their body that function like those in an electric eel. They serve a similar purpose, aiding normal vision for the A'Ghuu by providing a "sense" of the location of nearby objects. In times of emergency they deliver a powerful electric shock. The shock is delivered through their "arm" appendages. The SHOCK ability starts at level 1 and may be improved as any ability score. This ability may be used once per day for every level of ability. Damage done is equal to $d10 + 2 \times \text{SHOCK}$. This is electric shock damage. The SHOCK ability may be raised using CP during character generation. There is no limit to how high it may be raised. SHOCK may not be reduced to gain CP. A'Ghuu reduce the duration of all electric stun attacks by 50%.



Natural Camouflage

When they are in a plant, woodland or forest type of environment, the pigments in their leaves and vines will change to match the surroundings. This is automatic and the A'Ghuu has no control of it. The change takes about 1 minute to complete. This allows them a 60% chance to be "invisible" when in jungle and forest type surroundings (the percentage increases to 95 if the A'Ghuu remains very still). When employing their natural camouflage they receive a -30% penalty to hit and a -45% penalty to hit if they remain very still to gain the 95% chance to be "invisible."

Thorns

Anyone wrestling an A'Ghuu (attempting to Sweep, Throw, Lock, Break or Control) receives damage equal to 2x the A'Ghuu's FLX score. This is automatic and is a result of their thorns.

Pyrophobic

A'Ghuu take double damage from flame and plasma attacks. As such all A'Ghuu have a great fear of fire. Although it is not severe enough to be considered an actual phobia, they will avoid dealing with fire and fire wielding creatures if possible.

Deafness

A'Ghuu are deaf and their bark is very tough, consequently sonic weapons do not do double damage to them.

[IMAGE SPLASH 8 ½ x 11] (Graff) A Graff stomping through a thick swamp. There are large insects and such about. He is huge. He has a Gollaga slung from his hip along with a few other items on a belt. He wears little else. One arm has a gladiator style piece of heavy armor, which is flared at the shoulder. This image will be used opposite the discussion of the Graff race. Is intended to give new players and idea of what the race looks like.

[The explorers collectively shuddered as monsters out of every child's nightmare approached. The steamy jungle added to the fear in the air. The strange, nearly 3 meter tall dinosaurs wore little in the way of clothing, but each had several web belts and bandoleers slung across it. Each carried a metal tube about the length of a human arm at it's side. A medium sized member of their group pulled out his tube. There was a loud snap and suddenly the creature carried a menacing looking battle ax. Before the group could react, the creature turned and handed the weapon to his fellow. Unarmed, the creature approached the group. The Graff had arrived.]

Graff

Height: 2.5 Meters

Mass: 135 kg

Life Span: 310 years

Walk / Jog / Run / Sprint: 1.3xMOV meters/turn, 2.1xMOV meters/turn, 5.1xMOV, 7.4xMOV

Sex: male / female

Physiology

Graff look like a tyrannosaurus w/ the tail of a stegosaurus. They stand taller than an average human.

Culture

Graff love combat. They prefer melee combat to ranged combat feeling that any idiot can fire a gun, but that it takes skill to defeat an opponent (especially a larger one) in melee combat, and the bigger the opponent, the better. Their preferred melee weapon is the Golloga. This weapon is a type of collapsible battle-ax. The handle telescopes out, and the blades fan out like an oriental fan. The weapon is activated by a button on the side of its haft and does not require power to function; it is spring loaded. The Golloga is a Forced Carbon melee weapon and has the stats: DMG: d12, Mass: 1.9, Pow: --, Cost: 470. The Golloga actually weighs about 4.7 kg, but it is superbly balanced for the size and strength of a Graff. When carried or wielded by a Graff, the character treats the weapon as if it weighs 1.9 kg.

Graffian society is very strange to humans. Graff society is a vast hierarchy style government where ritualized combat is used to settle disputes. Their nature is both combative and non-combative at the same time. Many disputes in their society are settled through various forms of combat. On the other hand, there are relatively few disputes. Also, despite the fact that they are natural fighters, they are quite friendly and personable.

Graff are not hostile creatures. They can be gruff but are quite friendly. They will not flee from a good fight.

Unique Abilities

Martial Prowess

All melee skills for Graff are considered to have an LF one lower than listed.

Death Claw

Death Claw is the name of the Graffian art of fighting with the Golloga. It is a skill that must be learned. It has an LF of 3 (5 for other character races). Melee bonuses are: Strike +3, Parry +3, Disarm +1, Break +2, Knockout --, Kill +1.



Tail Lash

Melee attack. During melee combat a Graff may make an additional attack, the tail lash. The tail lash is considered a Strike, but does damage equivalent to a kick, plus and additional d10 from the spikes.

Bite

Graff still have vicious fangs from their ancestors. During melee combat a Graff may make a bite attack. Bite attacks do damage equal to the character's STR x 2.

Befriend

Graff are natural friend makers, in spite of their imposing appearance. On a successful Moderate (CHR) check, a Graff may move an NPC's reaction down one level (on the NPC Reaction table) in his favor.

[IMAGE SPLASH 8 ½ x 11] (Voix) A Heavy, Light and Diplomat Voix character standing near each other. This image will be used opposite the discussion of the Voix race. Is intended to give new players an idea of what the race looks like. Possibly an intensely bright energy shimmer among them as well (Voix in natural form), as well as several large crystalline structures framing the image (suggesting a relationship with certain crystals). One of the Voix units should be demonstrating the use of his Lifting Arm.



[A slender crystalline structure moved forward. The crystal growth appeared to have been some how mated to a small, yet sophisticated, wheeled suspension system, which allowed it to move. A single half crystal, half mechanical arm protruded from a steel ring set just above the small chassis. The arm swung around to point at a nearby robot. The robot imperceptibly shuddered and then froze. Then it started speaking slow halting Standard. The Voix had arrived.]

Voix

Height: 1.6 meters

Mass: 160 kg

Life Span: unknown

Walk / Jog / Run / Sprint: MOV meters/turn, 1.5xMOV meters/turn, 3xMOV meters/turn, --

Sex: not applicable

Physiology

Voix are very unusual creatures. They are pure energy creatures. The Voix robot is actually the housing for a Voix creature. They live in its internal circuitry. There are three types of Voix units, diplomat, heavy and light.

Voix have a symbiotic relationship with their robot hosts: neither can survive without the other. Consequently, Voix never leave their robot hosts for very long. Voix robots tend to look rather menacing, although they never have weapons mounted on them.

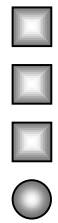
Voix speech can be described as parallel spectrum multi-frequency FM transmissions. That is, they speak on the FM radio portion of the electromagnetic spectrum, and the specific frequency they speak on is related to their mood. For example, a Voix speaking on a very high frequency is likely to be very excited, possibly angry or hostile. To understand the Voix, special radio receivers have been developed that constantly scan a multitude of bands simultaneously. These are extremely portable devices and any Voix that habitually comes into contact with the other races will generally carry one. The Diplomat Voix Units are always equipped with a voice box. The voice emitted from a Voix box is usually a smooth and pleasant tenor with well enunciated speech.

Unique Abilities

Voix Unit

The Voix unit never runs out of power and it never needs sleep. It must operate at a reduced capacity for short periods of time, though. During this time they can still interact with other people, but tend not to move a whole lot. Voix will "heal" 1 point of damage for every hour they rest. To accomplish this, they must place raw material in a feed tray located in their bodies. Requisite raw materials include silicone (sand), iron, steel, aluminum, gold, silver, nickel and carbon (coal or diamond). They do not need all these elements to repair minor damage, but severe damage requires at least six of them.

Voix can wear armor plates. These armor plates are equivalent to an armor mesh jacket. The plates cost and weigh 60% more than a mesh jacket.



Light Unit

Light Voix units have 2 legs and 3 arms. Two arms are built for dexterity and fine motor capabilities, similar to the Heavy units. The third arm is a heavy lifting arm and is stored on the back of the unit, as on the Heavy units. The light units are lighter and faster than their heavier brethren. The light Voix unit's lifting arms are capable of lifting 10x STR value for short periods of time. The unit has 120 DP. They rest for 1 hour out of 30. This unit receives a +1 bonus to the MOV score listed for Voix units.

Heavy Unit

Heavy Voix units have 4 legs and 4 arms. Two arms are built for dexterity and fine motor capabilities. These two limbs are attached at the middle of the suit in the front, slightly offset to each side. The other two arms are designed for heavy lifting and torque. These two are attached opposite the front arms, on the back. They reach up and over the "shoulders" of the Voix to access objects in front of them. Normally, they are folded up and stowed on the back. The heavy Voix unit's lifting arms are capable of lifting up to 15x STR value for short periods of time. The unit has 200 DP. They rest for 1 hour out of 10. This unit receives a -1 penalty to the MOV score listed for Voix units.

Diplomat Unit

So named because the Voix diplomats encountered by explorers were of this variety. This model is actually the standard "person" model. The Light and Heavy models are typically used for rugged activities, such as exploring, construction, combat, etc. The Diplomat Unit resembles a slender three sided pole with large wheels at the base. It is translucent and glows and shimmers with the Voix's life energy inside. The Diplomat unit has a single manipulative arm and no lifting arms. All Physical Abilities for the Diplomat unit are 5. They receive 1 melee attack per turn and have 90 DP.

Machine Control

Voix are able to temporarily leave their robot hosts in order to assume control of nearby machinery. To successfully assume control of a mechanical device, the Voix must make a Moderate (WIL) check. This check is modified more difficult by certain factors. If the target is a robot, +3; if the target is a computer, +1; if the target already has an artificial intelligence, +2. A Voix is able to remain in control for a maximum of 10 minutes x WIL. At the end of which, the Voix must return to it's original Voix Unit host or die by dispersion. A Voix can "leap" up to 2 meters x FOC to attempt to control a machine. A failed attempt to control a machine results in the Voix remaining in its current host and being stunned the following turn.

[IMAGE SPLASH 8 ½ x 11] (Meylor) Meylor in full religious regalia. Dressed up with much jewelry, a long flowing robe, a crown with many jewels and made of gold adorns his head. Perhaps rings and bracelets on his tentacles. He holds a scepter that is almost as tall as he is. This image will be used opposite the discussion of the Meylor race. Is intended to give new players and idea of what the race looks like.

[The tentacled creatures half slithered, half crawled towards the group. There were nine of them, each wore ornate rings, cape and head dress. Eight of the creatures formed two columns of four, ahead and to either side of the ninth creature. The leading eight always kept at least three tentacles on the strange devices they carried and seemed to be watching the surroundings. The aliens stopped 15 meters from the group. The two columns moved apart from each other. The last alien slowly made its way forward of the rest. The sunlight sparkled brightly from the jeweled crown it wore and its ornate scepter glittered with amazing intensity. It stopped in front of the group and raised its scepter to the sky. After a few strange utterances, which the other eight aliens repeated in unison, the alien placed his scepter on the ground and spoke. The Meylor had arrived.]

Meylor

Height: 1.7 m

Mass: 120 kg

Life Span: 190 years

Walk / Jog / Run / Sprint: MOV meters/turn, 1.5xMOV meters/turn, 2.4xMOV, 3.1xMOV

Sex: male / female

Physiology

Meylor tend to be quiet. They are land octopii and although they are descent swimmers, they are not natural swimmers nor can they breathe underwater.

Culture

Meylor are generally pleasant creatures. Although they occasionally exhibit a slight prejudice against creatures with less than 8 arms. Meylor love jewelry and have excellent taste. They frequently wear exquisite rings and necklaces made of pure gold and other precious metals. Meylor are known for their patience.

History

In the Meylor society it is normal to commit suicide, and death by any other means, especially old age or other "natural causes" is considered to be extremely terrible, as well as "rude" to their god. The philosophy being that the individual will have a revelation as to when he has outlived his usefulness to his family, community, all things living and his god, and that it is time to end his life. However, by hanging on until the very end the individual is asking for something from his god, to which he is no longer entitled, to which he is no longer "earning."

Historical accounts of the Meylor record them as an extremely religious race. They believed in a single deity named Malex. Their societies were feudal, with the church and state being one and the same. At the head of the church were the king and queen, which was based on heritage and faith. The Meylor thrived for centuries believing that Malex the Almighty took them to the promised land on the eve of their death. Some Meylor were very zealous and committed early ritual suicide (which is a sin because they have now deprived everyone around them of whatever need they were intended to fill). Most were content to raise their families. For many millennia the Meylor functioned alone and it was rare that anyone questioned the reality of their supreme being. Those people were regarded as sick and feeble, and the churches judged them as "cursed" for not believing in Malex.



Technological advances eventually made space travel possible and the stars they once thought were dead ancestors turned out to be nothing more than stars. The underground theory that there was no Malex became ever more popular. The churches fought hard to squash this unrest, proclaiming thousands of people to be "non-believers, blasphemers and sinners." These people were hunted down and ceremoniously destroyed. This era of their history was commonly referred to as the Hunts.

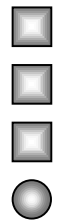
The arrival of humans to the Meylor system brought more unrest. The non religious humans played down the image of Malex in an effort to "modernize" their new Meylor friends. The church responded with anti-human propaganda. It tried to cover up the non-religious humans, claiming they were sabotaging the Meylor way of life, and making bold accusations that creatures with less than eight arms were blasphemers and out of favor with the mighty Malex. This started a crusade against humans, which left the humans bewildered and frightened. The humans left, along with a large number of Meylor, who pled to be taken from their system of religious zealots. These expatriated Meylor began to colonize other worlds and grow and thrive as masters of their own lives, fitting in well with the other star-faring races.

Meanwhile, the religious aristocratic Meylor were savoring their victory in the name of Malex and fueling the propaganda machine that "races with less than eight deserve only hate." (It is from here that came a deep rooted hatred for creatures of less appendages, which is now only a vestigial shadow of the original hate.)

Several hundred years after the humans and renegade Meylor left, a horrible plague struck the Meylor system. Known as the Falling, it would infect a Meylor and within two weeks it would die. The church blamed the humans, but few people believed the church, since the humans had been gone for so long. Together with the fact that every sick and diseased Meylor in history had been labeled a traitor to Malex and out of his favor, the Meylor of the system believed they had done something very wrong and that their god had forsaken them. The church, wishing to die in the favor of their god, began ritual suicides before they caught the plague. However, they were caught in a bind, as a preemptive suicide was just as much a sin as was dying of natural causes (to include plagues).

Desperate and numbering less than ten million across their system, the survivors began transmitting distress signals across the cosmos. Upon learning of the dire circumstances of their home, many Meylor returned, with humans and other races, to help their ancient brothers. The survivors saw that the star-farers were not taken by the plague and without the church propaganda they lost faith in Malex. The survivors fled the Meylor home system with the star-farers and the system was quarantined. Few Meylor mourned the loss of their god because Malex had been a cruel god. The Meylor spoke of him rarely.

Many generations after the Meylor had populated the systems around their home planet, some ventured back to their quarantined home to read their history. They regarded their foolish ancestors with interest and the name of Malex was known for the first time in many years. It was discovered that the plague was a mutated strain of bacteria from the mines of the outermost planet of the Meylor system. The exporting of mined ore and mineral medicine had spread the plague. The name Malex is nearly unheard of due to the cleansing of the Meylor home system worlds (many cities and areas required burning as well as advanced bio-engineered anti-plague bacteria). There is no longer any original record of the Great Malex or the Hunts, all that lingers from that era is the occasional slight prejudice for creatures with less than eight arms.



Unique Abilities

Grapple

Meylor are inherently good grapplers. They receive a +4 bonus in melee combat any time they attempt to perform the following maneuvers: Escape, Sweep, Throw, Lock, Break and Control. Conversely, they suffer a -2 penalty in: Strike, Kick and Dodge.

Suction Cups

Their tentacles are lined with many small suction cups on the bottom. These allow the Meylor to climb extremely steep walls and slopes. Although they are not strong enough to hold the Meylor to the ceiling in a 1g environment, they are sufficient to allow it to climb up to a 60 degree slope without extra equipment.



Creating Characters

Ability Scores

Ability scores range from 2 to 9, with 5 being average. Occasionally some characters may have exceptional ability scores, due to extremely high die rolls or alien characteristics. The minimum an ability score can be for a character is 1.

Physical Attributes

Attrib	Description	Function
STR	Strength	Lifting ability; provides bonuses to melee weapon damage, also is a factor in HTH combat attack and defense.
END	Endurance	Carrying over long periods of time and distance running; also effects characters ability to keep up on long marches and cross country travel; effects number of consecutive turns that can be spent using psionics.
TGH	Toughness	Body's ability to negate or ignore minor amounts of lethal and bruise damage
FLX	Flexibility	Body dexterity
COR	Coordination	Hand / eye coordination; effects base chance to hit with ranged weapons.
SPD	Speed	Quickness or body speed, e.g., striking speed; effects attack and defense rolls in melee combat; effects damage in melee combat.
REF	Reflexes	Reaction speed, e.g., how fast a character can react to a thrown object, strike, kick, etc.; effects attack and defense rolls in melee combat; effects base chance to hit with ranged weapons.
ATR	Attractiveness	Physical beauty; influences NPC reactions.
MOV	Movement	Walk, jog, run, sprint speed factor

Strength

The Strength Damage Bonus is added to all melee weapon and bow (but not crossbow) damage, as well as RC for bows. For scores over 14, subtract 9 from the score, this is the damage bonus. So, a 16 would be +7, and a 17 would be +8, etc.

STR	Damage Bonus
2, 3	-2
4	-1
5	+0
6	+1
7, 8	+2
9, 10	+3
11, 12	+4
13, 14	+5

Toughness

The Toughness Damage Modifier is subtracted from all lethal attacks, i.e., ranged weapons, melee weapons. Against HTH attacks, the full score is subtracted from damage. Bruise damage is always deducted first, then lethal damage.

TGH	Damage Modifier
2	+1
3, 4	-0
5, 6	-1
7, 8	-2
9, 10	-3
11, 12	-4
13, 14	-5
15+	-6

Attractiveness

The Attractiveness Social Modifier is a reflection of the character's drawing power, simply due to his or her appearance. A positive modifier indicates that the character is considered "attractive" by normal social standards and that people will tend to seek out the character and his or her attention. A negative modifier indicates the character is repulsive and people will generally avoid the character. The Social Modifier is added to NPC reaction rolls anytime the characters are the same race.

ATR	Social Modifier
1 or less	-3
2	-2
3, 4	-1
5	+0
6, 7	+1
8, 9	+2
10	+3
11, 12	+4
13+	+5

Mental Attributes

Attrib	Description	Function
INT	Intelligence	Knowledge, both accumulated and capacity for accumulation; influences number of starting skills, as well as maximum starting level in skills; influences ease of learning new skills.
WIS	Wisdom	Insight, forethought
CLV	Cleverness	Ability to figure out puzzles, mind teasers, complex patterns, codes, etc.
WIL	Willpower	Determination and drive; influences exceptional feats and efforts of determination.
FOC	Focus	Ability to concentrate on something specific to the exclusion of all distracting stimuli, including distracting thoughts; influences ease of learning new skills.
CHR	Charm	Charisma, personality; influences NPC reactions.
LCK	Luck	Do you feel lucky? Influences combat and non-combat skill rolls.

Intelligence

The Intelligence Skill Modifier is the number of additional skill levels the character starts with (to be spent in accordance with the guidelines under the character's selected occupation). This modifier also adjusts the maximum starting level the character may purchase in skills (unless otherwise specified in the character's occupation, the maximum starting level for skills is 3). The modifier increases 1 point for every point above 10. So a score of 12 would grant a +4.

Skill	
INT	Modifier
1 or less	-3
2	-2
3	-1
4 - 7	+0
8, 9	+1
10+	+2

Willpower

The Willpower Feat Modifier is added when making an exceptional feat, such as arm wrestling or attempting to force a door open in an emergency. The bonus or penalty is added to any roll where the character's determination to succeed can influence the results. The Feat Modifier may be added to all ability checks.

Feat	
WIL	Modifier
1	-3
2	-2
3, 4	-1
5, 6	+0
7, 8	+1
9, 10	+2
11, 12	+3
13, 14	+4
15+	+5

Charisma

The Charisma Social Modifier is added to the rolls for the number of Friends, Contacts and Enemies the character has acquired over the course of his life. Humans receive an additional +1 modifier to their *Friends, Contacts And Enemies* rolls.

Positive or negative Social Modifiers indicate exceptional ability (or inability) to hold the attention of others in a conversation; it is a reflection of both speaking ability and personality. The Social Modifier is also added to the NPC reaction roll when the character initially encounters a new NPC.

Social	
CHR	Modifier
1 or less	-3
2	-2
3	-1
4 - 7	+0
8, 9	+1
10, 11	+2
12+	+3

Luck

Under most conditions the Luck Combat Modifier may be added to Initiative, to-hit (Modifier x 5%), melee attack and melee defend rolls. The Non-combat Modifier may be added to all skill and ability checks. The conditions under which the modifiers may not be added to the characters rolls are left to the discretion of the Game Referee.

LCK	Combat	Non-Combat
	Modifier	Modifier
1 or less	-2	-2
2	-1	-1
3	+0	-1
4 - 7	+0	+0
8	+0	+1
9	+1	+1
10	+1	+2
11, 12	+2	+2
13+	+3	+2

Meta Attributes

Meta attributes are a combination of the sixteen basic attributes. There are nine Meta Attributes. These attributes are listed below, along with the primary attributes that form them. Meta attributes are designed to bring together closely related attributes into familiar concepts. At their most basic level, Meta attributes provide an idea of how the character rates on broader and more obvious scales to other characters. For example, the Body Meta attribute is an indication of overall body toughness and build. Magnetism is an indication the character's strength of presence, which is a combination of both physical beauty, and his ability to hold his own in the company of others (charisma). Meta attribute checks are handled exactly as normal attribute checks (the AIP award for a successful check is awarded to either primary attribute). If there is a fraction after calculating a Meta attribute, drop the fraction and add a "+" symbol next to the Meta attribute.

[A player is creating Sloro, a Ferrite. Sloro has a FOC of 6 and a WIL of 5. This gives him a Motivation score of 5.5. The player drops the fraction and writes "5+" on Sloro's character sheet.]

Meta	Description	Method	Function
MOT	Motivation	$(\text{FOC} + \text{WIL}) \times \frac{1}{2}$	Influences Loss Of Consciousness, psionics
MAG	Magnetism	$(\text{ATR} + \text{CHR}) \times \frac{1}{2}$	Influences NPC reactions
BOD	Body	$(\text{STR} + \text{TGH}) \times \frac{1}{2}$	Influences resisting shocks and stuns
AGI	Agility	$(\text{COR} + \text{REF}) \times \frac{1}{2}$	Influences ranged combat, grenade combat and melee defense
SAN	Sanity	$(\text{INT} + \text{WIS}) \times \frac{1}{2}$	Influences skill checks in most Sciences
PHY	Physical Prowess	$(\text{COR} + \text{SPD}) \times \frac{1}{2}$	Influences melee offense
MEN	Mental Acuity	$(\text{CLV} + \text{WIL}) \times \frac{1}{2}$	Influences resistance to death from Psionic depletion
STA	Stamina	$(\text{END} + \text{MOV}) \times \frac{1}{2}$	Influences swimming and other high-effort movement over distance
MEM	Memory	$(\text{WIS} + \text{WIL}) \times \frac{1}{2}$	Determines attempts to recall information the player did not write down.

Synergism & Interference

After the Meta Ability Scores have been computed, players may adjust them. When two ability scores form a Meta Ability Score that is higher than their average, they are Synergistic. When two ability scores form a Meta that is lower than their average, there is said to be Interference. In game terms, after the Meta's have been figured, the player may adjust each score up or down by 1 point. To adjust a Meta up, another Meta must be adjusted down. This adjustment is permanent and is not changeable.

[Sloro's player decides that Sloro's FOC and WIL will be synergistic, and so adds 1 point to his MOT score, making it a 6+. The player must now designate a Meta to have Interference. Sloro is an attractive and personable scientist, but his player decides that he will be a little goofy inspite of his characteristics. So, he adds interference to Sloro's MAG score, reducing it by 1 point. This balances the synergism added to Sloro's MOT score.]

If a character's ability scores change, any relevant Meta's must be recomputed, and the same Synergism / Interference adjustment applied. (For a Meta ability score to change by 1 point, one of its constituent scores must change by 2 points, or both of its constituent scores must change in the same direction by 1 point each.) When one constituent score increases, a "+" should be written next to the Meta score. When one constituent decreases, a "-" should be written next to the Meta. When two symbols are next to the score, it adjusts by 1 point up (for "++") or down (for "--") and the symbols are erased. If the symbols are opposites, i.e., "+-" or "-+" they cancel each other out and can be erased.

[After playing for awhile, Sloro is able to increase his FOC to 7. The player writes a "+" next to Sloro's MOT score. Sloro's MOT score is now "5++" so the player erases the "++" and changes Sloro's MOT score to 6.]

Character Generation

Characters may be any of the following races: Human (including genetically engineered & cybernetic humans), Ferrite, Slen Boraka, A'Ghuu, Graff, Voix, Meylor or Lyandithate.

Humans

Ability scores range from 2 to 9, with 5 being average. Players roll d3 + d6 for each of the character's sixteen abilities. For every ability roll that is a 9, the character has a chance of having an exceptional ability score. Add an additional d3 -1 roll to the score.

Each character receives 2d12 Character Points (CP). These points may be spent to improve the character's ability scores. Ability scores may be improved up to 2 ability points, costing 1 CP per point of improvement. Ability scores may be reduced by 1 ability point, generating 1 CP. Increasing an ability of 9 to a 10 costs 2 CP. Increasing ability scores over 10 costs 3 CP per ability point. (For example, raising a 10 to an 11 will cost 3 CP.) Reducing a rolled ability score higher than 10 produces 2 CP. (For example, reducing an 11 to a 10 generates 2 CP.)

Standard humans (those without genetic or cybernetic enhancements), sometimes referred to as "pure" have all starting money's tripled. Straight humans are also allowed to purchase all D and below availability items, without restriction, and some E items, subject to DM approval.

Genetic Engineered Humans

All genetic engineered humans receive 96 +2d10 character points. Genetic engineered humans are always designed for a specific occupation or Occupation. Characters that are to be Gengineered must choose an Occupation from the table below. Each Occupation specifies various ability scores. The total cost to "purchase" the Occupation and its ability scores is listed at the bottom. The remaining points may be spent in any manner the player desires. If the character cannot afford the cost for a given Occupation, then that Occupation is unavailable to the character.

Ability scores may be improved, costing 1 CP per point of improvement. Ability scores may not be reduced below the listed values.

	Bot Pilot				Space Construction					Diplomat	Underwater Welding Exp					
	Soldier				Aerospace Pilot				Pleasure			Scientist		Spy		
Ability	Assassin			Vehicle Pilot	Rescue					Police		Athlete				
STR	6	8	6	7	5	9	7	2	2	7	2	8	10	2	2	
END	6	8	7	7	10	10	7	8	2	8	2	10	8	7	2	
TGH	7	9	8	7	8	9	7	2	2	8	2	9	10	7	2	
FLX	2	2	2	2	2	2	2	8	2	2	2	2	2	2	2	
COR	10	9	9	7	8	8	6	2	2	7	2	10	8	9	2	
SPD	2	2	2	2	2	2	2	2	2	7	2	2	2	2	2	
REF	10	8	9	7	10	9	8	2	2	7	2	7	7	9	2	
ATR	2	2	2	2	2	2	2	10	8	2	2	2	2	6	2	
MOV	2	8	2	2	2	2	6	2	2	7	2	2	8	2	2	
INT	7	6	6	6	9	7	8	8	9	7	10	8	2	8	2	
WIS	7	2	2	2	2	8	7	6	10	7	7	8	2	7	2	
CLV	8	2	2	2	2	2	2	2	8	7	10	2	2	9	2	
WIL	2	8	2	2	2	2	2	2	9	2	8	8	2	8	2	
FOC	9	7	6	6	7	10	9	2	8	2	9	10	6	8	2	
CHR	2	2	2	2	2	2	6	10	9	7	2	2	2	6	2	
LCK	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Cost	87	88	71	68	78	90	87	75	82	85	68	96	77	98	39	

Genetic Engineered characters have certain genetic enhancements depending on their occupation. An asterisk (*) after the name of an enhancement indicates the enhancement is of a solely role-playing nature and thus has no description in the *Genetics and Cybernetics* section. The number of enhancements each Occupation receives is indicated by a number. This number is listed after each Occupation. Players must choose from the enhancements listed under each Occupation.

Assassin (3)

G, eyes (IR, Low Light)
 G, weapon mount
 G, body armor, medium
 G, motor response tuning (x2)
 G, regeneration
 G, skeletal replacement

Soldier (3)

G, weapon mount x2
 G, body armor, medium
 G, speed healing
 G, regeneration
 G, morphine synthesizer
 G, skeletal replacement
 G, hardened skin
 G, improved nerve impedance
 G, thermal sensor

Bot Pilot (2)

G, eyes (image enhancement, 1 option)
 G, adrenaline synthesizer
 G, fireproof skin
 G, body armor, light
 G, weapon mount

Vehicle pilot (3)

G, eyes (image enhancement, 1 option)
 G, adrenaline synthesizer
 G, fireproof skin
 G, body armor, light
 G, weapon mount
 G, hardened skin



Aerospace Pilot (3)

G, eyes (image enhancement, 1 option)
G, adrenaline synthesizer
G, radiation proof skin
G, fireproof skin
G, speed healing
G, hardened skin

Space Construction (4)

G, eyes (3 options)
G, morphine synthesizer
G, adrenaline synthesizer
G, radiation proof skin
G, fireproof skin
G, skeletal replacement

Rescue (4)

G, eyes (2 options)
G, ears (audio filter, audio enhancement)
G, olfactory chemical analyzer
G, web feet & hands
G, gills
G, speed healing
G, skeletal replacement
G, thermal sensor

Pleasure (Entertainment) (5)

G, perpetual sexual prime*
G, ageless body*
G, permanent infertility*
G, eyes (color control)
G, perpetual sexual desire*
C, pain inhibitor

Diplomat (3)

G, photographic memory*
G, body armor, light
G, advanced antibodies
G, personality rewrite

Police (3)

G, eyes (2 options)
G, ears (1 option)
G, body armor, light
G, speed healing

Scientist (2)

G, eyes (microvision, image enhancement)
G, motor response tuning x2
G, memory enhancement
G, logic & learning integration x2

Athlete (2)

G, body armor, medium
G, morphine synthesizer
G, adrenaline synthesizer
G, speed healing
G, skeletal replacement
G, improved nerve impedance

Spy (4)

G, eyes (3 options)
G, ears (2 options)
G, body armor, light
G, chameleon skin
G, malleable muscles
G, weapon mount
G, regeneration

Underwater Welding (4)

G, eyes (3 options)
G, web feet & hands
G, gills
G, morphine synthesizer
G, adrenaline synthesizer
G, skeletal replacement

Experimental (special)

Experimental characters receive 7 genetic enhancements. Players may choose to use fewer than 7 enhancements. In this case, the character receives 1 CP per enhancement forfeited in this manner. Experimental Genetic characters automatically have the *Reduced Life Span, Drastic* disadvantage. (Their life span is d10 years.) Character may select occupation normally.

Cybernetic Humans

Cybernetic humans have been in some sort of accident (usually) during their careers and have received cybernetic replacements and enhancements to allow them to continue to perform their jobs (sometimes even better than before). All cybernetic humans receive a number of Character Points (CP) that is calculated as follows:

- Roll d3 + d6, 16 times.
- For every 9 that is rolled, add an additional d3 -1.
- Add 2d12.
- This is the CP allotment for the character.

Characters that are to be Cybernetic must choose an Occupation from the table below. Each Occupation specifies various ability scores. The total cost to "purchase" the Occupation and its ability scores is listed at the bottom. The remaining points may be spent in any manner the player desires. If the character cannot afford the cost for a given Occupation, then that Occupation is unavailable to the character.

Increasing an ability of 9 to a 10 costs 2 CP. Ability scores above 10 cost 3 character points per ability point over 10, i.e., improving a STR 10 to a STR 12 would cost 6 (3 x 2) points. No ability score may be reduced below the specified minimum for the character's selected Occupation.

Ability	Assassin	Soldier Elite	Rescue	Spy	Police (SWAT)	Experimental
STR	6	7	7	2	7	2
END	6	7	7	7	7	2
TGH	7	8	7	7	7	2
FLX	2	2	2	2	2	2
COR	8	8	6	8	7	2
SPD	2	2	2	2	7	2
REF	8	7	7	8	7	2
ATR	2	2	2	6	2	2
MOV	2	7	6	2	7	2
INT	7	6	8	8	7	2
WIS	7	2	7	7	7	2
CLV	8	2	2	7	7	2
WIL	2	8	2	8	2	2
FOC	8	7	7	8	2	2
CHR	2	2	6	6	7	2
LCK	2	2	2	2	2	2
Cost	84	88	87	96	93	60

Cybernetic characters also have certain cybernetics depending on their occupation. Some enhancements, such as eyes, can be either cybernetic or genetic enhanced. The notation "C" indicates the character received cybernetics, a "G" indicates genetic enhancements. The notation "C/G" indicates that the player may choose. The number of enhancements each Occupation receives is indicated by a die roll. This roll is listed after each occupation. Players must choose from the cybernetics listed under each occupation.

Assassin (2d4)

C, cybernetic eyes (IR, Low Light)
C, cybernetic arm
C, weapon mount (melee weapon)
C, body armor, light
C, chameleon skin
C, motor response tuning (x2)
C, d4 ability boosters (can choose multiples of the same one)
C, pain inhibitor

Spy (2d6 -1)

C, d4 mental ability boosters
C/G, cybernetic eyes (color control, d3 options)
C, cybernetic ears (d2 options)
C, cybernetic arm
C, weapon mount (melee weapon)
C, body armor, light
C, chameleon skin
C, malleable muscles
C, line-thrower
C, voice modulator
C, voice synthesizer

Police SWAT (2d5)

C, skeletal augmentation
C, cybernetic eyes (d3 options)
C, cybernetic ears (1 option)

Alien Races

Player rolls d3 + d6 for each of the character's sixteen abilities. For every ability roll that is a 9, add an additional d3 -1 roll to the score. Next, add the ability score modifiers, listed on the table below, to the rolled ability scores. Finally, ability scores may be modified using the character's CP. The rolled scores for END, TGH, ATR and MOV for Voix characters are replaced by the listed values or die rolls.

C, cybernetic arm
C, energy weapon mount (energy melee weapon)
C, body armor, medium
C, radar
C, thermal sensor
C, radio communicator
C, d3 ability boosters

Soldier Elite (2d8)

C, skeletal replacement
G, eyes (2 options)
C, cybernetic limbs (d4)
C, weapon mount (1 in each limb, melee weapon)
C, body armor, heavy
C, thermal dead skin
C, d3 physical ability boosters
C, pain inhibitor
C, thermal sensor
C, electrified skin
C, speed healing
C, regeneration
C, adrenaline synthesizer
C, radio communicator
C, seismic sensors
C, morphine gland

Rescue (2d6)

C, d3 boosters
C/G, cybernetic eyes (4 options)
C/G, web feet & hands

C/G, gills
C, cybernetic ears (audio filter, audio enhancement)
C, toxin filters
C/G, olfactory chemical analyzer
C, thermal sensor
C, radiation proof skin
C, fireproof skin
C, lung modifications
C, toxin filters
C, advanced antibodies
C, radio communicator
C, structural analyzer

Experimental (special)

Up to ¼ of the enhancements may be genetic. Character may select occupation normally. Roll d5 on the following table to determine quantity of cybernetics:

Roll	Result
1	2d4 +9 enhancements
2	2d6 +7 enhancements
3	2d8 +5 enhancements
4	2d10 +3 enhancements
5	2d12 +1 enhancements

Each character receives additional Character Points (CP), listed at the bottom of the following table. These points may be spent to improve the character's ability scores. Ability scores may be improved up to 2 ability points, costing 1 CP per point of improvement. Ability scores may be reduced by 1 ability point, generating 1 CP. Increasing an ability of 9 to a 10 costs 2 CP. Increasing ability scores over 10 costs 3 CP per ability point. (For example, raising a 10 to an 11 will cost 3 CP.) Reducing a rolled ability score higher than 10 produces 2 CP. (For example, reducing an 11 to a 10 generates 2 CP.) Voix END and TGH scores cannot be modified at all.

Alien races may not have exceptional ability scores (over 10) in any ability in which they receive a penalty.

Ability	Ferrite	Slen Boraka	A'Ghuu	Graff	Voix	Meylor	Lyandithate
STR		+3	-2	+3	+3	+1	-2
END	+2			-2	10 ^Π		+1
TGH	+3	+2		+3	8 ^Π	+1	+3
FLX	-1	+4	+3	-3		+2	
COR	+2				+2	+1	
SPD	-3				+4		
REF	-1		+2		+1		
ATR ☺					d10		
MOV		-1		+2	5	+1	-1
INT			-1		+3	+3	+1
WIS		+2	-2			+1	
CLV			+2	+2	+1	+2	+1
WIL		+2		+2			+1
FOC	+2	+2	+2				+1
CHR			-1	+2		+1	+1
LCK							
CP:	2d10 -1	d4	2d12	d6	d6 +2	2d12	2d8

^Π Fixed values that cannot be changed.
 ☺ Attractiveness values for all races indicate the physical attractiveness only to members of the same race. Across races, ATR reflects how frightful an individual appears. A low ATR score means the individual is very frightening looking.

Drawbacks and Special Abilities

Characters may have a maximum of 4 CP generated from Drawbacks. CP generated from drawbacks may be spent to improve ability scores or purchase special abilities. Any number of CP may be spent on special abilities, including CP generated from reduced ability scores.

Drawbacks

Accelerated Aging process	2	Character looks older than chronological age. For every year the character ages, or has aged, the character appears to be d2 years older.
Bad Habit	1	Character has some socially frowned upon habit, e.g., smoking, belching, swearing, recreational drug use, etc. Character receives a -1 penalty on the NPC reaction table.
Blind, partial	1	Character has seriously impaired vision, lacks depth perception, -50% to all targeting; correctional lenses can compensate for this drawback.
Blind, complete	2	Character cannot see
Deaf, partial	1	Character has impaired hearing, is deaf in one ear, lacks stereo hearing, unable to determine direction of noises, frequently will not hear things on the deaf side.
Deaf, complete	2	Character cannot hear
Debilitating disease	4	Character is afflicted with Parkinson's disease or some other nasty disease. Character suffers a -2 penalty to all physical abilities for all purposes. This penalty increases by -1 every year. Character's Hit points are halved. Character fatigues at twice the normal rate. Character's load is halved. There is a 30% chance every year of the disease killing the character. This disadvantage eliminates the 2 up / 1 down limit on adjusting mental ability scores, and reduces the cost of exceptional Mental ability scores to 1 CP per point.
Egocentric	1	Character believes the world revolves around himself; character may not necessarily believe he is the best at everything, but he definitely believes he is the most important. Character receives a -2 penalty on the NPC reaction table.
Egotistical	1	Character believes he is the best, quickest, smartest, whatever at everything. Constantly talks down to everyone from strangers to friends. Character believes himself to have no equal. Will deny any suggestions to the contrary, even when supported by fact. Character will never listen to advice or suggestions from others, even if they are qualified. Character receives a -2 penalty on the NPC reaction table.
Emotionless	1	Character is completely emotionless. This does not mean that the character is a robot or completely rational and logical all the time. It means the character acts without feeling. Character receives a -1 penalty on the NPC reaction table.
Flashbacks, Mild	1	At stressful moments and occasionally at random, character suffers from flashbacks to a traumatic episode of his life. Character loses sense of location and activities. Character is temporarily distracted but likely to be snapped back to reality relatively easily.

Flashbacks, Severe	2	At stressful moments and occasionally at random, character suffers from flashbacks to a traumatic episode of his life. Character loses all sense of location and activities. Character is temporarily catatonic (d4 turns) and is difficult to bring back to reality.
Haptic Deficiency, partial	1	Character has diminished sense of touch; -2 to attack and defense in melee combat.
Haptic Deficiency, complete	2	Character has no sense of touch; -4 to attack and defense in melee combat.
Lacks inner monologue	1	Says everything they think
Mania, Mild (compulsion)	1	Compulsive gambler, compulsive liar, compulsive honesty, kleptomania, etc. Character must make a Difficult (WIL) check to resist any temptation pertaining to the mania.
Mania, Severe (obsession)	2	Character is obsessed with something, someone or some activity. Character will devote an exceptionally large amount of time and money to this affection. Character must make a Very Difficult (WIL) check to resist any temptation pertaining to the mania.
Megalomania	2	Extremely severe case of egotism. Character believes it is his destiny to rule the world / system / galaxy / etc. Character receives a -3 penalty on the NPC reaction table.
Obese	2	Character weighs 200% the generated value, and suffers a -2 penalty, each, to any two physical abilities (with a minimum value of 1).
Olfactory Deficiency, partial	1	Character has diminished sense of taste and smell
Olfactory Deficiency, complete	2	Character has no sense of taste or smell
Phobias, Mild	1	Character will go to great lengths to avoid the object of the phobia. Character must make a Difficult (WIL) successfully deal with the object of the phobia. Failure means the character will do everything possible to avoid the object of the phobia, short of using lethal force, if evasion is not possible character will become paralyzed with fear for d4 turns.
Phobias, Severe	2	Character will go to very extreme lengths to avoid the object of the phobia. Character must make a Very Difficult (WIL) check to successfully deal with the object of the phobia. Failure means the character will panic and flee in terror for d4 minutes when confronted, if flight is not an option, character has 50/50 chance of either becoming catatonic for d10 minutes from fear, or going berserk and attacking the source with horrifying ferocity. Phobias can be anything, but some suggestions are: guns, bugs, spiders, snakes, lizards, water, heights, water bodies, flying, interstellar travel, deep space, wide open places, crowds, dogs, being alone, dying, vacuum, zero G, rejection, physical contact, another race, robots, computers, music, fire, aliens
Reduced life span, Mild	1	Character will die in ½ his normal life span.
Reduced life span, Severe	3	Character will die in d10 years of age.
Superstition	1	
Sociopath, Mild	1	Character does not get along well in groups. Character feels compelled to know who outranks whom and if this is unclear, will constantly strive to establish the "pecking order" and determine who is the alpha-male. Character receives a -2 penalty on the NPC reaction table.



Sociopath, Severe

2

Character will aggressively and lethally take steps to insure he is the alpha-male. Character receives a -1 penalty on the NPC reaction table.

Trouble magnet

2

Trouble flocks to the character almost as fast as he can get rid of it.

Special Abilities

Absent Aging process

2

Character's apparent age is permanently fixed at approximately 15 + 2d10 percent of his race's maximum life span.

Accelerated Metabolism

4

Character's body processes material faster than normal. Character digests food in less than 30 minutes. Medicines and drugs are twice as effective.

Ambidexterity (partial)

3

Character can use either hand equally well. No "off hand" penalties.

Ambidexterity (full)

5

Character can use either hand equally well and at the same time. No "off hand" or "firing two weapons" penalties.

Autistic

2

Character can perform some feat as well as or better than most computers, e.g., memorizing phone numbers, reading and reciting lists from memory, etc.

Cybernetics

Skin

3

Select one: chameleon, radiation proof, fireproof, thermal dead

Replacements

4

Select one: arm, leg, head, tentacle, torso, skeletal, cardio, lung

Senses

2

Select one: eye, ear, radio comm, thermal sensor, radar system

Boosters

1

Options

2

Select one: eye option, ear option, cybernetic armor, cybernetic options, arm options

Armor, light

2

+1 CP for E or P, +2 CP to upgrade E to H or B to K, i.e., HKP is 2 (base) +1 (for E) +1 (for P) +2 (upgrade E to H) +2 (upgrade B to K) = 8 CP

Armor, medium

3

+1 CP for E or P, +2 CP to upgrade E to H or B to K

Armor, heavy

4

+2 CP for E or P, +3 CP to upgrade E to H or B to K

Armor, assault

5

+3 CP for E or P, +4 CP to upgrade E to H or B to K (HKP = 19 CP)

Other

2

Select one from everything else

Direction sense

2

Character always knows which way is north, which way he is going and relative directions to anywhere he has personally seen or been. Character cannot get lost.

Double jointed

2

Character has a +2 bonus to all wrestling maneuvers.

Elongated life span

2

Character has unique condition allowing him to live 3d20 percent longer than his race's maximum life span.

Heightened eyesight

4

Character can see twice as far as normal. Character treats all range classes as one closer during ranged combat.

Heightened hearing

3

Character can hear whispering from across a room and understand it. Character receives a +2 bonus to Awareness checks when attempting to notice someone sneaking up on them, or any other situation where hearing might influence the ability to detect something.

Heightened olfactory senses

2

Allows limited tracking (creatures that have passed within the past hour), grants +1 bonus to tracking skill

Heightened sense of touch

2

Character can identify most materials simply by touching them, character can make inferences about an object based on it's texture

Insightful	2	Character is gifted with the ability to see what is troubling other people when they talk to him. Character has ability to answer the rhetorical questions people ask him – even if nobody ever listens.
Magnetic personality	3	Character has that special *something* to which people are drawn, regardless of the character's CHR and ATR score. All NPC's react to the character as if they were of the same race. Character has +2 to Reactions when encountering NPC's.
Natural aptitude	4	Character has innate aptitude for a skill. When learning the skill, the character treats it as having an LF of 1 lower than listed.
Photographic memory	3	
Psionic resistance	4	Character has an inherent psionic resistance equal to 3x his chance to be psionic. This resistance is to all mentally invasive effects, regardless if they are good or bad.
Reduced sleep requirement	3	Character can comfortably survive with ½ the normal sleep requirement for his race.
Skill Levels	1	3 additional starting skill levels

Demographics

Sex

Players may choose the sex of their character.

Age

All characters start their lives at approximately 20 percent of their average life spans.

Height and Weight

The percentage of the racial average value is given by $2d10 + 89$. Roll separately for height and weight.

Handedness

Most races must choose their handedness (left handed or right handed). To check for ambidexterity, roll d10, on a 1 the character is Ambidextrous (Limited). If the character is Ambidextrous (Limited), roll d4; on a 1 the character is Ambidextrous (Full).

Salary

Determine the character's salary. This is what the character gets every month from whomever is employing him at the time the character is created. Salaries listed are monthly values.

Savings

Each character starts the game with a certain amount of saved money. This value is equal to the listed die roll, multiplied by his monthly salary.

Race	Starting Age
Human	15 +2d6
Cybernetic Human	15 +2d6
Genetic Human	3 +d4
Lyandithate	64 +d60
Ferrite	31 +d30
Slen Boraka	15 +2d8
A'Ghuu	15 +d15
Graff	30 +d30
Voix	35 +d100
Meylor	18 +d20

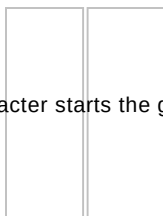
Salary	d12
300	1
400	2
600	3
900	4
1,000	5
1,200	6
2,200	7
2,600	8
3,000	9
3,400	10
3,800	11
4,200	12

Savings	d6
d2-1	1
d3-1	2
d4-1	3
d5-1	4
d6-1	5
d8-1	6



Employment

Finally, roll d6. On a 1-3, the character starts the game unemployed, but still has whatever savings he may have rolled.



Equipment Fund

The initial equipment fund is provided to represent items the character has acquired / accumulated over the past couple of years. All money not initially spent from this allotment is lost. The character is prohibited from purchasing anything with an availability of D, E, F or G. If the player can provide a good rationale, the character may be allowed to purchase selected D availability items at the Referee's discretion. Under no circumstances should the character be allowed to purchase weapons, explosives or poisons with his equipment fund. Characters receive d8 x 500 credits.

Duty Gear

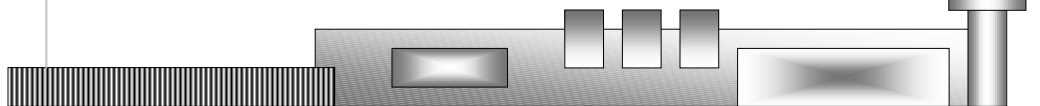
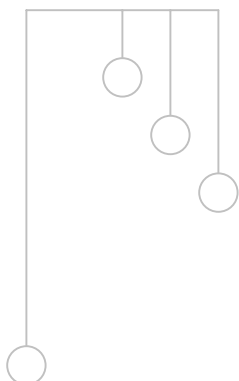
This should initially be issued to the character based on his Occupation and assigned by the Referee. Below is a typical list of duty gear issued to a beginning character. The *Duty Gear* section lists items commonly issued to each profession.

- A single hand weapon (pistol, carbine or rifle) Weapons will have no weapon modifications.
- Two to three ammunition clips / magazines (cap charge clips or magazines for power weapons)
- A small power source, if the character has power using equipment (not weapons)
- One to four pieces of miscellaneous equipment
- Possibly a vehicle, tailored to the character's job, e.g., a police cruiser
- Any special equipment necessary for the character to perform his primary mission, e.g., space suit and other such space items for a Space Marine, scuba gear for a rescue diver, etc.

Referees may wish to allow their players the option of picking out their Initial Issue Equipment. The players write down everything they think they should receive and the Referee then goes down the list and approves or disapproves each item.

Appearance

All characters look different. The Appearance section is designed to provide for those differences. Players may roll on the appropriate following tables. At the Referee's discretion, the players may be allowed to simply select the results they prefer from these tables.



Human Eyes, Normal

Color	d10	Shade	d10	Adjective	d10
Jade	1	Bright	1	Young	1
Brown	2	Pale	2	Benign	2
Blue	3	Dark	3	Warm	3
Green	4	Fading	4	Hollow	4
Hazel	5	Shining	5	Sunken	5
Gray	6	Dull	6	Piercing	6
Cyan	7	Deep	7	Curious	7
Amber	8	Vivid	8	Squinting	8
Hazel	9	Flat	9	Patient	9
Azure	10	Glossy	10	Large	10

Human Eyes, Unusual

Color	d6	Shade	d6	Adjective	d6
Black	1	Glowing	1	Small	1
Red	2	Translucent	2	Friendly	2
Violet	3	Glinting	3	Benevolent	3
Purple	4	Metallic	4	Hateful	4
White	5	Neon	5	Haunted	5
Orange	6	Florescent	6	Empty	6

Human Voice

Pitch	d4	Quality	2d6
Soprano	1	Calm	2
Tenor	2	Smooth	3
Alto	3	Soft / Loud	4
Bass	4	Quiet	5
		Kind / Harsh	6
		Abrasive	7
		Squeaky	8
		Mellow	9
		Barking	10
		Melodic	11
		Soothing	12

Human Hair

Color	2d6	Style	d8	Length	d8
Blue	2	Dreadlocks	1	None	1
Green	3	Wavy	2	Buzzed	2
White	4	Curly	3	Cropped	3
Black	5	Straight	4	Short	4
Blonde	6	Mohawk	5	Medium	5
Brown	7	Braided	6	Shoulder	6
Red	8	Unkempt	7	Long	7
Auburn	9	Layered	8	X Long	8
Silver	10				
Purple	11				
Orange	12				

Ferrites

Black: $60 + 2d20$ is the percentage of their body that is black.

Gold: $d10 \times 10$ is the percentage of the non-black that is gold.

Silver: $d10 \times 10$ is the percentage of the non-black and non-gold that is silver.

The rest of their color is made up by Gray.

Slen Boraka Ø

Base color (d10):
1-5 Black, 6-10
Gray

Band colors:
(d4 +2 bands)

Color	d10
Yellow	1
Red	2
Blue	3
Green	4
Purple	5
Orange	6
White	7
Silver	8
Gold	9
Bronze	0

A'Ghuu

Eye matter (d6):
1-4 two lumps, 5-6
single ridge

Base Color	d6
Lime Green	1
Forrest Green	2
Brown	3
Black	4
Gray	5
Sand	6

Variation	d10
Red	1
Yellow	2
Purple	3
Fuzz	4
Blue	5
White	6
Orange	7
Gold	8
Tan	9
Gray	10

Graff Ø

Skin Color	d8
Yellow	1
Brown	2
Green	3
Red	4
Black	5
Blue	6
White	7
Gray	8

Skin Pattern	d8
Leopard Spots	1
Large Spots	2
Ring Spots	3
Tiger Stripes	4
Thick Stripes	5
Mottled	6
Wood Bark	7
Bands	8

Voix

Body Color	d8
Black	1
Gray	2
Silver	3
Gold	4
Bronze	5
White	6
Tan	7
Blue	8

Camouflage	d8
None	1
Jungle	2
Desert	3
Aquatic	4
Space	5
Marsh	6
Mountain	7
Urban	8

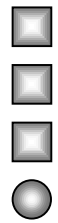
Meylor Ø

Color	d6
Purple	1
Gray	2
White	3
Green	4
Two toned	5
Black	6

Type	d4
Dark	1
Pale	2
Translucent	3
Metallic	4
Iridescent	5
Bright	6

Ø

Slen Boraka,
Graff and Meylor
roll on the Eyes
table above.



History

The more a player knows about his or her character, the more the player can identify with that character and the easier it is to play. Consequently, the concept of a randomly rolled character history has been included here to give the players a chance to find out where their character came from and why they are here now. The results of these tables are meant to suggest, not to be taken literally. The results represent the high points that someone might mention about the character if they didn't know him too well. That is, some information might be twisted or backwards. For the best results, watch for trends when generating the history and try to rationalize them. If the character seems to know a lot of military types, perhaps he lived near a military post of some sort? Or perhaps the character lived near a heavily contested area. Maybe that's why one of his parents disappeared without a trace. And so on and so on. The most interesting stories and backgrounds come from rationalizing every point of the character's history into a single twisting story.

The following tables can be used or discarded. They are provided to help describe each character's past and history. They are also designed to provide adventure opportunities that are relevant and personal to the character. Feel free to elaborate on any die rolls. The history tables use a d12 and the entries use d10's.

Your Character Came From: (d12)

1 - 4	Orphan
5 - 10	Diminished family, e.g., 1 parent family for humans
11 - 12	Full family, e.g., 2 parent family for humans

Missing Parent (roll for each): (d12)

1	Ran off (why and with who?)
2	Died of natural causes
3	Was killed in an accident (what kind?)
4	Was murdered (by who?)
5	Is POW / MIA (by who?)
6	Disappeared under unusual circumstances (which are?)
7	Disappeared without a trace and nobody knows anything
8	Committed suicide (why?)
9	Is in prison (d10): 1,2,3 – political prisoner, 4,5 – felon, 6,7,8 – treason, 9,10 – mutiny (where? why?)
10	Was there but neglected you
11	Was abducted (by who?)
12	Died in news event or natural disaster

Missing Parent Left d8 Years Ago (roll for each).

Missing Parent Is (if applicable): (d12)

1 - 6	Male
7 - 12	Female

Orphans Were Raised By: (d12)

- 1 - 4 Immediate family other than parents
- 5 - 8 Other relatives (roll on the "Relation of the orphan's other relatives" table)
- 9 - 12 Other guardians (roll on the "Relation of the orphan's guardians" table)

Relation Of The Orphan's Other Relatives Were: (d12)

- 1 - 3 Siblings only; number of siblings is d10 -4; check for sex of siblings
- 4 - 7 Single sibling and the sibling's (d10): 1 – spouse, 2 – significant other, 3 – friend, 4-10 – relative
- 8, 9 Descendant family (grandfather, grandmother, etc.)
- 10, 11 Extended family (aunt, uncle, cousins, etc.)
- 12 Distant relatives (god parents, adopted family, etc.)

Relation Of The Orphan's Guardians: (d12)

- 1 - 3 Friends of the family
- 4 - 6 Foster parents
- 7, 8 The state
- 9, 10 A complete stranger
- 11, 12 An organization, e.g., a company, band of pirates, orphanage, etc.

Race Of The Orphan's Guardians: (d12)

- 1 - 8 Same race as character
- 9 - 12 Different race from character. Consult the Race of Friends, Contacts and Enemies table to determine the race of guardians.

Your Home Was: (d12)

- 1 A farm (d10): 1 – land crop, 2 – sea crop, 3 – deep sea, 4,5 – gas, 6,7 – moisture, 8,9 – exotic animal, 10 – mineral
- 2 An exotic locale (d10): 1 – arctic, 2 – desert, 3 – rain forest, 4 – moon, 5 – deep sea, 6 – huge ravine miles deep, 7 – mountain reaching into the stratosphere, 8 – tropical crater in mountains or desert, 9 – asteroid, 10 – laboratory
- 3, 4 A city (d10): 1,2 – floating, 3,4 – sky borne, 5 – deep sea, 6 – land locked, 7,8 – coastal, 9,10 – underground
- 5 A town (d10): 1-4 – outpost, 5-8 – small, 9,10 – large
- 6 A boat (d10): 1,2 – research vessel, 3,4 – fishing boat, 5,6 – pirate ship, 7 – military ship, 8 – cruise liner, 9,10 – freighter
- 7 An industrial locale (d10): 1,2 – recycling field, 3 – oil / mineral processing plant, 4 – refinery, 5 – factory, 6 – construction yard, 7,8 – robotic repair yard, 9 – incineration plant, 10 – cloning facility
- 8 A secluded island
- 9 A space station (d10): 1,2 – commercial, 2 – military fortress, 3,4 – outpost, 5,6 – deep space, 7,8 – research, 9,10 – ship yard
- 10, 11 A spaceship (d10): 1 – system, 2 – deep space, 3 – interstellar, 4 – research, 5 – pirate, 6 – military, 7 – cruise liner, 8 – freighter, 9 – salvage, 10 – construction
- 12 A military base (d10): 1 – an outpost, 2,3,4 – a fortress, 5,6,7 – a garrison post, 8,9 – near a demilitarized zone, 10 – a training base.

You Left Home Because: (d12)

- 1 Wanted adventure
- 2 Had financial problems – What kind / for what?
- 3 Got kicked out – Why?
- 4 Moved in with someone else (d3): 1 – friend, 2 – lover, 3 – stranger
- 5 Couldn't stand living with family – which family member? What was the problem?
- 6 Got in trouble with the law – How?
- 7 Hated living in the area / region / environment – Why?
- 8 It was about time – How did you know?
- 9 Always wanted to travel – Anywhere in particular?
- 10 Wanted a job in a distant location – Where? Doing what?
- 11 Your life was in danger – Why?
- 12 You are searching for someone or something – Who? Why?

You've Been Away From Home For: d6 years, or the number of years spent learning your profession, whichever is greater.

Friends, Contacts and Enemies.

No adventurer worth his salt is not without an eclectic assortment of friends, enemies and contacts.

During your time away from home, you have made d4 friends, d4 -1 contacts and d6 -2 enemies. Add the character's CHR and ATR Social Modifiers to each of these rolls. If both CHR and ATR Social Modifiers are positive, add an additional +1. If both Social Modifiers are negative, add an additional -1. Rolls adjusted below zero are considered to be zero.

Relation of Friend, Contact or Enemy is (roll for each): (d12)

- 1, 2 Romantic interest (d10): 1,2 – current lover, 3-6 – former lover, 7 – soon to be lover, 8,9,10 – desired lover.
- 3 - 5 Professional (d10): 1 – boss, 2 – subordinate, 3,4 – partner, 5 – co-worker, 6,7,8 – someone from another section, 9,10 – someone from another organization.
- 6, 7 Educational (d10): 1,2,3 – mentor, 4,5 – student, 6-10 – fellow classmate.
- 8, 9 Familial (d10): 1,2,3 – someone from your extended family, 4-7 – a friend of the family, 8,9,10 – a family member by someone's marriage.
- 10 - 12 Stranger (d10): 1 – working at a place you frequent, 2,3 – from an agency you deal with on a regular basis, 4,5,6 – you lived with or near, 7,8 – complete stranger from a random encounter, 9,10 – someone who went out of their way to meet you.



Race of Friends, Contacts and Enemies (roll for each): d12

1-3	Same race as character
4	Ferrite
5	Slen Boraka (d10): 1,2,3 – male / female, 4-10 – permanent female
6	A'Ghuu
7	Graff (d10): 1-5 – male, 6-10 – female
8	Voix
9	Meylor (d10): 1-5 – male, 6-10 – female
10	Lyandithate
11	Human (d10): 1-5 – natural, 6,7,8 – cybernetic, 9,10 – genetic; (d10): 1-5 – male, 6-10 – female
12	AI (d10): 1,2,3 – computer, 4-10 – robot

Determine appearance of each Friend, Contact and Enemy.

Each friend, contact and enemy should at least have his or her ATR score rolled (d6 + d3), if only to give an idea of what they look like. Beyond this, it is suggested that the person's CHA (d6 + d3) and appearance be determined as well. Use the tables provided in the Appearance section.

Profession of each Parent/Guardian, Friend, Contact and Enemy: d12

1	Public Service (d10): 1,2 – Police, 3,4,5 – Rescue, 6 – Vet, 7,8 – Doctor / Nurse, 9 – Politician (governor, commissioner, etc.), 10 – Communication Director
2, 3	Independent / Illegal (2d10): 2,3 – Spy, 4 – Assassin, 5 – Mercenary, 6 – Smuggler, 7 – Adventurer, 8 – Inventor, 9 – Prospector, 10,11,12 – Merchant (kind?), 13 – Geological Survey Team leader, 14 – Gambler, 15 – Professional Nomad / Hitchhiker, 16 – Gun for hire, 17 – Blockade Runner, 18 – Privateer, 19,20 – Terrorist
4, 5	Blue Collar (d10): 1 – Chef, 2 – Commercial Pilot (d5: 1-air, 2-sea, 3-sub, 4-shuttle, 5-starship), 3,4 – Mechanic / technician (d6: 1-bot, 2-AFV, 3-spacecraft, 4-vehicle, 5-robot, 6-power system), 5,6 – Construction (d6: 1-Deep Space, 2-Underwater, 3-space station, 4-starship, 5-military, 6-city), 7 – Athlete (sport?), 8 – Martial Arts Instructor (number of schools owned: d12), 9 – Animal Trainer, 10 – Zoo keeper / employee.
6, 7	Military (2d10): 2,3 – Soldier Elite, 4 – Military Police, 5,6 – Combat Vehicle Pilot (d8: 1-tank, 2-hovercraft, 3-PC, 4-stalker, 5-pede, 6-helicopter, 7-VTOL, 8-ornothopter), 7,6,9 – Combat Bot Pilot (Type is d3: 1-walker, 2-stalker, 3-pede. Role is d8: 1-recon, 2-light, 3-medium, 4-heavy, 5-assault, 6-super assault, 7-semi-mobile fortress, 8-artillery), 10,11,12 – Soldier, 13,14,15 – Combat Aerospace Pilot (d4: 1-light, 2-heavy, 3-bomber, 4-variable geometry strike fighter), 16,17 – Space Marine, 18 – Guard (d4: 1-National, 2-planetary, 3-space, 4-honor), 19,20 – Operative (Specialty is d4: 1-investigation, 2-internal security, 3-field agent, 4-assassin)
8, 9	White Collar (d10): 1 – Executive, 2 – Clerk, 3 – Chauffeur, 4,5 – Scientist (d12: 1-nuclear / quantum / astrophysicist, 2-entemologist, 3-chemist, 4-biologist, 5-psychologist / sociologist, 6-parapsychologist, 7-geologist, 8-exologist, 9-materials scientist, 10-architecture, 11-engineer, 12-archeologist), 6 – Military R&D, 7 – Diplomat (d3: 1-government, 2-racial, 3-xeno), 8 – Archeologist, 9 – Stock Broker, 10 – Business manager
10	Media (d10): 1,2,3 – Reporter (d4: 1-field reporter, 2-news reporter, 3-weather reporter, 4-anchor), 4 – Media Personality, 5 – Musician (instrument?), 6 – Entertainer (d6: 1-comedian, 2-magician, 3-dancer, 4-singer, 5-stripper, 6-subsidised prostitute), 7,8 – Photographer (d4: 1-fashion, 2-photojournalist, 3-media/news, 4-pornography), 9,10 – War correspondent
11	they claim to be something (roll again), but you have doubts
12	unknown to you

Strength of bond with parent/guardian, strength of friendship, contact or hatred is (roll for each): (d12)

1 - 3	<i>Mild</i> , you can ignore comments about the individual, even if they are true.
4 - 7	<i>Average</i> , comments about the individual bother you, you will argue or take offense.
8 - 10	<i>Strong</i> , comments about the individual will move you to violence.
11, 12	<i>Blood</i> , comments will move you to lethal violence, similar to the Samurai and their family honor.

Major Events

Every good adventure hero has some sort of traumatic event in his or her past that helped drive that character to the life he or she now leads. There is good trauma and bad trauma. These are reflected by Major Events in the character's life, and there are two types: Positive and Negative.

You had d6 -1 Major Events in your life. Roll d4 to determine how many of those Major Events were Negative. The remainder are Positive.



Major Events, Positive (roll for each): (d12)

- 1 When you were young you studied under a great master for 2d10 years. You have a level 5 skill in (d10): 1 – a *Bot Combat* skill (select any piloting or gunnery), 2 – a *Bot Technical* skill (select any mechanic), 3 – a *Personnel Combat* skill (select any ranged weapon, melee weapon or martial art), 4 – a *Personal Technical* skill, 5 – a *Science* skill, 6 – an *Artisan* skill, 7 – an *Active* skill, 8 – a *Cultural* skill, 9 – an *Interpersonal* skill, 10 – a *Media* skill
- 2 Were a local hero for some reason
- 3 Were instrumental in solving a crime in your region. The crime was (d10): 1,2,3 – minor, 4-10 – major.
- 4 Accidentally discovered something important
- 5 Saved someone's life
- 6 Won a lottery (d10): 1,2,3 – small (roll on Large Lottery table), 4-10 – large (roll d20 +83 and consult the Large Lottery table).
- 7 Won a lawsuit (d10): 1 – counter suit, 2 – libel, 3 – on the job injury, 4 – food poisoning, 6-10 – etc.
- 8 Inherited something (d10): 1 – money (roll on Huge Lottery table with a +33 modifier), 2 – expensive vehicle, 3 – mansion, 4 – land, 5 – business, 6 – starship, 7 – giant robot, 8 – title, 9 – estate, 10 – roll twice.
- 9 Promotion (increase pay grade by d3 levels)
- 10 Received award of significance
- 11 Won massive contract, talent show, pageant, competition, etc.
- 12 Patented something incredibly useful (you invented pencils, band aids, the copyright symbol, etc.)

Major Events, Negative (roll for each): (d12)

- 1, 2 Lived in a natural disaster region (d10): 1 – prone to earthquakes, 2 – violent thunder storms, 3 – floods, 4 – volcanic eruptions, 5 – asteroid impact, 6 – seasonal plagues, 7 – tornadoes, 8 – pirate / gang attacks, 9 – fearsome natural predators, 10 – drought.
- 3 Witnessed a murder or fatal accident (d10): 1-7 – someone you knew, 8-10 – stranger.
- 4 Witnessed or were victim of a violent crime (d10): 1,2 – rape, 3 – armed robbery, 4 – beating, 5,6 – assassination of a public figure, 7 – homicide, 8 – hate crime, 9 – rioting, 10 – terrorist act
- 5 Were a hostage or POW (by who?)
You were (d10): 1,2,3 – tortured, 4 – branded, 5,6 – brainwashed, 7,8 – raped, 9,10 – etc.
You have (d10): 1,2,3 – flashbacks, 4-7 – scars, 8,9,10 – suppressed memories
- 6 Charged with a serious crime (d20): 1 – treason, 2 – robbery, 3 – murder, 4 – rape, 5 – underage porn, 6 – prostitution, 7 – computer hacking, 8 – grand larceny, 9 – fraud, 10 – embezzling, 11 – organized crime, 12 – conspiracy, 13 – mutiny, 14 – slave running, 15 – aiding and abetting a known criminal, 16 – narcotic possession with intent to distribute, 17 – possession / sale of illegal cyber-sim chips, 18 – armed robbery, 19 – homicide, 20 – spying
- 7 Were sued (d10): 1 – counter suit, 2 – libel, 3 – criminal negligence, 4 – copyright infringement (for what? By who?), 5 – false representation, 6 – personal injury, 7,8 – corporate espionage, 9,10 – computer piracy
- 8, 9 Is actually a Major positive event, but was surrounded by very suspicious circumstances. The suspicions are (d10): 1-4 – unfounded, 5,6,7 – justified, 8,9,10 – unknown. Note, character does not gain the benefit of the positive event rolled for this result.
- 10 Were a slave (d10): 1,2,3 – escaped, 4,5 – were bought and something happened to your owner, 6 – your freedom was purchased for you, 7,8,9 – killed your master, 10 – you were lost and presumed dead / destroyed. (where? Or what? What kind of slave? What did you do?)
- 11 Subjected to a mind wipe (complete loss of memory up until the most recent several months)
- 12 Re-roll, and add 1 to the number of major negative events you suffered.

For each serious crime the character was involved in, roll regarding the charges. The charges were (d12):

- 1 - 4 Upheld and you (d10): 1,2 – escaped, 3 – case thrown out on a technicality, 4,5, 6 – were pardoned, 7,8 – were paroled, 9, 10 – paid your due (2d6 years in penitentiary)
- 5 - 7 Dropped mysteriously
- 8 - 10 Unsubstantiated
- 11, 12 Unprovable

Personality

Answer the following questions about your character to help describe who he or she is and wants to be. Following these questions are sample answers. Feel free to elaborate.

- **What is most *important* to you?** Person (relative, lover, friend), object (heirloom, charm, memento, etc.), value (honor, honesty, getting laid, having fun, etc.), being beautiful, healthy, wise, wealthy, employed, religious, fair, intelligent / well read, a good friend, honest, independent, competent, etc., having inner harmony, companionship, etc.
- **What are your *goals* in life?** Goals often start off as “to do ~” or “to be ~” and flow from there. Examples include: to be famous / notorious, own a company, rule a world, to be happy, get laid as much as possible, be the best at something, genocide a race, amass great quantities of something (wealth / firepower / rare art / etc.), etc., clear your name of some crime, free your parents / relative / lover / etc., escape someone / something / some organization, get revenge for something, bring some secret truth to public knowledge, etc., bring about some social change / reform, expose something that others are trying to keep under wraps, etc.
- **What do you *respect* the most?** Money, power, nothing, intelligence, order, firepower, opposite sex, exceptional skill, another race, knowledge, scientists, fine art, excellent craftsmanship, etc., beauty, health, wisdom, family, money, love, work, security, religion, equality, knowledge, friendship, power, pleasure, honesty, independence, competence, possessions, companionship, harmony, etc.
- **What do you *despise* the most?** Same possible answers as for *Respect*.
- **What *quirks* do you have?** Quirks include personal habits as well as unconscious actions, such as a nervous tick, unusual accent, style of dress, certain artifacts (sunglasses, hat, etc.), won't enter sunlight, never without favorite pet / female / etc., fanatical collector of something (art, weapons, historical artifacts, books, rare gems or wines, etc.)
- **What items, phrases, clothing, etc. do other people associated with you? Your “*trade marks*?”** A good trade mark is an action, object or phrase that will trigger people to say “so-and-so was here” or “that sounds like so-and-so speaking.”
- **What is your *moral* outlook?** Are people are obstacles, tools or allies? Does the end justifies the means, etc.? What is “Right” and what is “wrong” to you. What sorts of behavior will you tolerate from other people?
- **Your *honor*?** Will you always keep a promise, is your word as good as a promise, is it OK to lie to enemies, to execute or torture prisoners, etc.? Will you betray your friends, family, etc.? Will you back up someone just because they are a friend, etc., regardless of the situation?

Initial Training

A character's Occupation represents the character's pre-game training. All characters receive initial training. All characters except Genetic Engineered and Cybernetic characters may choose their Occupation. The Occupation for Gene Engineered and Cybernetic characters is determined during Ability generation. Characters receive the initial training listed under their Occupation. Experimental Cybernetic and Experimental Genetic characters may choose any Occupation, as if they were a normal human.

Each Occupation grants various skills at specified levels. In addition, each Occupation grants a number of skill levels to be used to purchase additional skills or improve initial skills. Some Occupation's have a “max skill level” designation. This is the highest level that is allowed in any skill during this part of character creation. Some skills have an asterisk (*) next to them. This means there is a 50% chance the character will receive that skill. Roll for each skill that has this designation.

If an Occupation lists a Skill Area (*italicized*), e.g., *Science* or *Personal Combat*, and a skill level, this means the player may choose any skill from the listed Skill Area. If the Skill Area is preceded by a multiple, e.g., 2x Bot Technical 4, then the player may choose this many skills (in this example, 2 skills) from the Bot Technical Skill Area, each of which will be at the listed level (here, they will both be level 4).

Occupation

A character's Occupation describes what sort of training the character has received. Sometimes this training is formal, through a college, university, trade school, or other organized institution. Sometimes, the training has been from peers and friends, associates or people the character has worked with in the past. A character's Occupation is only a reflection of his past training and should not restrict the character from pursuing any adventuring career. Several occupations are listed for reference and use for NPCs; for example, it is unlikely that any player will want to play a desk clerk.

Every Occupation will add a number of years to a character's age. This reflects both time spent in training and time spent improving the skills to get them to the point listed below.

When a set of skills is listed in parenthesis with a number following, e.g., (driver, track driver, hover pilot) 3, this means the character has one of the listed skills (players may select which) at the listed level. An asterisk (*) following a skill means the character has a 50% chance to have the skill.

The number of starting skills, as well as the maximum starting level, is modified by the character's INT Skill Mod value.

Aerospace Fighter Pilot

- Age: +d3 years
- Aerospace pilot 2, Bot Combat 2 x2, Bot technical 2, Deep space navigation 2, Personal Combat 2, Physics 2, Tactics 2
- 12 skill levels to spend on new skills or improve current skills. No maximum starting level.

Animal Tamer & Trainer

- Age: +d6 years
- Animal taming 3, Animal training 3, Intimidation 1, Veterinary medicine 2, Motivate 2
- 9 skill levels to spend on new skills or improve current skills. Maximum starting level is 4.

Archeologist

- Age: +d6 years
- Archeology 3, Awareness 3, Draw or Paint 2, Inspire 2, Orate 2, Organize 3, Photography* 2, Science 3 x2, Teach 3
- 9 skill levels to spend on new skills or improve current skills. Maximum starting level 4.

Assassin

- Age: +d5 years
- Awareness 3, Deceive 2, Disguise 2, Driver 3, Hide in shadows 3, Interrogation 2, Melee weapon (select) 2, Martial art (select) 2, Move silently 2, Personal Combat 4 (ranged weapons only) , Personal Combat 2 x2 (ranged weapons only) , Science 2 x2, Interrogate* 2, Tail / follow 2
- No additional skill levels available.



Athlete

- Age: +d4 years
- Diving 2, Inspire 2, Jumping 3, Running 4, Sports 5, Swimming 4
- 5 skill levels to spend on new skills or improve current skills.

Chef

- Age: +d2 years
- Chemistry* 2, Etiquette 3, Gourmet cook 4, Grooming 3, Thrown weapon (knife) 2, Melee weapon (knife) 2, Persuasion 2, Sculpt (food) 3, Style 3
- 9 skill levels to spend on new skills only. Maximum starting level 3.

Clerk

- Age: +d2 years
- Deceive 2, Grooming 2, Lie 2, Manipulate 2, Persuasion 2, Style 2, Streetwise 2, Seduction 2, Wardrobe 2
- 18 skill levels to spend on new skills or improve current skills. Maximum starting level is 4.

Combat Bot Pilot

- Age: +d3 years
- Bot pilot 2, Bot Combat 2 x3, Bot technical 2 x2, Martial art (select) 2, Organize 2, Personal Combat 2 x3, Survival (select) 2, Tactics 2
- 12 skill levels to spend on new skills or improve current skills. No maximum starting level.

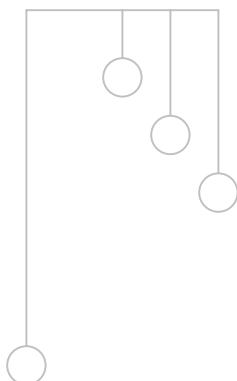
Combat Medic

- Age: +d4+2 years
- Combat medics are trained to go anywhere, in any conditions, at anytime, to aid wounded soldiers. They are elite personnel.
- Awareness 2, Biology 3, Camouflage 1, Field medicine 3, Personal combat (ranged weapon) 2 x2, Leadership 3, Martial art (select) 2, Melee weapon (knife) 1, Military Specialist* 2, Motivate 3, Organize 3, Psychology 1, Sign language (select) 1, Surgery 2, Survival (select) 2 x3, Swimming 2, Tactics 1
- 4 skill levels to spend on new skills or improve current skills. Maximum starting level is 4.

[IMAGE 2 ½ x 4] (Occupation) #4 The Combat Medic, repelling with one hand down a rope from above. In the other hand he has a submachinegun which he is using to lay suppressive fire. There are explosions and tracers all around. He wears the red "plus" of a medic on one arm and has a medical kit around his shoulders. He has a knife strapped to one boot.

Combat Vehicle Commander

- Age: +d2 years
- Bot Combat 2 x3, Bot technical 2 x2, (Driver, Hover pilot, Chopper Pilot) 2, Organize 2, Personal Combat 2 x3, Survival 2 x2, Tactics 2
- 15 skill levels to spend on new skills or improve current skills. No maximum starting level.



Commercial Pilot

- Age: +d4 years
- (Aerospace pilot, Hover pilot, Submarine Pilot) 4, Field medicine 2, General mechanic 2, Leadership 2, Organize 2
- 15 skill levels for new skills only. Maximum starting level is 3.

Computer Specialist / Hacker

- Age: +d3 years
- AI Design 1, Draw 3, Computer Hacking 3, Computer Technician 3 x2, Persuasion 2, Programming (AS-AI) 2, Science 2 x3, Science 1 x2
- 4 skill levels to spend on new skills only. Maximum starting level is 3.

Detective

- Age: +d4 years
- Awareness 4, Chopper Pilot* 1, Driver 2, Forensic Science 2, Info gathering 3, Intimidation 3, Martial art (select) 2, Personal combat 1, Persuasion 3, Projectile weapon 3, Science (select) 1, *Personal Combat* (ranged) 2, Tail/follow 3

Diplomat

- Age: +d6 years
- Argue 2, Deceive 3, Etiquette 3, Grooming 2, Lie 3, Orate 3, Persuasion 3, Style 2, Wardrobe 2
- 6 skill levels to spend on new skills or improve current skills. Maximum starting level is 4.

Deep Space Construction

- Age: +d3 years
- Awareness 2, Physics 2, Fire fighting 3, Hazmat containment 2, Survival (zero G) 3, Survival (vacuum) 3, Welding 3, Zero G combat 2, Zero G equipment operator 2, Zero G power Tool operation 2
- 3 skill levels to spend on new skills or improve current skills. Maximum starting level 4.

Demolitions & EOD Expert

- Age: +d3+1 years
- Awareness 2, Chemistry 2, Combat Engineer 3, Camouflage 2, Demolitions 4, Leadership 2, Martial art (select) 1, Organize 3, Personal Combat 2, (ranged weapons only), Physics 2, Sapper* 2, Sign language (select) 1, Structural Analysis 3
- 8 skill levels to add to current skills. Maximum starting level is 4.

[IMAGE 2 ½ x 4] (Occupation) #7 Demolitions / EOD expert, standing with cases of c-9 and other explosives hung from his shoulders. He has a sidearm in a holster and has a canteen strapped to his belt.

Doctor / Nurse

- Age: +d4+4 years
- Biochemistry 3, Biology 3, Chemistry 3, Deceive 2, Field Medicine 4, Grooming 3, Inspire 2, Psychology 3, Persuasion 2, (Surgery, Veterinary Medicine, Xenologic Medicine) 3, Science 3 x2
- 9 skill levels to spend on new skills only. Maximum starting level is 3.

Entertainer

- Age: +d5 years
- Act 3, Dance (select) 4, Grooming 3, Hypnosis* 2, Magic* 3, Music Instrument (select) 3 x2, Orate 3, Personal Combat* 2, Seduction* 3, Sing 3, Style 4, Wardrobe 3, Write (creative) 3
- 6 additional skill levels to spend on new skills only. Maximum level that can be purchased is 2.

Executive

- Age: +d6 years
- Argue 2, Deceive 3, Etiquette 3, Grooming 3, Leadership 3, Orate 3, Organize 3, Persuasion 2, Projectile Weapons* 2, Science 3, Science 2, Style 2, Wardrobe 3
- 9 skill levels to spend on new skills only. Maximum level is 2.

Explorer / Adventurer

- Age: +d5 years
- The explorer/adventure is part environmental scientist, outdoors-man, soldier, technician, pilot, etc.. The explorer/adventure is a jack of many trades and master of few.
- Active 2, Camouflage 2, (Driver, Hover Pilot) 3, Deceive 2, General mechanic 3, Hide in shadow 2, Personal Technical 2 x5, Personal Combat 3, Personal Combat 1, Pick locks 2, Science 2 x3, Survival (select) 1
- 9 skill levels to spend on new skills or improve current skills. Maximum starting level 3.

Hostage Negotiator

- Age: +d6 years
- Argue 2, Awareness 4, Deceive 2, Driver 1, Forensic Science 2, Information Gathering 3, Lie 3, Manipulate 3, Personal Combat 2, Personal Combat 1, Persuasion 3
- 4 skill levels to spend on new skills or improve current skills. Maximum starting level is 3.

Independent

Age: +d6+3 years

- The Independent rolls 5d6. This result is used for both of the following steps.
- Add the roll to 20 to determine the number of starting skill levels the character receives.
- Subtract the roll from 30. Multiply by 250 and add this to the character's Equipment Fund.
- The character has the option of having a maximum starting level of 3 in all skills or having a maximum starting level of 2 and any single skill starting at level 4.
- The Independent does not receive Duty Gear.

[IMAGE 2 ½ x 4] (Occupation) #8 Explorer / Adventurer standing fearlessly on a hill or cliff on an alien world. In the background are strange and exotic plants and fauna. Perhaps, also his vehicle is parked nearby with a couple other characters in it. There might be something lurking just behind a rock or something that the characters in the picture seem unaware of.

Inventor

- Age: +d3 years
- Argue 2, Draw or Paint 3, General Mechanic 3, Organize 2, Personal Technical 3, Persuasion 2, Sculpt* 3, Science 4, Science 3, Science 2 x3
- 6 skill levels to spend on new skills. Maximum starting level 2.

Martial Arts Instructor

- Age: +d5 years
- Awareness 2, Field medicine 2, Intimidation 2, Inspire 3, Martial art (select) 5, Martial art (select) 4, Martial art (select) 2, Melee weapon (select) 3 x2, Melee weapon (select) 2 x2, Motivate 3, Organize 2, Psychology 2, Teach 4
- 6 skill levels for new skills only. No maximum starting level.

[IMAGE 2 ½ x 4] (Occupation) #9 Martial Arts Instructor

Mechanic

- Age: +d3 years
- Bot technical 4 x2, Bot technical 3 x3, Bot technical 2 x2, Bot technical 2, (driving or piloting type skill), Personal Technical 3, Personal Technical 2 x2, Science 3, Science 2
- 15 additional skill levels to spend on new skills or improve current skills. Maximum starting level is 3.

Media Personality

- Age: +d3 years
- Act 3, Anchor* 3, Cameras* 2, Editing* 2, Interview 3, Lighting tech* 2, Personal Technical* 2, Produce 2, Write (media) 3
- 9 skill levels to spend on new skills or improve current skills. Maximum starting level 4.

Mercenary

- Age: +d2 years
- Bot Combat 2 (Piloting & Driver type skills only), Bot Combat 1, Camouflage* 2, Demolitions 2, General Technician 3, Interrogation 3, Intimidation 3, Organize 3, Personal Combat 3 (ranged weapons only) , Personal Combat 2 (ranged weapons only)
- 4 skill levels for new skill only. No maximum starting level.

Merchant / Trader

- Age: +d2 years
- Bot Combat 3, Bot Combat 2, Bot technical 3 x3, Driver or Aerospace or Hover or Submarine Pilot 4 (50% chance of having two), Field medicine 1, General mechanic 2, Leadership 2, Manipulate 3, Organize 3, Personal Combat 3, Persuasion 3
- Robot Technician 3 or Computer Technician 3 (50% chance of both)

Military Police

- Age: +d2 years
- Beam weapons 4, High Energy weapons 3, Intimidation 3, Martial Art (select) 3, Melee Weapon, (Night Stick) 3, Motivate 3, Organize 2, Persuasion 3, Projectile weapons 3, Psychology 2, Rail weapons 3, Sign language (select) 2, Tactics 2
- 6 skill levels to spend on new skills only. Maximum starting level of 3.

Military R&D

- Age: +d10 years
- Organize 3, Draw 3, Design 4, Science 4 x2, Science 3, Science 2 x3, Personal technical or Bot technical 4 x2, Personal technical or Bot technical 3 x2, Personal technical or Bot technical 2 x3, Personal Combat* 2
- 6 skill levels to spend on new skills. Maximum starting level is 4.

Musician

- Age: +d3 years
- Motivate 2, Music instrument 3, Music Instrument 2, Organize 2, Personal Combat* 2, Sing* 2, Streetwise 2, Style 2
- 12 skill levels to spend on new skills or improve current skills. Maximum starting level is 4.

Police

- Age: +d2 years
- Awareness 4, Interrogation 2, Intimidation 3, Martial arts (select) 2, Persuasion 3, Projectile weapons 3, Streetwise 4, Tail/ follow 3
- 12 skill levels to spend on new skills or improve current skills. Maximum starting level is 3.

Reporter

- Age: +d2 years
- Awareness 3, Driver 2, Deceive 3, Cameras (video) 3, Grooming 2, Interrogation* 2, Interview 3, Lie 2, Personal Combat* 2, Personal Technical 2, Photojournalism* 3, Report 3, Streetwise 3, Style 3, Tail 2, Wardrobe 3
- 6 levels to spend on new skills or improve current skills. Maximum starting level 4.

Rescue

- Age: +d4 years
- Awareness 3, Diving 3, Ecology 3, Field medicine 3, Fire fighting 4, Hazmat disposal 4, Motivate 3, Organize 4, Psychology 2, Sociology 2, Swimming 4
- 6 skill levels to spend on new skills or improve current skills. Maximum starting level is 3.

Rogue

- Age: +d3 years
- Deceive 2, Diving or Swimming or Hide in shadow 2, Intimidation 2, Personal Technical 3, Personal Combat 3, Personal Combat 2, Pick locks 2, (Running, Jumping) 2, Science 2, Science* 2, Sleight of hand 3, Streetwise 3, Survival 3
- 18 skill levels to spend on new skills or improve current skills. Maximum starting level 3.

[IMAGE 2 ½ x 4] (Occupation) #11 Reporter

Scientist

- Age: +d6 years
- Draw 3, Persuasion 2, Science 4 x2, Science 3 x3, Science 2 x5
- 6 skill levels to spend on new skills only. Maximum starting level is 5.

Smuggler

- Age: +d2 years
- Bot Combat 3 x3, Bot technical 3 x4, Deceive 3, Demolitions* 3, Driver or Aerospace Pilot 4 (50% chance of having both), General mechanic 1, Lie 2, Manipulate 3, Organize 3, Personal Combat 3 x2 (ranged weapons only), Persuasion 3, (Robot Mechanic, Computer Technician) 2, Science 2 x2
- 3 skill levels to spend on new skills or improve current skills. No maximum starting level.

Soldier

- Age: +d4 years
- Awareness 2, Combat Engineer* 3, Camouflage 3, Demolitions* 3, Energy weapon 3, Fox-November weapon 3, Leadership 2, Martial art (select) 2, Military Specialist* 2, Motivate 2, Organize 3, Sign language (select) 1, Survival (select) 2, Tactics 3
- 3 skill levels to add to current skills. Maximum starting level is 4.

Soldier Elite

- Age: +2d4 years
- As Soldier with the following modifications: Demolitions* +1, Field medicine 2, (Fox-November, Energy weapon) +1, High Energy Weapons 3, Martial Arts +2, Melee weapon (select) 2, Military Specialist 2, Military Specialist* 2, Move silently 3, Survival (original) +1, Survival (another) 2, Tactics +1
- No additional skill levels.

Space Marine

- Age: +d6 years
- Awareness 2, Energy weapons 4, Fire fighting 3, Fox-November weapons 3, Hazmat 3, Leadership 2, Martial art (select) 3, Motivate 2, Organize 2, Sign language (select) 2, Survival (vacuum) 3, Survival (zero G) 3, Tactics 2, Zero g combat 3
- 3 skill levels to spend on new skills or improve current skills. No maximum starting level.

Spy

- Age: +d4 years
- Awareness 3, Deceive 3, Disguise 2, Intimidation 3, Lie 3, Manipulate 3, Martial Art (select) 3, Move Silently 3, Personal Combat (ranged weapon) 3, Persuasion 2, Pick Locks 2, Seduction 3, Tail / follow 3, Science 2 x3

Vari-form Fighter Pilot

- Age: +d8 years
- These pilots are masters of variable form robots, the elite corp of aerospace and land combat units.
- Aerospace pilot 2, Bot Combat 2 x5, Bot technical 2 x2, Deep space navigation 1, Personal Combat 2 x3, Personal Technical 2, Physics 2, Tactics 2
- 9 skill levels to spend on new skills or improve current skills. No maximum starting level.

Weaponsmith / Armorer

- Age: +d6+1 years
- Awareness 2, Computer Technician 2, General Mechanic 3, Robot Mechanic 3, Weapon Tech (specify technology) 1 x2, Vehicle Mechanic 2, Chemistry 2, Demolitions 2, Design 2, Electronics 2, Cybernetic Engineer 2, Physics 2, Programming 2, Thermodynamics 2, Bot Technical 2 x3, Personal Combat 2

- 7 skill levels to spend on new skills or improve current skills. Maximum starting level is 4.

Skills

Each section of skills is listed in bold. These are Skill Areas. Numbers in parenthesis after a Skill Area indicate the Learning Factor (LF) of all the skills in that Skill Area. If a skill is listed with an LF, that value supersedes the Skill Area's LF.

The notation (specify) indicates that the skill may be learned multiple times. Each time the skill is learned, the player must specify a particular field of study. For example, when learning Dance, the character must specify the style of dancing, e.g., country, ballet, modern, break, ballroom, etc.

The notation (x, y, z) indicates that the skill may be learned multiple times, as per a (specify) skill. The only difference is that the fields of study are explicitly listed.

The notation [x, y, z] indicates that the skill includes training in every facet listed.

Active (1)

Awareness (2)	WIS
Camouflage (2)	INT, WIS
Disguise (2)	WIS, CLV
Diving	STR, END, INT
Equestrian	COR
Gymnastics	COR
Hide in Shadows (2)	COR, INT
Hypnosis (3)	WIS, CLV
Jumping	STR
Land Navigation (3)	INT
Observation (2)	INT, FOC
Pick locks (2)	INT, CLV
Pick pockets (3)	COR, CLV
Running	MOV
Mountain Climbing	STR, END, INT
Move Silently (3)	COR, INT
Sleight of hand (4)	COR, CLV
Sports (specify)	STR, END, WIL

Survival (2)

(Desert, Arctic, Ocean, Vacuum, Jungle, Urban, Deep Space, Zero G)

INT, WIS, CLV

Swimming

END, MOV

Tail / follow

WIS, CLV

Artisan (2)

Carpentry

INT, WIS

Dance (3)

INT, COR

(modern, metal, ballet, ballroom, classical, country, exotic)

Draw

INT, WIS, COR

Glass Blowing

INT, WIS

Magic

INT, CHR, CLV

Music Instrument

INT, COR, CLV

(specify instrument)

Paint

INT, WIS, CLV

Photography

INT, WIS, CLV

Plastic Working

INT, WIS

Sculpt INT, WIS, CLV
Sing CHR, INT
Welding INT, WIS

Bot Combat Skills (2)

Bot Melee (4) REF
[melee weapons, unarmed]

Bot Pilot (3) REF
[biped, quadped, multi-ped,
trackbot, hoverbot,
serpentine]

Direct Gunnery REF
[autocannon, ease,
particle, microwave, HE,
mass driver, projectile,
rocket & missile]

Indirect Gunnery (3) INT
[artillery autocannon,
artillery rocket & missile,
mortar]

Strategy (3) INT, WIS
[offensive, defense, supply]

Tactics INT
[bot, vehicle, air support,
indirect, siege]

Pilot (3) REF
[aerospace, rotor, rotary
wing, ornthinopter]

Vehicle Pilot REF
[wheel, track, hover]

Bot Technical (3)

Armor Smith (4) INT
[all]

Control Tech (4) INT
[cockpit, bridge, symbiotic,
robotic, AI]

General Mech INT

Impulse Mech, Bot INT
[biped, quadped, multi-ped,
serpentine, trackbot,
hoverbot]

Impulse Mech, Ground INT
[wheel, track, hover]

Impulse Mech, Flying INT
[thruster & wing, rotor,
rotary wing, ornthinopter,
vectored thrust]

Power Mech (5) INT
[all]

Scanning Mech (4) INT
[visuals, scanners, tracking
systems, dampers,
jammers, shields]

Stabilization Mech INT
[gyro, standard, monitor,
statistical, laser, SOTA]

Weapon Mech (4) INT
[autocannon, ease, HE,
mass driver, microwave,
particle, projectile, rocket &
missile, artillery
autocannon, artillery rocket
& missile, mortar]

Cultural (2)

Etiquette INT, WIS
Gamble WIS, CLV
Grooming ATR, CHR
Info Gathering (3) INT, CLV
Seduction ATR, CHR, CLV
Sports Rules (select) INT
Streetwise CHR, WIS
Style ATR, CHR
Wardrobe ATR, CHR

Interpersonal (2)

Argue FOC, WIL, CLV
Barter CHR, CLV
Deceive WIS, CLV
Inspire CHR, INT
Intimidation STR, CLV
Interrogation WIS, CLV
Leadership (3) CHR, WIS
Lie (3) INT, CLV
Manipulate INT, WIS, CLV
Motivate (3) CHR, WIS
Orate CHR, ATR
Organize INT, WIS
Persuasion INT, WIS, CLV
Teach (3) INT, CLV, CHR

Personal Combat (2)

Bayonet Fighting COR, SPD, REF

Disruption Weapons COR, REF

Energy Weapons COR, REF

[laser, ion, maser]

Shard Weapons COR, REF

[flechette, needle]

Grenades COR

High G Combat (3) STR, COR, REF

Heavy Beam Weapons COR, REF

[fusion, plasma, graviton]

Martial Arts: Aikido (3) REF, COR, SPD

Martial Arts: Boxing (3) END, REF, TGH

Martial Arts: Combat STR, SPD

Martial Arts: Hap Ki Do (3) FOC, COR, SPD

Martial Arts: Judo (3) COR, FOC, REF

Martial Arts: Kick Boxing (3) STR, COR, SPD

Martial Arts: Kung Fu (4) STR, FLX, COR,

SPD

Martial Arts: Self Defense (2) REF, COR

Martial Arts: Tae Kwan Do (3) REF, FLX, SPD

Martial Arts: Wrestling (3) STR, FLX, END

Melee Weapon COR, REF

(specify Design)

Paired Melee Weapons (4) COR, SPD, REF

(specify both Designs)

Particle Weapons COR, REF

[electron, proton, particle]

Projectile Weapons COR, REF

Rail Weapons COR, REF

Ramjet Weapons COR, REF

Tactics INT

[individual]

Thrown Weapon COR, STR

(specify design)

Weapon Specialization, COR

Melee (4) (specify both
Technology and Design)

Weapon Specialization,

Ranged (4) COR

(specify Technology and

either Pistols, Rifles,

Subguns, Support weapons)

Zero G Combat (3) FLX, COR, REF

Personal Technical (3)

Computer Tech INT

Comm Equipment Operation INT

Deep Space Navigation (5) INT

General Tech INT

Small Power Mech (5) INT

[all non-Bot system]

Robot Tech INT

Weapon Tech INT

(specify Technology)

Vehicle Mech (non-bot) INT

Zero G Tool & Vehicle

Operator (4)

INT, FOC

Sciences (4)

Aerodynamics INT, WIS

Aero / hydro dynamics INT, WIS

Aerospace dynamics INT, WIS

AI design INT, WIS

Animal Taming INT, WIS

Animal Training INT, WIS

Archeology INT, WIS

Architecture INT, WIS

Astronomy INT, WIS

Astrology (2) INT, WIS

Astrophysics INT, WIS

Biochemistry INT, WIS

Biology INT, WIS

Chemistry INT, WIS

Combat Engineer INT, WIS

Computer Hacking INT, WIS

Computer Science INT, WIS

Demolitions INT, WIS

Design INT, WIS

Ecology INT, WIS

Electrical Engineer INT, WIS

Electronics INT, WIS

Entomology INT, WIS

Field Medicine (2) INT, WIS

[CPR, first aid]

Fire Fighting INT, WIS

Forensic Science INT, WIS

Gemology INT, WIS

Geology INT, WIS

Gourmet Cooking INT, WIS

HazMat Containment INT, WIS

Hydrodynamics INT, WIS

Interstellar Navigation	INT, WIS
Language (Standard, Race)	INT, WIS
Law	INT, CLV
Meteorology	INT, WIS
Materials Science (5)	INT, WIS
Nuclear Physics	INT, WIS
Oceanography	INT, WIS
Paleontology	INT, WIS
Parapsychology	INT, WIS
Physics	INT, WIS
Programming (computer, robot, AI)	INT, WIS
Propaganda	WIS, CLV
Psychology [all races]	INT, WIS
Quantum Physics	INT, WIS
Sign language (Standard, Racial, Combat, Xeno)	INT
Sociology	INT, WIS
Structural Analysis [all structures]	INT
Surgery (5) [all procedures]	INT, WIS
Thermodynamics	INT, WIS
Veterinary Medicine [all animals]	INT, WIS
Xenologic Medicine (5)	INT, WIS, CLV

Media (2)

Act [recorded, live]	CLV, WIL
Anchor	CHR, ATR
Cameras [2D, 3D]	COR, INT
Editing (3) [visual, textual]	FOC, INT
Interview	CHR
Lighting technician	INT, WIS
Produce (3) [recorded, live]	INT, WIL
Photojournalism	INT, WIS, CLV
Public Speaking (3)	CHR, FOC
Report	CHR, ATR
Sound Tech	INT
Special effects (3) [recorded, live]	INT, CLV
Write [creative, media]	INT, CLV, CHR

Military Specialist Skills (3)

Airborne	END, COR, INT
Air Assault	REF, COR, INT
Astro-Assault	INT, WIS
HALO / HAHO	END, COR, INT
Mountain Assault	STR, END, INT
MOUT	SPD, FOC, WIS
Sapper	INT, WIS
SEAL (4)	END, INT
SERE (4)	END, INT, WIS
Sniper (4)	COR, FOC
Ranger (4)	REF, COR, INT

Skill Descriptions

Most skills listed in the skill list are self explanatory. Below are a number of skills which require special attention. These are described below.

Air Assault

Skill level may be added to all repelling and air assault related rolls.

Air Borne

Skill level may be added to all parachuting and sky diving rolls.

Astro-Assault

This skill covers the training of a soldier in how to properly board a hostile starship, space station, etc.. Skill level may be added to all zero G and vacuum survival related rolls. Character may add 3% per skill level to hit when conducting Astro-Assault operations.

Bot Melee Combat skill (LF: 4)

The pilot may use his martial arts bonuses from any style he knows when engaged in Bot melee combat. The maximum level that can be added is the BMC (Base Movement Class) of the Bot or his martial art level, whichever is lower.

Demolitions

Disarming a bomb typically requires three Difficult skill rolls. The first roll is the character's attempt to identify the type of bomb, the trigger mechanisms and any other relevant information about the bomb. The character will generally have a pretty good idea of whether or not he's failed this roll. Failure will not detonate the bomb. The second roll is to neutralize the detonation devices. That is, to keep the bomb from exploding. Failure of this roll could very well result in detonation, if the skill check is failed by 3 or more. If successful, the bomb will not detonate on its own. Finally, the last roll is to render the bomb inert. That is, prevent it from accidental detonation by jarring it, etc. Failure of this roll indicates that the bomb is still unstable and should be disposed of by a proper ordinance disposal unit.

[IMAGE 3 x 3] (skills Descriptions, Demolitions) disarming a bomb.

To set an explosive requires two skill checks. First, the character must make a Difficult skill check to determine the proper method to employ the explosive to deliver maximum damage. Success means the explosive will deliver rolled damage to the structure it is placed on. If the check is failed by less than 3, the bomb does half damage, otherwise it does no damage to the structure beyond superficial scorching. Second, a Medium skill check is to set the bomb. Failure indicates the bomb is not set. Failure will not detonate the bomb.

HALO/HAHO

High Altitude Low Opening and High Altitude High Opening. Air borne related skill. Adds 6% per level to all related rolls.

Hide in Shadows, Move Silently, Disguise, Tail / Follow, Pick Locks, Pick pockets, Sleight of Hand and Hypnosis

Using any of these skills successfully is considered a Difficult task. The difficulty should be modified by the surroundings and relevant circumstances. For example, hiding in shadows in a bright hallway would be an Impossible task (difficulty 40), or tailing an individual through a crowded sports stadium might be Very Difficult.

Martial Arts (Combat)

The character has been trained in the most practical fundamentals of martial arts. As the character progresses in skill, the character chooses his own curriculum. Thus, the character focuses his training on whichever aspects of martial arts he wants. Each level grants the character a +1 assignable bonus to maneuvers. This bonus may be added to any maneuver desired, as long as the maneuver does not have a “—” under it. Once the bonus is assigned to a maneuver, the character may not change it.

Melee Weapon Skills (Specify Design)

Character must specify design of the weapon, e.g., long sword, whip, dagger, etc.. LF for the skill is based on the design of the weapon and is listed in the Martial Arts Weapons section.

Mountain Assault

Skill level may be added to all mountain climbing and mountain survival related rolls.

MOUT

Military Operations in Urban Terrain. Include training in passive and active room clearing procedures, etc. Skill level may be added to all urban survival related rolls. Character may add 3% per skill level to hit when conducting MOUT operations.

Paired Melee Weapons Skill (Specify Both Design) (LF: 4)

LF is that of the most difficult weapon of the pair. Character must specify the design of the weapons being learned. Character is skilled at using the two specified weapon together. Note, the character cannot effectively use either weapon by itself, as the character has learned how the weapons work with each other, he is at a complete loss with only one. When armed with both weapons, the character receives one additional melee attack (with weapons only). All of the attacks may not be from the same weapon, each weapon must be used at least once to gain the bonus attack. Melee combat bonuses granted are the higher of the two weapons. For example, a character trained in Paired Weapons (Long Sword / Short Sword) would receive the following bonuses: Strike +3, Parry +4, Disarm +1, Break --, Knockout --, Kill +2, regardless of which weapon is used to perform the maneuver. Note, the character must have enough hands to hold both weapons at once, therefore a human could not learn Paired Weapons (Great Sword / Long Sword), because that would require three hands. Although an A'Ghuu could do this.

Ranged Weapon Skills (2) (Disrupters, Energy, Fox-Nov, Heavy Beam, Particle, Projectile, Rail Or Ramjet)

At first level in a weapon skill, the character has an ROF of 1 with all weapons covered by that skill. As a character improves in skill, his ROF with those weapons will increase. For every two levels of skill possessed by the character, his ROF will increase by 1. So, a character with a level 3 Projectile Weapons skill has an ROF of 2 with any projectile weapon. The ROF listed under each weapon is the maximum ROF that can be used with that weapon. So, a character with a level 3 Projectile Weapons skill can still only fire a sniper rifle once per turn (because the maximum ROF for a sniper rifle is 1).

Ranger

Skill level may be added to all survival and clandestine tactical operations related rolls. Skill level is added to HTH damage. Bonus HTH damage from the Ranger skill is not cumulative with the damage bonuses from SEAL or SERE skills, the character simply uses the highest bonus.

Running And Swimming Skills

Each level grants +1 m/t movement and +1 minute of duration when running or swimming.

Sapper

Skill level may be added to all related rolls anytime the character is employing tactical explosives.

SEAL

SEa, Air and Land. Skill level may be added to all diving related rolls. Skill level is added to HTH damage. Bonus HTH damage from the SEAL skill is not cumulative with the damage bonuses from Ranger or SERE skills, the character simply uses the highest bonus.

SERE

Survival, Evasion, Resistance, Escape. Skill level may be added to all wilderness survival related rolls. Skill level is added to HTH damage. Bonus HTH damage from the SERE skill is not cumulative with the damage bonuses from SEAL or Ranger skills, the character simply uses the highest bonus.

Sniper

Skill level may be added to all stealth, hiding and camouflage related rolls. Character may add 3% per skill level to his careful aim bonus. Character may *negate* the *Attacker Attempting To Remain Unseen* penalty. The penalty can be negated at 6% per level, e.g., a level 3 Sniper can reduce the AATRU penalty from 60% to 42%. Character can accumulate the Careful Aim bonus for every consecutive minute spent aiming at a target, to a maximum of triple the listed bonus.

Structural Analysis

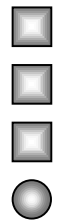
Skill grants character the ability to analyze a building, bridge, bunker or other structure to determine the optimum way to destroy it. Usually, this skill is employed with explosives, to determine the proper placing of explosives to minimize resources used and maximize destructive potential. But, this skill can be used for determining the "keystone" of any structure. Base chance to succeed is 3% x INT, +6% per level.

Weapon Specialization, Melee (specify Technology and Design) (4)

Character must specify design and technology of the weapon, e.g., force long sword. Design is the type of weapon, such as a long sword, whip or dagger. Technologies are: forced carbon/solid, vibro/chain, force, electron, sonic, laser, proton, fusion and neuro. Character has devoted an exceptional amount of time and effort into the study of the weapon, progressing very slowly through all the techniques for the weapon. The character receives the listed bonuses for the appropriate melee weapon skill. The character receives an additional melee attack with the weapon every even level (instead of every third level), e.g., at level 2, 4, 6, etc. The character also receives a +1 bonus to any facet of his weapons training, e.g., the character may add a +1 bonus to Strike, Parry, Disarm, etc. This bonus is permanent once it has been assigned. The character receives this bonus every odd level.

Weapon Specialization, Ranged (4) (specify Technology and either Pistols, Rifles, Subguns or Support)

Specialization is done by technology (disrupter, laser, maser, flechette, needle, fusion, plasma, graviton, electron, proton, particle, projectile, rail, ramjet) and weapon category (pistols, rifles, subguns and support weapons).



Pistols

This covers the use of the holdout, light and heavy pistol. Each level of specialization will add 3% to the character's chance to hit. In addition, it will allow the character to use his weapon more efficiently. Pistol specialization allows the character to raise the weapon's ROF by +1 per 2 levels, to a maximum of 3 above the listed maximum ROF. Specialization is treated as a completely new skill. So, a character might have Projectile weapons 3 and Weapon Spec, Pistols (Projectile) 2, thus granting a +18% to hit and ROF 1 for his basic skill, a +6% to hit and a +1 ROF for his specialization skill.

Rifles

This covers the use of the rifle, assault rifle, sniper rifle and shotgun-type weapons. Each level of specialization will add 3% to the character's chance to hit. Rifle specialization allows the character to increase RC by +2 every level. Specialization is treated as a completely new skill. So, a character might have Rail weapons 4 and Weapon Spec, Rifles (Rail) 2, thus granting a +24% to hit for his basic skill, a +6% to hit and +2 RC for his specialization skill.

Subguns

This covers the use of the machine pistol, carbine and submachine gun. Each level of specialization will add 3% to the character's chance to hit. Subgun specialization allows the character to raise the weapon's RC by +1 per level, to a maximum of 8 above the listed RC. Specialization is treated as a completely new skill. So, a character might have Flechette weapons 3 and Weapon Spec, Subguns (Flechette) 2, thus granting a +18% to hit for his basic skill, a +6% to hit and +1 RC for his specialization skill.

Support Weapons

This covers the use of the SAW, support rifle and tripod weapons. Each level of specialization will add 3% to the character's chance to hit. Support specialization allows the character to increase the number of rounds that hit from a burst by his skill level. Specialization is treated as a completely new skill. So, a character might have Energy weapons 5 and Weapon Spec, Support (Energy) 4, thus granting a +30% to hit for his basic skill, a +12% to hit and +4 to the number of rounds that hit from a burst.

Skill Focus

If a player or the referee so chooses and there are areas of specialty for a given skill, the player can opt to have his character focus on one of those areas, e.g., with the dance skill, the character Focuses on Modern or Ballroom or Country, etc.. The character can be considered to be 2 levels higher than his actual skill when operating within his Focus. The character is considered to be 2 levels lower than his level (minimum of 1) for areas outside his Focus.

Skill Checks and Ability Checks

Skill Checks

A Skill Check is performed when a character attempts to perform an action which falls under some area of training the character has received. To perform a Skill Check, assign a difficulty to the task, listed below. Next, roll d10. Add this to the character's skill level and appropriate ability score (specified in the Skill description; if several abilities pertain to the skill, average the scores). If the sum is more than the difficulty, then the character successfully performs the action. Making a skill check with a skill the character does not possess is done with a +3 penalty. Skill checks are written in the format: Difficult (skill name) check, to indicate a skill check and its difficulty.

[After traveling cross-country in their hover truck, Ed and Neb encounter some extremely rough terrain and end up damaging one of the fan blades on their vehicle. After wrestling the vehicle to a halt, Ed dismounts and attempts to repair the damaged blade. Ed's Vehicular Technician skill level is 3 and is repairing severe damage to an impulse system, so it takes him $45 - 2/\text{level} = 39$ minutes to effect repairs. At the end of this time, he makes a skill check. The relevant ability score for Vehicle Technician is INT. Since Ed's INT score is 7, his base skill check is $7 + 3$, or 10. Rolling a d10 and getting a 8, Ed's skill check is an 18. The referee determines that repairing the blades is a Difficult task (17), that Ed is partially equipped (+1) and in a field environment (+1). So the final modified difficulty of the skill check is 19. Ed's skill check of 18 is less than this, so after 39 minutes of banging on the blades with a hammer, he still hasn't managed to repair the damaged vehicle.]

Ability Checks

An Ability Check is performed when a character attempts to perform an action for which the character has no training, or for which there is no appropriate skill. To perform an Ability Check, assign a difficulty to the task, listed below. Next, roll d10. Add this to the appropriate Ability score (if several abilities pertain to the action, average them) and add the character's Feat Mod (derived from his WIL). If the sum is more than the difficulty, then the check is a success. Ability checks are written in the format: Difficult (Ability) check, to indicate an ability check and its difficulty. Occasionally, several abilities are listed in parenthesis. If the abilities are separated by a comma, this indicates the abilities are to be averaged. If the abilities are separated by a slash, this indicates the higher ability is to be used.

Note, ability checks are inherently more difficult to make than skill checks since there is no skill level added in. This is because a skill check is a check against both the character's natural ability at a task combined with his training. Whereas an ability check is simply a check against the character's natural ability to succeed.

Task Difficulty	Target
Trivial	4
Simple	7
Moderate	13
Difficult	17
Very Difficult	22
Impossible	28

Difficulty Modifiers	Mod
Well equipped	-2
Properly equipped	+0
Partially equipped	+1
Unequipped	+2
In field environment	+1
Under fire	+3
Never done it before	+2
Never done it, but seen it	+1
Unskilled	+3

[Neb is replacing a damaged Grav Pod on his hovertruck. This is a Moderate task. Neb is at home and working in his garage, which he spent considerable money towards outfitting with tools and equipment. The Referee determines that Neb is Well Equipped, thus the modified difficulty of the skill check is 11.]

Opposed Skill Rolls & Opposed Ability Checks

An opposed roll is conducted whenever multiple people are competing with each other. To make an opposed roll, both characters make the skill or ability check as normal. However, instead of comparing the result to a difficulty score, their results are compared with each other. The person with the higher score wins the contest. Ties result in a stalemate at the end of the turn. The contest continues the next turn.

[For example, two pilots are trying to out maneuver each other in a dog fight. Both pilots make a skill roll using their piloting skill. The pilot that gets the higher score wins and moves into his desired position.

Another example, two spacers are arm wrestling in a local bar. To determine who wins the bout, they both make STR ability checks. The spacer that gets the highest score wins the bout.]

Luck

A character may "spend" his LCK (luck) score. Each luck point spent may be used as a +10 bonus for to-hit rolls and other percentage rolls, or as a +2 bonus to Attack/Defend in melee, +2 bonus to weapon damage, or as a +1 bonus to skill & ability checks. Luck may be spent to influence other die rolls as well. The referee should use the above as a guideline.

Die rolls that can be influenced are any made by the character or another character, if the outcome of that roll directly affects the character spending the Luck. Additionally, a player may opt to spend a LCK ability point to gain an additional die roll. These points must be spent prior to the die roll, if it is to be spent at all. The character may then make his roll, plus an additional roll for each luck point spent, and take the best roll as his result.

All characters' LCK scores will return to normal at the end of the adventure, or in 1 weeks time, whichever comes first. The bonuses conferred by a character's LCK score are based on the character's current LCK score.

Character Improvement

Characters may improve skills, learn new skills and improve ability scores. Skill points may only be spent to improve or learn skills. Ability Improvement Points may only be spent to improve ability scores. Experience points may be used to improve ability scores, skills or learn new skills. Psionic abilities are treated as skills for the purposes of character improvement.

Ability Improvement Points (AIP)

When a character makes a successful ability check, the character earns AIP (equal to the difficulty value) for the purposes of improving that ability only. The cost to improve an ability score is equal to the next level multiplied by 50. This may be paid with AIP, XP or both. Ability scores may be improved by a maximum of 2 points. No ability score can be raised above a 10 through the use of XP or AIP.

Skill Points (SP)

Skill points are earned when a character uses a particular skill. SP may only be used to improve the skill generated them. SP awards are usually equivalent to the character's Natural Aptitude in that skill. In addition, every time a character makes a successful skill check with a skill, that character receives a number of SP equal to the difficulty of the skill check.

Experience Point Multiple (XPM)

Every character has an Experience Point Multiple (XPM). $XPM = 105 / (INT + FOC)$, round .5 up.

Improving and Learning Skills

Improving a skill costs a number of XP or SP equal to: $New\ Level \times LF \times XPM$. Learning a new skill altogether is $XPM \times LF \times 3$. A skill's Learning Factor (LF) is effectively +1 (penalty) if proper learning facilities are unavailable at the time the skill is learned. Sciences require classrooms, laboratories and teachers. Combat and Active skills require only XP/SP and proper equipment to practice. Technical skills only require classroom environments for the initial purchase of the skill. After that, additional levels require only XP/SP and proper equipment to practice.

Skill Limits

The limit to the number of possible skills a character can learn is $3 \times INT$. After this limit is reached, character must make a Moderate (INT) check to pick up a new skill (along with paying XP and meeting all other requirements to learn the skill). If this check is failed, the character retains the XP that would have been spent.

[Neb is attempting to learn Robot Technician at level 1. His INT score is 8 and he already has 24 skills. To learn a 25th skill, he makes a Difficult (INT) check. He rolls a 7 and adds his INT, giving him a 15. This is a success, so Neb is able to learn Robot Technician at level 1. He must pay the XP requirement to purchase the skill as well as take a course on Robot Technician (required when initially learning a technical skill).]

Ed, the A'Ghuu, on the other hand, is level 6 in Bo Staff and wishes to improve it to level 8. This will cost him $8\ (new\ level) \times 2\ (Bo\ Staff\ LF) \times 5\ (XPM, which\ is\ located\ on\ his\ character\ sheet) = 80\ Skill\ Points$. Ed already has 7 skill points in Bo Staff, so he only needs to spend $80\ (SP\ requirement) - 7\ (Skill\ Points\ already\ acquired) - 18\ (Ed's\ Natural\ Aptitude\ in\ Bo\ Staff) = 55\ XP$.]

Exceptional Skill Levels

After a character has reached a level equal to the average of the skill's pertinent abilities (round down), the character has reached his limit of understanding in that field. To improve the skill any further, the character must make a Moderate ability check (using the pertinent abilities for the skill) to advance to the next level, and for every level improvement thereafter. This is because the character is 'forging new paths' in his field or attempting to grasp impossibly difficult concepts. For each attempt made, the PC must expend the required number of XP to improve the level (regardless of success or failure). This check receives a modifier based on the number of times the character has already attempted to improve this skill level. The modifiers are listed below.

1st attempt	+0
2nd attempt	+1
3rd attempt	+2
4th attempt	+1
5th attempt	pattern repeats

[Neb is attempting to improve his Demolitions skill. He is currently level 7. The pertinent abilities for Demolitions are INT and WIS. Neb has an INT of 8 and a WIS of 6. Thus his maximum skill level is 7 (the average of the pertinent abilities). For Neb to improve his Demolitions skill beyond level 7, he must make a Moderate (INT, WIS) check. Neb pays the required XP and rolls the die. He gets a 4, adding 7 gives a 11. A Moderate check requires at least a 13. So, Neb fails to improve his skill to level 8. His next attempt will cost XP again, and receive a +1 bonus to the ability check.]

Experience Points (XP)

Experience Points (XP) may be used to "fill in the gap" when it comes to spending SP and AIP. For example, if a character needs 60 SP to raise a skill level, and only has 45, then he may spend 15 XP to make up the difference and raise the skill level. Likewise, if a character needs 400 AIP to improve an ability score, and only has 250, then he may spend 150 XP to make up the difference and raise the ability score. Also, should a character wish to improve or learn a skill or ability that has 0 SP or AIP, the cost may be paid entirely from XP.

Experience points are earned when a character performs an exceptional feat that does not fall within a particular skill, does something of exceptional note-worthiness or an elaborate plan is employed with at least partial success. Below are listed some of the most common reasons for awarding experience points. Note, there are four columns. The first column describes typical reasons for awards. The next three indicate varying amounts of awards. These represent awards that are recommended based on your campaign style. If the characters are to advance slowly, the first column should be used. If the characters are to advance quickly, the last column should be used. Typically, the center column should be used as this provides for a reasonable level of advancement.

Common XP awards

Event	Low Award	Normal Award	High Award
Entering Combat	5	10	30
Each opponent Neutralized or Killed	5	10	30
Avoiding Combat	15	30	90
Preventing henchmen or NPC from dying	7	15	20
Recovering or reviving a dead PC	8	15	35
Dying	10	20	90
Executing an elaborate plan	15	30	90
Executing a simple plan	5	10	20
Obtaining vital information	10	20	50
Generating large rewards for the group	10	25	70
Meeting a primary mission goal	20	40	100
Meeting a secondary goal	10	20	40
Role-playing & staying in character	5 – 15	10 – 30	30 – 70
Successful completion of the mission	30	60	250

"Ok. We're using the flare.
We promise."

Natural Talent

Each skill has a set of pertinent ability scores. These are the primary abilities for the skill. While the abilities are used when performing skill checks, they also give a general indication of how naturally inclined a character is at the skill. The character is considered to already have a number of skill points equal to the sum of the pertinent ability scores for each skill. This applies for every level. For example, a character with a REF, COR and INT of 6, 7 and 9 has the Ranger skill at level 1. For purposes of improving to level 2, he is considered to already have $(6 + 7 + 9) = 22$ skill points. Now, say the character has made it to level 2. Once again, he is considered to already have 22 skill points for purposes of going to level 3.

Character Level

Used to tailor an adventure or campaign's difficulty, or to specify the experience range of characters a campaign or adventure is designed for. Character level is calculated as follows:

- Base of zero;
- Add 1 per ability of 10
- Add 2 per ability of 11 or more
- Add 1 per 10 skills the PC knows
- Add 1 per skill level 5 or higher

A typical starting character has a Level of 2 - 3.

Alternate Improvement System

Purpose is to simplify level and skill advancement for characters. This also has the additional benefit of reducing the amount of calculations required for skill advancement.

Character Level

All Characters start out Level 1. To go up a level, a character must earn a number of XP (which are no longer "spendable"). The number of XP required is equal to 25, multiplied by XPM. This value then doubles to reach the next level. For example, multiply 25 by a character's XMP (normal is 10), this produces 250 XP required to reach level 2. The character must then earn 500 to reach level 3, 1,000 for level 4, 2,000 for level 5, etc.

Skill Points

When characters advance levels, they are granted Skill points. The number of Skill Points (SP) granted is $3 \times \text{INT}$. These SP are spent to improve skill levels and buy new skills. It costs $(1 \times \text{skill LF})$ to raise a skill between levels 1 and 5, by 1 level. It costs $(2 \times \text{skill LF})$ to raise a skill between levels 6 and 9, by 1 level. Thereafter, it costs $(4 \times \text{skill LF})$ to raise a skill level by 1. It costs $(1 \times \text{skill LF})$ to gain a new skill at level 1. No skill may be advanced more than 1 level at a time.

When using the Alternate Improvement system, DM's may wish to award 3-5 SP (plus INT Modifier) at the end of major adventures. Skill Limits and Exceptional Skill Levels can still be used in conjunction with this alternate character improvement system.

[IMAGE 6 x 4] (Psionics) Display of psionic power. Say, from an A'Ghuu. This would be an opportunity to use lots of blending and morphing, swirlies, and other nifty thingies like that.

[Neb cursed as he looked back at Sherina. She'd stopped running and was standing at the ledge staring intently across the bridge. He yelled for her, but she did not seem to notice. He was getting impatient and could sense Ed behind him motioning for them to hurry. The cavern was beginning to rumble and shake and still Sherina hadn't moved. Neb cursed again and yelled for Ed to come back as he unslung his rifle. Ed came running back with two heavy flechette pistols drawn. Neb slapped a fresh power mag into his rifle and took up a position aiming on the opening in the far side of the cavern. The shaking was getting worse and rocks were starting to fall from the cavern roof. Sherina seemed to almost be glowing with light, and Neb rubbed his eyes. The horde appeared in the entrance of the far side of the cavern and Neb heard Ed squeeze off several shots with his shredders. The ground was shaking uncontrollably now and he fumbled with his rifle. When he looked up again, large stalactites were falling from the roof on the far side of the cavern and piercing the foul creatures chasing them. More stalactites were falling on the rope bridge that separated them from the horde. After a long minute, the horde was all but crushed under rock and the bridge was gone. The ground stopped shaking and all that could be heard were the echoes rolling down the various caverns and tunnels from the crashing rock. Sherina slumped to her knees, then stood back up. Looking tired, she joined Neb and Ed. "Let's get out of here," she said.]

Psionics

Learning

All the character races are eligible for psionics. To determine if a character is psionic: add up all the character's Mental Attributes, and divide by 4. This is the percentage chance the character is a psionic. If a character is psionic, roll d4. This is the number of levels of psionic skills the character starts with. They may be spread across several skills, or all put into the same skill. Psionic skills are extremely difficult to improve. All psionic skills the character started with have an LF of 5. New psionic skills can be learned, but they have an LF of 6.

"Watching television and Televiewing are NOT the same thing."

P Rating

Psionic characters have a "P" rating. This rating is defined as the highest level of psionic skill the character has. Socially, a character's P rating can be very important, as it can preclude a character from being offered certain psionic related jobs if it is too low, similar to a security clearance, and having a high P rating is similar to having a permit to carry a gun in today's world – not uncommon, but it makes some people nervous none the less. The higher a character's P rating, the more psionically powerful he is and the less people understand his capabilities. Hence, there is a certain amount of distrust that is associated with high P ratings. A character may attempt to use a number of psionic talents each turn equal to his P rating.

Using Psionics

Using psionic skills is not easy. Next to each skill is listed an ability score, a skill check difficulty level and a general description of the skill. To use a skill, the character must make a skill check against this level of difficulty. The difficulty of the skill check can be modified depending on the feat. Psionic characters receive a +1 bonus to their skill check for every consecutive attempt to employ the same psionic skill. Psionic characters may employ psionics a number of consecutive turns equal to their END score. After which they must spend an equal number of turns without employing psionics.

Psionic Combat

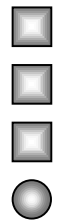
All characters have a number of psychic hit points equal to the sum of their mental attributes. Psionic hit points are replenished completely after a full rest period spent asleep. When a character's psionic hit points are depleted, the character must make a Very Difficult (Mental Acuity) check to avoid dying. If the check is successful, the character is reduced to a comatose state, but remains alive. Non-psionic characters receive a +3 bonus to make this check. Non-psionic characters have a natural defense against psionic attacks equal to their chance for psionics, i.e., $\frac{1}{4}$ the sum of their mental attributes. Psionic characters have a concentrated defense against psionic attacks equal to $\frac{1}{2}$ the sum of their mental attributes. This is the percentage chance the attack can be ignored.

Psionicist Occupation

This occupation is available only to characters that roll natural psionics. Characters that roll natural psionics have the option of choosing the Psionicist Occupation. This Occupation grants the character 2d4 additional levels of psionic skills and 15 levels of regular skills (with no level limit). All psionic talents are 1 level of difficulty easier for a Psionicist. After character generation, all additional normal skills learned by the character have an LF value 1 higher than listed.

Psionic Devotions

Psionic talents can be divided into five groups called Devotions. The Devotions are Curative, Sensory, Manipulative, Combat and Metabolic. Characters with the Psionicist occupation may designate a particular Devotion as his chosen field of study. All psionic talents in the character's Devotion are 1 LF easier to learn and receive a +2 bonus to skill checks. Talents outside the character's Devotion receive a -2 penalty to skill checks. Following is the list of Devotions and the psionic talents included in each.



Curative Psionics

Coax Memory
Ease Fatigue
Heal
Metabolic Harmony
Purify
Soothe Psyche

Sensory Psionics

Animal Telepathy
Aura Reading
Audiokinesis
Blind / Illuminate
Empathy
Invisibility
Phantom projection
Phobia Detection
Read Object
Read Area

Sixth Sense
Telepathy
Xeno Empathy
Xeno Telepathy

Manipulative Psionics

Aquakinesis
Audiokinesis
Dream Roam
Electrokinesis
Foist Intellect
Levitate
Lumikinesis
Nucleokinesis
Pyrokinesis
Teleport
Teleport Another
Telekinesis

Teleprojection
Televiewing
Terrakinesis
Thermokinesis
Thought Control
Vaporkinesis

Combat Psionics

Electrokinesis
Gelid Beam
Rip Psyche
Jejune Wave
Lethiferous Blast
Omphalos Vacuum
Pernicious Word
Psychic Vampirism
Psychic Drain

Metabolic Psionics

Endure
Empathy
Effulgence
Enervate
Foist Intellect
Metal Skin
Miasmatic Presence
Metabolic Control
Memory Shape
Memory Void
Paralysis
Psychic Symbiosis
Psychic Drain
Pain Amplification
Strength
Shape Change
Thought Control
Xeno Empathy

Psionic Talents

The following is an alphabetical list of all known psionic talents along with their effects and usage. Psionic talents other than those listed have been encountered around the galaxy, but unique talents have not been listed.

Animal Telepathy (FOC, Moderate)

Read basic thoughts and memories of animals.

Aquakinesis (WIL, Difficult)

To control water. Quantity: 125 gallons per level.

Audiokinesis (WIL, Difficult)

To control sound, including muting and amplification. Volume: 25 dB per level.

Aura Reading (FOC, Simple)

Read the personality and general morals of another individual.

Blind (FOC, Moderate)

To cause another person to temporarily undergo psychosomatic blindness. Can also be used to cure psychosomatic blindness induced by someone else. Duration: 3 turns, +1 turn per level.

Coax Memory (MOT, Moderate)

Allows psionicist to coax form information from the target's memory. If the target is willing, there is a +2 bonus to the skill check. This can also be used, with a -2 modifier, to help the target recall repressed or forgotten memories.

Dream Roam (WIL, Moderate)

Character is able to enter and modify the dreams of other individuals.

Ease Fatigue (MOT, Moderate)

Reduces fatigue, reduces sleep requirement for target character by 50% that night.



Effulgence (MAG, Moderate)

To character seems to give off a sense of strength, wholesomeness, goodness, friendship, etc. (+2 INT, WIS, CHR, ATR, LCK). Duration: 2 minutes plus 1 minute per level.

Electrokinesis (WIL, Difficult)

To control electricity. 120 V at 15 Amps per level. Attacks as an electric weapon. Damage is 2d10 + stun. Each level increases damage by 1d10. Stun duration is 2d6 turns. Stun duration is increased by d6 per level.

Empathy (FOC, Simple)

To be able to read other people's emotions.

Endure (MOT, Difficult)

To be able to ignore the effects of prolonged lack of oxygen, sleep, food, pressure, cold, heat, blood loss, etc. Duration: 10 minutes per level.

Enervate (MEN, Moderate)

To cause another person to be deprived of their strength and focus, the target loses track of what he was doing and begins to suffer from feelings of worthlessness and inadequacy (-2 all physical attributes). Duration: 2 minutes plus 2 minutes per level.

ESP (FOC, Moderate)

Extra Sensory Perception; detecting objects, people, etc. This skill level may be added to Awareness skill rolls. ESP acts as a passive Awareness skill. That is, the game master should make ESP checks for the character whenever there is danger near, and notify the character if he detects it.

Fly (MOT, Difficult)

The character is able to fly through the air at up to 3x sprint speed, effortlessly. Duration: 1 turn per level.

Foist Intellect (MEN, Moderate)

To character forces his intellect upon the target, similar to possession. Target's INT is a negative modifier on the skill roll.

Gelid Beam (FOC, Moderate)

The character shoots a beam of freezing cold (range: 30 m + 5 m per level; d10 damage per level). Number of attacks: 1 per level.

Heal (MOT, Difficult)

Restores hits equal to the skill roll. The skill roll must be successful for any hit points to be restored.

Invisibility (WIL, Difficult)

The character creates a field around himself that deflects light around the character, thus allowing the character to be rendered invisible. Duration: 4 turns + 1 per level.

Jejune Wave (MEN, Moderate)

The target's mind is clouded (-2 all mental attributes). Duration: 2 turns + 2 per level.

Lethiferous Blast (FOC, Difficult)

To blast the target with psionic energy (range: 20 m + 2 m per level; d6 damage per level. Damage may be lethal damage or psychic damage.

Levitate (WIL, Difficult)

To causing one's body to float in the air. Duration: 5 turns per level.

Lumikinesis (WIL, Difficult)

To control light. Brightness: 100 lumens (Lm) plus 20 per level. (1 candle equals abc Lm; a 75 watt light bulb equals xyz Lm; a spot light equals ??? Lm.)

Metabolic Control (WIL, Moderate)

Control one's own body, accelerate healing, feign death, etc. Healing rate can be doubled for 1 day per level. Death can be successfully feigned for a number of minutes equal to 5 x level.

Metabolic Harmony (MOT, Moderate)

Harmonizes the target's entire body with itself. Grants the character a +2 bonus to all ability checks for the next 24 hours.

Metal Skin (WIL, Moderate)

To cause one's skin to become as hard as steel without inhibiting movement (TGH is increased by 1+ skill level). Duration: 1 minute per level.

Memory Shape (FOC, Difficult)

Character can change the target's memories.

Memory Void (FOC, Moderate)

Character can temporarily erase the target's memories.

Miasmic Presence (WIL, Moderate)

To cause anyone within 30 meters of the character to suddenly suffer an overwhelming feeling of dread and fear of the character (-8 WIS). Duration: 2 minutes plus 1 minute per level.

Nucleokinesis (WIL, Difficult)

To control molecules, cannot induce nuclear reactions, but can create & destroy molecular bonds.

Omphalos Vacuum (FOC, Moderate)

Character focuses on the target's psionic center and forcefully sucks energy from the target (range: 10 m + 2 m per level; d8 psychic damage per level).

Pain Amplification (FOC, Difficult)

All damage the target has taken is doubled. The extra damage is bruise damage and will vanish normally.

Paralysis (FOC, Difficult)

To cause another person to become paralyzed temporarily. Duration: 3 turns, +1 turn per level.

Pernicious Word (MAG, Difficult)

As the character speaks to the target, the target reacts as if everything the character says is true. Duration: 1 turn per level.

Phantom Projection (WIL, Difficult)

To project an image of someone or something elsewhere. Distance: 100 m + 50 m per level.

Phobia Detection (FOC, Moderate)

Character can detect the target's greatest fears and play upon them.

Pyrokinesis (WIL, Difficult)

To control fire, including creating and extinguishing it. Size: 8 cubic feet per level. Temperature: 100 degrees Celsius plus 15 per level.

Psionic Focus (MOT, Moderate)

Character can heal 2 hit points per psychic hit point sacrificed.

Psychic Drain (FOC, Moderate)

Character does d4 psychic hit points of damage per level to the target. Character is healed a number of psychic hit points equal to the damage done to the target.

Psychic Symbiosis (WIL, Moderate)

Character is able to link to a willing recipient. The two combine their total physical and psychic Hits for all purposes. When the bond is severed, the remaining hits are divided equally between the two characters.

Psychic Vampirism (MOT, Moderate)

Character does d6 hit points of damage per level to the target. Character is healed a number of Hits equal to the damage done to the target.

Purify (MOT, Difficult)

Cures poisons, sicknesses, etc. Character will start to recover immediately, and be fully health in d10 days. If the duration of the poison, sickness, etc. is less than this, then the character will recover in d10 minutes.

Read Area (FOC, Moderate)

To be able to detect the strongest emotions that were in an area in the past.

Read Object (FOC, Simple)

Character can read the emotions and feelings of the last person to hold or use an object.



Rip Psyche (FOC, Moderate)

To cause another person to suffer extreme psychosomatic pain temporarily. Target takes d10 psychic hit points of damage per level. Damage vanishes after duration has lapsed. Duration: 3 turns, +1 turn per level. Range is line of sight.

Shape Change (MOT, Difficult)

To physically change shape into something else. The character may change his mass by -50% up to +200%. Ability scores and psionics remain unchanged. Duration: 2 minutes per level.

Sixth Sense (FOC, Simple)

To detect when something unusual is about to happen, or when one is being watched. Chance of success: 75 % + 3 % per level.

Soothe Psyche (MOT, Moderate)

Restores psychic hits equal to the skill roll. The skill roll must be successful for any psychic hit points to be restored.

Strength (WIL, Moderate)

To increase one's STR by up to 2x skill level. Duration is a number of minutes equal to the character's skill level. Duration: 1 minute per level.

Telekinesis (WIL, Difficult)

To move things with the mind. Total mass movable is 15 kg per level.

Telepathy (FOC, Simple)

To be able to read and transmit thoughts.

Teleport (MOT, Difficult)

To physically displace oneself from one place to another along with everything carried. Distance: 150 m + 100 m per level.

Teleport Another (MOT, Difficult)

To teleport another person somewhere. Distance: 75 m + 50 m per level.

Teleprojection (WIL, Difficult)

To project an image of oneself somewhere. Distance: 300 m + 100 m per level.

Televiewing (FOC, Moderate)

To leave one's body to travel to another local for observational purposes. Distance: 1 km + 1 km per level.

Terrakinesis (WIL, Difficult)

To control earth and rock. Quantity: 80 kg plus 20 per level.

Thought Control (MOT, Moderate)

To be able to change another person's thoughts, induce nightmares, emotions, make them think things, etc..

Vaporkinesis (WIL, Difficult)

To control wind and gasses. Force: 30 kph + 10 kph per level.

Xeno Empathy (INT, Difficult)

To be able to read the emotions of aliens. A successful check will provide the character with knowledge of the alien's current emotional state.

Xeno Telepathy (INT, Difficult)

To be able to read and transmit thoughts. Only a single skill check is required to establish a "conversation link" with an alien.

[IMAGE 6 x 4 ½] (movement) A mixed group of adventurers hiking across country. They are armed, but their weapons are slung or holstered. They carry rucksacks of various styles and sizes, along with other items.

[They'd been traveling for several days now. Neb glanced back at Grwlrr. The big graff had been having a time of it traveling over the rough terrain with them. Only his tremendous willpower had allowed him to keep up with the pace the group was setting. They would not be able to continue like this for long, eventually they'd have to slow down and rest.]

Movement

Running

Humans can run a number of minutes equal to 2.5 multiplied by their END score. Ferrites can run for a number of minutes equal to 2 multiplied by their END score. Slen Boraka can run for a number of minutes equal to 3.5 multiplied by their END score. A'Ghuu can run for a number of minutes equal to 3 multiplied by their END score. Graff can run for a number of minutes equal to 2 multiplied by their END score. Voix can run for a number of minutes equal to 10 multiplied by their END score. Meylor can run for a number of minutes equal to 1.5 multiplied by their END score. Lyandithates can run a number of minutes equal to 10 multiplied by their END score.

Sprinting

Humans can sprint a number of turns equal to 0.25 multiplied by their END score. Ferrites can sprint for a number of minutes equal to 0.125 multiplied by their END score. Slen Boraka can sprint for a number of minutes equal to .5 multiplied by their END score. A'Ghuu can sprint for a number of minutes equal to 0.4 multiplied by their END score. Graff can sprint for a number of minutes equal to .5 multiplied by their END score. Voix cannot sprint. Meylor can sprint for a number of minutes equal to 0.25 multiplied by their END score. Lyandithates cannot sprint.

Cross Country

Humans move at an hourly rate equal to $\frac{2}{3} \times \text{END}$ kilometers per hour. Ferrites move at an hourly rate equal to $\frac{2}{9} \times \text{END}$ kilometers per hour. Slen Boraka move at an hourly rate equal to their END kilometers per hour. A'Ghuu move at an hourly rate equal to $\frac{4}{5} \times \text{END}$ kilometers per hour. Graff move at an hourly rate equal to $\frac{8}{9} \times \text{END}$ kilometers per hour. Voix move at an hourly rate equal to $\frac{2}{3} \times \text{END}$ kilometers per hour. Meylor move at an hourly rate equal to $\frac{2}{3} \times \text{END}$ kilometers per hour. Lyandithates move at an hourly rate equal to $\frac{1}{2} \times \text{END}$ kilometers per hour.

Swimming

All characters can swim at $\frac{1}{2}$ their Run in m/t. Characters can swim a number of minutes equal to $\frac{3}{4}$ the number of minutes they can run.

Race	Walk	Jog	Run	Sprint	Cross Country	Swim
Human	1	2	3 (2.5)	3.7 (1/4)	2/3	1.5 (1.875)
Ferrite	1/3	1	2 (2)	2.5 (1/8)	2/9	1 (1.5)
Slen Boraka	2/3	2.5	4 (3.5)	4.5 (1/2)	1	2 (2.625)
A'Ghuu	1.2	2.3	2.8 (3)	3.3 (.4)	4/5	1.4 (2.25)
Graff	1.3	2.1	5.1 (2)	7.4 (1/2)	8/9	2.55 (1.5)
Voix	1	2.5	3 (10)	n/a	2/3	1.5 (7.5)
Meylor	1	1.5	2.4 (1.5)	3.1 (1/4)	2/3	1.2 (1.125)
Lyandithate	1/2	1	1.2 (10)	n/a	1/2	.6 (7.5)

Walk, Jog, Run, Sprint and Swim are multiplied by MOV and give the number of meters per turn. Values in parenthesis are multiplied by END and give the number of minutes the activity can be maintained. Cross Country is multiplied by END and gives the number of kilometers per hour.

[IMAGE 6 x 2 ¼] (encumbrance)

[Neb would never have agreed to taking that aristocrat's brat along, if he could have avoided it. As it was, he was having difficulty deciding whether to berate the kid, or laugh at him. His "protégé," as the contract had called him, stood before him wearing full plate armor and a fully loaded combat helm. The kid had put on an oversized rucksack that was packed with Space knows what. Over one shoulder he'd slung the biggest jet-rifle Neb had ever seen this side of the galaxy. He wore two crossed bandoleers of magazines for the jet-rifle along with a large holster on each hip. The kid had taken a shoulder holster and somehow managed to rig it to his LBE and rucksack and it looked like he'd crammed the ship's EMP stunner into it. Neb could see three defensive screens hooked to the kid's belt. There were two shin powerpacks, two thigh powerpacks, two forearm powerpacks, two bicep powerpacks and a backpack strapped to his body. He had a large sonic knife strapped to the inside of one leg and a multi-tool on the other. The kid had literally staggered from the armory when he stepped into the hall. He could barely move with all that crap hanging off him, thought Neb. The guild would pay for this treachery.]

Encumbrance

Completely unencumbered (carrying less than his STR, in kg), a character's MOV score is increased by 1 point. A character can comfortably carry 3x his STR score, in kilograms. Carrying more than 3x STR will cause the character to move more slowly and be less effective in combat. The character will also fatigue faster and require more food and water. If, due to encumbrance, a character's MOV score falls below 0, the character is unable to move more than 1 meter every other turn.

Load	END	COR	SPD	MOV	WILL	FOC	CHR	
<- 1x				+1				
<- 3x				+0				
<- 4x				-1				
<- 5x		-2	-1	-2				No sprinting
<- 6x ☹	-1	-4	-2	-4			-1	No running or sprinting
<- 7x ☹☹	-1	-6	-3	-6	-1	-1	-1	No jog, run or sprint
<- 8x ☹☹☹	-2	-8	-4	-9	-2	-2	-2	No jog, run or sprint
<- 9x ☹☹☹☹	-2	-10	-5	-12	-3	-3	-2	No jog, run or sprint
				☹	Character fatigues at 2x normal rate			
				☹☹	Character fatigues at 3x normal rate			
				☹☹☹	Character fatigues at 4x normal rate			



[IMAGE SPLASH 8 ½ x 11] (combat) big exciting fight. Lots of color, shooting weapons, people throwing grenades, slugging it out, robots running, sword play, aliens attacking, etc., etc. Chaos.

Combat

All combat takes place in turns. A turn is 4 seconds.

Initiative

Initiative is rolled each turn. The Initiative Roll is: d12, plus the average of SPD, REF, INT and WILL (round down). The highest initiative moves first. After all movement is complete, the highest initiative attacks first. Then, the next highest, and so on down to the lowest initiative roll. Character's may choose to delay their action until another character has acted.

Spotting (LOS)

To attack a target, the attacker must have a Line of Sight (LOS) to the target, i.e., the attacker must be able to see the target.

Surprise

When a character or group surprises another character or group, the surprised group may do nothing that turn. The attacker gains a +20% bonus to hit (+4 bonus in melee) for the first 2 turns.

Ranged Combat

To-Hit Roll

To shoot someone, a character has a certain percentage chance to hit. This is equal to $AGI \times 6 + \text{Weapon Skill Level} \times 6$. The attacker adds any appropriate modifiers and rolls d100. If the roll is under the chance to hit, the shot hits. If the character is unskilled with the weapon, the percentage chance to hit is equal to hit $AGI \times 4$ and all bonus modifiers are halved.

[Sloro the Ferrite has an AGI score of 5 and an Energy Weapons skill level of 2. So his base chance to hit (with Laser, Maser or Ion weapons) is $5 \times 6 (30) + 2 \times 6 (12) = 42\%$.]

Targeting Modifiers

Some targeting modifiers can be offset by either FOC or COR. These are listed next to each modifier. The attribute multiplied by 4 is considered a bonus for the purposes of negating penalties. This "bonus" may not be used to confer an actual bonus to hit. Targeting Modifiers are added to the character's chance to hit. If a targeting penalty can be negated, it will have either FOC or COR listed next to it on the targeting modifier tables.

Rate of Fire

All weapons have a Rate of Fire (ROF). This represents the maximum number of times the weapon can be fired in a given turn. Character skill will influence the usable of fire available. Each shot is rolled to hit separately. Weapons firing a burst (controlled, short or long) may fire a number of bursts equal to the usable ROF. If a character is to fire Single Shots and bursts in the same turn, the Single Shots must be fired before the bursts.

[Ed has a F/N weapons skill level of 7, granting him a maximum usable ROF of 4. That is, he is skilled enough to be able to acquire and fire on a target four times a turn. However, Ed's weapon of choice is a chain fed modified Flechette Carbine with an ROF of 3. Thus, even though he is capable of firing 4 times a turn, his weapon is not. Ed is limited to the weapon's ROF when in combat.]

Neb, on the other hand, is a pistol expert. He has a Rail weapons skill level of 4, granting him a maximum usable ROF of 2. However, Neb has Pistol Weapon Specialization (Rail) at level 2, granting him an additional +1 usable ROF. This also allows Neb to fire rail pistols at an ROF of 1 higher than listed in the weapon description. Thus, with his Light Rail Pistol, which has an ROF of 2, he can fire the weapon at an ROF of 3.]

Weapon Jams & Fumbles

All weapons have a Jam Rating. The higher the rating, the more likely the weapon is to jam. A weapon will jam when the to-hit roll is within Jam distance of 100. That is, if a character is firing a weapon with a Jam Rating of 4, then any time a 97-100 is rolled, the shot not only misses, but the weapon has jammed, malfunctioned in some way, shorted out the power source, etc.. Likewise, a weapon with a Jam of 2 will jam any time the to hit roll is 99-100.

Unjamming a weapon is a Simple (weapon skill) check, but requires d4 minutes. Note, when an energy weapon that is connected to a Power Linkage jams, the power linkage shorts out and is rendered unusable until repaired (see *Power Systems* regarding *Power Linkages*).

Fumbles

Any time a ranged weapon jams on a roll of 100, the Referee should roll a d10. On a 1 the character has not jammed his weapon, but fumbled his attack and shot himself in the foot, etc. The character takes 1/3 normal damage from a single round.

Grenades are only fumbled on a natural roll of 100; they do not jam. When a character fumbles, he has dropped the grenade at his feet. The character may make a Difficult (REF, SPD, COR) ability check to grab the grenade and throw it before it goes off. The throw is wild and only generally in the original direction it was intended.

Melee weapon fumbles are handled differently. Any time the attack roll is made the dice roll is 2, the character has fumbled. The character has cut himself with his own sword, etc.. He takes ½ damage of a single hit.

Automatic Hits and Misses

There are two types of automatic hits and misses: Statistic and Common Sense.

Statistic Automatic Hits / Statistic Automatic Misses

Statistic Automatic Hits / Statistic Automatic Misses are shots that, after adding all the appropriate modifiers, cannot miss or cannot hit regardless of the die roll. Statistic Automatic Hits still have a chance to fumble or jam and so the to-hit roll should still be made. Statistic Automatic Misses have a 2% chance of a lucky shot. The to-hit roll should be made and on a 1 or 2, the shot hit. Of course, these shots also have the normal chance of jams and fumbles.

Common Sense Hits / Common Sense Misses

Common Sense Hits / Common Sense Misses are shots that the referee has decided will automatically hit (or miss) because of the situation. An example of this would be if a character was holding a gun to someone's head. In this case, there is no need to roll the die. The character will hit or miss regardless of modifiers. The Referee determines if a shot is a Common Sense hit or miss. The Referee may also require a to-hit roll to check for weapon jam and fumbles.

Critical Hits

A critical hit is a catastrophic success when attacking. If a player rolls a 1 on a normal to hit roll, the character has scored a critical hit. The attack automatically does double damage. If the roll was for a grenade, the character has the option of “putting a spin on it,” and the character may opt to have the grenade bounce in the direction of his choice.

Optional: Accidental Hits

There is a 10% chance to hit someone behind a target that has been missed. For example, if there is a shot misses a target, then there is a 1 in 10 chance that someone within 10-15 m behind the target is hit by a round.

Reloading

A weapon may not be fired during the turn it is reloaded. It takes one turn to change a magazine or clip, or load a single round into a weapon, magazine or clip.

Range

The penalty to hit due to range is based on the range class (RC) of the weapon and the distance to the target.

Range in meters		
Range Category	Modifier to hit	(based on the weapon’s RC)
Point blank	+60%	½ x RC
Short	+0%	2 x RC
Medium	-20%	8 x RC
Long	-60%	16 x RC
Extreme	-100%	32 x RC

[So a Flechette Carbine (RC 6) would have the following range categories: Point Blank, 0-3 m (+60% to hit); Short, 3.1-12 m (+0% to hit); Medium 12.1-48 m (-20% to hit); Long 48.1-96 m (-60% to hit); Extreme 96.1-192 m (-100% to hit).]

[Ed the A’Ghuu is attempting to fire upon a pirate who has just surprised him, with his Flechette Carbine. Ed’s base chance to hit with his weapon is 65%. The pirate is 35 m away, which falls into the Medium range category (-20%), Ed is making a Snap Shot due to his surprise (-15% [COR]). Ed is also walking (-10% [COR]) and moderately wounded (-30% [FOC]). Ed’s target is hiding behind some boxes, which the referee determines to be light concealment (-15%).

Ed has a FOC of 8 and COR of 6, so he can negate up to 8x4 (-32%) in FOC related penalties and 6x4 (-24%) in COR related penalties. Here, Ed has -30% in FOC related penalties, so this is eliminated. He has -25% in COR related penalties, so this is reduced to -1%.. Finally, there are -35% in other bonuses and penalties. So, Ed’s base chance to hit is 65 -1 -35 = 29%.]

Attacker Fire

Snap Shots

A snap shot is made anytime the character does not set himself in a proper firing position or firing stance. This is a “shoot from the hip,” reaction fire or quick-draw type of shot. During the first round of an ambush, the ambushees are considered to be making “snap shots.” This modifier is -15.



[Time seemed to freeze for a split second. Then, faster than anyone could see, Neb had produced a shredder from somewhere and had it pointing at the ruffian's head. "Now," said Neb, patiently, "would you like to take back what you said about my mother?"]

Careful Aim

To receive the "Careful Aim" bonus, the character must spend one uninterrupted turn aiming at the target. The "Careful Aim" bonus can be accumulated up to three times, for three consecutive, uninterrupted turns spent aiming at the target. If at anytime during the turn, the target leaves the character's field of view, the bonus is lost and must be reacquired next turn. This modifier is +20 for single shots (maximum of +60), +10 for controlled bursts (maximum of +30).

Consecutive Fire

The Consecutive Fire bonus is granted for each consecutive round or burst a character fires at the same target. The bonus may be acquired a maximum of two times. Stopping to reload, change weapons, switch hands, etc., will all break the consecutive fire bonus. This modifier is +10 per shot, to a maximum of +20.

Off Hand Firing

Characters may occasionally opt to fire a weapon with their off hand. This confers a penalty of -20 to hit.

Firing Multiple Weapons

When firing multiple weapons at the same time, all weapons receive a -20 penalty to hit. Weapon(s) in the off hand(s) also receives the Wrong Hand Firing penalty. The character may opt to take Careful Aim with any weapon, but not all of them.

Unstable Firing

A character is subject to the Unstable Firing penalty when using a carbine, subgun, rifle, assault rifle or SAW with only one hand. In the case of a SAW, the weapon needs to be supported by a sling on the character's shoulder. The penalty for firing a two handed weapon with only one hand is -40%.

Stabilized Firing

A character receives to the Stabilized Firing bonus when using a holdout, light, heavy or machine pistol with two hands. The bonus for firing a one handed weapon with two hands is +20%.

Called Shot

In some situations, characters may wish to target a specific part of an individual. For example, shooting someone in the arm or leg, taking a head shot, etc. A character cannot make a called shot when using burst fire. This modifier is -50%.

[IMAGE 2 ¼ x 3 ½] (unstable firing) character entering a tunnel / tube system. He is the last of the group to enter and has stopped, with one hand on the entrance and half turned towards the rear and is firing a rifle with one hand back at an unseen enemy.

Ambidexterity

There are two degrees of ambidexterity: Limited and Full. Ambidextrous (Limited) characters can use both hands equally well, but not at the same time. These characters receive no penalty for Off Hand Firing. Ambidextrous (Full) characters can use both hands equally well and at the same time. These characters receive no penalty for Wrong Hand Firing and also ignore the penalty for Firing 2 Weapons. All other rules apply normally to ambidextrous characters.

Multiple Targets

Characters firing weapons with an ROF of 2 or higher may choose to fire at multiple targets. The penalty is -20. The penalty is applied to each target beyond the first. This is different from spray fire in that the targets may be more than 3 meters apart, and the character is not trying to catch them both in the same burst of fire. This penalty is not cumulative, but does apply to each target beyond the first.

[While Neb sprays the area with suppressive fire from his Subguns, Ed aims his Flechette Carbine (with chain feed modifications) and goes to work. He fires a single shot at three different targets. Hit final modified chance to hit is 85% for his first target. His second and third targets are subject to the multiple target penalty of -20%, so Ed has a 65% chance to hit his second and third targets.]

Burst Fire

Some weapons are capable of firing many rounds very rapidly, called a burst. These weapons are noted on the weapon table along with the types of bursts they are capable of firing. There are three types of burst fire: Controlled Burst, Short Burst, and Long Burst. Firing a burst confers a bonus to hit, does more damage to the target and uses more ammunition. A controlled burst fires 3 rounds and hits the target with d2 rounds. A short burst uses 9 rounds and hits the target with 2+d2 rounds. A long burst uses 15 rounds and hits the target with 3+d4 rounds. Hit locations are rolled for in 2 round groups.

SAW weapons (and larger) that are burst capable fire double the number of rounds as their smaller counter parts. They hit with 3x as many rounds, i.e., Controlled burst: fires 6 rounds and hits with 2+d4, Short burst: fires 18 rounds and hits with 6+d6, Long burst: fires 30 rounds and hits with 9+3d4. Hit locations are rolled in 3 round groups.

Burst Type	Modifier to hit	# Rounds Fired*	# Rounds Hit*
Controlled Burst	+10	3 (6)	d2 (2 +d4)
Short Burst	+20	9 (18)	2 +d2 (6 +d6)
Long Burst	+30	15 (30)	3 +d4 (9 +3d4)

"Do NOT fire a burst weapon while I'm standing next to the target!"

* Values in parenthesis are for SAW weapons and larger.

[Ed follows up his attack with two short bursts from his carbine while Neb moves into cover. He is firing at the same target as last turn, so he receives a +10% consecutive fire bonus, as well as a +20% bonus for firing a short burst. Now, his chance to hit is 77%. He rolls twice, getting a 32 and a 65. His magazine depletes 18 rounds (2 short bursts of 9 rounds each). Each short burst hits with 2 +d2 rounds. Ed rolls a 1 and a 2, so he hits with a total of 7 rounds.]

Optional: Fast Burst Damage

When a character hits with burst fire, roll for number of rounds that hit normally. Roll damage for a single round and multiply this by the number of rounds that hit. Roll 1 hit location for each Controlled Burst that hits. Roll 3 hit locations (and divide damage evenly) for each Short and Long Burst. This results in burst fire being a lot more lethal, but a quicker paced combat game.

Spray Fire

Character computes all modifiers normally to hit the first target in the group. The character then rolls to hit each target separately. The character suffers a cumulative penalty to hit each target after the first. The penalty is equal to the distance between the next target and the current target. However, the chance to hit will never fall below 1/4 of the original chance to hit. The character may continue to sweep across targets as long as the total width of the sweep is no more than 30 m wide. Each target hit is treated as hit by a Controlled burst from the weapon. For every hit or miss rolled, 3 rounds from the spray are accounted for (6 rounds for SAW and larger weapons). The character may continue to sweep across the target group until all the rounds in his burst are accounted for. Each target that is hit resolves the hit as if it were a Controlled Burst from the attacker's weapon.

[Neb is spraying an attacking horde with a heavy machine gun. He is using a long burst. This means he will fire 30 rounds, since the weapon is larger than a SAW. The horde consists of 10 attackers. He has a base chance to hit of 65% against the lead target. He rolls and hits, accounting for 6 rounds. The next target is 8 m to the left, so he rolls to hit with a -8 modifier (57%). He hits, accounting for 6 rounds. The next target is 2 m to the left. He has a 55% to hit. He misses (6 more rounds). The next target is 10 m to the left, so he has a 45% to hit. He hits (6 more rounds). Neb is now at the edge of the horde and sweeps back across. The previous target is 10 m to the right, so he has a 35% to hit. He misses (and accounts for the last 6 rounds). Each target now resolves the hits against it as normal. Note that 5 members of the horde were not fired upon at all.]

Optional: Fast Spray Fire

The chance to hit is computed normally, but only rolled once. Number of targets hit is $d4+1$. Double the number of rounds that hit (maximum value is the number of rounds fired in the burst). Roll damage for a single round and multiply by the number of rounds that hit. Divide damage evenly among all targets hit by the spray. Roll hit location for each target separately. This results in spray fire being a lot more lethal, but a quicker paced combat game.

Suppressive Fire

The more rounds characters put into an area, the more likely anything moving through that area is to be struck. When laying suppressive fire, characters must declare how many rounds they are firing and the area they are covering with their fire. The chance a target will be hit by round is equal to: $6\% \text{ per round} / \text{width of area, per meter the target moves through the suppressed area}$.

[Once in position, Neb lays down suppressive fire so Ed can move into position. Neb is armed with two Rail Subguns, and fires a short burst from each in suppressive fire. Neb is covering an area 5 meters wide and 20 meters away. The base chance for anyone moving through the suppressed area to take a round is: $18 \text{ rounds} \times 6\% / 5 \text{ meters} = 21.6\% \text{ per meter moved}$.

One of the attackers moves 3 meters through the suppressed area. His total chance to take a round is $21.6 \times 3 = 64.8\%$. The referee rolls, and gets a 29. The hapless target takes $3d10\%$ of the rounds fired ($d10\%$ per meter moved). The roll is 15. 15% of 18 rounds is 2.7, rounded to 3. So the target takes 3 rounds.]

When someone is hit by suppressive fire, the number of rounds that hit is a percentage of rounds fired. This percentage is calculated by rolling d10 per meter moved in the suppressed zone. For example, the above target would be hit by 2d10% of the rounds in the zone. If an 11 was rolled, then the target would be hit by 11% of 15 rounds, which is 1.61 (round .5 up), so the target takes 2 rounds.

Because suppressive fire does not involve directly aiming at a target and reacquiring a target after each round or burst is fired, characters may employ the full ROF of a weapon, regardless of their skill level with the weapon. Targets low crawling through an area under suppressive fire have $\frac{1}{2}$ the normal chance to be hit by a round.

Optional: Fast Suppressive Fire

Fast suppressive fire is probably the least accurate of all the Fast rules. Any target moving through a suppressed zone will be hit by d4 rounds per person laying suppressive fire (this value is multiplied by the ROF being used); it is assumed Short Bursts are being used for suppressive fire. Targets hit by multiple rounds are treated as if hit by a burst, and the Fast Burst rules can be used as well.

[IMAGE 3x4] (suppressive fire) A character hiding behind a 50 gallon drum or some such relatively small item as incoming fire blazes all around him. He has his weapon ready and is clearly waiting for the fire to stop. He looks nervous.

Attacker Fire	Modifier	Attrib
Snap Shot	-15	COR
Careful Aim (For Single Shot)	+20	--
Careful Aim (For Control Burst)	+10	--
Consecutive Fire ¥	+10 / Shot	--
Off Hand Firing ¥¥	-20	COR
Firing Multiple Weapons ¥¥	-20	COR
Unstable Firing	-40	COR
Stabilized Firing	+20	--
Called Shot / Specific Target ¥¥¥	-50	COR
Multiple Targets (Not Spraying)	-20	COR
Control Burst	+10	--
Short Burst	+20	--
Long Burst	+30	--
Spray Fire	-1 x Distance Between Targets	
Suppressive Fire (Per Meter)	6% x Rounds Fired / Area Width	

¥ Consecutive fire bonuses can be accumulated for 2 shots (receiving a +20% bonus). If the character continues to fire at the target, the bonus remains at +20%.

¥¥ Limited ambidexterity will negate Off Hand Firing. Full ambidexterity will negate Off Hand Firing and Firing Multiple Weapons.

¥¥¥ A Called Shot / Specified Target may not be declared when employing burst fire.



Attacker Movement

Running around while trying to shoot people makes the whole process more difficult. The attacker movement modifiers reflect this. Coordination will help offset these penalties.

Firing Stance

A character can set himself into a firing stance by assuming a comfortable firing position, kneeling one knee, crouching or otherwise steadying his body and bracing himself against the weapon's recoil. This action must be declared at the end of movement. Character's must sacrifice half their move distance to assume a Firing Stance. This grants a +10 bonus to hit.

Acrobatic Dodge

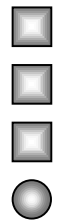
This is a special dodge, whereby the character directs his full effort into ducking, leaping, back-flipping, cartwheeling, etc., to avoid incoming attacks. When performed, the character becomes limited in other actions available to him for the duration of the turn. The character may perform only one of the following actions while performing an Acrobatic dodge: move (no more than walking distance), make a ranged weapon attack (maximum ROF of 1), engage in melee combat (see *Melee Combat*). The character suffers a –40% to-hit penalty for ranged weapons. Anyone firing upon the character suffers a penalty to hit equal to the character's Agility score x10%.

Attacker Movement	Modifier	Attrib
Stationary	+5	--
In Firing Stance	+10	--
Walking	-10	COR
Jogging	-20	COR
Running	-40	COR
Sprinting	-80	COR
Dodging	-20	COR
Dodging Acrobatically	-40	COR
Prone	+10	--
In Moving Vehicle	-20	COR

Attacker Camouflage

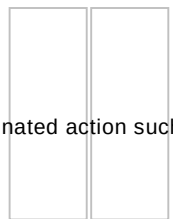
If the attacker has taken measures to camouflage either himself, his firing position, or both, and is attempting to fire from a camouflaged position, there is a penalty to hit. Typically, when attempting to remain unseen, range of movement is limited, movement must be slower so as not to attract attention or to allow electronic camouflage to keep up with character movement, etc. The penalty to hit is –60.

Attacker Camouflage	Modifier	Attrib
Attempting To Remain Unseen	-60	--



Attacker Wound Level

Being wounded is highly distracting when attempting a coordinated action such as aiming and accurately firing a weapon. Focus will help offset these penalties.



Attacker Wound Level	Modifier	Attrib
Light Wound	-15	FOC
Moderate Wound	-30	FOC
Severe Wound	-45	FOC
Head Wound	-45	FOC

Target Movement

The faster and more erratically a target is moving, the more difficult it is to hit it with a weapon. Focus will help offset these penalties.

Surprise

When a target is surprised, as when an ambush has been successfully executed, the attacker gains a +20 bonus to hit during the first two turns of combat.

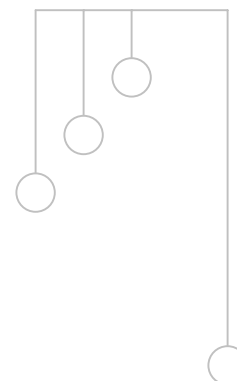
Target Movement	Modifier	Attrib
Surprised	+20	--
Immobilized / Stationary	+25	--
Slow	-10	FOC
Quick	-30	FOC
Dodging	-30	FOC
Acrobatic Dodge	-10 x AGI	FOC
Prone	-15	FOC



Target Cover and Camouflage

When attacking a target that has protective cover the chance to hit is reduced due to the protection offered by that cover and the reduced amount of the target that is visible. These modifiers cover situations where visibility of the target is inhibited or impaired in some manner.

Target Cover and Camouflage	Modifier	Attrib
Marginal Cover	-15	--
Half Cover	-30	--
Full Cover	-60	--
Camouflaged (Moving)	-25	--
Camouflaged (Stationary)	-50	--
Nearly Invisible	-60	--
Invisible	-90	--





Target Size

All of the character races and most robots are considered medium sized creatures.

Target Size	Modifier	Attrib	Examples
Very Small	-40	--	Car tire
Small	-20	--	Tractor trailer tire
Medium	+0	--	People, robots (all the character races)
Large	+30	--	Common vehicle (car, etc.)
Huge	+60	--	Large vehicle (truck, van, rig, etc.)
Giant	+120	--	Ship

Other Modifiers

This catch-all category includes such uncommon modifiers as inclement weather, darkness, storms, blindness, etc. Focus score will help offset some of these penalties.

Environment and Weather	Modifier	Attrib
Illuminated By Spotlight	+30	--
Night	-60	--
Dusk / Dawn	-30	--
High Winds	-40	--
Fog	-40	--
Rain	-15	--
Heavy Rain / Storm	-45	--
Sand Storm	-60	--
Quake	-100	--

Fog of War	Modifier	Attrib
Attacker Distracted	-30	FOC
Attacker Confused	-20	FOC
Attacker Partially Blind	-60	FOC
Attacker Blind	-150	--

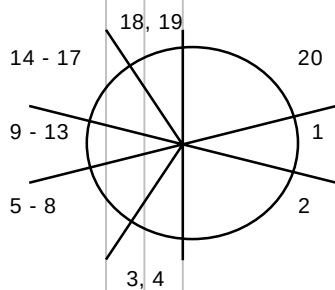
Grenade Combat

A character can throw a number of grenades per turn equal to half the number of melee attacks he can make. This is done in lieu of weapon fire or melee combat. A grenade may be accurately thrown a number of meters equal to: $5 \times (\text{STR} + \text{COR})$ meters. Roll to hit normally. A missed throw will bounce. The direction of bounce can be determined by consulting the chart below. The distance the grenade will bounce is equal to the STR of the character plus 10% distance thrown, multiplied by d6 meters. On a critical hit, the character may opt to have the grenade bounce a number of meters up to his STR score.

[IMAGE 3 x 2 ½] (grenade combat) character throwing a grenade

Grenade Bounce Table

Roll d20 and consult the chart.



[Their situation desperate, Neb pulls out a flechette grenade he's been saving for just such an occasion and throws it. Neb's chance to hit with a grenade is a 65%. Neb's STR and COR are 8 and 9, respectively, so his maximum throw range is $5 \times [8 (\text{STR}) + 9 (\text{COR})] = 5 \times 17 = 85$ meters. Neb is targeting a cluster of attackers hiding behind a grounded hover truck 55 meters away. Since this is within his maximum throw range, he makes his roll to hit. Neb rolls a 1, which is a critical hit. For grenades, this means he may "put a spin" on it. Neb's bounce distance is $9 (\text{STR}) + 5.5 (\text{distance thrown} \div 10) = 14.5$ meters. He opts to have the grenade bounce an extra 3 meters past the truck, so it explodes behind his targets. The grenade explodes, throwing out a thousand tiny flechettes of shredded plastic. The enemy gunfire is silenced.]

[IMAGE 6 x 5] (melee combat) A character cleaving into a robot with a power weapon of some sort. Glowing sparks and electricity can be seen coming from damage to the robot, especially where the character hit. There are other characters around laying covering fire against the rest of the pursuers. This unfortunate robot happened to surprise the group from another direction.

["What are they doing now," asked the kid. "Well," said Neb as he drew his plasma sword from his holster and loaded a therm-clip into it. "The first thing they'll do is shoot until out of ammo, which," Neb paused to enunciate the silence surrounding them, "it sounds like they have done." The kid looked confused, "and then what?" "Then," said Neb as he activated his sword and swung it upward, "they charge." As he spoke his last words, he threw his weight into his blade and connected with the leading edge of the first assassin droid as it came flying around the corner and sliced it neatly in half. "Standard assassin program procedure," Neb said as he kicked the robot's carcass.]

Melee Combat

The character with the highest initiative score may attack first. This character may attack as many times as he has melee attacks. An attacking character receives a +1 bonus for each additional attack he makes in the same turn, after the first. Melee strikes against unarmored locations and the head do not do double damage. The target may subtract full TGH score from hand to hand (HTH) damage.

All melee attacks receive a skill bonus based on the character's training. If the character's training includes the maneuver he is attempting, e.g., +2 Strike or +1 Disarm, then the character may add his full skill level to his attack roll. If the character is using a maneuver he does not have formal training with, i.e., a "—" is listed under his martial art, then the character may only add half his skill level (round down).

Attack and Defend Roll

To attack someone in melee, the Attack Roll is: $COR + SPD + 2 \times Skill + 2d10$. The target's Defend Roll is: $COR + SPD + REF + 2 \times Skill + d12$. If the attack roll is greater than the defend roll, the target is struck. Tie rolls go to the defender.

Damage

Untrained HTH attacks will do only 1 point of lethal damage. The rest of the damage is considered "bruise" damage and will "vanish" in 1 hour. Until that time, though, the character suffers as though all the damage is real, except that he will not die, he will simply fall unconscious.

HTH attacks by characters with martial arts training are more lethal. Lethal HTH damage is equal to the character's highest martial art skill level. The remainder of the HTH damage is bruise damage.

Characters with exceptional ability scores in STR or SPD will do an additional point of lethal damage, over and above normal melee damage, per point over 10.

Number of Unarmed Attacks

Due to their unique physiology's, each of the races has a number of natural attacks, regardless of the individual character's skill in melee combat. The number of melee attacks a character has per turn is increased by 1 for every 3 levels of their highest Marital Art skill level. Characters will always have at least as many unarmed melee attacks as is listed in the table below, regardless of skill level.

Race	Number of Unarmed Attacks
Lyandithate	2 per turn
Ferrite	2 per turn
Slen Boraka	2 per turn, plus a bite attack
A'Ghuu	3 per turn, plus a bite attack
Graff	3 per turn, plus a bite attack, plus a tail lash attack
Voix	2 per turn
Meylor	4 per turn
Human	2 per turn

Number of Melee Weapon Attacks

All characters can make 1 melee weapon attack per turn. This is increased by 1 per 3 levels of weapon skill. For example, a level 6 long sword skill will provide 2 additional attacks (+1 at level 3 and 6). These attacks are not cumulative with Unarmed attacks.

[Ed the A'Ghuu is a level 7 Kung Fu expert, so he has 2 additional attacks, giving him 5 unarmed melee attacks, plus his bite attack. Neb the Human, on the other hand, is a long sword expert (he is level 4), so he has 1 additional attack, giving him 2 melee weapon attacks.]

Mixing Unarmed and Melee Weapon Attacks

Characters may freely mix attacks. However, a character may never make more attacks than either his Unarmed or Weapon attacks (whichever is greater).



[Ed picks up level 1 with the nunchaku, granting him 1 melee weapon attack with any type of nunchaku. If he decides to mix his attacks, the melee weapon attack will take the place of one of his unarmed attacks.]

Types of Melee Attacks

There are a number of maneuvers available to a martial artist: Strike, Power Strike, Kick, Power Kick, Block/Parry, Dodge, Sweep, Throw, Lock, Escape, Break, Kill, Knockout, Control, Stun and Disarm. Each martial art grants different bonuses to these maneuvers.

Strike

Hitting someone with your hand, head, elbow or shoulder, or with a melee weapon. Unarmed strike damage is equal to $(STR + SPD) / 2$.

Power Strike

Hitting someone with your hand, head, elbow or shoulder, or with a melee weapon. Character puts all of his weight and power into the blow, generally doing more damage, but leaving himself open (-3 to Defend score for duration of the turn, cumulative per attack). Power strike damage is double Strike damage.

Kick

Hitting someone with your foot, knee or shin. Kicking damage is equal to $(2 \times STR + SPD) / 2$.

Power Kick

Hitting someone with your foot, knee or shin. Character puts all of his weight and power into the blow, generally doing more damage, but leaving himself open (-4 to Defend score for duration of the turn, cumulative per attack). Power kick damage is double Kick damage.

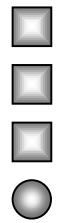
Block / Parry

Blocking a melee attack with some part of your body (or a melee weapon) in a manner so as not to take damage. This value is a bonus to the character's Defend Roll. Note parrying an unarmed attack with an energy melee weapon will inflict the weapon's base damage (no STR bonuses) to the attacker's limb. Block, Dodge and Escape bonuses are mutually exclusive and cannot be combined to defend against the same attack.

Dodge

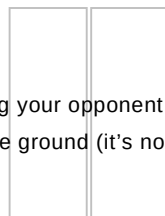
Avoiding getting hit at all by an attack. This value is a bonus to the character's Defend Roll against any attack. The character may not use this bonus and another bonus to defend against an attack. If several bonuses apply, the character must decide which to use. Block, Dodge and Escape bonuses are mutually exclusive and cannot be combined.

[IMAGE 3x3] (melee combat, martial arts maneuvers) character delivering a devastating kick to someone.



Sweep

This value is a bonus to the character's Attack Roll. Knocking your opponent to the ground by hitting him some way. A character's Sweep bonus is reduced by 1 when on the ground (it's not as easy to move). A character must sacrifice 1 melee attack to stand up.



Throw

This value is a bonus to the character's Attack Roll. Knocking your opponent to the ground by throwing him some way. A throw does not do damage, but will serve to Stun the opponent for 1 turn (Moderate (TGH) to ignore the effects) along with render him off his feet. Throws are not possible when a character is not on his feet. A character must sacrifice 1 melee attack to stand up.

[IMAGE 3x3] (melee combat, martial arts maneuvers) character throwing another character across a room.

Lock

This value is a bonus to the character's Attack Roll. Immobilizing an opponent's limb. A Lock attack is made with a -2 penalty to the Attacker Roll. A successful attack immobilizes the opponent. The target loses all melee attacks (and his Defend bonus is halved) until he makes a successful Escape attack.

Escape

This value is a bonus to the character's Defend roll when someone attempts to attack with a Break, Lock or Control maneuver. This value is used as a bonus to the character's Attack roll when attempting to get free from an opponent that has successfully employed a Lock or Control attack. When attempting to Escape, the attack roll is made with a -4 penalty. If successful, the character has escaped the lock or control hold. Block, Dodge and Escape bonuses are mutually exclusive and cannot be combined.

Break

This value is a bonus to the character's Attack Roll. Breaking an opponent's limb. A Break attack is made with a -3 penalty to the attacker. A successful attack reduces the opponent's limb to 1/2 its current hit points and renders the limb unusable in combat. The target loses 1 melee attack. The target receives a -4 penalty on all melee / HTH maneuvers until it is fixed and is considered to have a severe wound. If the target is using a melee weapon, this attack can be used to break the target's weapon. If the attacker is using a melee weapon, this attack can be used to break ranged weapons as well.

[IMAGE 3x3] (melee combat, martial arts maneuvers) character delivering a fatal unarmed attack.

Kill

This value is a bonus to the character's Attack Roll. Killing an opponent with a special strike (major nerve center, blood line, etc.) A Kill attack is made with a -5 penalty to the attacker. If the attack fails, the attacker loses all his melee attacks on the following

turn. If the attack is successful, the opponent must make a Very Difficult (TGH) check to avoid being instantly killed. If the check is a success, the target takes double Strike damage. If the target has a screen that defends against the attacker's weapon, the screen absorbs the maximum damage deliverable by the weapon. A successful Kill attack is considered to do maximum damage for a single hit, and bypasses physical body armor worn by the target.

Knockout

This value is a bonus to the character's Attack Roll. Rendering an opponent unconscious by hitting him somewhere, or putting him in a choke hold. A Knockout attack is made with a -4 penalty to the attacker. If successful, the opponent must make a Very Difficult (MOT) check to avoid being knocked out for 5d6 turns. If the check is a success, the target takes normal Strike damage. If the attack fails, the attacker loses ½ his melee attacks on the following turn.

Control

This value is a bonus to the character's Attack Roll. Putting an opponent into a type of hold where he can easily be made, by causing pain, to walk where you want, behave, etc. Pinning or immobilizing an opponent is also considered a Control attack. A Control attack is made with a -2 penalty to the attacker. A successful attack immobilizes the opponent. The target loses all melee attacks (and his Defend bonus is halved) until he makes a successful Escape attack.

[IMAGE 3x3] (melee combat, martial arts maneuvers) character putting another character in a control hold, like having an arm pinned behind him, or a painful wrist lock, etc.

Stun

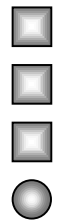
This value is a bonus to the character's Attack Roll. Stunning an opponent unconscious by some sort of strike (kick to the groin, eye poke, etc.). A Stun attack is made with a -3 penalty to the attacker. If successful, the opponent must make a Difficult (FOC/WIL) check to avoid being stunned for 1+d4 turns. A stunned character may do nothing except stand there in shock / pain. If the check is a success, the target takes normal Strike damage. If the attack fails, the attacker loses 1 melee attack on the following turn.

Disarm

This value is a bonus to the character's Attack Roll. Disarming an opponent by some sort of strike or block maneuver. Works against melee weapons and against ranged weapons if the martial artist knows exactly where the weapon is, i.e., it's sticking him in his back, back of his head, his gut, etc. A Disarm attack is made with a -3 penalty to the attacker. If successful, the opponent's weapon is wrenched from his hands and lands d10 meters away in a random direction. A failed attack means if the opponent tries to disarm the character in the next turn, he will receive a +2 bonus.

Martial Art Styles

Martial Arts skills grant bonuses in various aspects of HTH combat. These bonuses are listed on the following table. The bonus received may not be higher than the character's skill in that style, i.e., to receive the +4 bonus to strike from Kung Fu, the character must have at least a level 4 in Kung Fu. Otherwise, the character will receive a bonus equal to his current level.



Maneuver	TKD		Kung Fu			Self Defense		Judo	Boxing	
	Wrestling		Aikido	Kick Boxing			Hap Ki Do		Combat	
Strike	--	+3	+2	+4	+3	+1	+1	--	+0	+3
Power Strike	--	+1	+0	+2	+1	--	--	--	+0	+2
Kick	--	+4	+1	+2	+3	+2	--	--	+0	--
Power Kick	--	+2	--	--	+0	--	--	--	+0	--
Block	--	+3	+2	+4	+1	+1	--	+1	+0	+1
Dodge	+1	+1	+3	+2	--	--	--	+2	--	+2
Escape	+3	--	--	+0	--	+2	+4	+3	+0	--
Sweep	+2	+1	--	+2	--	--	--	+3	--	--
Throw	+1	--	+3	--	--	+1	+2	+3	--	--
Lock	+3	+1	+2	--	--	--	+3	+2	--	--
Break	+1	+2	+3	--	+3	+1	+3	+1	+0	--
Kill	+0	+2	+1	+3	+3	+1	+2	--	+0	--
Knockout	+2	+0	--	+2	+3	--	--	+1	+0	+4
Control	+2	+1	+3	--	--	--	+3	+1	+0	--
Stun	--	+1	--	--	--	+3	--	+1	--	--
Disarm	--	+2	+1	+3	--	--	+2	--	+0	--

Combination Attacks

Certain attack types are easier if the attacker has already successfully employed a previous attack, e.g., it is easier to Break a limb if the attacker has already employed a Control move. A character receives the bonus listed below when attempting a maneuver if the requisite maneuver is currently being successfully employed. Note, each style has its own combination attacks. If a character has more than two melee attacks per turn, it is possible to string combination attacks together. For example, a Tae Kwan Do expert with three melee attacks per turn might opt to use a Strike, Kick, Power Kick combination, or a triple kick combination, etc., and an Aikido expert with 3 attacks might employ a Control, Throw, Break combination. Combination attack bonuses are only received if the character successfully executes the requisite attack. Where more than one requisite attack is listed on a line, this means either attack can be used as a requisite attack. Where more than one follow up attack is listed on a line, this means either attack can be used as a follow up attack.

Style	Requisite Attack	Follow up Attack	Bonus
Wrestling	Sweep	Lock	+2
Tae Kwan Do	Strike	Kick, Pow kick	+1
	Strike	Sweep	+2
	Kick	Kick, Pow kick	+3
	Lock	Break	+1
	Control	Stun, Kill	+1
	Disarm	Kick	+1
Aikido	Throw	Break	+1
	Control or Lock	Break	+1
	Control	Throw	+3
	Control	Disarm	+2
	Stun	Kill	+1
Kung Fu	Strike	Strike	+3
	Strike	Pow strike, Kill	+1
	Strike	Knockout, Disarm	+2
Kick Boxing	Strike, Pow Strike	Strike, Pow Strike, Kill, KO	+2
Self Defense	Control or Lock	Disarm	+1
	Kick	Stun	+1
Hap Ki Do	Lock	Break	+2
	Control	Break	+1
	Control	Throw, Stun, Disarm	+2
Judo	Strike	Throw	+1
	Control or Stun	Throw	+3
Boxing	Strike	Strike	+3
	Strike	Pow strike, KO	+2

Counter Attacks

Certain attack types, when failed, leave the attacker open for an immediate counter attack from the target, depending on the style of the target. These counter attacks are in addition to a character's allotted number of melee attacks per turn. A counter attack is made with a +2 bonus.

In order for the target to attempt a counter attack, the attacker must fail his attack and the defender must have training in a style that provides a counter attack against the failed attack. For example, a character that studies Judo and has successfully defended against a Sweep attack will have the option to make a Break or Lock counter attack.

If the counter attack is successful, the character may press the attack using combinations. As long as the attacks can be strung together in a combination, the character may continue to make attacks. These attacks are not free and are deducted from the attacks the character may make each turn. The character may continue to press the attack as long as he has melee attacks left, he has not missed an attack, and each attack can be linked from the previous in a combination. It is not possible to counter attack a failed counter attack.

Style	Attack Failed	Counter Attack
Wrestling	Sweep	Lock
	Throw or Strike	Control
TKD	Kick	Sweep, Kick
Aikido	Strike	Control, Lock, Break
	Kick	Throw
	Control	Break, Throw
Kung-Fu	Kill	Strike, Kick
	Knockout	Strike, Kick
	Stun	Strike, Kick
Kick Boxing	Strike	Kick
	Kick	Strike
Self Defense	Lock, Break or Control	Stun
Hap Ki Do	Lock or Control	Control, Lock
Judo	Sweep	Break, Lock
	Throw	Sweep, Throw
Boxing	Strike	Strike

[As Ed and Neb turn to leave the scene, they are confronted by Drea and Rlgrrlwr, two bounty hunters who have outflanked them during the fight. After a few snap shots, everyone is out of ammo. Ed's opponent, Drea, wins the initiative and launches a devastating series of attacks. Drea successfully attacks Ed with a Strike to the head. Drea has studied Tae Kwan Do, and a successful strike will set her up for a follow up attack. She chooses to follow her strike with a kick. This attack will gain a +1 bonus because it is her second attack, plus, since she successfully executed a strike (a prerequisite for a strike-kick combination), she gains an additional +1 to strike. The attack and defend rolls are made, Ed gets a 39, Drea gets a 39. Tie goes to the defender, so Ed blocks Drea's blow and has the opportunity to counter attack. Ed is also a tae kwan do expert, so he is trained in countering kick attacks. He chooses to execute a sweep attack on Drea. The to hit rolls are made, Ed gets a 41, Drea gets a 37 and is knocked to the ground. Drea uses her final attack to stand up.

Now, Ed gets to attack Drea. Ed begins with a kick attack and hits, delivering a devastating blow to Drea's midsection. Ed follows up with another kick. Kick-kick is a tae kwan do combination, so Ed gets a +1 for his second attack, +3 for a kick-kick combination. To hit rolls are made, Ed slams Drea in the head with the heel of his foot. Ed presses the attack with a third kick attack. Ed gets a +2 for his third attack, +3 for a kick-kick combo. Ed drills Drea in the chest, leaving her laying on the ground sucking for air.]

All-out Attacks / Berserking

Occasionally, a character may opt to make an all-out attack, throwing caution to the wind. In such a case the character receives a +4 bonus to all melee attacks and suffers a -3 penalty to defense. The character may use Combination Attacks but does not have the presence of mind to make use of Counter Attacks.

Acrobatic Dodge

The character may make a single melee attack when performing an acrobatic dodge. The character suffers a -6 ATK melee penalty. Melee attacks against the character are made with a penalty equal to the character's Agility score x2.

Martial Arts Weapons

Characters with training in Melee Weapon Skills will receive various bonuses to certain aspect of combat, just as Martial Arts skills confer bonuses in melee combat. The bonuses depend on the specific weapon. These are listed on the following table. Characters may learn melee skill with weapons not listed on the table, these weapon skills fall under the other category listed below. All-out attacks may be made with melee weapons.

	LF	Strike	Parry	Disarm	Break	Knockout	Kill
Short sword	2	+2	+4	+1	--	--	+1
Long sword	2	+3	+3	+1	--	--	+2
Two handed sword	2	+2	+2	+1	+1	--	+2
Bastard sword	3	as long sword or two handed sword					
Great sword	2	+3	+2	--	+2	--	+3
Dagger	2	+1	+1	--	--	--	+1
Nunchaku	3	+2	+3	+2	--	+3	+0
Weighted Chain	3	+1	+1	+4	--	+2	--
3 Piece Rod	2	+1	+1	+3	--	+4	--
Bo staff	3	+3	+2	+1	+1	+1	+1
Jo staves	2	+3	+3	+2	--	+2	--
Escrima stick	2	+3	+2	+2	--	+3	--
Battle ax	2	+2	+1	+1	+1	--	+3
Polearm	2	+2	+1	--	--	--	+2
Tunfa	4	+1	+2	+3	--	+4	--
Whip	2	+2	--	+3	--	--	--
Other	3	+2	+2	--	--	--	--

[In the mean time, Neb has drawn a laser long sword and is engaged in melee weapon combat with Rlgrrlwr, who is armed with a fusion battle ax. Rlgrrlwr attacks with a standard Strike attempt. His attack roll is a 35. Neb's defend roll is also a 35. Since tie rolls go to the defender, Neb successfully defends against the strike. Rlgrrlwr's next attack is a disarm attempt. The penalty for this is -3, but his training with a battle ax gives him a +1 bonus. So, rolling to attack, Rlgrrlwr gets a $33 - 3 + 1 = 31$. Neb's defend roll is a 36, so he successfully defends against the attack and his weapon remains in his hands.

Rlgrrlwr has used up all his attacks, so now it is Neb's turn. Neb launches his onslaught with a viscous Strike attempt. Rolling a 42, he easily beats Rlgrrlwr's defend roll of 38. Neb rolls damage and location. Neb's second attack is another Strike. Again, he rolls a 39, beating Rlgrrlwr's paltry 32. Neb rolls damage and location. Finally, Neb finishes off with a Kill attempt. The penalty for this maneuver is -5, but Neb's long sword training grants him a +2 bonus to Kill attempts. Rolling his attack and adding these two modifiers, Neb gets a 39. Unfortunately, Rlgrrlwr is unable to defend with a roll of 33. Rlgrrlwr may now attempt to make a Very Difficult (TGH) check to avoid being beheaded. Rlgrrlwr is pretty tough, even for a Graff, and manages to make his check. So, instead of being rendered headless by Neb's energy blade, he takes double damage, which is enough to knock him unconscious and allow Neb and Ed to escape.]

Ranged Weapons in Melee

Character's may want to fire a ranged weapon while engaged in melee combat. This may be done at any point during melee combat under the following restrictions. The character must have at least 1 HTH attack left to sacrifice for the ranged attack. The weapon to be fired must not have fired previously during the turn. Firing any weapon larger than a Heavy Pistol is done with a -30 penalty. Once a character fires a ranged weapon in melee combat, he may make no more melee attacks that turn. The character also loses all defensive bonuses (Block, Dodge and Escape) for the rest of the turn, in addition to forfeiting all opportunities to Counter Attack.

Defending Against Ranged Weapons with Melee Weapons

Laser melee weapons may defend against any E ranged weapon. High Energy melee weapons may defend against any H or E ranged weapon. P melee weapons may defend against P ranged weapons. Forced carbon weapons may defend against B ranged weapons. Chain and vibro weapons may not defend against ranged weapons. The Defender makes an Impossible skill check with the skill he is using (melee skill and specialization skill can be added together). If the check is a success, a single shot is deflected. This attempt supplants a single melee attack.

Melee Attack Modifiers

Attack modifiers for melee combat are similar to the modifiers for ranged combat. COR and FOC may negate negative melee modifiers, equal to the score. Modifiers that can be negated, and which ability score negates them, are denoted under the "Attrib" column.

Attack Type	Modifier	Attrib
Specific Maneuver	As Per Style	--
Multiple Attack *	+1 / Attack	--
Combination Attack	As Per Style	--
Counter Attack	+2	--
All Out Attack / Berserk **	+4	--
Called Shot / Specific Target	-2	COR
Attacking From The Rear	+10	--
Attacker Partially Invisible	+4	--
Attacker Invisible	+6	--

* Multiple attack bonus is cumulative and granted to each attack after the first.

** Attacker suffers a -3 penalty to defense.

Attacker Movement	Modifier	Attrib
Prone	-2	--
Walking	-1	COR
Jogging	-2	COR
Running	-4	COR
Sprinting	-4	COR
Acrobatic Dodge	-6	COR

Attacker Wound Level

	Modifier	Attrib
Light Wound	-1	FOC
Moderate Wound	-2	FOC
Severe Wound	-4	FOC
Head Wound	-4	FOC

Target Movement

	Modifier	Attrib
Surprised	+4	--
Acrobatic Dodge	-2 x AGI	COR
Prone	+3	--

Target Cover and Camouflage

	Modifier	Attrib
Partially Invisible	-12	--
Invisible	-18	--

Target Size

	Modifier	Attrib	Examples
Very Small	-10	--	Car tire
Small	-5	--	Tractor trailer tire
Medium	+0	--	People, all the character races
Large	+5	--	Common vehicle (car, etc.)
Huge	+10	--	Large vehicle (truck, van, rig, etc.)
Giant	+20	--	Ship

Environment & Weather

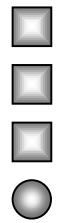
	Modifier	Attrib
Illuminated By Spotlight	+6	--
Night	-12	--
Dusk / Dawn	-6	--
Rain	-1	--
Heavy Rain / Storm	-3	--
Sand Storm	-1	--
Quake	-20	--

Fog of War

	Modifier	Attrib
Attacker Distracted	-3	FOC
Attacker Confused	-4	FOC
Attacker Partially Blinded	-6	FOC
Attacker Blinded	-15	--

Underwater Combat

Characters can hold their breath for a number of seconds equal to 10 x END score. This duration can be increased by 50% if the character hyperventilates prior to submersion and remains inactive while submerged. SPD and REF both suffer a -1 penalty underwater.



Ranged Weapons

Many ranged weapons will not function underwater. Only lasers, proton, microwave, plasma and fusion weapons will fire underwater. There is a -30% penalty to hit when firing these weapons underwater. Also, RC is reduced by 50%. Defensive screens will not function underwater, unless waterproofed (+200% cost).

Sonic weapons are very nasty underwater. Their RC is increased by 100%. Anyone within 5m of the "beam" (including the target and the firer) takes ½ roll damage from the weapon. The target takes double damage. Note, if the target is unarmored and organic as well, then the total damage is x8.

[IMAGE 3x3] (underwater combat) character's swimming underwater and perhaps firing an energy rifle or something.

Melee Weapons

Melee combat underwater is conducted with a -6 penalty to attack and a -6 penalty to defend. Solid, vibro, force, laser, proton and fusion melee weapons will function underwater. Sonic melee weapons do not work underwater. Damage from Ballistic and Kinetic melee attacks is halved while underwater. Energy Melee Shields (EMS) will not function underwater, unless waterproofed (+200% cost).

Grenades

All grenades function underwater. Fragmentation and flechette radii are halved. Concussion and sonic radii are doubled.

[IMAGE 6 x 4] (Weightless Combat) Space Marine about to board a crippled enemy ship. He wears spacesuit, armor and carries a heavy weapon. His back mounted maneuver unit is flaring brightly as he maneuvers. He has several partners in the distance and foreground.

Weightless Combat

Firing at great distances in space is a lot easier than planet side. All weapon RC's are tripled when in a weightless environment.

Due to recoil issues, various weapons suffer penalties when firing multiple shots in a single turn. Projectile weapon, needle weapon and flechette weapon attacks are made with a -30% penalty in a weightless environment. Ramjet weapons receive a -20% penalty. Rail weapons receive a -60% penalty. Energy weapons receive a -10% penalty. These penalties are halved if the character has secure footing. These penalties apply only to the second and subsequent shots fired by the weapon in a single turn. The first shot is made with no penalty.

Melee combat in a weightless environment is conducted at a -12 ATK / -10 DEF penalty. Zero G combat skill will reduce these values by an amount equal to the skill level. Unless the attacker has secure footing, all non-energy melee attacks will do $\frac{1}{2}$ damage.

Disruption weapons do not work in space. The electrostatic discharge (lightning) from ion weapons will not occur in space.

[Ed and Neb have ventured into space. During the space walk, pirates attack them. Neb is fired upon by a pirate armed with a Gauss Assault Rifle. Because they are in space, the Gauss Assault Rifle's normal RC of 24 is tripled, becoming 72. The pirate is 500 m away, placing Neb in Medium range (no penalty to hit). The pirate fires twice. The pirate's second shot is made with a -60% penalty (due to recoil in space). Neb is hit twice, taking 25 and 21 points of K damage. Neb is wearing a spacesuit with 5 layers of armor (RUG 10, 40 DP). Each hit is reduced by the spacesuit's RUG (10) to 15 and 11, respectively. The suit DP is reduced to $40 - 15 - 11 = 14$ DP. Each of the hits is more than 10% of the suits original DP of 40, so his suit is also punctured twice. To patch his suit he must make a Simple (COR) check (with a -3 modifier because he is wearing an armored spacesuit). If Neb is unable to patch his suit, he will die in 10 (suit RUG score) turns. Neb can make two attempts per turn to patch his suit.

Meanwhile, Ed, who is attempting to make repairs on the outside of their ship, is set upon by a very large pirate. The pirate has snuck up on Ed and makes a surprise melee attack. Because they are in a weightless environment, the pirate suffers a -12 Attack penalty, and Ed suffers a -10 Defense penalty. However, Ed also has Zero G combat level 4, so his defense penalty is only -6.]

Hit Locations

Optional Rule: Fast Hit Locations

Characters have a number of hits equal to 2x their base Hits score. All damage is deducted from this value. When a character is hit, roll a d20. On a result of 19 or 20, the character has been hit in the head or other vital organ. Make a immediate Difficult (MOT) check for Loss of Consciousness. If the check succeeds, the character is stunned for 2d10 turns, if the check fails, the character is rendered unconscious for d10 minutes. This results a faster paced combat game.

Lyandithates

Lyandithates have Hits equal to STR x3. They have only 2 Hit locations: Body and Sensory. A Hit to their Sensory location is like a head wound for a human. Their sensors can take a combined total of 1x Hits. Their body can take $1\frac{1}{2}$ x Hits.

Lyandithate Hit Location Table

Hit Location	d20
Body	1 – 18
Sensory	19 – 20

Ferrites

Ferrites have Hits equal to $(END + TGH) \times 8$. They have only 1 hit location.

Slen Boraka

Slen Boraka have Hits equal to STR + TGH + 2xWIL. They have 2 hit locations: Head and Torso. Their heads have Hits x2, and their torsos have Hits x3.

Slen Boraka Hit Location Table

Hit Location	d20
Torso	1 – 16
Head	17 – 20

A'Ghuu

A'Ghuu have Hits equal to $\frac{1}{2}$ STR + $\frac{1}{2}$ END + TGH + FLX + WIL. They have 8 hit locations: head, torso, 3 arms and 3 legs. Each location has 1x Hits; the torso has 1.2x Hits.

A'Ghuu Hit Location Table

Hit Location	d20
Legs*	1 – 6
Torso	7 – 12
Arms*	13 – 16
Head	17 – 20

- Damage to Arms and Legs is applied to which ever Arm or Leg is facing the attacker. If the target is facing the attacker, roll to determine which one is hit (d4, 1-2 left, 3-4 right). If the target's side is to the attacker (d4, 1-2 side appendage, 3-4 rear appendage). If the target's rear is to the attacker (2d4, 2-3 left, 4-6 rear, 7-8 right).

Graff

Graff have Hits equal to STR + END + TGH + WIL. They have 6 hit locations: head, torso, 2 arms and 2 legs. Each location has 1.2x Hits. The torso has 1.8x Hits. Graff use the same hit location table as humans.

Voix

Voix have 1 hit location and can take 200 points of damage.

Meylor

Meylor have Hits equal to $\frac{1}{2}$ STR + $\frac{1}{2}$ END + TGH + WIL. They have 9 hit locations: torso and 8 limbs. Torso has $1\frac{1}{2}$ x Hits, each limb has $\frac{3}{4}$ x Hits.

- Randomly determine which tentacle is hit by an attack. (d8, 1 1st tentacle, 2 2nd tentacle, etc.)

Meylor Hit Location Table

Hit Location	d20
Tentacles	1 – 7
Torso	8 – 20

Humans

Humans have Hits equal to $\frac{1}{2}$ STR + END + TGH + WIL. They have 6 hit locations: head, torso, 2 arms and 2 legs. The torso has $1\frac{1}{4}$ x Hits, the head and limbs each have 1x Hits.

- Damage to Arms and Legs is applied to which ever Arm or Leg is facing the attacker. If the target is facing the attacker, then randomly determine which limb is hit (d4, 1-2 left, 3-4 right).

Human Hit Location Table

Hit Location	d20
Legs*	1 – 6
Torso	7 – 12
Arms*	13 – 18
Head	19 – 20

[During their previous exchange, Ed is hit by an enemy laser blast. A d20 is rolled and the result is an 18, consulting the A'Ghuu hit location table, we find that this is a head hit. If Ed does not have an active Chromatic or Glow screen, he's likely to be finished.]

Taking Damage

"What do I gotta roll? Does it matter what size die?"

Wounds

A character's TGH score will reduce the amount of damage he sustains from a weapon hit. Every time a character takes damage, it is reduced by the character's TGH score Modifier. Consult the TGH table for hit reduction values. Hits to the head do double damage.

A character is considered to have a Light wound the first time a location takes damage of any kind. A character is considered Moderately wounded if he receives another Light wound in another location, or he takes another hit to a wounded location. A character is considered to have a Severe wound when any location is reduced beyond 50% its starting hits, or the character has a broken limb, etc. A character is considered to have a Head wound anytime after he has taken damage to the head. For targeting modifiers, only the worst wound severity is applied. Head wounds are applied in addition to wound severity.

If a character's Head or Torso hits are reduced below zero, he automatically falls unconscious. The character will loose 1 hit per turn from the location until the bleeding is stopped, or he receives enough shots of Revive to bring his hits back above zero.

Loss of Consciousness

The LOC roll is based on damage the character has taken. Anytime the character receives a Moderate wound, the character must make a Moderate Ability Check (MOT) to remain conscious. Anytime the character receives a Severe wound or a Head wound, the character must make a Difficult ability check (MOT). If the character fails, he will fall unconscious for d10 minutes. At the end of this time, the character may make another LOC check to regain conscious, this check may be made once per turn. Once awake, the character must continue to make LOC checks to avoid falling unconscious for another d10 minutes. If medical drugs are administered, this cycle is terminated and the character will remain awake once he wakes up.

[IMAGE 3x3] (Loss of consciousness) character laying face down in a pool of his own blood.

[Ed's head hit was from a laser rifle and is absorbed by his Chromatic Screen. Unfortunately, he took another shot in the arm from a heavy ramjet pistol (B rating). The rolled damage is 12. Ed's TGH modifier is -2, so the 12 is reduced to 10, which is subtracted from the hits on his left arm. This leaves his left arm Hits at 8, which is less than half its starting value of 18, and thus is considered a Severe wound. Ed must now make a Difficult (MOT) check to remain conscious. Ed's MOT (Motivation) score is 8 (average of WIL and FOC), he rolls a 5, which gives him an 13, so he falls unconscious. If he awakes, Ed will have a -45% penalty to hit for the rest of the combat due to his severe wound, as well as having to make a Difficult (MOT) check to remain conscious every turn until medical attention is administered to him.]

Recovery

Surgery

Unless otherwise stated, all characters naturally heal 1 hit point per day. This can be accelerated through the use of drugs and surgery. Surgery can fix all a character's damage. Surgery takes 10 minutes (minus the surgeon's skill level, to a minimum of 3) per point of damage repaired. Surgery also requires 30 minutes of time before and after the operation. Separate surgery is required to fix damage to multiple locations on a character. Characters require bed rest after surgery to recover. This time is equal to 1 day per hit point fixed. In a fully decked out hospital or similarly equipped facility, with complete bed rest, a character will heal at double his natural rate.

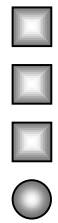
Medical Drugs

Some field medicine will allow a character to heal faster. Common medical drugs follow. A character can only benefit from 3 doses of any type of drug in an eight hour period.

Endorflow

Heals 10 points of damage as long as the character's Head and Torso are both above 0. 90 credits per dose.

NoTox	Prevents character from suffering the effects of poisons if taken before encountering the poison; allows an additional resistance check against a poison, 2 levels of difficulty easier, if taken after encountering the poison. 180 credits per dose.
StayWound	Seals open wounds, prevents infection, reduces wound level by 1. 90 credits per dose.
RecoverAid	Speeds healing, frequently administered in hospitals, allows the character to heal 1 additional point of damage per day with complete bed rest. 90 credits per dose.
Revive	A true life-saving drug, frequently administered by emergency paramedics at disaster sites; heals 10 points of damage immediately; heals 5 points of damage the next turn; only restores hits to the Torso, and only if the Torso has been reduced below 0 Hits. 270 credits per dose.
PainStop	Blocks out all pain in the character. Duration is 2d10 minutes. While under the effects, the character feels absolutely no pain. For the duration of the drug, the character's wound level is reduced to None and the character makes no LOC checks. 180 credits per dose.
SlowMetab	When administered, the character's metabolism, heart rate, breathing, brain wave activity, etc., are all reduced to a near comatose state. The net effect is that the character is placed in a near stasis, preventing death from mortal wounds (torso and head reduced below 0). The drug will last for 60 + 3d10 minutes. 270 credits per dose.
Medipack	50 credits, .5 kg, holds 8 doses of medicine, synth-skin, antiseptic spray, gauze, small bandages, sterile-pads, mild pain killers, etc.



[IMAGE SPLASH 8 ½ x 11] (Weapons) One or two characters in a gun store. They are at the counter, the viewer is behind the characters so all we see is their back. They are clearly adventures and they are talking to the shop keeper. Behind him are all sorts of bizarre weapons on tables, in stands, and on display. There may be a weapon on the counter as well, and weapons in the counter top that is clear.



Weapons



Ranged Weapons

[Neb lifted the missile launcher onto his shoulder. He sighted in on the distant aircar, it was still too far off. It would only take one shot from the anti-tank weapon to destroy the aircar, but he had several just in case. He wasn't sure what kind of warheads were on the missiles he was using, but Ed had assured him they would make a big enough boom. That was all he cared about.]

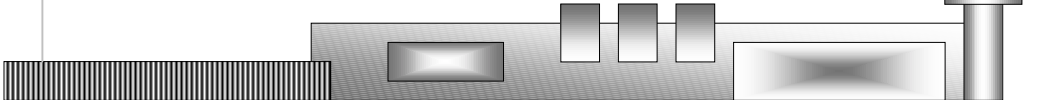
As in real life, ranged weapon combat is very deadly. A single shot from even a small weapon can kill most people if it hits the right spot.

Table Headers

RC	Range Class of the weapon, this is used to determine the weapon's range categories
Damage	The damage the weapon does to the target
ROF	Rate of Fire; the number of times the weapon can fire during a turn
Pow	The power requirement for a single shot from the weapon
Mass	The mass of the weapon in kilograms
Jam	The Jam Rating of the weapon. The higher the Jam, the more likely it is to malfunction.

Notations

AT	Anti-Tank or Anti-Armor weapon.
Semi	Semiautomatic weapon capable of firing single shots and controlled bursts.
Select<	Fire selectable weapon capable of firing single shots, controlled bursts, short bursts.
Select	Full fire selectable weapon capable of firing single shots, controlled bursts, short bursts and long bursts.
Burst	Burst capable weapon that can fire controlled bursts, short bursts and long bursts.
Auto	Fully automatic weapon capable of firing only long and short bursts.
Short	Fires short bursts only.
Long	Fires long bursts only.
Shot	Weapon fires a shotgun blast. Fires a cone spread of rounds / energy / etc. Target is hit by d3 rounds.
Clip	Weapon uses ammunition clips. Energy weapons use power clips or can be attached to a power pack via an adapter (.1 kg, 100 credits).
Mag	Weapon uses ammunition magazines. Energy weapons use power mags or can be attached to a power pack via an adapter (.1 kg, 100 credits).
Belt	Weapon is belt fed.
Mag or Belt	Weapon can be magazine or belt fed.
Backpack	Weapon must be powered from some a power backpack or larger power source.
Cell	Weapon must be powered from some a power cell or larger power source.
(T)	Weapon must be mounted on a tripod



Airguns	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Auto Carbine	8	3d6	2	2	1	2.65	mag	225
Submachine gun	8	3d8	2	2	1	3.4	mag	370
Autorifle	12	3d8	2	2	1	4.2	mag	240
Assault Rifle	12	3d10	2	2	1	4.6	mag	310

Fires “bolts” of high pressure air and are short to medium range weapons designed for non-lethal riot control. All damage is bruise damage. B rated armor will negate half the damage, taking no damage in the process. These weapons are not effective beyond medium range. Airguns fall under the “Projectile Weapons” skill.

Projectile Weapons	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost	
Holdout Pistol	2	2d4	2	--	3	1	clip	120	
Light Pistol [.30]	3	2d6	3	--	3	1.5	clip	280	
Heavy Pistol [9mm]	4	2d8	3	--	3	2.5	clip	470	
Machine Pistol [Uzi]	4	2d8	3 ^{Auto}	--	4	2	mag	430	
Auto Carbine	8	3d6	3 ^{Select}	--	4	2.5	mag	325	
Submachine gun	8	3d8	1 ^{Auto}	--	4	3.25	mag	490	
Autorifle	12	3d8	3 ^{Select}	--	4	4	mag	380	
Assault Rifle	12	3d10	3 ^{Select}	--	4	4.5	mag	430	
Squad Assault Weapon	10	3d10	4 ^{Long}	--	4	5.25	mag	500	
Pulse Rifle Φ	8	3d12	2 ^{Select<}	--	4	5.6	mag or belt	840	+25% bonus to hit
Support Rifle	10	3d12	1 ^{Burst}	--	4	6	mag or belt	565	
Machinegun (T)	14	6d12	1 ^{Auto}	--	4	20	belt	720	
Heavy Machinegun (T)	16	8d12	1 ^{Auto}	--	4	35	belt	1,450	
Sniper Rifle Ω	20	3d12	1	--	3	4	12	430	Uses Rifle Rounds
Minigun Ξ	8	6d12	1	--	4	6	belt	630	No barrel mods
Grenade launcher (single) ϑ	12	special	1	--	3	2	1	130	Fires grenades
Grenade launcher (auto) ϑ	12	special	3 ^{Semi}	--	4	3.5	mag or belt	390	Fires grenades
Shotgun (single)	6	3d8	2 ^{Shot}	--	3	3	12	360	
Shotgun (double barrel) θ	4	3d8(x2)	1 ^{Shot}	--	3	2.5	2	310	
Shotgun (automatic)	6	3d8	3 ^{Select<, Shot}	--	4	3	mag	465	
Plastique Bolt gun	9	5d20⊗	1	--	3	4.5	clip	595	Heavy Pistol size
Heavy Bolt gun	15	10d20⊗	1	--	3	6.2	mag	1,110	SMG size
Hand flamer	6	3d10ψ	1	--	3	3.5	tank	930	
Flame thrower	8	5d10ψ	2	--	3	5	tank	1,370	

Availability B. Commonly referred to as Slug-guns or “Punchers.” Require Projectile Weapons skill to use.

- Φ +25% bonus to hit; cross between a projectile and ramjet weapon; size equivalent to a support rifle
- Ω Bolt action, rounds are loaded directly into the weapon. Uses Rifle Rounds. Sniper weapons suffer a –60% penalty to hit at point blank range and a –40% penalty to hit at short range.
- Ξ The minigun can fire controlled bursts and short bursts.
- ϑ The weapon does damage appropriate to the type of grenade fired. Typically, fragmentation grenades are used (damage 4d20)
- θ The double barrel shotgun can fire either one or both barrels at once.

⊗ All damage is class B. Bolt guns fire two types of ammunition, standard and proximity fused. Proximity fused ammunition costs twice as much. Standard ammunition does the rolled damage (5d20 or 10d20) to the location hit and all other locations take ¼ damage. Proximity ammunition detonates before hitting the target. The target takes ½ rolled damage to every hit location. In both cases, everything within 3 m of the target takes ½ damage; everything within 12 m of the target takes ¼ damage.

ψ Fire burns for 6 more turns, doing 1d10 damage to a random location each turn.

Needle Weapons →(	RC	Damage δ	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Needle Pistol	1	d4	2	--	2	.7	clip	216
Light Needle Pistol	2	2d4	1	--	2	1	clip	504
Heavy Needle Pistol	2	2d6	2	--	2	1.6	clip	846
Machine Needle Pistol	2	2d6	1 ^{Short}	--	3	1.12	clip	774
Needle Carbine	4	3d4	1 ^{Select}	--	3	1.7	mag	585
Needle SMG	4	3d6	1 ^{Long}	--	3	2.2	mag	890
Needle Rifle	8	3d6	1 ^{Select}	--	3	2.7	mag	684
Assault Needle Rifle	8	3d8	2 ^{Select}	--	3	3	mag	774
SAW Needle Rifle	6	3d8	3 ^{Long}	--	3	3.5	mag	900
Support Needle Rifle	6	3d10	2 ^{Burst}	--	3	4	mag or belt	1,017
Needle Machinegun (T)	10	6d10	1 ^{Auto}	--	3	13.4	belt	3,240

Availability B. Require Shard Weapons skill to use.

→(Needle weapons ignore mesh and cloth armors.

δ For an additional 5 credits per round, needle weapons can fire drugged rounds. Available drugs are Sleep and Poison. To resist the Sleep drug, the target must make a Moderate ability check (END, WIL). Failure results in the target falling unconscious for 3d20 turns. To resist the Poison drug, the target must make a Difficult (END, TGH) check. Failure results in the target becoming incapacitated for the next 6d10 minutes (after being revived, the character can only move at ½ walking pace and cannot fight or perform any strenuous activity). If the target fails a second Difficult (END, TGH) check, the target will die in d12 hours unless hospitalized immediately.

Ramjet Weapons ⊕	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Ramjet Pistol	4	2d6	1	--	3	1.2	clip	192
Light Ramjet Pistol	8	2d8	1	--	3	1.8	clip	448
Heavy Ramjet Pistol	8	2d10	1	--	3	2.9	clip	752
Machine Ramjet Pistol	6	3d8	1 ^{Semi}	--	4	2	clip	688
Ramjet Carbine	12	3d8	1	--	3	3.1	mag	520
Ramjet Subgun	12	3d10	1 ^{Short}	--	4	3.9	mag	790
Ramjet Rifle	16	3d10	1	--	3	4.7	mag	608
Assault Ramjet Rifle	16	3d12	2	--	3	5.3	mag	688
SAW Ramjet Rifle	14	3d12	3 ^{Short}	--	4	6.15	mag	800
Support Ramjet Rifle	14	4d12	2	--	3	7	mag	904
Ramjet Recoilless Rifle (T) 18		6d12 ^{AT}	1	--	3	23.6	shell	2,304
Rocket Pack (shoulder) 14		4d12 ^{AT}	1	--	3	12	rocket	607
Shoulder Launcher	--	warhead	1	--	3	6.4	msl ∩	429
Tripod Launcher (T) ∅	--	warheads	1	--	3	10.2	hvy msl ∩	858
Tripod Launcher II (T) ∅	--	warheads	1	--	3	16.6	hvy msl ∩	1,716
30mm Minimissile Rifle 12		3d12 ^{AT}	2	--	3	4.1	mag	532
Tri-30 Minimissile Rifle θ 14		3d12(x3) ^{AT}	1	--	3	5	9	1,064
MkV antitank weapon Γ 10		9d20 ^{AT}	1	--	3	3.4	1	620

Availability B. "Jetguns." Require Ramjet Weapons skill to use.

- ⊕ All ramjet technology weapons have simple aspect seeking guidance mechanisms in the head of their ammunition. Ramjet weapons receive a +30% bonus to hit.
- ∅ The Mark 1 tripod missile launcher holds only one heavy missile. After it is fired, the launcher must be reloaded. The Mark 2 tripod missile launcher holds three heavy missiles and can fire one at a time, or all three at once. The missiles must all be fired at the same target if fired together. The missiles are loaded directly into the launcher. Missiles must be built by selecting warheads and guidance system in the *Ramjet Ammunition* section.
- ∩ Missiles must be built by selecting warheads and guidance system in the *Ramjet Ammunition* section.
- θ The Tri-30 Minimissile Rifle has three barrels and can fire 1, 2 or 3 rounds at a time. These rounds must all be fired at the same target. Damage listed is for each round fired. The rounds are loaded directly into the weapon. It uses the same missiles as the 30mm Minimissile Rifle.
- Γ Single-shot disposable weapon

Laser Weapons Δ	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Laser Pistol	8	d10	2	1	2	1.1	clip	324
Light Laser pistol	12	2d8	2	1	2	1.7	clip	756
Heavy Laser pistol	12	2d10	2	2	2	2.7	clip	1,269
Laser Machine Pistol	10	2d10	3 ^{Short}	2	3	1.9	clip	1,161
Laser Carbine	16	3d8	3	2	2	2.8	mag	878
Laser SMG	16	3d10	1 ^{Auto}	2	3	3.65	mag	1,340
Laser Rifle	24	3d10	3	3	2	4.5	mag	1,030
Laser Shot	12	3d10	2 ^{Shot}	6	2	3.2	mag	927
Assault Laser Rifle	24	3d12	4 ^{Select}	4	3	5	mag	1,161
SAW Laser Rifle	20	3d12	5 ^{Long}	3	3	5.85	mag	1,345
Support Laser Rifle	18	4d12	4 ^{Auto}	4	3	6.7	mag	1,530
Laser Sniper Rifle Ω	26	3d12	1	4	2	4.5	mag	1,345
Laser Cannon (T)	22	8d20 ^{AT}	2	10	2	22.3	backpack	8,505
Heavy Laser Cannon (T)	24	12d20 ^{AT}	2	35	2	39.1	cell	24,300

Availability C. Blasters. Require the Energy Weapons skill to use.

Δ Laser weapons can dial their power from 1 to 5. This regulates how much damage they do. At a setting of 1, all values are as listed for the weapon. For each setting above 1, the PU use is increased by 1, and the damage is increased by 1d. So, a Laser Sniper Rifle set at 3 would use 6 (4+2) PU and deliver 5d12 (3d12 +2d12) damage per shot. Whereas a Heavy Laser Pistol set at 5 would use 7 (2+5) PU and deliver (2d10 +4d10) damage per shot.

Ω Sniper weapons suffer a –60% penalty to hit at point blank range and a –40% penalty to hit at short range.

Electron Weapons $\approx$	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Electron Pistol	4	d6	1	1	2	1.1	clip	504
Light Electron pistol	8	d8	2	1	2	1.7	clip	1,176
Heavy Electron pistol	8	d10	1	1	2	2.8	clip	1,974
Electron Blazer (Uzi)	6	d10	1 ^{Semi}	1	3	2	clip	1,806
Electron Carbine	12	2d8	2	1	2	2.8	mag	1,365
Electron SMG	14	2d10<	1 ^{Short}	2	3	3.65	mag	2,075
Electron Rifle	16	2d10	1	2	2	4.5	mag	1,596
Assault Electron Rifle	16	2d12	2 ^{Semi}	2	3	5.1	mag	1,806
SAW Electron Rifle	14	2d12>	3 ^{Short}	2	3	5.95	mag	2,090
Support Electron Rifle	14	2d20	1 ^{Semi}	2	3	6.8	mag	2,373
Electron Heavy Rifle (T)	18	4d20	1	6	2	22.6	backpack	39,690

Availability C. "Shockers," "Shock-guns," "Zappers" or "Zap-guns." Require the Particle Weapons skill to use.

$\approx$ Targets hit by electron weapons are stunned a number of turns equal to the maximum damage possible from the shot, minus the damage done, e.g., a d10 weapon that did 3 points of damage will stun for 7 turns. A successful Difficult (BOD) check will reduce this by 50%. If the number of turns the character is stunned for is less than the character's END ability, the character may further reduce the stun duration by 50%.

< When computing stun duration, the Electron SMG has a –2 modifier, i.e., stun equals 18 – damage.

> When computing stun duration, the Electron SAW has a +12 modifier, i.e., stun equals 36 – damage.

Proton Weapons	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Proton Pistol	12	d6	1	1	2	1.5	clip	468
Light Proton pistol	16	d8	1	1	2	2.3	clip	1,092
Heavy Proton pistol	16	d12	1	1	2	3.8	clip	1,833
Proton Blazer (Uzi)	14	d12	1 ^{Semi}	1	3	2.7	clip	1,677
Proton Carbine	20	d10	1	2	2	3.9	mag	1,270
Proton Subgun	20	d12	1 ^{Short}	2	3	4.95	mag	1,930
Proton Rifle	24	d12	1	2	2	6	mag	1,482
Assault Proton Rifle	24	d20	1 ^{Semi}	3	3	6.8	mag	1,677
SAW Proton Rifle	22	d20	2 ^{Short}	3	3	7.95	mag	1,945
Support Proton Rifle	20	2d20	1 ^{Semi}	3	3	9.1	mag	2,210
Proton Sniper Rifle	30	d20	1	3	2	4.95	mag	1,945
Proton Heavy Rifle (T)	28	2d100 ^{AT}	1	24	2	30	backpack	36,855

Availability C. Require the Particle Weapons skill to use. Proton fire causes any gas (including atmosphere) along the path of the beam to fluoresce very brightly. Typically the “beam” is cyan, orange or yellow in color, depending on the dominant gas in the atmosphere.

Flechette Weapons ∴	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Flechette Pistol	1	2d3	1	--	2	1.2	clip	240
Light Flechette pistol	2	3d4	2	--	2	1.7	clip	560
Heavy Flechette pistol	2	3d6	2	--	2	2.8	clip	940
Machine Flechette Pistol	2	3d6	2 ^{Short}	--	3	2	clip	860
Flechette Carbine	6	4d4	2 ^{Select}	--	3	2.9	mag	650
Flechette SMG	6	4d6	1 ^{Auto}	--	3	3.75	mag	990
Flechette Rifle	10	4d6	2 ^{Select}	--	3	4.6	mag	760
Assault Flechette Rifle	10	4d8	2 ^{Select}	--	3	5.2	mag	860
SAW Flechette Rifle	8	4d8	3 ^{Long}	--	3	6.05	mag	995
Support Flechette Rifle	8	4d10	2 ^{Burst}	--	3	6.9	mag or belt	1,130
Flechette Machinegun (T)	12	8d10	1 ^{Auto}	--	3	23.1	belt	3,780

Availability D. “Shredders.” Require the Shard Weapons skill to use. Flechette weapons fire clusters of serrated plastic shards.

∴ Armor is only ½ effective against flechette weapons. Flechette weapons do no damage to vehicles or vehicular armor.

Rail Weapons ▽	RC	Damage	ROF	Pow	Jam	Mass	Ammo	PU Ammo	Cost
Holdout Rail Pistol	12	2d6	1	1	4	1.7	clip	clip	924
Light Rail pistol	16	2d8	2	1	4	2.5	clip	clip	2,156
Heavy Rail pistol	16	3d8	3	1	4	4.1	clip	clip	3,619
Machine Rail Pistol	14	3d8	3 ^{Semi}	1	5	2.9	clip	clip	3,311
Rail Carbine	20	4d8	2	2	4	4.3	mag	mag	2,510
Rail Subgun	20	4d10	1 ^{short}	2	5	5.5	mag	mag	3,805
Rail Rifle	24	4d10	1	2	4	6.7	mag	mag	2,926
Assault Rail Rifle	24	4d12	2	3	4	7.5	mag	mag	3,311
SAW Rail Rifle	22	4d12	2 ^{short}	3	5	8.75	mag	mag	3,835
Support Rail Rifle	20	5d12 ^{AT}	1	3	4	10	mag	mag	4,360
Rail Cannon (T)	28	7d20 ^{AT}	1	9	4	33.3	round	backpack	72,765
Long Rail Cannon (T)	32	9d100 ^{AT}	1	24	4	58.4	round	backpack	83,160

Availability D. Also sometimes called “Gaussguns.” Require the Rail Weapons skill to use. When fired, rail weapons emit only a low hum as the magnetic coils pulse. However, the report from the round is a long tearing sound, like a hundred sheets of paper being ripped at the same.

▽ Rail weapons use both ammunition and power. The type of power system required is listed under PU Ammo.

Maser Weapons ξ	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Maser Pistol	6	d6	1	1	2	1.3	clip	372
Light Maser pistol	10	d8	1	1	2	2	clip	868
Heavy Maser pistol	10	d10	1	1	2	3.2	clip	1,457
Maser Blazer (Uzi)	8	d10	1 ^{Semi}	1	3	2.2	clip	1,333
Maser Carbine	14	2d8	1	2	2	3.3	mag	1,010
Maser SMG	14	2d10	1 ^{Short}	2	3	4.3	mag	1,531
Maser Rifle	18	2d10	1	2	2	5.3	mag	1,178
Assault Maser Rifle	18	2d12	1 ^{Semi}	3	3	6	mag	1,333
SAW Maser Rifle	16	2d12	1 ^{Short}	3	3	7	mag	1,550
Support Maser Rifle	16	2d20	1 ^{Semi}	3	3	8	mag	1,760
Maser Cannon (T)	20	4d20	1	8	2	26.6	backpack	19,530

Availability D. “Microwavers” or “M-wavers.” Require the Energy Weapons skill to use. Microwave weapons are fairly quiet and have an invisible beam. These weapons are favored by assassins.

ξ Maser weapons have an “overcharge” capability. When set to overcharge, the weapon can only be fired every other turn, as it spends the intervening turn cooling and recharging. When fired in overcharge, the weapon’s power consumption and damage are multiplied by 10.

Ion Weapons [⚡]	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost	Light (dmg)
Holdout Ion Pistol	6	d8	1	1	2	.8	clip	648	23 (d4)
Light Ion pistol	10	2d6	1	1	2	1.2	clip	1,512	21 (d6)
Heavy Ion pistol	10	2d8	1	2	2	1.9	clip	2,538	20 (d8)
Ion Blazer (Uzi)	8	2d8	1 ^{Semi}	2	3	1.4	clip	2,322	19 (d8)
Ion Carbine	12	3d6	2	2	2	2	mag	1,756	19 (d10)
Ion Subgun	12	3d8	1 ^{Short}	2	3	2.6	mag	2,678	19 (d12)
Ion Rifle	20	3d8	2	3	2	3.2	mag	2,060	17 (d12)
Ion Shot [⚡]	10	3d8	1 ^{Shot}	9	3	3.7	mag	1,854	17 (d12)
Assault Ion Rifle	20	3d10	2	4	2	3.5	mag	2,322	17 (d20)
SAW Ion Rifle	16	3d10	1 ^{Short}	4	3	4.1	mag	2,690	15 (d20)
Support Ion Rifle	14	4d10	2	4	2	4.7	mag	3,060	14 (2d12)
Ion Cannon (T)	18	6d12 ^{AT}	1	10	2	15.6	backpack	17,010	11 (4d20)
Heavy Ion Cannon (T)	20	8d12 ^{AT}	1	35	2	27.4	cell	48,600	10 (5d20)

Availability E. "Lightning guns." Require Particle Weapons skill to use. The "bolt" from an ion weapon looks like a heat shimmer in the atmosphere.

[⚡] Ion weapons are capable of inducing massive electrical discharges. They have three settings: Low, Medium and High. The settings allow the weapon to use 1, 2 or 3 times the listed PU to induce a bolt of static lightning from the surrounding atmosphere. The lightning does 1, 2 or 3 times the damage listed in parenthesis under "Light." E armor is only half effective against lightning. The value in the Light column is the number that must be rolled (or higher) on d20 for the lightning to hit. The number of PU used to induce the bolt is added to this roll. This roll is made regardless if the character successfully hit the intended target; the lightning will strike whatever the bolt from the weapon struck. Lightning can only be induced once per turn.

[⚡] The Ion Shot automatically has a chance of lightning with every *round* that strikes, at no extra PU cost.

Particle Weapons	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Particle Pistol	12	2d4	1	2	2	2.2	clip	1,407
Light Particle pistol	14	2d6	1	2	2	2.7	clip	3,284
Heavy Particle pistol	18	2d8	2	2	2	4.5	clip	5,513
Particle Carbine	28	3d6	2	4	2	5.4	mag	3,825
Particle SMG	28	3d8	1 ^{Short}	4	3	6.3	mag	5,790
Particle Rifle	36	3d8	2	5	2	7.2	mag	4,457
Particle Shot	18	3d8	1 ^{Shot}	5	2	5.4	mag	3,345
Assault Particle Rifle	36	3d10	4	6	2	8.1	mag	5,045
SAW Particle Rifle	32	3d10	2 ^{Short}	6	3	9	mag	5,900
Support Particle Rifle	32	4d10	2	8	2	10.8	mag	6,630
Particle Cannon (T)	40	8d12AT	3	21	2	36	backpack	36,950
Heavy Particle Cannon (T)	50	12d20AT	2	60	2	63	cell	84,456

Availability E. "Particle Beamer" or "P-Beamer." Require Particle Weapon skill to use. Fires a barrage of electrons, protons and neutrons. P rated defenses will protect normally against Particle weapons.

Neuro Weapons ∞	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Pistol	2	2d4	1	3	2	1.3	clip	1,225
Neuro Light pistol	3	2d8	1	5	2	2.1	clip	2,855
Neuro Heavy pistol	3	2d10	2	5	2	3.4	clip	4,795
Neuro Carbine	6	2d12	1	7	2	3.6	mag	3,315
Neuro Subgun	6	2d12	2	7	2	4.5	mag	5,040
Neuro Rifle	10	3d10	1	8	2	5.4	mag	3,875
Neuro Assault Rifle	10	3d12	2	10	2	6.3	mag	4,385
Neuro SAW Rifle	8	3d12	3	12	2	7.3	mag	5,070
Neuro Support Rifle	8	4d12	3	18	2	8.4	mag	5,765
Neuro Cannon (T)	12	8d20	1	48	2	32	backpack	32,130
Neuro Heavy Cannon (T)	16	10d100	1	185	2	50	cell	55,080

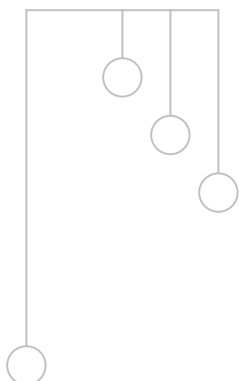
Availability F. Require Energy Weapons skill to use. Neuro disrupters inflict debilitating pain.

∞ All damage is bruise damage. Difficult (BOD) check to avoid falling to the ground writhing in pain for 1 turn. Any defense that protects against stun attacks will reduce the bruise damage by ½ and reduce the ability check to Moderate.

Disruption Weapons ϕ	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Disruption Pistol	1	4d2	1	1	3	1.3	clip	408
Light Disruption pistol	2	4d4	1	2	3	2	clip	952
Heavy Disruption pistol	2	4d6	1	2	3	3.3	clip	1,598
Disruption Blazer [Uzi]	2	4d6	1 ^{Semi}	2	4	2.3	clip	1,462
Disruption Carbine	4	5d4	1	3	3	3.5	mag	1,105
Disruption Subgun	4	5d6	1 ^{Short}	3	4	4.35	mag	1,680
Disruption Rifle	8	5d6	1	3	3	5.2	mag	1,292
Assault Disruption Rifle	8	5d8	1	4	3	6	mag	1,462
SAW Disruption Rifle	6	5d8	1 ^{Short}	4	4	7	mag	1,690
Support Disruption Rifle	6	6d8	1	6	3	8	mag	1,921
Disruption Cannon (T)	10	8d8	1	16	3	28	backpack	10,710
Heavy Disruption Cannon (T)	12	10d10	1	65	3	46	cell	18,360

Availability F. "Screamers" Disrupters are sonic weapons. Require Disruption Weapons skill to use.

ϕ Disruption weapons do double damage to organic targets. Damage is spread evenly among all parts of the body.



Plasma Weapons ☿	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Plasma Pistol	12	2d6	1	1	2	2.5	clip	745
Light Plasma pistol	14	2d8	1	1	2	3.4	clip	1,835
Heavy Plasma pistol	14	2d10	1	2	2	5.3	clip	3,080
Plasma Blazer (Uzi)	12	2d10	1 ^{Semi}	2	3	3.7	clip	2,819
Plasma Carbine	18	3d8	1	3	2	6.2	mag	2,138
Plasma SMG	18	3d10	1 ^{Short}	3	3	7.25	mag	3,240
Plasma Rifle	22	3d10	1	4	2	8.3	mag	2,491
Assault Plasma Rifle	22	3d12	2 ^{Semi}	6	3	9.5	mag	2,819
SAW Plasma Rifle	20	3d12	2 ^{Short}	6	3	11.1	mag	3,265
Support Plasma Rifle	20	4d12	1 ^{Semi}	7	3	12.7	mag	3,705
Light Plasma Cannon (T)	24	7d12 ^{AT}	2	21	2	56	backpack	20,650
Plasma Cannon (T)	26	7d50 ^{AT}	1	56	2	98	cell	47,200
Banshee PATW	18	4d100 ^{AT}	1/8	65	2	9.8	beltpack	5,638

Availability G. "Plas-guns." Require the Heavy Beam Weapon skill to use. Plasma weapons fire a blazing ball of energy that looks like a miniature sun. These weapons are very noisy.

☿ Although plasma weapons are considered H category attacks (High energy), they are also fire attacks. There is a 10% chance a plasma bolt will ignite anything it hits. This chance is increased to 50% for organic material (cloth, wood, underbrush, etc.). There is a 100% chance a plasma bolt will detonate any combustible or inflammable object it hits.

Fusion Weapons	RC	Damage ◇	ROF	Pow	Jam	Mass	Ammo	Cost
Holdout Fusion Pistol	8	2d8	1	2	2	2	clip	828
Light Fusion pistol	10	2d10	1	2	2	3	clip	1,932
Heavy Fusion pistol	10	2d12	1	3	2	5	clip	3,243
Fusion Blazer [Uzi]	8	2d12	1 ^{Semi}	3	3	3.5	clip	2,967
Fusion Carbine	14	3d10	1	5	2	6	mag	2,250
Fusion SMG	14	3d12	1 ^{Short}	5	3	7	mag	3,410
Fusion Rifle	18	3d12	1	6	2	8	mag	2,622
Assault Fusion Rifle	18	3d20	2 ^{Semi}	8	3	9	mag	2,967
SAW Fusion Rifle	16	3d20	2 ^{Short}	8	3	10.5	mag	3,435
Support Fusion Rifle	16	4d20	1 ^{Semi}	9	3	12	mag	3,900
Light Fusion Cannon (T)	20	7d20	2	27	2	40	backpack	21,735
Fusion Cannon (T)	22	7d100	1	81	2	70	cell	49,680

Availability G. "Nuclear guns" or "Sun-guns." Require the Heavy Beam Weapon skill to use. Fusion weapons fire magnesium bright beams of energy and have a distinct "crack" sound when fired.

◇ All Fusion weapons are considered AT weapons.

Grav Weapons ☐	RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost £
Light Graviton pistol	6	3d8	1	6	5	3.6	clip	28,980
Heavy Graviton pistol	8	3d10	1	9	5	6	clip	48,645
Graviton Carbine	14	4d10	1	18	5	9.6	mag	39,330
Graviton Subgun	14	4d12	1 ^{Short}	21	6	10.2	mag	57,860
Graviton Rifle	14	4d12	1	24	5	10.8	mag	44,505
Assault Graviton Rifle	16	6d12	2	27	5	14.4	mag	58,500
SAW Graviton Rifle	16	6d12	1 ^{Short}	27	6	15.8	mag	192,260
Support Graviton Rifle	16	12d12	2	81	5	17.2	backpack	326,025
Graviton Cannon (T)	18	6d100 ^{AT}	2	243	5	84	cell	745,200

Availability X. "Grav-guns." Require the Heavy Beam Weapon skill to use.

☐ The beam from graviton weapons is invisible and silent. These weapons will register prominently on every Magnetic Flux scanner or detector within 100 meters per point of damage inflicted.

£ Graviton weapons are never available for sale, they can only be acquired through highly extraordinary measures.

Under Barrel Weapons ‡ RC	Damage	ROF	Pow	Jam	Mass	Ammo	Cost	
UB 30mm Bolt Cannon ⊗	7	3d20	1	--	3	2.5	5	1,695
UB Shotgun, single ⊖	6	3d8	2 ^{Shot}	--	3	1.2	6	450
UB Shotgun, auto ⊖	6	3d8	3 ^{Semi, Shot}	--	4	1.4	clip	565
UB Ramjet ⊕	10	4d12	½	--	3	2.9	3	1,430
UB Laser Shot Δ	14	4d12 ^{Shot}	¼	16	2	2.7	clip	2,420
UB Flechette Shot ∴	5	4d10 ^{Shot}	½	--	3	2.8	3	1,785
UB Rail gun ∇	18	5d12	½	3	4	4.1	3 + clip	6,875
UB Ion Shot ∞	10	4d10 ^{Shot}	¼	16	2	3.8	clip	4,820
UB Particle Blaster ≡	22	4d10	¼	8	2	4.4	clip	10,470
UB Screamer ϕ	3	6d8	¼	6	3	3.3	clip	3,035
UB Plasma gun ∃	16	4d12	¼	7	3	5.3	clip	5,850
UB Fusion gun ◇	12	4d20	¼	9	3	5	clip	6,160
UB Heavy Gravgun ☐	12	6d12	1/6	27	5	6.4	clip	303,560
UB Taser §	6	special	½	2	3	.9	clip	480

Availability varies, see individual weapon note. Skill used to fire the weapon is the same as the family it comes from, e.g., Heavy Beam weapons skill to fire the UB Fusion gun, etc.

‡ Under Barrel weapons may be fired instead of the weapon they are mounted on. Both weapons may not be fired in the same turn. Under Barrel weapons can also be purchased in an Over Barrel configuration. The cost is +10%, all other values remain the same. A weapon may mount 1 Under Barrel weapon and 1 Over Barrel weapon. Under and Over barrel weapons may only be mounted on weapons of Carbine size and larger. When reloading, it takes 1 turn per round loaded into the weapon. If they are the same, UB and OB weapons on the same weapon may be linked to fire together for 200 credits. All UB weapons have the same special properties as the rest of their family of weapons, e.g., UB ramjets get a +30 bonus to hit, etc.

⊗ Availability D. Can use either Standard or Proximity Fused as per *Plastique Bolt Guns*. 30mm plastique round is 160 credits, .1 kg.

⊖ Availability D. The autoshotgun uses a 6 round clip (.05 kg, 2 cr).

- ⊕ Availability C. Fires support rifle rounds (.01 kg, 10 cr each).
- △ Availability D.
- ∴ Availability E. Flechette shot round is .1 kg, 3 cr.
- ▽ Availability E. Fires support rifle rounds (.01 kg, 3 cr each).
- ⋈ Availability E. The Ion Shot automatically has a chance of lightning with every *round* that strikes, at no extra PU cost. Chance of lightning is 21 (subtract PU used), damage is d20.
- ≡ Availability E.
- ⊗ Availability F.
- ⊖ Availability G.
- ◇ Availability G.
- ⊠ Availability X.
- § Availability D. Max range 20 m, stuns for d10 x5 minutes, Difficult (BOD) check will ½ duration. Requires the Projectile weapons skill to use.

Ranged Weapon Accessories and Modifications

All weapon accessories and modifications have the same availability as the weapon they are for.

Accelerated Fusion

Modification for fusion weapons. Weapon's power consumption is doubled. Weapon is 25% heavier. Weapon costs 200% more. Weapon does +1 additional damage dice, e.g., an accelerated fusion rifle would do 4d12. Also available for fusion melee weapons.

Bandoleer

Holds 30 clips or 15 magazines. Worn across the shoulders or as a belt. Cost 40 credits, weight is .2 kg.

Bandoleer Sling

Holds 6 magazines. Replaces the sling on carbines, rifles, assault rifles and support rifles. Cost 30 credits, weight is .1 kg.

Breakdown Modifications

Weapon can be broken down in to three or four large sections and several small pieces. Cost is 200% weapon cost. Mass is +15%, +1 Jam. Assembly time is 1 minute. Also available for melee weapons.

Ceramic Weapons

Similar to plastic weapons, except the weapon is constructed completely of ceramic. The weapon will be invisible to most Xray machines, but other density scanners may find the weapon. Also, not all weapons can be made ceramic as the stress of operation created by high cyclic rates of fire can cause them to self-destruct. +200% credits, -20% kg. Also available for melee weapons.

Chain Feed

Modification for rail, ramjet and flechette weapons. Completely redesigns the feed mechanism to accept rounds faster. +1 Jam, +1 ROF, +5% mass, +95% weapon cost.

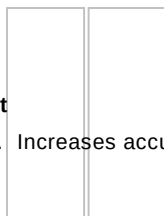
Cyclic Accelerator

Modification for proton and electron weapons. +1 Jam, +1 ROF, +20% mass, +50% cost.



Draft Compression Enhancement

Modification for flechette weapons. Increases accuracy. +25% to hit, +5% mass, +70% cost.



Drum Magazines

Available for projectile, flechette, needle, ramjet and rail technology weapons. Drum magazines hold 6x a standard magazine, weigh 6x as much and cost 6x as much. Drum magazines will not fit into bandoleers or bandoleer slings. A magazine pouch can hold 1 Drum magazine.

Flash Suppressor

Eliminates muzzle flash. Weapon fire cannot be seen at night. Mass: .15 kg, cost 45 credits.

Folding Bipod

For rifles, assault rifles, SAW and support rifles. When fired from a stable firing position (being prone counts) and the bipod is extended, the weapon's range class improves by 4. The bipod is spring loaded and can be extended by jerking the weapon downward. Collapsing the bipod takes 1 turn (4 seconds) and the weapon cannot be fired during the turn. Cost is 85 credits, mass is 1.15 kg.

Folding Stock

Available for light pistols, heavy pistols and machine pistols. Increases weapon mass by 25%. Weapon fires with a -5% penalty when stock is folded and a +10% bonus when extended. Cost is 90 credits.

Grenade Bandoleer

Holds 12 grenades. Worn across the shoulders. Cost 60 credits, weight is .3 kg.

Grenade Launcher, Barrel Mount

Mounted either on top or underneath the barrel of a carbine, rifle, assault rifle, SAW or support rifle. This weapon is identical to the single shot grenade launcher. Mass is 2.7 kg, cost is 260 credits.

Heavy Capacitance

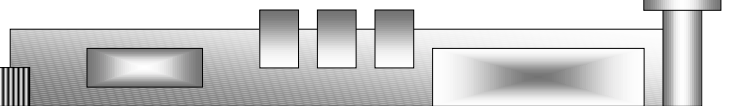
Modification for electron weapons and electric melee weapons. Increases strength of the shock. Shock damage is doubled, stun duration is quadrupled. Weapon is 20% heavier, uses +2 PU per shot. Weapon costs 35% more.

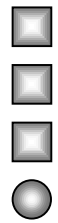
Heavy ion

Modification for ion weapons. Weapon does bonus damage equal to 1 full die. Lightning chance is improved by 2 points. Weapon mass is +30%, PU is +3 per shot. Weapon costs 160% more.

Hyper-Charged Particles

Modification for particle and proton weapons. +15% mass, +120% credits, +2 PU per shot, RC -6. Weapon does +2 dice of damage for proton weapons, +1 die for particle weapons. Also available for particle melee weapons.





Integral Midwall Cooled (IMC)

Allows higher rates of fire. +1 Jam, +1 ROF, + 100% cost. For an additional 300% weapon cost, the ROF may be increased by +2, weapon mass is increased by 20% due to higher performance requirements to accommodate the higher rate of fire, and Jam is also increased by 2. Available to Projectile, Rail, Flechette and Ramjet weapons.

Laser Designator

Attaches directly to the weapon. Range is 400 meters. Grants +20% bonus to hit. Available in visible light (red dot), IR, UV and Microwave. Characters must be using the appropriate vision system to see the pointer for IR, UV and MW designators. Power usage is 1 PU per 10 minutes. All designators weigh .3 kg. Visible light, 1,000 credits. IR, 2,000 credits. UV, 4,000 credits. Maser, 7,500 credits.

Laser Ignition System

Available to chemically propelled weapons only, i.e., projectile and ramjet weapons. Reduces chance of misfire, ensures 100% combustion of propellant. Uses 1 PU each turn the weapon is fired, when activated. Must be activated for the weapon to be usable in combat. Weapons will fire in oxygen deficient environments. Reduces Jam rating of weapon by 2. Weapon cost is increased by 30%. Weapon mass is increased by .1 kg. Adds a power clip mount point for the power supply.

Light capacitance

Modification for electron weapons. Reduces damage from shock, but increases duration of stun. Shock damage is halved, stun duration is sextupled (multiplied by 6). Weapon is 10% lighter, uses +1 PU per shot. Weapon costs 15% more. Also available for electric melee weapons.

Long Barrel

Increases weapon mass by 20%. Range class increases by 3. Pistols with long barrels require rifle holsters. Rifles with long barrels cannot be kept in holsters. Cost: 200 credits.

MICLIC, Barrel Mount

Mounted underneath the barrel of a carbine, rifle, assault rifle, SAW or support rifle. The weapon shoots a 200 meter strand of explosive wire up to 450 meters away. The strand automatically detonates 30 seconds after it is fired. The weapon must be reloaded after each shot. Typically used for clearing a path through minefields. Cost: 750. Mass: 2.3 kg. Ammo: 100 credits, .1 kg per canister (1 shot).

Micropulse

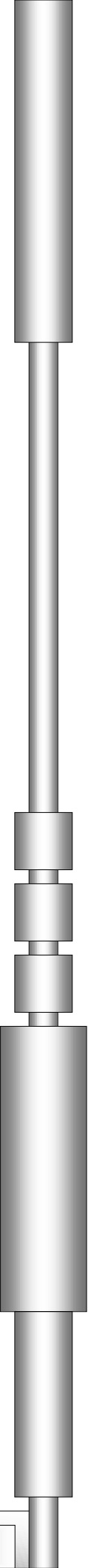
Modification for laser weapons. Weapon's range class is reduced by 2, weapon is 10% heavier, costs 60% more, uses +1 PU per shot. Weapon does +3 points of damage per die.

Muzzle Break

Grants a +10% bonus towards eliminating range penalties. .2 kg, 60 credits.

Muzzle Mount

Adds .1 kg to mass of the weapon. Can hold knives and flashlights. Cost 50 credits.



Negative Particle Deflector

Modification for ion weapons. This shield is installed around the barrel of the weapon. The weapon is far less susceptible to free ions in the surrounding atmosphere. The weapon receives a +20% bonus to hit. +15% mass, +50% cost.

Non-Linear Cycle

Modification for proton weapons; weapon is 20% lighter, uses +1 PU per shot, costs 45% more.

Optacoustic Focusing Chamber

Modification for sonic weapons. +1 Jam, +1 ROF, +25% mass, +1 PU per shot, +175% cost.

Plastic Weapons

Weapon is constructed completely of high density plastic polymer's. The weapon will still show up clearly on Xray machines and the like, but metal detectors will not find a plastic weapon, although they might still detect the ammunition. +120% credits, -15% kg. Also available for melee weapons.

Proton Dispersion

Available to proton weapons. Weapon fires a cone instead of a beam, -50% RC, +1% bonus to hit per meter of range (maximum bonus of +30%), +2 PU, +10% mass, +25% cost. Weapon hits with d2 rounds. Weapon ineffective beyond medium range. Not capable of spray fire.

Recoil Compensator

Increases weapon mass by 15%. Increases the consecutive fire bonus to +15%, and the bonus maximum to +45% (on the fourth turn). Cost is 360 credits.

Recognition Grip

Weapon has a hand-print scanner built in to the butt. The weapon will only fire if the character has the proper hand print. 1,200 credits, adds .1 kg to the mass of the weapon. Also available for melee weapons.

Remote Sight

Mounts a small camera and high frequency transmitter behind the weapon sight. A HUD display is mounted on the helmet providing the weapon's sight picture. Allows aiming from behind full cover, around corners, etc. The helmet display is .5 kg, 600 credits. Can be placed in a Combat Helmet as one of the options. Cost 900 credits, weight is .1 kg.

Selenium Graphite Bore And Chamber

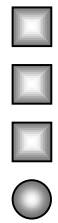
Reduces friction inside muzzle. Round loses less energy to the barrel. Result is a longer ranged, more accurate weapon. Available to Projectile, Rail, Flechette and Ramjet weapons. +2 RC, +15% to hit, +30% weapon cost

Short Barrel

Reduces weapon mass by 15%. Range class decreases by 4. Carbines and Subguns / SMGs with Short barrels require Pistol holsters. Cost: 30 credits.

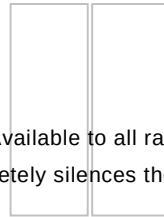
Silencer

150 credits, adds .15 kg to the mass of the weapon. Completely silences the weapon with zero degradation of performance. Weapons larger than assault rifles cannot be silenced with a silencer.



Silenced Receiver Assembly

200% weapon cost, adds .2 kg to the mass of the weapon. Available to all ranged weapons. Modifies the receiver assembly of the weapon for silent operation. Completely silences the weapon with zero degradation of performance.



Static Guard

Modification for electron, proton and ion weapons. Prevents beam from being disrupted by free ions and electrons in the atmosphere and surroundings. Grants +15% to hit. +5% mass, +40% cost. Also available for electric and proton melee weapons (grants a +1 to attack).

Steel Reinforced Aluminum Weapons (STRAP)

Weapon is constructed of advanced metal alloys. The original alloy used was Steel reinforced aluminum, but advanced developments in materials sciences have rendered this obsolete. The name, however, sticks. These weapons are lighter and more reliable than their conventional cousins. +300% credits, -50% kg. The cost and weight modifications are applied after all other modifications. Also available for melee weapons.

Subsonic Magnetically Propelled modification (SMP)

Available to rail weapons. Modifies weapon to keep velocity of projectile subsonic, thus eliminating the sonic signature of the round. Drawback is the round now does less damage. Weapon does -1 pt per die of damage. Weapon operation is nearly silent. Cost is 150% of weapon cost, mass is same.

Telescopic Eyepiece

Comes with integrated laser range finder. When firing using the eyepiece, the weapon's range class is improved by 6. Can only be used when firing single shots or controlled bursts. A maximum of 3 single shots or 1 controlled burst may be fired per turn when employing the telescopic eyepiece. A high power version is available which increases the weapon's range class by 10. Cost is 390 credits, .3 kg. The high power version is 1,170 credits and .6 kg.



Telescoping Stock

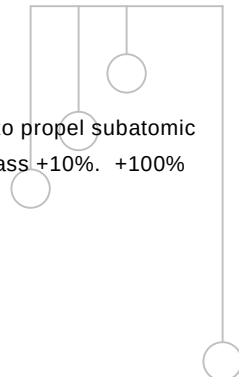
Available for carbines, rifles, assault rifles, SAW and support rifles. Reduces weapon mass by 25%. Weapon fire is at a 15% penalty when stock is folded. Stock is spring loaded and extends by flipping a switch. Folding the stock can be done in 2 seconds. The weapon may not be fired in the turn the stock is folded. Cost is 120 credits.

Turbocycle

Modification for lasers, particle weapons, fusion weapons, plasma weapons. Weapon weighs 15% more, costs 200% more, ROF increases by 1, +1 Jam.

Warp-Particle Technology

Modification for particle and proton weapons. Weapon uses sophisticated warp mechanics to propel subatomic particles faster than light. +1 Jam, +2 ROF, +1 die of damage. Cost 450% weapon cost, mass +10%. +100% PU per shot.



Weapon Stock Compartment

Standard equipment in all carbines, rifles, assault rifles and support rifles. Compartment has room for 1 kg of equipment, usually a cleaning kit or utility kit. Weapons with telescoping or folding stocks do not have this compartment.

Weapon Support Waldo Unit

Uses 3 PU per turn. Is capable of carrying a SAW, Support weapon or tripod weapon weighing up to 75 kg. The waldo unit has a mount on the back suitable for carrying a power cell, power backpack or ammo hopper (holds 50 belts). Any weapon carried by the support waldo unit is fully stabilized against the character's movement. SAW weapons received a +30% to-hit bonus, Support weapons receive a +20% bonus, tripod weapons receive a +10% bonus and heavy versions of tripod weapons receive a +0% bonus. The waldo unit harness is similar in design to an LBE. Consequently, the weapon it supports and the power supply / ammo hopper only weigh 1/3 their actual mass. Power backpacks and rucksacks cannot otherwise be worn while wearing a waldo unit. Cost 840 credits. Mass 6 kg.

Laser Tuning

Laser weapons may not have more than one Tuning modification with the exception of Armor Piercing. The Armor Piercing tuning may be combined with any other tuning modification. Also available for laser melee weapons (ignore RC adjustments).

Laser Tuning	RC	Dmg	ROF	Pow	Mass	Ammo	Cost	Notes
IR lasers	-1				+20%		+100%	beam visible only in IR, +10 to hit (+1 to melee ATK)
blue lasers	+100%		-1	+2	+15%		+200%	minimum ROF of 1
Sonoluminescent lasers				-50%	+5%		+300%	emits a faint high pitched sound when activated
UV lasers	+5	+1d		+2	+20%		+150%	blacklight beam, -10 to hit (-1 to melee ATK)
Armor Piercing	-3			x2	+10%		+190%	laser becomes H weapon

[Ed wishes to purchase an improved version of his typical side arm, a flechette carbine. He has the weapon modified to include Chain Feed, Draft Compression Enhancement, Integral Midwall Cooling, Selenium Graphite Bore and Chamber, a Muzzle Mount and a VL Laser Designator. Thus the weapon stats become RC 6, damage 4d4, ROF 5 (select), mass 4.27, cost 4,430. +45% bonus to hit.]

Ammunition

Ammunition is not interchangeable, with the following exceptions: rifles, carbines and assault rifles use the same size ammunition and magazines; SAWs use the same size ammunition as assault rifles, but not the same size magazines; light pistols and holdout pistols use the same size ammunition, although not the same size clips.

This is true across all weapon technologies. Ammunition belts can be linked together. Extended clips and magazines are available for projectile, flechette, needle, ramjet and rail technology weapons. These clips and magazines cost 50% more, weigh 50% more and hold 50% more ammunition (round all values down).

Ammunition Availability is the same as the weapon.

Projectile Ammunition	Mass	Cost	Capacity
Holdout pistol	.05	2	10 rounds (clip holds 4 rounds)
Light pistol clip	.05	2	10 rounds
Heavy pistol clip	.1	5	15 rounds
Machine pistol clip	.1	10	30 rounds
Carbine, rifle, assault rifle magazine	.15	5	30 rounds
SAW magazine	.75	25	150 rounds
Pulse rifle belt	.12	15	40 rounds
Pulse rifle magazine	.7	75	200 rounds
Support rifle belt	.15	5	30 rounds
Support rifle magazine	1.6	52	300 rounds
Minigun belt	.15	5	30 rounds
Machinegun belt	.1	3	15 rounds
Heavy machinegun belt	.1	6	15 rounds
Grenade magazine	.7	320	6 round
Grenade belt	.1	60	1 round
Shotgun shell	.1	4	20 shells
Shotgun magazine	.1	3	15 shells
Plastique bolt gun clip	.2	360	9 rounds
Heavy bolt gun magazine	.3	1,440	18 rounds
Hand flamer tank	.2	50	15 shots
Flame thrower tank	9	110	35 shots

Loading Ammunition
Some ammunition is easier to load than others. Needle and flechette ammunition is probably the easiest and thus the quickest because they use cartridges and flechette blocks. Ramjets are fairly quick to load because the rounds are comparatively large. Projectile ammunition is probably the hardest to load because it is the smallest of all the technologies.

Needle Ammunition	Mass	Cost	Capacity
Holdout clip	.05	12	18 rounds (clip holds 9)
Light pistol clip	.05	12	18 rounds
Heavy pistol clip	.05	20	30 rounds
Machine pistol clip	.05	40	60 rounds
Carbine, rifle, assault rifle magazine	.1	30	45 rounds
SAW magazine	.5	150	225 rounds
Support rifle belt	.1	30	45 rounds
Support rifle magazine	1.1	310	450 rounds
Machinegun belt	.1	46	35 rounds

Ramjet Ammunition

	Mass	Cost	Capacity
Holdout clip	.1	12	12 rounds (clip holds 2)
Light pistol clip	.1	12	12 rounds
Heavy pistol clip	.1	15	15 rounds
Machine pistol clip	.15	30	30 rounds
Carbine, rifle, assault rifle magazine	.3	20	20 rounds
SAW magazine	.75	50	50 rounds
Support rifle magazine	1.6	110	100 rounds
Recoilless Round	.3	35	1 round
Rocket	1.5	30	1 rocket
30mm Micromissile Rifle magazine	.2	36	8 rounds

Missiles

	Mass	Cost	Capacity
Missile (requires a warhead)	1	120	1 warhead RC 30, requires a guidance system
Heavy Missile (requires 2 warheads)	2	300	2 warheads RC 35, requires a guidance system
Warheads			
High Explosive Warhead	.1	30	Damage: 5d10, ½ damage w/in 45 m radius, AT
Concussion Warhead	.2	30	Damage: 4d10, as concussion grenade with double radii
Smoke Warhead	.17	25	350 m radius of smoke
EMP Warhead	.23	40	stun for 4d10d100 turns / shielding protects 80% time
Gravity Warhead	.3	1,750	Damage: d20 x150, AT
Fusion Warhead	.3	300	Damage: d20 x50, AT
Incendiary Warhead	.26	45	Damage: d12 x10, 3d12 burn damage for 20 turns
Phosphorous Warhead	.21	50	Damage: d12 x10, d12 x10 burn damage for 3 turns, AT
Tactical Nuclear Warhead	.62	1,425	Damage: 5d10 x100, AT
Guidance Systems			
Radar Guidance	--	700	confused by terrain & chaff, jammable
IR Guidance	--	700	heat seeking, confused by flares, jammable
Motion Guidance	--	900	confused by stationary targets
UV Guidance	--	1,000	easily confused by UV flares & solar flares
EM / Magflux Guidance	--	1,400	confused by EMP, EM flares & non-metallic targets
Ultrasonic Guidance	--	1,150	won't work in vacuum
Aspect Guidance	--	2,000	locks onto shape, confused by shadows / low light

Flechette Ammunition

	Mass	Cost	Capacity
Holdout clip	.05	6	18 rounds (clip holds 8)
Light pistol clip	.05	6	18 rounds
Heavy pistol clip	.1	15	45 rounds
Machine pistol clip	.15	30	90 rounds
Carbine, rifle, assault rifle magazine	.15	15	45 rounds
SAW magazine	.75	75	225 rounds
Support rifle belt	.15	15	45 rounds
Support rifle magazine	1.6	160	450 rounds
Machinegun belt	.1	18	25 rounds

Rail Ammunition	Mass	Cost	Capacity
Holdout clip	.1	18	9 rounds (clip holds 3)
Light pistol clip	.1	18	9 rounds
Heavy pistol clip	.2	60	20 rounds
Machine pistol clip	.3	120	40 rounds
Carbine, rifle, assault rifle magazine	.4	75	25 rounds
SAW magazine	1	150	60 rounds
Support rifle magazine	2.1	310	125 rounds
Rail Cannon round	6	120	1 round
Long Rail Cannon round	8	270	1 round

Special Munitions

12-Gauge Breacher

Will destroy most mechanical locks and hinges with almost no shrapnel. For Shotguns only. Cost: 1 credit per round.

Armor Piercing Rounds

Available for projectile and ramjet weapons. B armor stops $\frac{1}{4}$ damage, K armor stops $\frac{1}{2}$ damage. Cost 300% normal, same mass.

Explosive Rounds

Designed for projectile weapons. Does double damage to unarmored targets. B armor stops full damage. Cost 200% normal, mass is the same.

Explosively Formed Penetrator (EFP) ammunition

Designed for ramjet weapons. When employed, the lowest damage die rolled is converted to a maximum roll for the die. Cost is 200% of normal ammunition.

High Velocity Rounds

Available to projectile weapons. Designed for use in Assault rifles and larger. If used in a weapon smaller than an Assault rifle, the weapon's receiver will seize and melt the first time it jams. At this point the weapon will be worthless. Weapon's Jam is +2 when using this ammunition. Weapon does +2 per die of damage. Cost is 500%, weight is same.

Hollow Point Rounds

Available to projectile weapons. Weapon does +1 damage per die against unarmored targets and -1 per die against targets wearing armor, e.g., a 2d6 weapon with hollow point rounds does 2d6+2 to unarmored people and 2d6-2 to people wearing body armor. Cost is the same, mass is the same.

Hydrogenated Ammunition

Ammunition for projectile and ramjet weapons. Weapons are capable of operating in oxygen poor environments, e.g., space, inert atmospheres, etc.. Cost is 100% more than standard ammunition. Any type of ammunition can be hydrogenated.

Laser Reactive Propellant

Laser reactive propellant adds 50% to the cost of the ammunition. Only weapons with a laser ignition system can fire this ammunition. This weapon / munition combination does an additional +2 per die of damage to the target. Available to projectile and ramjet munitions.

Serrated Barb Needle Rounds

Available for needle weapons only. Weapon does +1 point of damage per die. Cost is 150% normal, mass same.

Short Range Ramjet Round

Weapon suffers an RC penalty equal to 50% of its normal RC, that is an RC 8 weapon becomes an RC 4 weapon. Cost 150% more, weight is the same. Damage is +2 per die. Increases explosive payload in exchange for reduced fuel capacity.

Intelligent Rounds

Available to Ramjet weapons only. Standard ramjet rounds are smart rounds and grant a +30% to hit. Brilliant munitions grant a +35% to hit, +150% credits. Genius munitions grant a +40% to hit, +250% credits. Super Genius munitions grant a +45% to hit, +350%. AI munitions grant a +50% to hit, +450%.

Long Range Ramjet Round

Grant +3 RC bonus. Cost 100% more, weight is the same. Damage is -1 per die, due to a reduced explosive payload in exchange for greater fuel capacity.

Paint Rounds

Available to projectile and ramjet weapons. Weapon damage dice are converted into 1 point of bruise damage each, e.g., a 3d8 weapon becomes 3 points of bruise damage. Available in multiple colors including IR and UV. Cost 50% normal, mass is the same. Does not damage armor. Jam +1.

Rubber Rounds

Available to projectile weapons. Rubber rounds do 1 point of lethal damage per die rolled for the weapon, the remainder is bruise damage. So a 3d8 weapon would do 3 points lethal damage and the rest would be bruise damage. B armor stops ½ the bruise damage and all the lethal damage. K armor stops all damage. Armor takes no damage from rubber rounds. Cost 75%, weight is the same.

Tungsten-Diamond Sabot Rounds

Available to rail weapons only. K rated armor stops only ¼ damage. +400% credits, +100% mass.

Wide Area Munition (WAM)

Available to ramjet weapons. Wide area munitions have a burst effect. The Primary radius is 3 m, the Secondary radius is 9 m. WAM lose the targeting bonus of standard ramjet munitions. +150% credits.

Melee Weapons

Melee weapons that use power can use either power clips, Xclips or forearm packs (via an adapter). The value under Pow is the number of PU used by a successful strike from the weapon. It is also the number of PU used every minute the weapon is activated.

Forced Carbon

Weapons	Damage	Mass	Pow	Cost
Short sword	2d8	1.1	--	260
Long sword	3d8	2.5	--	410
Two handed sword	3d10	4.1	--	490
Bastard sword	3d8 / 3d10	4.5	--	485
Great sword	4d10	5.1	--	675
Dagger	1d10	.2	--	60
Knife	1d8	.15	--	35
Nunchaku	3d6	.2	--	35
Weighted chain	2d4	1	--	8
3 piece rod	3d6	.7	--	120
Bo staff	2d10	.9	--	90
Jo staff	1d10	.2	--	40
Escrima stick	1d8	.1	--	25
Battle ax	1d12	2.7	--	235
Polearm	3d8	3.8	--	415
Tunfa	1d8	1	--	130
Whip	1d6	1	--	95

damage is for 1 handed and 2 handed use

Availability B.

Vibro

Weapons	Damage	Mass	Pow	Cost
Short sword	3d8	4	2	660
Long sword	5d8	7	2	1,050
Two handed sword	5d10	10	4	1,250
Bastard sword	5d8 / 5d10	11	4	1,236
Great sword	6d10	12	4	1,720
Dagger	2d10	1.8	2	153
Battle ax	3d8	7.2	3	600
Polearm	3d8	9.2	7	1,060

Availability B. They use a vibrating blade (for small weapons) or a micro thin chainsaw type blade running the edge of the weapon to increase damage.

Force

Weapons	Damage	Mass	Pow	Cost
Short sword	3d8	2	3	780
Long sword	5d8	3.5	3	1,230
Two handed sword	5d10	5	5	1,470
Bastard sword	5d8 / 5d10	5.5	5	1,455
Great sword	6d10	6	6	2,025
Dagger	2d10	.9	1	180
Nunchaku	4d6	1.1	3	105
3 piece rod	5d6	1.5	4	360
Bo staff	3d10	1.6	4	270
Jo staff	2d10	.9	3	120
Escrima stick	2d8	.7	1	75
Battle ax	3d8	3.6	4	705
Polearm	3d8	4.6	9	1,245
Tunfa	2d8	1.9	3	390
Whip	2d4	1.8	3	285

Availability C. Force melee weapons are energy kinetic weapons. They use a tractor / presser beam to create a "blade."

Electric

Weapons	Damage	Mass	Pow	Cost
Short sword	2d8	1.5	2	520
Long sword	3d8	3	2	820
Two handed sword	3d10	4.5	3	980
Bastard sword	3d8 / 3d10	5	3	970
Great sword	4d10	5.5	4	1,350
Dagger	1d10	.4	1	120
Bo staff	2d10	1.1	3	180
Battle ax	1d12	3.1	3	470
Tunfa	1d8	1.4	2	260
Whip	1d6	1.3	2	190

Availability C. Electric weapons are frequently used by police, especially for riot duty. A hit with an electric weapon inflicts an additional shock attack. This attack is 2d10 (TGH subtracts normally) and uses the listed PU. Electric melee weapons have a 5 in 10 chance of stunning an opponent anytime a successful hit is scored. If stunned, the target will remain stunned for d10 minutes. P rated armor defend normally against the shock effect, but not the listed damage roll or stun effect. B rated armor will defend normally against the listed damage roll, but not the shock or stun effect. Anti-stun devices will protect normally against the stun effect, but not the rolled damage or the shock damage.

Sonic

Weapons	Damage	Mass	Pow	Cost
Short sword	2d8	2.25	2	1,040
Long sword	3d8	4.5	2	1,640
Two handed sword	3d10	6.75	3	1,960
Bastard sword	3d8 / 3d10	7.5	3	1,940
Great sword	4d10	8.25	4	2,704
Dagger	1d10	.6	1	240
Bo staff	2d10	1.65	3	360
Battle ax	1d12	4.65	3	940
Polearm	3d8	6.15	6	1,660
Tunfa	1d8	2.1	2	520

Availability C. The “blade” of a sonic weapon is invisible. Sonic weapons do double damage to unprotected living tissue.

Laser

Weapons	Damage	Mass	Pow	Cost
Short sword	4d8	.75	6	1,300
Long sword	6d8	1.5	6	2,050
Two handed sword	6d10	2.25	9	2,450
Bastard sword	6d8 / 6d10	2.5	9	2,425
Great sword	8d10	2.75	12	3,375
Dagger	2d10	.2	3	300
Nunchaku	6d6	.3	6	175
Bo staff	4d10	.55	9	450
Jo staff	2d10	.2	6	200
Battle ax	2d12	1.55	9	1,175
Polearm	6d8	2.05	18	2,075
Tunfa	2d8	.7	6	650
Whip	2d6	.6	6	475

Availability C. Laser weapons are the premier energy melee weapons. They are light and powerful, but they are energy hogs.

Proton

Weapons	Damage	Mass	Pow	Cost
Short sword	2d4	.75	3	1,040
Long sword	4d4	1.5	3	1,640
Two handed sword	4d6	2.25	4	1,960
Bastard sword	4d4 / 4d6	2.5	4	1,940
Great sword	5d6	2.75	5	2,700
Bo staff	3d6	.55	4	360
Battle ax	2d8	1.55	4	940
Polearm	4d4	2.05	7	1,660

Availability C.

Fusion

Weapons	Damage	Mass	Pow	Cost
Short sword	4d8	3	6	2,340
Long sword	6d8	6	6	3,690
Two handed sword	6d10	9	9	4,410
Bastard sword	6d8 / 6d10	10	9	4,365
Great sword	8d10	11	12	6,075
Bo staff	4d10	2.2	9	810
Battle ax	2d12	6.2	9	2,115

Availability E. Fusion weapons will slice through just about anything. Fusion weapons have a very distinct sound when activated.

Neuro

Weapons	Damage	Mass	Pow	Cost
Short sword	2d8	1.6	2	2,080
Long sword	3d8	3.15	2	3,280
Two handed sword	3d10	4.7	3	3,920
Bastard sword	3d8 / 3d10	5.25	3	3,880
Dagger	1d10	.4	1	480
Bo staff	2d10	1.15	3	720
Polearm	3d8	4.3	6	3,320
Tunfa	1d8	1.5	2	1,040
Whip	1d6	1.35	2	760

Availability F. Inflict debilitating pain but little physical damage. Neuro melee weapons do double damage to unprotected living tissue. The lethal damage inflicted from a neuro weapon is equal to the number of die the weapon does, e.g., a Neuro Short sword will inflict 2d8 points of bruise damage, 2 points of which will be lethal damage. Damage from Neuro weaponry is excruciatingly painful. Anyone struck by a neuro weapon must make a Difficult (BOD) check to avoid falling to the ground writhing in pain for 1 turn. Any B or K rated armor that is tile or heavier will stop all damage from a Neuro melee weapon. Defensive Screens will not.

Melee Weapon Accessories and Modifications

All weapon accessories and modifications have the same availability as the weapon they are for. Some ranged weapon modifications can also be used on melee weapons.

Counter Surge Dampening

Modification for energy melee weapons. Incorporates active surge protection technology into the weapon's design. Grants +2 when attempting a Kill attack. The weapon's power consumption per hit doubles when used for a Kill attack. +15% mass, +100% weapon cost.

Directed Edge

Modification for Force, Sonic, Laser, Proton and Fusion weapons. The weapon has sensors that detect direction of movement and rotate the energy field's line of focus so the striking "edge" is always leading. Consequently, the weapons are easier to use and afford more opportunities to strike. They grant a +2 bonus to Strike in melee combat. Cost: +50% weapon cost. Mass: +.1 kg. Although weapons like Bo, Jo, Tunfa, etc., do not have edged blades, this modification will work on them as well.

Field Thickening

Available to energy melee weapons. Adds 1 point per die of damage to the weapon. Weapon uses +1 PU per hit. Mass: +10% kg, cost +50% credits.

Flux Disruption

Available to energy melee weapons. Grants a +1 bonus to Break attempts. Weapon uses +2 PU per Break attack. Mass: +10% kg, cost +50% credits.

Forced Overpower

Modification for energy melee weapons. Converts the lowest damage die rolled into a maximum value. PU use +50% (minimum increase of +2 PU), cost is +150%, weapon mass +10% (minimum of +.15 kg).

Projected Energy

Available to energy melee weapons. Weapon becomes capable of "firing" it's energy blade. This is a ranged attack and hence will terminate the character's melee options for the turn, as per the Ranged Weapons in Melee rules. RC = PU/hit. Maximum range = PU/hit. PU used to "fire" the blade is 3 times a normal hit. Weapon may not be used the following turn, as it is "resetting." Mass: +15%, cost +200%.

Phase Emulator

Does neat stuff for melee weapons. Allows weapon to be reconfigured into another melee weapon, e.g., a long sword becomes able to emulate a Short sword, dagger, etc.

Quantum Harmonic Disrupter

Available to energy melee weapons. Increases weapon mass by 15%. PU/hit increases by 1. Weapon uses improved technology to enhance it's performance characteristics against other melee weapons. Weapon receives a +1 bonus to Parry attempts. Cost is 75% weapon.

[Neb picks up a laser great sword with Directed Edge and STRAP modifications. A laser great sword typically costs 3,375 credits and weighs 2.75. The Directed Edge modification adds .1 kg and 1,688 credits (50% of 3,375) to the weapon. While the STRAP modification reduces the weapon's mass by 1.37 (50% of 2.75) and costs 9,956 credits (295% of 3,375) more. Thus his new sword costs 15,019 credits, weighs 1.47 kg, receives an extra +2 bonus to strike and has all other stats as listed.]

Exotic Weapons

Unless otherwise specified, all exotic weapons use power clips or Xclips.

"Fire your thingamabobers."

Weapon	Damage	Mass	Pow	Cost	Avail	Special Effects

Sonic Stunner	d6	2.8	4	1,598	C	RC 8, ROF 1

Uses power clips, stun duration is 2d10 turns. All damage is lethal if target is organic. Anti-disruption defenses will negate the stun and damage effects. Anti-stun defenses will negate the stun effects and reduce damage to bruise damage. Effective to Short Range.

Electro Stunner	2d8	2.1	3	1,974	C	RC 6, ROF 2

Uses power clips, stun duration is 3d20 turns. ½ of rolled damage is lethal. Anti-E defenses and anti-Stun defenses will negate the stun effects. Effective to Short Range.

Neuro Stunner	d10	2.9	3	4,795	D	RC 4, ROF 4

Uses power clips. Target must make an Impossible (BOD) check to avoid falling to the ground for d10 minutes in agony. Anti-Stun defenses will reduce check to Difficult. Effective to Medium Range.

EMP Stunner	special	2.3	6	985	D	

Fires a powerful EMP blast designed to stun electronics, etc., without damaging them. Commonly used to subdue renegade cyborgs and robots. No effect on other electronics. RC 15. Uses power clips. Stuns for d6d6 minutes. ROF: 2. Effective to Short Range.

EM Pulse Rifle	special	8.1	15	1,650	E	

Fires a conic EMP blast, +30% to hit. Freezes all the target's electronics, computers, robots, etc., for 5d10 minutes. Uses power magazines. RC 9. ROF: 1.

Heavy EM Pulse Rifles	special	9.3	35	3,275	F	

Fires a large conic EMP blast, +60% to hit. Freezes all the target's electronics, computers, robots, etc., for 10d20 minutes. Many components cannot survive a blast from this weapon and will require 3d100 x5 credits to bring the item back to operability. Uses power magazines. RC 12. ROF: 1.

Caltrop	d3	.3	--	30	B	

Standard caltrops. Running character's will step on d6 before falling; walking will halve this amount. Cluster of 10.

Sonic caltrop	d3	.1	--	95	E	

A running character will step on d6 before falling; walking will halve this amount. Cluster of 10.

"I feel tingly all over."

Stun caltrop	d4	.1	--	65	D	

A running character will step on d6 before falling; walking will halve this amount; each caltrop will stun a character for d6 turns, duration is cumulative; Difficult (BOD) check to ½ damage and duration. Cluster of 10.

Stun baton	d10	1	1	210	C	

P attack; stuns for 3d6 turns; Difficult (BOD) check to ½ damage and duration. Melee weapon.

Stungun	d8	.4	2	275	C	

P attack; stuns for 3d30 turns; Difficult (BOD) check to ½ damage and duration. Melee weapon.

Taser	d6	.8	2	320	D	

P attack; RC of 6, max range 20 m; stuns for d10x5 minutes; Difficult (BOD) check to ½ duration.

Stun gloves	d8	.2	1	65	C	

This is a P attack; stuns for 3d6 turns; Difficult (BOD) check to resist effects

Shock gloves	2d10	.3	2	85	C	

This is an P attack; no stun effects.

Shock suit	2d10	2	3	130	C	

This is an P attack; automatically hits opponents attempting to wrestle; no stun effects.

Spring spike gloves	+d4	.4	--	45	B	

Adds damage to strikes, -1 penalty to Block, B attack

Spring spike boots	+d6	1.2	--	75	B	
Adds damage to kicks, -1 penalty to Kick, B attack						
Bow		3	--	80	B	RC: 12; ROF: 2
(RC is increased by STR bonus)						
Piercing Arrows	2d6	1	--	2	B	quiver of 20; B attack
Kinetic Arrows	2d6	1	--	50	B	quiver of 20; K attack
Explosive Arrow	2d10	1	--	50	C	quiver of 20; B attack; 5 m radius; -10 to hit
Crossbow		3.6	--	80	B	RC: 12; ROF: 1
Impact Bolts	2d8	2	--	4	B	quiver of 20; B attack
Kinetic Bolts	2d8	2	--	100	B	quiver of 20; K attack
Explosive Bolts	3d10	2	1	50	C	quiver of 20; B attack; 5 m burst radius
Power Crossbow		3.2	1	150	C	RC: 24; ROF: 3
Impact Bolts	4d10	2	1	4	C	quiver of 20; B attack
Kinetic Bolts	4d10	2	1	100	C	quiver of 20; K attack
Explosive Bolts	3d10	2	1	50	C	quiver of 20; B attack; 5 m burst radius

Roller Bomb as grenade 3 -- 200 + gren E
 Programmable, can be given simple basic directions such as "move 100m, turn left 45 degrees, move 50m, detonate," The roller bomb holds one grenade and moves at 30 m/t. Maximum range of movement is 250 m. This device is about the size of a remote control car.

Punch Spike +d3 .1 -- 300 C
 Typically carried, can be incorporated into a glove. Adds d3 lethal damage to Strike and Power strike damage.

Elbow Spike +d4 .15 -- 200 C
 Incorporated into clothing or body armor. Adds d3 lethal damage to normal Strike damage.

Knee Spike +d4 .2 -- 200 C
 Incorporated into clothing or body armor. Adds d4 lethal damage to normal Kick damage.

Boot Spike +d3 .15 -- 250 C
 Built into a boot. Adds d3 lethal damage to Kick and Power kick damage.

Tenta-Needle +d10 .15 -- 250 D
 Adds d10 lethal damage to Strike and Power strikes when worn on the end of a tentacle. Illegal in most places.

Bang-Punch +2d10 .3 -- 350 D
 Character suffers a -3 penalty to Strike and Power strike attacks (and loses all Block bonuses) when this heavy glove is worn. The Bang-Punch has a heavy spike on the back of the hand. The spike is fired on impact by a shotgun shell, causing extreme damage to the target. After a successful attack, the shell must be reloaded to gain the damage bonus, but the penalties remain in effect as long as the glove is worn.

EMP-Punch -- .3 3 450 E
 Character suffers a -3 penalty to Strike and Power strike attacks (and loses all Block bonuses) when this heavy glove is worn. The EMP-Punch has a heavy EM coil on the back of the hand. The coil is triggered on impact. Any cybernetics in the struck location are stunned for d10 minutes. A successful attack uses 3 PU.

Slasher 3d10 .3 1 400 E
 Character enjoys a +1 bonus to Strike attacks (but loses all Block bonuses) when this heavy glove is worn. The Slasher has two or three retractable heavy blades on the back of the hand. The blades are triggered by attacking, making it very easy to use offensively. Slasher damage supplants normal strike damage. A successful attack uses 1 PU. All damage is lethal.

Crystus 2d6 .2 1 300 D

This glove uses 1 PU to activate and deactivate. There is no maintenance PU cost. Upon activation, the memory crystal on the back of the glove activates and realigns itself into a series of serrated blades. The weapon is easy to use, granting a +1 to strike attacks. Damage is lethal and supplants normal strike damage. For an additional 300 credits, the glove can be modified to appear as a normal hand glove.

Stun Web Spcl 4.7 varies 560 C

This carbine size weapon is thicker than typical carbines. It fires an expanding net at the target. The net can be used simply for entanglement, to stun the target, or to inflict damage to the target. Anyone caught in the net is considered to have been successfully Controlled. For 3 PU, the net can stun the target for 2d10 rounds. For 6 PU, the net can stun and damage the target. Damage is 4d10, divided evenly to all body parts, head damage is not doubled. Successful Difficult (END) check will halve both stun duration and damage effects. RC 10, max effective range is Medium. Holds 1 compressed net. Must be reloaded after each firing. Powered by clips.

Slip suit -- 3 -- 430 D

Slip suits have a very distinct look to them. They are very slippery on the outside, but tacky and provided with excellent grip on the palms, inner thighs, under arms, etc. Made of a special slippery material, a slip suit helps when wrestling. Anyone wearing a slip suit receives a +3 bonus on the following maneuvers for all purposes: escape, throw, lock, control. In addition, the suits slippery surface adds another +2 when defending against any of the following maneuvers: throw, lock, break, knockout, control.

Grenades

TGH and body armor protects normally. Damage from grenades and explosions is spread evenly across the character's entire body. A Difficult (REF) check will halve the effects (duration, damage and stun) of all grenades.

Halon Grenades

Pushes all oxygen out of the kill zone, immediately extinguishing any oxygen requiring fire.

Sonic Grenades

Sonic grenades have only a Kill and Primary Radius.

Fragmentation Grenades

Everyone within the Kill radius is stunned for d6 turns.

Concussion Grenades

Concussion grenades produce a physical shockwave in the atmosphere. Impossible (BOD) check within Kill radius; Very Difficult within Primary, Difficult within Secondary, Moderate within Hazard radius. A successful check halves the effects, failure renders character stunned for 3d8 turns.

Smoke

Smoke covers the Kill radius; available in various colors; smoke blocks LOS, thermals / IR and UV.

Flash Grenades

Difficult (REF) check for all within the Kill radius and looking in direction of grenade; success renders characters partially blinded for d6 turns; failure renders characters blinded for 3d6 turns.

Strobe Grenades

As Flash grenade; grenade “explodes” for 20 seconds (5 turns).

[IMAGE 6 x 3] (Grenades) Strobe grenade going off in the center of a group of people. All around can be seen people attempting to turn away and shield their eyes from the horrific light. Everyone has weapons drawn, some people have dropped their guns. Clearly there was a fire fight in progress here.

EMP Grenades

Stuns computers, robots, and characters w/ cybernetics for 3d10 turns; EMP shielding and hardened circuitry protects 90% of the time.

Flechette Grenades

Does ½ damage to structures within Kill radius; no damage to structures beyond the Kill radius.

Tangle Thread Grenades

Using biochemical technology derived from strands of spiderweb, the threads are sticky, stronger than steel and flammable. Impossible (AGI) check within the Kill radius, Difficult within Primary. A successful check ½'s MOV for 2d6 turns; failure renders character immobilized for 3d6 minutes. A single grenade can restrain creatures and characters with a STR up to 9. PCs and creatures with higher STR scores require multiple tangle grenades to be restrained.

Solid Grenades

Quick setting concrete-polymer; Impossible (AGI) check within the Kill radius, Difficult within Primary. A successful check ½'s MOV for 3d6 minutes; failure renders character immobilized for d4 hours.

Gravity Grenades

These produce a 5th dimensional negative spike, producing a very strong gravitational pull for a split instant. Warps and damages all structures and ruins all equipment within the kill radius. No effect beyond the Primary radius. There is a second type of Gravity grenade called a Neg-G grenade. It produce positive 5th D spikes, thus repelling all matter away from the detonation point. Game effect is exactly the same, though.

Light Grenades

Functions as EMP and flash grenade; also blinds IR / thermal scanners.



Fusion Grenades

Everything within Kill radius that takes damage is disintegrated.

"Fusion Grenades are not authorized for use as riot control."

Slick Grenades

Every surface within the Kill radius is covered w/ a super slick graphite like power; Difficult (COR) check to avoid falling any time the character moves faster than ½ walking speed.

Fire Retardant Grenades

Extinguishes fire within the Kill radius; 90% chance to extinguish within Primary; 45% chance within Secondary; 25% chance within the Hazard radius.

Incendiary Grenades

Ignites everything within Kill radius; 90% chance to ignite Primary radius; 50% chance for Secondary radius (if the primary radius is on fire); 20% chance for Hazard radius (if the secondary radius is on fire). Fire burns for 3d6 turns, doing full damage every turn.

Phosphorus Grenades

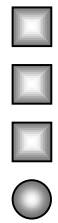
Functions as both incendiary and smoke grenade; water will not extinguish phosphorus.

Laser Aerosol Grenades

Disperses laser fire. Laser weapons cannot fire into, out of or through an aerosol cloud. High energy weapons suffer a -1% to-hit penalty per meter fired through.

Neural Mine

Can be set to detonate on contact (and thus used as a grenade), after a specified time delay (max of 30 minutes) or by fiber optic remote (length of fiber is 100 m). When "detonated" it will paralyze all living creatures within 30 m. The neural mine is powered by a standard capacity charge power clip and will remain on for 3 minutes. Once detonated, the Neural mine cannot be deactivated, nor can they be reused.



Grenade	Damage	Mass	Cost	Avail	Defense	Burst Radius (in meters)			
						Kill	Primary	Secondary	Hazard
Halon	--	.2	200	C	--	65	--	--	--
Sonic	6d10	.2	575	D	S / sonic	15	50	--	--
Fragmentation	4d20	.15	60	D	B	15	50	150	250
Concussion	4d10	.15	60	D	B	15	50	150	250
Smoke	--	.1	10	D	--	150	--	--	--
Flash	--	.1	15	D	--	60	--	--	--
Strobe	--	.1	35	D	--	55	--	--	--
EMP	--	.2	80	F	--	35	90	--	--
Flechette	8d20	.2	50	D	K	15	50	150	250
Tangle Thread	--	.2	100	D	--	10	20	--	--
Solid	--	.2	200	D	--	5	15	--	--
Gravity	9d20	.2	350	G	--	20	45	--	--
Light	9d20	.2	450	F	P	35	60	--	--
Fusion	6d20	.15	600	G	H	10	30	60	90
Slick	--	.1	120	D	--	100	--	--	--
Fire retardant	--	.2	220	D	--	25	50	100	150
Incendiary	5d12	.15	90	E	--	15	25	75	100
Phosphorus	5d12	.15	95	E	--	15	25	75	100
Laser Aerosol	--	.15	75	D	--	110	--	--	--
Neuro Mine	--	.2	230	F	--	30	--	--	--

Defense indicates the rating required for armor or defensive screens to protect against the effects.

Grenades Varieties

Mini Grenades

About the size of a large marble. Number of damage dice is halved (round down, minimum of 1). Burst radii are divided by 5. There is no Hazard burst radius. Effects in the Secondary Burst radius are as if the target was in the Hazard radius. (Grenades with only Kill and Primary burst radii have only a Kill burst radius, and effects within the Kill radius are as if it were a Primary radius.) Mass is ½ listed. Cost is the same. These grenades are smaller and more easily concealed than common grenades.

Over Grenades

Number of damage dice are increased by 50% (round down, minimum increase of 1). Burst radii are increased by 10%. Mass is double listed. Cost is triple listed. These grenades are larger than common grenades.

Mega Grenades

Number of damage dice are tripled. Burst radii are increased by 50%. Mass is triple listed. Cost is 5x listed. These grenades are very large. Throw range is reduced by 50% when heaving one of these monsters. Availability is 1 grade higher for Mega Grenades.



Defenses

Body Armor

Body armor protects by reducing the damage of a hit. Hits against a target or body area that is completely unarmored do double damage. (This is the 1 shot can kill realism factor.)

The DP value is the amount of damage the armor can withstand before losing its protective qualities. Armor provides its DP to each location protected by that style of armor. That is, a titanium polymer mesh jacket provides 45 DP to each arm and to the torso.

The HIND column lists the penalty that is suffered when wearing the armor. This value is deducted from each of the wearer's REF, SPD and MOV attributes for all purposes, except calculation of the character's Hits and encumbrance.

Availability is C for ballistic body armor, D for all other body armor.

Nomenclature	Armor Type	Protects against	Effects
B	Ballistic	Projectile, Needle, Ramjet, Sonic, Forced Carbon, Vibro	Stops ½ B damage
P	Particle	Proton, Electron, Ion, Particle, Electric	Stops full P damage
E	Energy	Laser, Maser	Stops full E damage
H	High Energy	Fusion, Plasma, Laser, Maser	Stops ½ H damage. Stops full damage from E attacks, taking 1 point of damage for every 2 points of E attack stopped
K	Kinetic	Rail, Flechette, Force,	Stops ½ K damage. Stops 3/4 B damage and B attacks and remainder is reduced to bruise damage.

Armor Style	Protects	
Helmet	Head	
Vest	Torso	
Jacket	Torso and Arms	
Bracer	Arm (Bracers protect on a roll of 1 – 4 on a d6)	
Pants	Legs	
Trench	Torso, Arms, Legs	Uses a single DP value to protect all locations listed.
Cloak	Torso, Arms, Head	Uses a single DP value to protect all locations listed. Includes a hood, which will protect the head.
Cape	Torso, Arms, Legs	Uses a single DP value to protect all locations listed.

Ballistic Polymer (B)	DP	Mass	Cost	HIND
helmet	30	2	250	0
cloth vest	30	1.6	270	0
cloth jacket	20	2	300	1
cloth pants	20	3	300	0
cloth trench coat	25	4	600	1
cloth cloak	25	3	450	1
cloth cape	40	5	750	1
mesh bracer	30	1	150	0
mesh jacket	45	3	400	1
mesh pants	45	5	400	1
mesh trench coat	55	6	800	1
mesh cloak	55	4.5	600	1
mesh cloak	90	7.5	1,000	1
tile bracer	50	1.25	300	0
tile vest	65	4	600	1
tile pants	65	6	600	1
plate bracer	75	1.5	400	0
plate vest	90	5	800	1
plate pants	90	7	800	2

Gauss Polymer (B,P)	DP	Mass	Cost	HIND
helmet	45	3	500	1
mesh bracer	50	1.25	400	0
mesh jacket	65	4	800	2
mesh pants	65	6	800	2
mesh trench coat	80	8	1,600	2
mesh cloak	80	6	1,200	2
mesh cape	130	10	2,000	2
tile bracer	75	1.5	600	0
tile vest	90	5	1,200	2
tile pants	90	7	1,200	2
plate bracer	100	1.8	800	0
plate vest	120	6	1,600	2
plate pants	120	8	1,600	2

[IMAGE 2 x 5]

(Body Armor) Image of an armored helmet sitting on the floor / table. It has a half visor and perhaps a power pack or something on it.

Therm Polymer (B,E)	DP	Mass	Cost	HIND
helmet	45	2	750	1
mesh bracer	50	1	600	0
mesh jacket	65	3	1,200	2
mesh pants	65	5	1,200	2
mesh trench coat	80	6	2,400	2
mesh cloak	80	4.5	1,800	2
mesh cape	130	7.5	3,000	2
tile bracer	75	1.25	900	0
tile vest	90	4	1,800	2
tile pants	90	6	1,800	3
plate bracer	100	1.5	1,200	0
plate vest	120	5	2,400	3
plate pants	120	7	2,400	3

Therm Laminate (B,H)	DP	Mass	Cost	HIND
helmet	65	1	1,000	1
tile bracer	100	1	800	0
tile vest	120	3	1,600	2
tile pants	120	5	1,600	3
plate bracer	135	1.25	1,600	0
plate vest	155	4	3,200	3
plate pants	155	6	3,200	3

Forced Carbon (K)	DP	Mass	Cost	HIND
helmet	70	2	1,500	1
tile bracer	110	1.25	1,200	0
tile vest	125	4	2,400	3
tile pants	125	6	2,400	3
plate bracer	140	1.5	2,400	0
plate vest	160	5	4,800	3
plate pants	160	7	4,800	3

Graffian (B)	DP	Mass*	Cost	HIND
helmet	90	3 (7.42)	3,000	0
tile bracer	130	2.5 (6.18)	2,400	0
tile vest	160	5.5 (13.6)	4,800	1
tile pants	160	7.5 (18.55)	4,800	2
plate bracer	175	3.1 (7.66)	4,800	0
plate vest	200	7 (17.31)	9,600	2
plate pants	200	9 (22.26)	9,600	2

* Graffian armor is superbly balanced for the size and strength of a Graff. When worn by a Graff, the character treats the armor as if it weighed the first value listed. When carried, the armor's full weight (listed in parenthesis) counts against the character's load.

Slen Borakan (B)	DP	Mass*	Cost	HIND	Rating	Notes
Ballistic Polymer Coif	45	2.6	250	0	B	head
Gauss Polymer Coif	65	3.9	500	1	B, P	
Therm Polymer Coif	65	2.6	750	1	B, E	
Therm Lamineate Coif	100	1.3	1,000	1	B, H	
Forced Carbon Coif	100	2.6	1,500	1	K	
Ballistic Polymer Plate	65	2.4	600	1	B	torso, 1-4 on d6
Gauss Polymer Plate	90	3	1,200	2	B, P	
Therm Polymer Plate	90	2.4	1,800	2	B, E	
Therm Lamineate Plate	120	1.8	1,600	2	B, H	
Forced Carbon Plate	120	2.4	2,400	3	K	
Forced Carbon Plate, hvv	160	3	4,800	3	K	

* Slen Borakan Coifs protect the head. The Plate is an articulated breastplate that slightly resembles a harness. Due to its design and the physiology of the Slen Boraka, it only protects on a d6 roll of 1-4. On a 5 or 6, the shot is considered to have hit an unarmored location. Slen Boraka lose their natural ability to move silently when wearing this armor.

Armor Modifications

Armor Modifications	DP	Mass	Cost	HIND	
Chromatic	--	+5%	+100%	--	adds E rating to armor
Civilian Camouflage	-30%	-20%	+200%	-1	resembles normal clothing
Energy State	+100%	-20%*	+500%	--	Uses 1 PU per minute per full kg of armor mass; * no mass reduction when combined with Zero G carbide, Honeycomb or Civilian Camouflage
Gauss Shielding	--	+5%	+150%	--	adds P rating to armor
Honeycomb	--	-20%	+200%	-1	
Kinetic Reinforcement	--	+15%	+150%	--	upgrades B rating to K rating
Sonic Shielded	--	+5%	+90%	--	modifies armor to stop sonic attacks, taking 1 point of damage for every 4 points of damage stopped.
Symbiotic Armor	--	--	+400%	-2	-1 END
Thermal Lamination	--	+15%	+250%	--	upgrades E rating to H rating
Tungsten-carbide plated	+100%	+20%	+120%	+1	Increases armor thickness at the expense of bulkiness
Zero G carbide-aluminum	--	-50%	+600%	-2	reduces mass and bulk by using advanced materials

[Ed and Neb are engaged in another viscous fire fight. They attempt to close the range with the enemy. Neb takes several bursts of weapons fire. The rounds hit all over his body, but he is wearing excellent body armor (forced carbon tile vest and pants, each with Chromatic, Therm Lamination, Tungsten Carbide Plate, Zero G carbide aluminum modifications, over ballistic cloth jacket). The hits are dealt with. Neb and Ed draw energy melee weapons and prepare to get really nasty.]

Civilian Camouflage

Available for any mesh or tile armor. Armor no longer resembles military body armor, it now appears to be civilian clothing. Mesh armor becomes difficult to recognize unless closely examined. Tile armor becomes difficult to recognize from a distance, but apparent at close range. -20% mass, -30% DP, +200% cost. Cannot be combined with Honeycomb Plate or Symbiotic Modifications. HIND is -1.

Load Bearing Modification

Incorporates a load bearing design into the armor. Adds pouches, a web belt and multiple universal clips to mount stuff. All equipment mounted or carried on body armor with this modification counts as only ½ its mass for encumbrance purposes. LB armor can carry 8 Small items, 8 Medium items and 2 Large items. Cost is increased by 50%. Mass is increased by .1 kg.

Power Assist Enhancement

Adds small motors to joints and polymer muscles to limbs. Serves to eliminate HIND penalty of the armor. PU use (per minute) of the armor is equal to amount of HIND negated. Cannot be used to give a HIND "bonus" and thereby amplify the wearer's movements. Cost is 4,000 cr. Mass is 2 kg.

Regenerative Armor

Armor is made of smart nano-polymer. This hyper-technology material actually regenerates itself using particulate matter attracted by natural static from the surrounding atmosphere. It can repair itself while it is worn. The armor "heals" 1 hit per 10 minutes (+1 minute per additional modification to the armor). Mass is +20%, cost is +300%. Availability E.

Symbiotic Armor

The armor is Semi-alive. An off-shoot of genetic and cybernetic technology. The armor feeds off of the radiant heat energy of the character as well as the salts and other nutrients typically emitted through the skin. When donned, it "bonds" to the wearer. Being half alive, the armor also senses the character's brain wave patterns. In this respect, the "built-in" quasi-musculature can anticipate the character's movements and accommodate. Thus, the HIND of this armor is reduced by 2. Should this render a piece of armor a negative HIND value, this value is treated as an increase (or boost) to the character's REF, SPD, MOV. This increase is for everything except encumbrance, hits and to-hit percentages. When worn, only half the armor's mass is used for encumbrance. Character's wearing symbiotic armor will fatigue faster (-1 END), become hungrier a lot faster and require more sleep than normal (+50% sleep time), as their body must compensate for the additional load on it's system. The armor heals at a rate of 1 hit per day and is subject to the same drugs as characters. It takes 15 minutes to "bond" with symbiotic armor. During this time, COR, REF and MOV are all at -2 due to the armor's inflexibility. Cost is +400%, DP is same, mass is same. Symbiotic armor is very uncommon. Availability is D.

Defensive Screens

All personal defensive screens are considered medium devices and are typically worn on the belt or thigh. No more than one defensive screen may be activated at a time, because their fields interfere with each other. Availability for defensive screens is C. The Glow and Kinetic screens have an availability of F; Integrity Fields are availability X.

Screen	Cost	Mass	PU-Hit	PU-Act	PU-min	Effects
Ballistic	1,800	3.1	¼	3	½	stops ½ damage from B attacks
Gauss	3,150	3.6	½	6	1	stops full damage from P attacks
Chromatic	2,700	2.7	1	4	2	stops full damage from E attacks
Glow	4,500	3	1	7	1	stops ½ damage from H attacks, stops full damage from E attacks, taking 1 points of damage for every 2 points of E attack stopped
Kinetic	3,600	4.2	½	5	1	stops ½ damage from K attacks, stops full damage from B attacks
Sonic	900	1.9	½	1	1	stops full damage from sonic attacks
Hard	2,700	4.2	10	1	½	protects against EM pulses
Holo	1,680	8	--	1	2 / turn	creates a holographic image around the character
Thermal	2,520	8.6	--	3	4	emits a preprogrammed thermal signature while disguising the wearers real thermal signature
Hush	900	3.7	--	3	5	silences all the character's activities
Filter Field	3,600	3.6	--	1	10	also called a Negative Field. Prevents foreign gasses and other impurities from reaching the character
Integrity	18,000	12.2	3	1	1	stops full damage from graviton attacks
Buzz	2,000	3.5	3	--	1	negates the stun effects of non-EMP shock attacks, does not affect damage

PU-hit Power per Hit. Power usage listed is the number of PU consumed per point of damage absorbed.

PU-act Power to Activate. This is the amount of power the defensive screen draws when it is initially activated, to establish the screen field around the character.

PU-min Power per Minute. This is the amount of power the defensive screen draws every minute to maintain the screen's field around the character.

[As Ed charges a pirate held building, he comes under fire from several pirates using laser rifles (E rated weapons). Ed is hit by 110 points of damage. Fortunately, Ed is wearing a Chromatic Screen with a Thermo Beltpack. The screen absorbs all the damage, burning 110 points of power. Ed is unharmed and his beltpack is reduced to 10 PU stored.]

Energy Melee Shields

All Energy Melee Shields (EMS) are worn on the forearm during use. A character may wear one shield per arm, although a shield cannot be worn on any arm that is wielding a weapon (melee or ranged). Availability for EMS is D. In dire circumstances, EMS may also be used to defend against ranged attacks. The wearer must make a Difficult (REF) check to successfully block an incoming attack. A character must sacrifice a melee attack to attempt this. A successful check will block a single attack (single shot or burst).

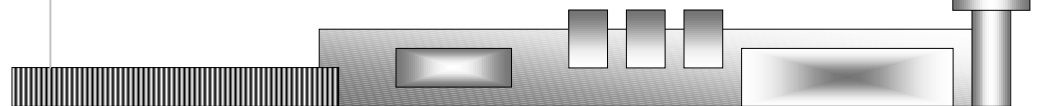


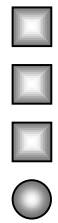
Shield	Cost	Mass	PU-Hit	PU-Act	PU-turn	Effects
Forced Carbon	600	1	--	--	--	grants +2 bonus to parry, has 100 DP, takes no damage from B attacks, ½ damage from K attacks
Force	900	1½	½	2	1	grants +2 bonus to parry, +3 vs B and K melee
Laser	1,350	1	½	2	1	grants +2 bonus to parry, +3 vs E melee
Plasma	2,250	1.8	1	3	2	grants +2 bonus to parry, +3 vs H melee
Sonic	450	1½	1	2	2	grants +4 bonus to parry vs sonic melee

PU-hit Power per Hit. Power usage listed is the number of PU consumed per point of damage parried.

PU-act Power to Activate. This is the amount of power the EMS draws when it is initially activated, to establish the screen field.

PU-min Power per Minute. This is the amount of power the EMS draws every minute to maintain the screen's field.





[IMAGE SPLASH 8 ½ x 11] (power systems) character with a Power Linkage in use. He is carrying loads of power systems, and they are all linked together and fed to his nasty rifle that he is aiming at something.

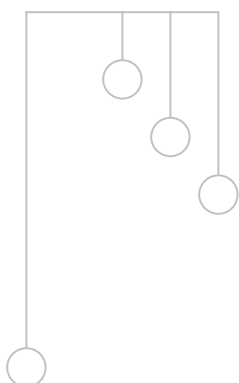


Power Systems

Power systems are customizable. To create a power system, choose a containment system and a power source. The power system will hold a number of PU equal to the containment system's Capacitance Rating multiplied by the power source's Power Rating. The power system will weigh a number of kilograms equal to the containment system Mass multiplied by the power source Mass. The power system will cost a number of credits equal to the containment system Cost multiplied by the power source Cost.

Availability for power systems is C. Plasma and Fusion power systems have an Availability of E. AM and Dimensional Tap power systems have an Availability of F.

Containment Systems	Capacitance	Mass	Cost	
Back pack	60	6	360	
Belt-pack	20	2.5	240	
Thigh-pack	18	1.5	270	
Shin-pack	12	1	180	
Bicep-pack	12	.8	144	
Forearm-pack	9	.6	108	
Helmet-pack	6	.45	81	
Power sling	15	.35	200	only available in CC and Thermo; replaces normal weapon sling for Carbine up to Support Rifle
Microcell	1	.02	10	avail only in burnout & Thermo
Clip	3	.1	30	holdout pistols, light & heavy pistols and melee weapons
Xclip (extended clip)	5	.15	50	
Magazine	4	.12	40	carbines, rifles, assault rifles, SAW and support rifles
Xmag (extended magazine)	7	.18	70	
Heavy mag	14	.36	140	SAW and support rifles
Heavy Xmag	28	.72	420	SAW and support rifles
Cell (ammo cell)	144	9	720	support and tripod weapons
Battery	96	32	480	vehicles
Generator	1,000	120	3,000	



Power Sources

	Power Rating	Mass	Cost	Recharge Rate
Capacity Charge +	7	1	1	
High Capacity +	10	2	1.5	
Low Capacity +	5	.6	.5	
Burnout charge -	8	.8	.75	
Kinetic @	2	.5	1.2	
Thermocouple Σ	6	1.2	2	6 / minute
Plasma Σ	9	2	3	9 / minute
Fusion Σ	12	1.8	6	12 / minute
Sonoluminescent +	8	1.5	4	
RF cell @@	7	1.1	2.5	
Turbine Σ*	7	1.8	1	7 / minute
Impulse Σ*	8	3	2	8 / minute
AM conversion Σ*	35	6	16	35 / minute
Dimensional Tap Σ**	500	40	10,000	500 / minute

+ Recharging costs 10 credits, +1 per PU. This is the most common form of power system.

- Disposable, these systems cannot be recharged or re-energized in any way.

@ Generating power from the natural movement of the wearer, these chargers are only available as thigh-packs or backpacks. They do not store energy like other power systems. Low or empty power systems can be recharged from Kinetic chargers. The power system cannot supply power to other items while being recharged in this manner. They can be used to charge other power systems via a power linkage (thus allowing the power system to remain connected to other equipment). Power generation is doubled during periods of high physical activity by the wearer.

Σ Power system is self recharging. The recharge rate is listed at the right side of the table above.

@@ Broadcast power receiver; must be used in conjunction with an RF Trans-Unit or other source of broadcast power. The PU of the power system is the amount of power it can receive in a single turn. If a device attempts to draw more power from an RF cell power system than it can receive in one turn, the cell burns out and must be replaced.

* Available for generator and battery containment systems only.

** Available for generators only.

[Neb decides to purchase a new power system for his screen. He decides he needs a thermocouple thigh pack. Checking the tables, we see that the thigh pack has a Capacitance Rating of 18, and that thermocouple technology provides a Power Rating of 6. Thus, multiplying 18×6 , the thermocouple thigh pack will hold 108 PU. Likewise, the thigh pack has a mass of 1.5 kg. Thermocouple technology will multiply this by 1.2, so the mass of the thermocouple thigh pack is $1.5 \times 1.2 = 1.8$ kg. Finally, the cost will be 270 credits for the thigh pack, multiplied by 2 for thermocouple technology, resulting in $270 \times 2 = 540$ credits. Thus, Neb's thermocouple thigh pack holds 108 PU, weighs 1.8 kg, and costs 540 credits.]

Power Transfer

Power can be transferred from one power system to another at the rate of 1 PU per second. Thus, characters can recharge their magazines and equipment from vehicles, generators or even other character's personal power systems. The two power systems must be plugged into each other for the transfer to take place, so power transfer cannot be done while using either power source.

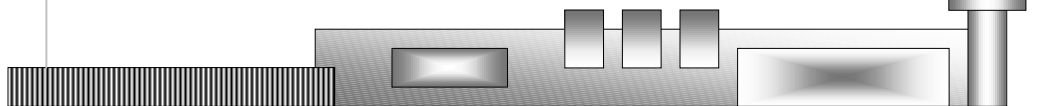
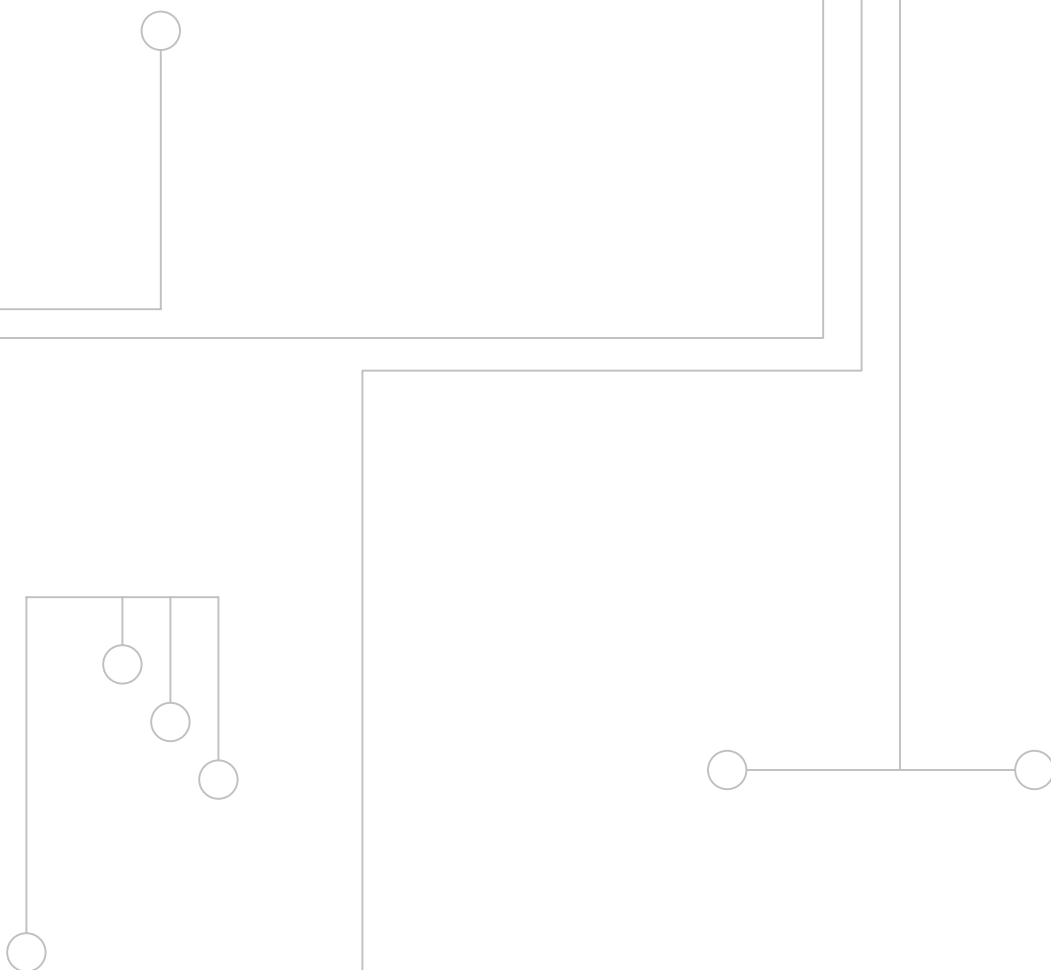


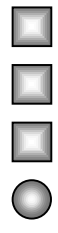
[As Neb and Ed are resting after a battle, Neb takes a drink from his canteen while they collect the power sources from their dead opponents. The process takes 5 minutes to complete. During that time, Ed's Thermo beltpack recharges 30 PU (6 PU per minute). At this point, Ed's Thermo beltpack is now up to 40 PU.

Ed begins transferring power from the enemy power magazines. He hooks a magazine into his beltpack. The magazine has 21 PU left, so it takes 21 seconds to transfer into the beltpack, bringing it up to 61 PU. Ed discards the empty magazine and attaches the next magazine into his beltpack. This magazine only has 6 PU left in it, so it takes 6 seconds to transfer into the beltpack, raising the beltpack to 67 PU. Ed and Neb continue to transfer power from all the enemy power systems until their gear is fully recharged.]

Power Linkage

Multiple Power Systems can be linked together via a network of micro-thin wires allowing energy drain to be distributed evenly among all power systems. In this manner, several smaller power systems can be used to supply power to an item. For example, a character wearing a Thermo beltpack and a Capacity Charge beltpack could "link" them and then plug in a SAW laser rifle. Thus, as the rifle is used, the energy drained would be split between both systems. Once the Thermo beltpack recharged itself, it would "overflow" into the CC beltpack and recharge it as well. The linkage also eliminates the necessity of switching power sources on a device once the current power source is drained. If a power consuming weapon jams while connected to linked power systems, one of the cables in the linkage fries. The linkage stops working and must be repaired (50 cr). A power linkage costs 360 credits, weighs 1 kg and consists of a network of multiple jumpers and power cables.





[IMAGE SPLASH 8 ½ x 11] (Robots) robot montage



Robots

"Save the environment!
Recycle the warbots!"

These rules cover character sized robots. Much larger robots are akin to automated vehicles (at least in design and function) and are fully covered in Fusion Death, the robot combat game rules.

Design

All robots must have the following pieces of equipment: body, impulse system, power system, core processor and one detection system. The following pieces of equipment are optional: manipulative limbs, multiple power systems, multiple processors, multiple detection systems and options.

Body Type	Mass	Load	Pow	Cost	Hits	STR	RUG	
Light	6	110	6	500	30	6	4	
Medium	14	150	8	600	55	9	6	the standard robot body
Heavy	25	200	16	800	90	12	7	
Super Heavy	35	300	30	1,600	130	16	8	
Xenopomorphic Ж	10	130	16	2,400	45	7	6	

Ж Shaped like one of the races, Xenopomorphic robots may wear character body armor (appropriate to the race). No other body type may do this.

Mass Mass of the body in kilograms.

Load Total mass of equipment the body can support. The mass of the body does not count against the robot's load, but all other robot parts and accessories do.

Pow Number of PU the body uses per hour.

Hits How much damage the robot body can take before being destroyed. A robot will continue to operate until its body is 95% destroyed, at which point it shuts down if it can.

STR The robot's strength. Encumbered robots suffer only movement penalties. Robots rarely carry anything unless they are AI's.

RUG How rugged the robot is. RUG is the robot equivalence of END, TGH and FLX.

Impulse Systems	Mass	MOV	Load	Hits	Pow	Cost	
Biped legs, reverse	30	8	x.8	20	18	950	two reverse articulated legs
Biped legs	40	6	x1	30	16	400	two legs
Tripod legs	35	6	x1	25	18	650	three legs
Quadped legs	72	7	x1.2	25	24	840	four legs
Quadped legs, heavy	108	5	x1.6	40	36	1,680	four heavy legs
Hexapod legs	84	8	x1.3	20	30	1,260	six insect legs
Octapod legs	96	10	x1.2	15	32	1,280	eight spider legs
Dual tracks	50	4	x1.7	55	20	1,050	two tank tracks
Triple tracks	60	4	x1.9	65	25	1,550	three tank tracks
Quad tracks	70	3	x2.1	75	35	2,050	four tank tracks
Hover system	50	8	x1	50	25	1,750	hovercraft
Wheels	40	6	x1	40	10	700	wheels
Antigrav	80	9	x1.1	60	80	4,200	levitation
VTOL thrusters	45	12	x.7	40	70	2,800	vectored thrust movement
Rotors	30	7	x.5	35	35	2,100	helicopter

MOV This is the robot's MOV score. Robots have a walk and sprint movement value. Robots walk at the MOV value, and sprint at 4x MOV. (The terms walk and sprint are used loosely to represent how fast the robot moves, since many robots don't even have legs.) A robot may continuously move at sprint speed for 2x RUG minutes, after which it must slow down to avoid burning out its impulse system. Hourly move rate is: MOV x3 kph.

Load This modifier is applied to the Load value of the Body and will increase or decrease the amount of mass the body can carry.

Hits How much damage the impulse systems can take before being destroyed. Impulse systems will function until they are 75% destroyed, at which point they fail. Hits for legs and tracks is the number of hits each leg or track can take. Track systems have 2, 3 or 4 tank tracks, depending on whether they are a dual-, triple- or quad- track system. Antigrav impulse systems have 2 levitation pods (AG pods), each of which has 60 hits.

Pow Number of PU the impulse system uses every hour.

[IMAGE 6 x 4] (Robot Power Systems) Image of the back of a tracked humanoid robot, from the rear. Between it's tracks is a large power pack. The power pack is being installed / removed, or perhaps being hooked up for recharging.

Power Systems

Robot power containment systems are available using the following power sources: Capacity Charge (low, standard or heavy), Thermo, Fusion and RF cell. When a robot's power system is drained, it shuts down. If the power system is a self charging variety, the robot will "wake up" when it has 80-100% of its charge back. Robots with RF cells will function as long as they are within range of the broadcast power transmitter. If a robot uses more power in one turn than can be received by the RF cell, the cell burns out and must be replaced. Robots with capacity charge power systems must be recharged before they will function again. Robots must have at least 1 power containment system. Extra systems are optional.

Robot Containment Systems

	CR	Mass	Cost	
Light pack	36	20	540	
Medium pack	96	30	720	the standard robot power system
Heavy pack	192	45	3,840	
Extra heavy pack	384	60	11,520	
Combat pack	288	50	17,280	

Core Processors

This will determine most of the robot's attributes. Particularly, it will determine all mental attributes, and those physical attributes that depend on the brain. All robot bodies are capable of moving at capacities far in excess of most core processors, this is just inherent due to the construction materials' superior to organic flesh. Thus certain physical attributes are also determined by the core processor. Robots may have multiple cores and cores may be modified (specialized) to enhance various attributes.

Core Processors	CYC	Pow	Mass	Cost	Avail	Common Uses
Mindsink	3	1	.1	500	B	vending robots
Automatron	4	1	.2	1,000	B	infobots
Cyber700	5	2	.3	1,400	B	repair, maintenance, technician robots
Mantronix Mk III	6 ^{AI}	3	.5	2,000	C	personal, service, and robots routinely dealing with people
HyperLife	7 ^{AI}	4	.6	2,200	C	
JRYL model D	9 ^{AI}	6	1.1	3,000	C	
Omni Task XL	11 ^{AI}	8	1.4	6,900	D	
Thought Jammer	13 ^{AI}	10	2.4	12,400	E	
Task Flayer	16 ^{AI}	15	3.8	21,500	E	
SciTek CP	21 ^{AI}	25	6	37,800	F	

CYC The number of thought cycles the robot can complete in a nanosecond. This value is the robot's ability score for COR, SPD, REF, as well as INT, WIS, CLV, WIL, FOC and CHR.

AI This notation indicates the robot may be made self aware, although not all of them are. Making a core processor self aware will double the cost of the core.

Pow The number of PU used by the core processor every hour.

Core Specialization

Robots may modify the ability scores generated from the CYC value of their Core Processors. For every 2 points reduced, 1 point is generated. That is, in order to raise any single ability by 1 point, there must be a deduction of 2 points somewhere else.

Multiple Core Processors

A robot may have multiple core processors. They must all be identical. For each additional core, the robot's CYC is effectively increased by 1. When a core processor is destroyed or damaged a different processor can take over, this will result in the loss of 1 CYC. If the cores are specialized, they must all be specialized exactly the same way.

Core Transplants

Transplanting an AI core from one robot body to another is risky and expensive. Cost is 100x core cost. Success is determined by a die roll (d6): 1 – success, 2,3,4 – failure, core returned to the original host body, 5 – failure, core returned to the original host body and suffers irreparable damage (-d10 CYC), 6 – failure, core dies.

Manipulative Limbs

Robots can be built with a variety of manipulative appendages. None of these are required, although most designers include one or more on their robots.



Manipulative Limbs	Load	Hits	Pow	Mass	Cost	
Delicate manipulator	6	8	2	9	600	small arm with a 6 finger hand with heightened sensitivity
Standard manipulator	36	27	6	14	400	standard arm with a hand
Heavy manipulator	108	36	12	19	500	heavy duty arm with a massive powerful claw type hand
Multi tool	--	18	5	8	450	drum shaped device with flip out tools
Heavy Tool	--	42	16	19	750	heavy duty arm with a forklift, chainsaw, trench digger, or other heavy tool.
Turret	54	42	6	3.5	900	provides 360° field of fire and full stabilization for mounted weapons, giving them a +30% to hit
Equipment Pod	--	30	6	8	400	no hands, 60° field of "fire"
Weapon Pod	--	40	12	12	800	no hands, 100° field of fire

Load Load refers to the maximum mass of equipment that may be designated as inside the limb. This equipment still counts against the robot body's load.

Hits How much damage the limb can take before being destroyed. Limbs will function until they are 75% destroyed, at which point they fail.

Pow How much power each limb uses every hour.

Multitool Limb

This limb has a variety of fold out tools on it, equivalent to any specific toolkit. The drum that the tools are mounted on contains several fluid containers inside for supplying various liquid agents to the tools that require them, e.g., caulk dispenser, microtorch, sealant sprayer, etc. A robot is capable of inflicting d10 lethal (B) damage with this limb.

Heavy Tool Limb

This limb has a single heavy duty tool mounted on it. The tool can be anything from a chainsaw, trench digger, sand blaster, steam cleaner, rock drill, pile driver, etc. A robot is capable of inflicting 6d10 lethal (B or K) damage with this limb.

Equipment Pod Limb

This limb is can carry 1 large item, 2 medium items or 4 small items. The mass of these items counts against the load of the robot body. A robot is not capable of inflicting damage with this limb.

Weapon Pod Limb

This limb is can carry 1 SAW or larger size weapon, 2 carbine to assault rifle size weapons, or 4 pistol weapons. The mass of these weapons counts against the load of the robot body. A robot is not capable of inflicting damage with this limb.

Detection Systems

Each of these systems will allow the robot to operate normally, e.g., move about, shoot, fight, etc. If a system is jammed, the robot is considered blind unless it has an extra detection system and that system is not also being jammed. Robots may have duplicates of the same detection system, allowing the robot to use the backup systems should the primary system be destroyed.

Detection Systems	Mass	Pow	Cost
Radar	.5	10	700
IR	.3	5	700
Motion	.4	15	900
UV	.9	10	1,000
Magflux	.7	10	1,400
Olfactory	.3	15	1,150
Ultrasonic	.6	10	1,050
Seismic	.4	5	1,250

Pow How many PU the system uses every hour.

Options	Mass	Pow	Cost	Effects
Hydraulic Amplification	--	+50%	1xBody	STR score +30%; Hourly PU use is 50% the body hourly PU use.
Heavy Load Hull	--	--	3xBody	MOV -2, load +30%, increases Body Load as well as the limb loads, cannot be combined with Speed Boost.
Speed boost	--	+150%	+80%	MOV +1; Pow and Cost values are applied to the impulse system
Stealth	6	100%	16,000	hourly power consumption is doubled when activated
Synthskin	2	--	2,300	Xenopomorphic only; robot can pass as a real alien 99% of the time
Camoskin	2	--	4,200	provides the same effects as a Camosuit
Stun hull	.2	1	600	provides the same effects as stun gloves, except over the entire body of the robot
Electrified hull	2	3	1,800	provides the same effects as a shock suit
Class I Ruggedization	3	--	1,000	RUG +1; can be purchased a maximum of 6 times; cost doubles with each additional purchase, e.g., class I costs 1,000, class II costs 2,000, class III costs 4,000, etc. Effects of RUG are applied to the robot's body, limbs and impulse system. Mass increases with each purchase.
Armored hull	8%	--	3,000	increases body, limb and impulse system Hits by 50%; mass is 8% of Load
Hvy Armored hull	16%	--	4,400	increases body, limb and impulse system Hits by 100%; mass is 12% of Load
Thermal damping	--	--	12,000	robot has a reduced IR signature; robot can complete mask its IR signature for up to 30 minutes at a time, it must then spend an equal amount of time unmasked venting the built up heat



VL redirection

--

200%

35,000

robot hull has a light-shift capability, allowing the robot to instantly be nearly invisible in any terrain, with only a slight delay in the pattern change (resulting in a blurred effect when the robot moves). Hourly power consumption is 200% the body's hourly PU use.

UV damping

--

--

9,000

robot has a reduced UV signature

Radar damping

--

--

14,000

robot has a reduced radar signature

Space proofing

4

--

2,000

can survive and function normally in a vacuum

Water proofing

--

--

500

robot can survive underwater and is corrosion resistant

Deep sea proofing

3

--

3,500

robot can survive and function normally at extreme depths underwater

Desert proofing

1

--

10,000

robot can survive and function normally in desert conditions

Arctic proofing

2

--

2,000

robot can survive and function normally in arctic conditions

Radiation shielding

2%

--

8,000

robot can survive in radioactive environments without becoming damaged

EMP shielding

2%

--

5,500

robot is resistant to EM pulses

EMP synthetic

3%

--

7,500

absorb energy from EM pulses – includes EM shielding; 50 PU per pulse generating event, e.g., nuclear explosion

Photosynthetic

--

--

1,000

robot can absorb energy from light; 12 PU per hour

Hydro-synthetic

--

--

3,200

absorb free electrons from running water (when submerged more than 50%); 1 PU per gallon

Electro-synthetic

--

--

7,000

absorb energy from shock and electrical attacks; 1 PU per point of damage or minute of stun

Electro-directive

1%

special

5,000

can transmit (shoot) energy from it's power source; cost 1 PU per meter to the target, plus 10 PU per d8 of damage inflicted.

Flux induction

--

--

6,000

absorb energy from magnetic fields; 25 PU per large fluctuation, 10 PU per minute in areas of constant fluctuation

Auto-repair

5%

1

12,150

Auto Repair heals 1 hit point every two hours.

Imp auto-repair

8%

2

24,300

Improved Auto Repair heals 1 hit point every hour.

Nanite Bay

4%

3

32,000

Nanite Bay repairs 1 hit point every 30 minutes.

Voice synthesizer

2

--

200

allows robot to perfectly duplicate voice samples

Voice analyzer

2

--

250

allows robot to determine if a voice sample is genuine; requires sample of genuine in memory

Cargo bay, small

4

--

100

can hold small cargo (rock samples, hand weapons, etc.)

Cargo bay, large

6

--

200

can hold large cargo (tires, garbage cans, etc.)

Weapon

same

same

200%

any character weapon can be installed in a robot; the weapon costs 200% normal

Equipment

same

same

120%

any character equipment can be installed in a robot; the item costs 120% normal

Defense	--	--	--	any character defensive screen or jammer can be installed in a robot; the item costs 350% normal; no robot may have body armor "installed" except for the armor listed above
Psionic driver	6	x2	56,000	grants the robot the normal chance of psionic abilities; doubles the power consumption of the core processor
Psionic amplifier	4	10	32,000	experimental; psionic amplifiers are occasionally installed in research AI robots in an attempt to enhance psionic abilities; grants a +2 to all psionic skill checks
Core Armor	x3	--	x3	Modifies critical hits to the Core Processor: when hit by a critical hit, they are destroyed on roll of 1 on d10, otherwise they loose d4 cycles. Mass and Cost of the Core Processor are tripled. Power consumption is unaffected.
Survival Center	x1	--	x2	Advanced circuitry and integrated micro power system. Allows the robot's intelligence to survive catastrophic failure of the Body. AI will survive in the survival center until the torso is reduced beyond -200% hits. AI can perform no action while residing in the survival center.

Mass Mass of the modification or accessory. Percentages are of the robot's Load.

Pow How many PU the modification uses every hour. Percentages are based on the robot's base hourly rate (body, sensors, core, impulse system and manipulative limbs).

Retrofitting Equipment

Cost to retrofit equipment to a robot is 300% the cost of the item and takes 1 day per kilogram of mass of the item to be retrofitted. Some retrofits can require extensive reorganization of the robot's internal system, thus it takes awhile to complete. Robot cores cannot handle the surges and load changes created when installing an item, so robots must be completely shutdown and the core powered down before equipment can be installed in a robot. As a result, robots with AI cores, which cannot be shutdown, cannot have equipment retrofitted to them without expensive equipment and lengthy procedures.

Maintenance & Repair

Maintenance

Robots require a fair amount of maintenance to operate, especially highly sophisticated robots. This maintenance can be pulled by the owner or the robot can be taken to a shop. Cost of maintenance at a shop: 200 credits + 1% robot cost. Robot will be in the shop for 1 day per 100 kilograms of robot mass. Maintenance must be pulled every month. Failure to pull maintenance will result in a 5% chance per day the robot will suffer a major breakdown. This chance increases by 5% per month.

Repairs

Cost to repair damage to a robot is as follows:

Component	Cost to repair
Hull	100 credits per point
Impulse System	300 credits per point
Detection System	45% system cost
Manipulative Limb	150 credits per point
Weapon	2d4 x 10% weapon cost
Other	d4 x 10% item cost

Robots as Characters

Players may use robots with AI core processors as characters if they want (the robot should cost about $6d10 \times 1,000$ credits). AI robot characters choose an Occupation and skills and everything else like normal. Robots have LCK of 4. ATR is usually not applicable, but for Xenopomorphic robots it defaults at 4 and can be increased at a cost of 420 credits per point, to a maximum of 10. PC AI robots may not improve ability scores with XP.

Robot Skills

Artificial minds, which is what AI robots have, must actually learn their skills, as a character. They receive occupational training and receive skill and experience points as normal characters.

Advanced state memories, which is what non-AI robots have, cannot learn. They have a limited memory, but skills come on "chips" and can be swapped quickly. Skill chips cost 500 credits, plus $300 \times \text{skill level} \times \text{LF}$ and enable the robot to operate as a character with that skill.

Advanced state memory robots may hold a number of skill chips equal to their CYC score. The maximum level a core can handle is equal to its CYC score.

Robot Demographics

Age: $d4d8!$ years for AI, and $d4d10!$ for Advanced State Memory.

Height: Base height is equal to the total robot mass in centimeters, e.g., a 250 kg robot has a base height of 250 cm. There may be a variation of $\pm 20\%$.

(d3): 1 – no change, 2 – increase, 3 – decrease

(d20): is percentage

Power Consumption

Robots use a number of PU every hour of normal activity. This number is the sum of its body power, manipulative limb power, impulse system power, detection system(s) power, and core processor(s) power. If the robot is relatively inactive (just standing there, waiting, etc.) it will use $1/3$ this amount. Heavy activity, such as combat or adventuring, will double the robot's power consumption.

Cyborgs

The distinction between a cyborg and a cybot is a blurry, yet important one. Cyborgs are creatures that have been augmented cybernetically, but still retain their original living brain and make their own decisions. Their cybernetics are an extension of their body and serve to augment their functions. Merely possessing cybernetics does not make one a "cyborg." One must be sufficiently enhanced in ability by those cybernetics as to be so far out of bounds from one's original race as to require separate definition.

[IMAGE SPLASH 8 ½ x 11] (Robot Combat) Image similar to a fantasy image of a hero slaying a mighty dragon. The hero is on the dragon's neck and is poised to jam a sword straight down through it's neck. Here the dragon is a huge robot of some sort. Perhaps a quad or hexped robot with huge menacing limbs with power tools on them. The hero is poised on top of the robot with a blazing power sword pointing down, about to thrust the sword straight into an open access plate. The robot should be super detailed and fearsome looking. All around should be indications of the destructive potential of the robot, such as huge stone pillars that it has knocked down in it's thrashing, perhaps a car or two crushed here and there, maybe one still flattened beneath it's foot.



Robot Combat

Damage to unarmored locations is not doubled for robots. Robots do not suffer Loss Of Consciousness (LOC) from battle damage. Robots have a number of melee attacks per turn equal to their CYC score divided by 3, round down. Martial arts skills will improve these numbers. All HTH damage from a robot is lethal. Robots ignore bruise damage. Attack and Defend scores are computed the same as other characters.

Robot Hit Percentages (For PC Robots)

Integral Weapon Systems: (REF+COR) x3 + CYC x6%, with no skill bonus.

All other scores (ranged to hit, unskilled to hit, grenade, melee attack and defense, initiative, etc.) are computed normally.

Robot Hit Percentages (For NPC Robots)

Assume an NPC robot has the pertinent skill to fire whatever it mounts or carries.

Skilled: CYC x9%

Unskilled: CYC x4%

Integral Weapon Systems: CYC x12%.

Hit Locations	d20
Body	1-12
Appendage(s)	13-16
Impulse System	17-19
Critical Hit	20

Critical Hit	d20
Weapon System	1-9
Detection System	10-13
Power System	14-18
Core Processor	19 - 20

Critical Hit Table Results

Weapon System One of the robot's internal weapon systems has been jammed or destroyed (roll d4, on a 1 it merely jammed). If the robot has no weapon systems, treat this critical as a maximum damage body hit.

Detection System One of the robot's detection systems was destroyed.

Power System The robot's power containment system has been hit. It loses d10 x10% of its remaining power. Thereafter, the robot will drain a full charge in d4 hours until the containment system has been repaired.

Cybots

Cybots are the opposite of cyborgs. Cybots have computer brains and their organic bodies are merely a part of the machine. Cybots are frequently made from capitol criminals after they have been captured and sentenced to death. When this is done, typically all distinguishing features are removed from the body. This includes tattoos, scars, the face, fingerprints, hair, etc.

"Don't shoot him. He's a squishy. You know, a human. He'll explode and it'll be really messy."

Core Processor The robot's brain has been hit. Roll d4, on a 1 the processor has been destroyed, otherwise the processor loses d8 cycles until it is repaired (this will reduce its ability scores). If damage causes a core processor's cycles to drop below 1, the processor is destroyed. Robots suffer the "Attacker has Head Wound" targeting penalty if they have received a hit to their Core processor.

Computers

Computers are similar to robots, except they have no bodies. Computers store, retrieve, process and create information. Computers can be self-aware. Wrist computers are small devices. Pocket and Belt computers are medium devices.

Mainframe computers cost 30,000 credits, plus 1,000 credits per CYC over 20. So, a 25 CYC mainframe would cost 35,000 credits. Mainframe computers are always AI's. Power usage is equal to CYC multiplied by 5. Damage Points (DP) is equal to CYC x5.

All other computers can have their CYC boosted for a cost of 2,000 credits per +1. Max CYC boost is equal to the Computer Tech level of the character modifying the computer. Once a computer's CYC score hits 10, it automatically achieves artificial intelligence. At this point, the cost of CYC boost becomes 4,000 per +1.

Computer	Mass	Cost	CYC	PU	DP	Pow
Wrist computer	.3	7,200	2	1	6	clip
Pocket computer	.5	4,800	3 ^{AI}	2	12	mag
Belt computer	1	3,600	4 ^{AI}	4	25	mag
Laptop computer	2.5	2,400	4 ^{AI}	6	35	mag
Desktop computer	15	1,800	5 ^{AI}	12	45	belt
Mainframe computer	--	30,000+	20+ ^{AI}	100+	CYC x5	vehicle power source

CYC The number of thought cycles the computer can complete in a nanosecond. This value is the computer's ability score for INT, CLV, WIS, WIL, FOC and CHR. Computers have no other ability scores.

AI This notation indicates the computer may be self-aware, although not all of them are. Making a computer self-aware increases its cost by 50%.

PU The number of PU used by the computer every 5 minutes. All computers must be connected to a power system.

DP The number of damage points the computer can take before being destroyed. At 70% damage, the computer memory and processing capabilities are lost. Armor costs 10 credits per 1 DP and effectively increases the DP of the computer. Computers may have up to 4x their DP in armor, e.g., a wrist computer may have an additional 24 DP in armor, for a total of 30 DP.

Pow The smallest power containment system the computer can operate off.



Computer Accessories & Modifications

Organic computer

Using long strings of DNA, RNA and other complex protein molecules to store data, these computers are extremely efficient at storing large amounts of data. They can store thousands of times as much data as their silicon equivalents. Data is stored holistically. That is, every memory location contains all the information in the computer. When memory sections are lost, the computer does not lose specific items of data, it loses quality of data. Similar to someone with a failing memory. Organic computers require special life support systems to maintain themselves. This is included in the cost and mass figures. Cost is 10x, mass is the same, but the life support system adds 30 kg. PU consumption per hour is increased by 30 for the life support system.

EMP Hardening

5x cost, grants 90% resistance to all EM pulses. Adds 10% to mass.

Ruggedisation

5x cost. Doubles the computer's DP. Renders the computer water and shock resistant. The computer is also self-grounding and thus impervious to minor electric shocks. Adds 30% to mass.

Vacuum Proofing

10x cost. Renders the computer safe to operate in a complete vacuum. Includes radiation shielding and cosmic shielding. Also provides an anti-static dust coating. Adds 50% to mass.

Physical Security

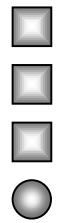
1,000 cr. Adds .1 kg to mass. This adds a physical security system to the computer so that only authorized users can have access to it. This system can be a fingerprint reader, retinal scanner, voice recognition device, etc.

Self Defense System

5,000 cr. Adds .4 kg to mass. Allows the computer the ability to deliver a nasty shock through its surface to anyone touching it. The shock consumes 2 PU and delivers 4d10 electrical damage. Anyone being shocked is also stunned a number of turns equal to 40 minus the damage delivered.

External Device Interface

500 cr. Adds .1 kg to mass. Allows the computer to be linked to external hardware, such as surveillance cameras, sensors, weapon systems, vehicle control systems, etc. This allows either the computer operator or the computer itself to control the device it is linked to. A single EDI is required for each system the computer is to link with.



Virtual Reality Interface

5,000 cr. Adds 2 kg to mass. Allows the operator to play some really outstanding games. Also allows the computer to run simulation and training software to help character's build skills (character is considered to have "proper facilities and equipment" for purposes of learning and improving skills). Allows a more natural interface with the computer during hacking and data manipulation, as well (granting a +3 to initiative during hacking operations). PU use for the computer is tripled when the VRI is in use.

[IMAGE 3x 2 ½] (computer accessories) Virtual Reality Interface connected to a laptop.

Sample Analyzer

1,200 cr. Adds .5 kg to mass. Allows the computer to use any skills it may possess to analyze the contents in the sample tray. The sample tray can hold a volume of mass equal to 5 x 5 x 4 cm.

Computer Software

Computer software is negligible in mass. It comes on small memory tabs, each about the size of a stick of gum. Each program is contained on a separate memory tab. A case that holds 30 tabs weighs less than .1 kg and can be obtained for free at any software retailer with the purchase of any software. A weather proof case that holds 30 tabs is also available. It weighs .1 kg and costs 20 cr. It has 1 DP, which is sufficient to protect it from Short drops, rain, sand and mild jolts.

Simulation and Training Software

When purchased, the character must specify what skill the S&T software is for. Cost: 3,000 cr. Serves as a complete reference for any single skill. When combined with a VRI (see Computer Modifications), it can be used to train a character at its particular skill. Maximum level trainable is equal to the computer's CYC score.

Game and Entertainment Software

Cost: 100 – 1,000 cr. A bewildering variety of computer games are available for all tastes, interests and desires.

Reference Software

Cost: 900 cr. Similar to S&T software, except that it cannot be used to train a character in its skill, and consequently does not require a VRI to use.

Database Software

Cost: 300 cr. Can be used to store vast amounts of information. The software allows conclusions and inferences to be drawn from the information, as well as the generation of reports, graphs, slide shows, etc.

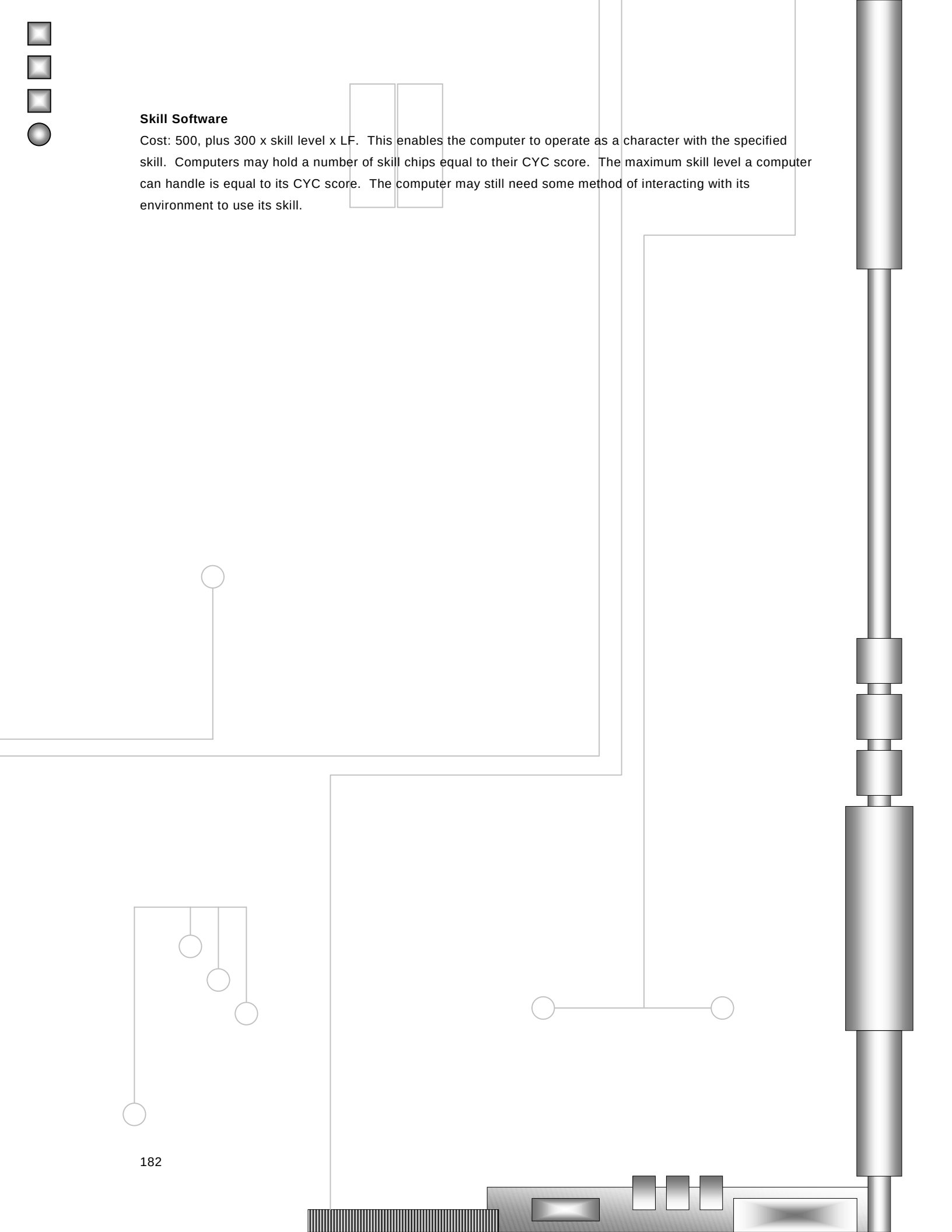
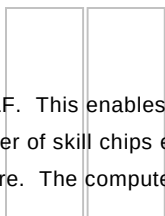
Computer Aided Design Software

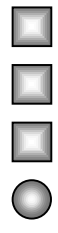
Cost 6,000 cr.



Skill Software

Cost: 500, plus 300 x skill level x LF. This enables the computer to operate as a character with the specified skill. Computers may hold a number of skill chips equal to their CYC score. The maximum skill level a computer can handle is equal to its CYC score. The computer may still need some method of interacting with its environment to use its skill.





[IMAGE SPLASH 8 ½ x 11] (Equipment)

Equipment

Equipment List

(s) denotes space equipment
(w) denotes weapon modification or equipment

Item	Mass	Cost
12 gauge breaching rnd (w)	--	1
550 cord	.1	10
Armor Piercing round (w)	--	300%
Accelerated Fusion (w)	+25%	+200%
Anti-Surveillance Device	7.6	545
Autodoc	.45	1,600
Automech	.6	1,200
Bandoleer (w)	.2	40
Bandoleer Sling (w)	.1	20
Beer, 12 pack	1½	10
Binoculars	2	370
Bolt Cutters	4	100
Break Down Mod (w)	+15%	+200%
Camera	2.4	330
Camera, simple	.3	30
Camosuit	3	300
Camouflage Net	12	500
Canned air	.1	12
Canteen, 1q	1	5
Canteen, 2q	2	10
Canteen, 5q	5	25
Cargo pouch	.7	90
Cargo pouch, small	.1	10
Caving gear	12	215
Ceramic Weapon (w)	-20%	+200%
Chain Feed (w)	+5%	+95%
Chemical detector paper	.1	1
Chemlights, box	.1	30
Chronograph	.1	230
Clip pouch	.05	40
Cold weather coat	5	100
Cold weather pants	5	110
Compass	.1	35
Combat boots	1.15	80
Combat helmet	.6	195
Combat Shelter	1.9	315
Communicator	.6	90

"Anyone got any toys that'll make me invisible?"

Item	Mass	Cost
Computer Archive Device	2	300
Computer Printer	9	250
Computer Scanner	12	290
Coolant Suit	3.5	1,900
CPOG, pants	2	170
CPOG, coat	2	210
CPOG, over-boots	1	90
CPOG, gloves	½	120
Cyclic Accelerator (w)	+20%	+50%
Datapad	.1	210
Deep Sea Diving Suit	150	16,000
Definable Spatial Comp (s)	.2	85
Directed Edge (w)	+.1	+50%
DSLSU (s)	36	9,600
Diving gear	5	320
DNA Scanner	.8	1,680
Draft Compression (w)	+5%	+70%
Drum Magazines	x6	x6
E-tool	2.5	60
EEG Scanner, non-medical	1.2	3,250
EFP ammunition	--	200%
EM Boots (s)	1.1	135
Energy bar, box	.1	20
Energy drink	1	3
Endo-skeleton (s)	9	3,700
Epidermal Injector	.25	325
EVA Maneuver Unit (s)	25	1,600
Exoskeleton, A rating	5	1,200
Exoskeleton, B rating	8	3,600
Exoskeleton, C rating	12	7,200
Fast Patch	.35	65
Field Chair	.8	40
Field Dressing	¼	25
Field Table	1.9	50
Fighting Position	24	1,700
Fire Extinguisher	2.5	60
Fire Retardant suit	4.8	1,100

Item	Mass	Cost
Fine Wine, bottle	½	200
Flare	.3	60
Flash light	.1	10
Flash Suppressor	.15	45
Florescent chalk	.4	10
Fluxsuit	5.6	1,600
Foam mat	1	20
Folding Bipod (w)	1.15	85
Folding Stock (w)	+25%	90
Grapple	3.5	190
Grapple gun	3.2	240
Grenade Bandoleer (w)	.3	60
Groceries (1 day worth)	--	24
GPS receiver	.3	210
Hand UV light	2.9	165
Handcuffs, ion	1.5	460
Handcuffs, steel	1.2	105
Heavy Capacitance (w)	+20%	+30%
Heavy Ion (w)	+30	+160%
High Velocity round (w)	--	500%
Hollow Point round (w)	--	150%
Holoprojector	12	470
Holoviewer, 1.5 m	15	1,100
Holster, Energy Melee	.05	45
Holster, Pistol	.1	50
Holster, Rifle	.2	75
Holster, Sword (Scabbard)	.2	95
Holster, Melee, Small	.1	35
Hydrogenated ammo (w)	--	200%
Hypercharged Particle (w)	+15%	+120%
ID Scanner	1.6	325
Inflatable boat w/ motor	60	680
Insta-Shape Comfort Chair	30	420
Integral Midwall Cooled (w)	--	+100%
Integral Midwall Cooled (w)	+20%	+400%
Intelligent round, AI (w)	--	+450%
Intelligent round, B (w)	--	+150%
Intelligent round, G (w)	--	+250%
Intelligent round, SG (w)	--	+350%
Lantern	3.1	45
Laser Aerosol	.45	150
Laser Cutting Torch (s)	16	370
Laser Designator (w)	.3	1,000
Laser Igniter (s)	.1	90
LBE	1	130
Light Capacitance (w)	-10%	+15%

Item	Mass	Cost
Line Sled (s)	6	200
Long Barrel (w)	20%	200
Magazine pouch	.1	50
Magnetic Anchor (s)	3	350
Magnetic Boots (s)	6	120
Meal, Ready to Eat	.5	30
Message Tablet	½	60
Micro Communicator	.2	120
Micropulse (w)	+10%	+60%
Micro torch	.05	45
Mixed Drink	¼	8
MOLLE, small	1	90
MOLLE, medium	1½	130
MOLLE, large	3	180
Monocle	.1	800
Mountain Climbing gear	7	195
Multi-tool	¼	60
Muzzle Break (w)	.2	60
Muzzle Mount (w)	.1	50
Neg. Particle Deflector (w)	+15%	+50%
Neuro Neutralizer	.1	200
Non-linear cycle (w)	-20%	+45%
Nylon cuff-tape	.4	50
Optacoustic Focusing (w)	+25	+175%
Paint round (w)	--	50%
Parafoil	9	125
Personal Flyer	15	200
Plastic Weapon (w)	-15%	+120%
Portable Holoviewer, 20 cm	2	260
Portable Music System	3.2	190
Portable Scanner	2	435
Protective mask	1	350
Proton dispersion (w)	+10%	+25%
Prybar	1.1	35
Radar Proof suit	5.2	3,200
Radiation suit	7.2	3,500
Recoil Compensator (w)	15%	180
Recognition Grip (w)	.1	1,200
Remote Sight (w)	.1	900
Restraining Bolt	.15	250
Retina Scanner	.6	790
RF Trans-Unit	.3	300
Riot Gear	12	4,500
RLTD, case	.1	180
Rubber round (w)	75%	--
Rope	3	100

Item	Mass	Cost
Sabot round (w)	+100%	+400%
Salt tablets, box	.1	5
Sea Sled	20	1,200
Secure Communicators	1.2	360
Selenium Graphite bore (w)	--	+30%
Short Barrel (w)	-15%	30
Silencer (w)	.15	150
Sleeping bag	2	180
SMP modification (w)	--	+150%
Space Proofing	--	x2.5
Space Suit (s)	45	18,000
Space Suit Armor (s)	3.7	815
Splint Kit	½	40
Spot light	2	70
Spray, Anti-dust	.15	20
Spray, Anti-EW	.15	55
Spray, Anti-static	.1	15
Spray, Antiseptic	.15	18
Spray, Bonding	.15	15
Spray, Bug	.1	8
Spray, Electronics cleaning	.1	24
Spray, Paint	.1	6
Spray, sealant	.1	36
Spray, UV	.2	30
Spray, Waterproofing	.15	20
Stasis / Preservation Field	6	2,100
Static Guard (w)	+5%	+40%
Sticky Boots (s)	1	85
Suit Patch (s)	1.3	145

Item	Mass	Cost
STRAP Weapon (w)	-50%	+295%
Stun collar & "leash"	6	120
Stun cuff wand	.2	225
Stun cuffs	1	90
Stun Driver	1.2	1,800
Sun Visor	.1	300
Technician's suit	3	120
Telescopic eyepiece (w)	.3	390
Telescoping Stock (w)	-25%	120
Tent, small	10	90
Tent, medium	15	135
Tent, large	25	270
Thermosuit	6.1	3,200
Turbocycle (w)	+15	+200%
UV suit	2.1	1,800
Video camera, hand	3.6	620
Video camera, muzzle	1.2	310
Video camera, shoulder	14.7	3,000
VL Disruptive suit	4.9	7,500
Wide Area Munition (w)	--	+150%
Weapon Stock Compartment	--	--
Weapon Support Waldo (w)	6	840
Wet weather coat	.15	40
Wet weather pants	.2	50
Water purification device	4	60
Water purification insert	.1	5
Water purification tabs, box	.1	5
Wetsuit	2	800

Equipment Descriptions

All miscellaneous equipment is Availability A. Exceptions are noted below.

550 cord

50 meters; supports 550 kg; .1 kg, 10 credits.

Anti-Surveillance Device

This device is just slightly smaller than a large toolbox. It broadcasts a series of alternating EM frequencies which interferes with the electronics in surveillance devices. Range is adjustable from 5 to 40 meters. Power usage is 10 PU per minute. Requires an external power source. 545 credits, 7.6 kg. Availability C.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Autodoc

Allows a character with surgery or field medic skills to operate by talking through the procedure. It has a screen on it for display of what is "under the knife." This device enables a surgeon to operate on himself or on someone he cannot reach. The autodoc has a basic level AI and knowledge of racial physiology's and thus can perform minor first aid on a character without direction from someone with medical skills. In such a situation, the autodoc can restore basic functionality of limbs, broken bones, etc., but no DP is regained. PU use is 15 per session. Requires an external power source to function. 1,600 credits, .45 kg.

[IMAGE 3 x 3 ¼] (equipment descriptions) Piece of equipment.

Automech

Allows a character with any kind of mechanic or technical skills to manipulate, modify, change or operate on a device by talking. It has a screen on it for display of what is "under the drill." The automech has a basic level AI and knowledge of common design technologies and thus can perform minor repairs on a device or robot without direction from someone with mechanic or robotic skills. In such a situation, the automech can restore basic functionality of limbs, broken joints, etc., but no DP is regained. PU use is 25 per session. Requires an external power source to function. 1,200 credits, .6 kg.

Binoculars

Standard 30X binoculars. Available with IR, UV, Flux, motion, image enhancement, Low Light and range finder enhancements. Uses 1 PU per hour activated. 2 PU per hour when using alternate vision functions. Microcell powered. 2 kg, 370 credits. Modifications cost 200 credits each. Medium Device.

Bolt Cutters

Capable of cutting military quality pad locks and other mechanical devices. Mass: 4 kg, cost: 100 credits.

Camera

Professional camera; takes 40 pics; requires photography skill 1 to operate. 2.4 kg, 330 credits.

Camera, simple

Simple camera; takes 20 pics. Point and shoot technology. Requires no skill to operate. .3 kg, 30 credits.

Camosuit

This loose fitting suit resembles a set of military BDU's. The fabric of the suit is embedded with hundreds of microscopic sensors and cell processor computers. When worn in confined surroundings the suit's sensors detect the wavelength of light being reflected off nearby objects and changes its color to the same. Thus allowing the character to be garbed in appropriate camouflage clothing in any terrain. The suit takes 30 seconds to adjust. The suit is powered by sunlight and at night turns completely black. Characters wearing a camosuit and attempting to blend with their surroundings are targeted with a -10% penalty. Mass: 3 kg. Cost: 300 credits. There is another type of camosuit, the Type S. The type S is specifically designed for a particular environment only. It retains the chameleon technology and abilities, but as it is tailored to a particular environment, it functions better. In it's own environment, the type S provides a -25% penalty to be targeted. Outside its environment, the suit confers no bonuses and resembles a



standard set of military BDU's for the terrain it was designed for. The type S costs 400 credits.

Camouflage Net

5 x 5 m hexagonal shaped camouflage net.

Provides radar camouflage as well. Cost 500 credits. 12 kg. Takes 10 minutes to set up.

Multiple nets can be linked together for greater coverage.

[IMAGE 3 x 3] (equipment descriptions) Piece of equipment.

Canned air

Used for cleaning electronics, .1 kg, 12 credits.

Canteen (1q, 2q, 5q)

Hold water or other liquids. Insulated. Can be attached to LBE (medium device). Cost is 5, 10 & 25 credits, mass is 1, 2 & 5 kg (full).

Cargo Loader, Hulk

This is a very heavy exoskeleton designed for moving heavy objects. Typically, used at spaceports for loading and unloading spacecraft. All loaders feature backup beepers, flashing yellow warning lights, flood lights on the arms, knees and hull and a heavy roll cage protecting the pilot.

Cargo loaders come in three sizes: Hulk, Goliath and Monolith. The Hulk is worn and most closely resembles a large exoskeleton. When worn, the character's STR is x3, REF is -2, MOV is 3 meters per turn (walking only). The Hulk has 200 DP and protects the wearer from gun fire on a die roll of 1 on d10. It takes 1 minute to get in to and activate a Hulk.

Cargo Loader, Goliath

The Goliath is "ridden" rather than worn and most vaguely resembles a large heavy exoskeleton.

When used, the character's STR is x6, REF is -3, MOV is 1 meter per turn (walking only). It has 300 DP and protects the wearer from gun fire on a die roll of 1-2 on d10. It takes 2 minutes to get in and activate a Goliath.

Cargo Loader, Monolith

The Monolith is "ridden" rather than worn. When used, the character's STR is x9, REF is -4, MOV is ½ meter per turn (walking only). It has 400 DP and protects the wearer from gun fire on a die roll of 1-4 on d10. It takes 4 minutes to get in and activate a Monolith.

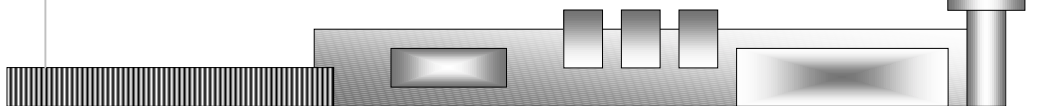
Cargo pouch

A large belt pouch. This is a medium device. It is designed to be worn over a power belt pack on an LBE (thus allowing a single medium device slot to do double duty), or by itself on a standard belt. It has space to hold 9 kg of gear. When worn in conjunction with a power beltpack already on an LBE, the cargo pouch does not use an additional medium device slot. .7 kg, 90 credits.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Cargo pouch, small

A common belt pouch. This is a small device. It is designed to be worn on an LBE or on a standard belt. It has space to hold 1.5 kg of gear. .1 kg, 10 credits.



Caving gear

Contains the necessary equipment to go spelunking – character needs Spelunking skill; 12 kg, 215 credits.

Chemical detector paper

Worn on the wrist, upper arm, and shin of a MOPP suit. Changes color when it comes into contact with chemical agent. Color indicates type of chemical agent. 10 sheets; 1 credits; .1 kg.

Chemlights

Disposable chemlights. Available in red, blue, green, yellow, white, orange, IR and UV. Last for 6 hours, peak illumination lasts 3 hours. 30 credits for a box of 10, 0.1 kg per box.

[IMAGE 3 x 3 ½] (equipment descriptions) Piece of equipment.

Chronograph

An advanced watch. Functions include 8, 10, 12, 15, 20, 24 and 30 hour days, month / year function, stop watch w/ lap functions, 8 alarm settings, alarm chime or vibrate, calculator, compass, barometer, altimeter, depth gage, cave mapper and thermometer. The chronograph is ruggedized to take abuse, water resistant and shock resistant. It is powered by the wearer's movement. 230 credits., 0.1 kg.

Clip pouch

This pouch can hold 2 weapon clips. Weight is .05 kg. Cost is 40 credits. Is considered a small device for purposes of mounting on an LBE.

Cold weather gear

Coat, pants; can be worn over regular clothing; coat: 5 kg, 100 credits; pants: 5 kg, 110 credits.

Compass

Points to magnetic north. Disrupted by large amounts of metal and strong EM fields. 35 credits, .1 kg. Small device.

Combat boots

Water proof, reinforced heel and toe, +1 lethal kicking damage; 1.15 kg, 80 credits.

Combat helmet

Has 3 equipment slots. Each slot can hold one of the following: audio amplifier & filter (290 credits), voice amplifier / synthesizer & modulator (210 credits), scanner, helmet powerpack, holdout weapon, audio recorder (80 credits), wrist computer and most small devices. The combat helmet has 2 vision system mounts, one is for a visor system, the other may mount either a visor or a goggle system. For 100 credits, the combat helmet can also have a Sun Visor which slides down over the vision systems. A communicator can be mounted in the ear piece (communicator cost +10%). The helmet can carry an audio damper (sound proofing) for 100 credits. The helmet may be fitted with a Protective Mask (Promask cost +25%), and EMP proofing (+100% final cost). A combat helmet's functions can be built into a normal armor helmet. This will add ½ the combat helmet's weight to the armor helmet's weight. The cost to have a combat helmet built into an armor helmet is 150% the combat helmet cost. Basic helmet: .6 kg, 195 credits. Each accessory or modification will add .1 kg to helmet mass. Availability C.

Combat Shelter



Lightweight 2 man shelter that can also be used as a poncho. 315 credits, 1.9 kg.

Communicator

Available as a wrist watch type device, throat mike and transmitter combination, or hand held unit. Can be mounted on an LBE. They have a range of 3 kilometers. They are powered by microcells. They burn 1 PU for every hour of continuous transmission. 90 credits, .6 kg. Small device.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Coolant Suit

Reduces chance of dehydration, heat exhaustion and other heat injuries in extremely hot environments. 3.5 kg, 1,900 credits.

Chemical Protective Over Garments (CPOG)

Protects against chemical and biological contamination; includes pants, coat, over-boots and gloves; pants: 170 credits, 2 kg; coat: 210 credits, 2 kg; over-boots: 90 credits, 1 kg; gloves: 120 credits, ½ kg. Availability D.

Datapad

This small device is capable of storing 100 pages of writing. The datapad has a touch sensitive screen. Information can be input either by speaking or "writing" on the pad with any solid object that has a narrow point. Information can be easily downloaded to any standard computer. Cost is 210 credits, .1 kg.

Deep Sea Diving Suit

More of a small vehicle than a suit. The character sits inside the suit and does not actually wear the suit. Maximum depth is 8 kilometers; good for 6 hours; 150 kg, 16,000 credits.

Diving gear

Contains the necessary equipment to go diving for 2 hours – character needs Diving skill; 5 kg, 320 credits.

Duct Tape

Amazingly useful item. Provides 100 meters of strong tape. .3 kg 10 credits.

E-tool

Entrenching tool. This device functions as a shovel, pickax and mallet. Available in many colors. 2.5 kg, 60 credits. Is considered a medium device for purposes of mounting on an LBE.

Energy bar

Box of 10 food bars; .1 kg; 20 credits; reduces effects of fatigue.

Energy drink

1 quart; 1 kg; 3 credits; reduces risk of dehydration.

Epidermal Injector

Worn on the arm or leg and may be linked to a belt computer, communicator, or small remote control worn on the wrist. Holds 2 doses of any type of drug. When activated either dose is administered to the wearer. .25 kg, 325 cr.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Exoskeleton

This is a thin, lightweight metal alloy framework that the character wears. The lightest of which can actually be worn under clothing, although it is still noticeable upon inspection or at a range of less than 5 meters. There are three ratings available: A, B, C. An A rated exoskeleton amplifies a character's STR, SPD and END by 1.5. A B rated exoskeleton amplifies a character's STR, SPD and END by 2. A C rated exoskeleton amplifies a character's STR, SPD and END by 3. They also provide a MOV boost equal to +1, +2 or +3. Exoskeletons provide no protection from weapons fire, combat or any other form of personal harm. The exoskeletons use 3, 4 and 8 PU per minute of operation. Mass is 5, 8 and 12 kg, respectively. Cost: 1,200 for A rating, 3,600 for B rating and 7,200 for C rating.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Fast Patch

.35 kg, 65 credits. When applied to a wound, it seals around the wounded area immediately, preventing infection. The patch contains antiseptics, antibiotics and painkillers, as well as several hundred Short lived but furiously energetic nanite machines. These machines will immediately begin rebuilding the damaged tissue, based on the design of the surrounding tissue (thus using the host as a map for the repairs). Game effect: the turn following application to a wound, the character is restored 10 hits to that location. If unconscious, the character is granted an LOC check to regain consciousness.

Fighting Position

Erects a heavy integrated defensive screen and shield. This device is about the size of a man pack radio. As long as power holds out, this device will simultaneously function as a Kinetic screen and Glow shield. The power drain is enormous, though. Erecting the protective field costs 50 PU. Maintaining the field costs 3 PU per minute. Energy drain is 5 PU per point of damage absorbed. This device will protect everything within a 10 meter radius. Mass: 24 kg. Cost: 1,700 credits.

Fire Extinguisher

Mass: 2.5 kg, cost: 60 credits. Uses: 2.

Fire Retardant suit

Protects against fire for 60 minutes; 1 piece suit; 1,100 credits, 4.8 kg.

Flare

Single frequency or multiple frequency; specify IR, UV, or visible light. Flares are one shot items and "burn" or emit for 1 hour +2d10 minutes; .3 kg, 60 credits.

Flash light

High powered flashlight. Comes with clip for attaching to LBE and colored lenses (red, blue, green, yellow, purple). Powered by a microcell. Flashlights will work one hour for every PU they burn. Small device. 10 credits, .1 kg.

Florescent chalk

For marking caves, sidewalk, etc.; available in various colors; 15 pieces; .4 kg, 10 credits.

Fluxsuit

Evades EM scanners, 1 piece suit; uses 4 PU per turn; 1,600 credits; 5.6 kg.

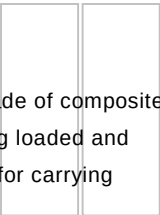
Foam mat

Protects against ground frost; 1 kg, 20 credits.



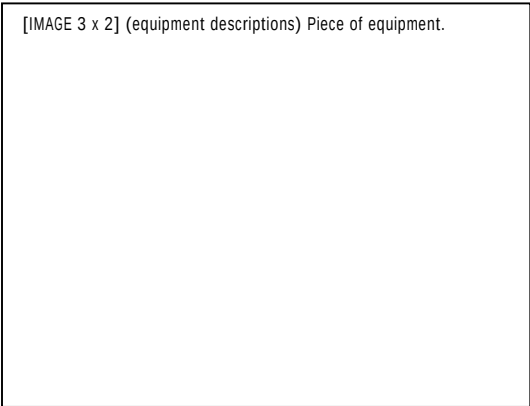
Grapple

A three pronged grappling hook made of composite metal alloys. The prongs are spring loaded and can be folded into the center shaft for carrying ease. 190 credits, 3.5 kg.



Grapple gun

Special gun that can fire a grapple. Uses special charges, similar to shotgun rounds, to propel the grapple up to 270 meters. The gun is very easy to use. The grapple gun is fired using the Projectile Weapons skill, and has a +50% bonus to hit. 240 credits, 3.2 kg. Charges: .1 kg, 20 credits for a box of 20.



GPS receiver

Provides 12 digit grid to current location (accurate to within .1 meters). Powered by a microcell. Power consumption is 1 PU per minute. Only works on planets with GPS satellites in orbit. 210 credits, .3 kg. Availability B. Small device.

Hand UV light

For detecting UV spray; 2.9 kg, 165 credits.

Handcuffs (steel and ion)

Steel: impossible STR check to break, 1.2 kg, 105 credits. Ion: powered by microcell, impossible STR check to break w/ -10 penalty, 1.5 kg, 460 credits, microcell is good for 1 hour confinement per PU. Handcuffs come with a .1 kg carrying case, which is a small device.

Holoprojector

Can project a holographic image up to 50 meters away. Images and scenes come on a disk. The projector can hold 15 disks at once and may switch between images, combine images and perform other simple editing effects. Weight 12 kg, 470 credits, 3 PU per turn, uses beltbags. Holodisks cost 60 credits. A disk carrier weighs .1 kg, costs 5 credits, and holds 20 disks.

Holster, Energy Melee Weapon

Holds a single energy melee weapon of any variety. .05 kg, 45 credits. Small device. Holstered weapons do not count against a character's encumbrance.

Holster, Pistol

Holds a single sidearm of Light, Heavy or Machine / Uzi Pistol designation or any variety of stunner. .1 kg, 50 credits. Medium device. Holstered weapons do not count against a character's encumbrance.

Holster, Rifle

Holds a single sidearm of Carbine to Assault Rifle designation. .2 kg, 75 credits. Large device. Holstered weapons do not count against a character's encumbrance.

Holster, Sword (Scabbard)

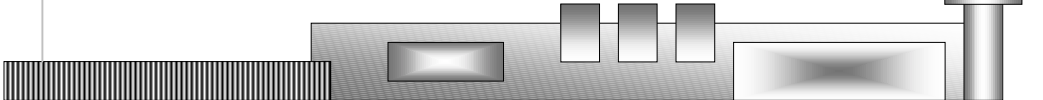
Holds a single Forced Carbon sword of any size. .2 kg, 95 credits. Medium device. Holstered weapons do not count against a character's encumbrance.

Holster, Melee, Small

Holds a single dagger, knife, nunchaku or tunfa. .1 kg, 35 credits. Small device. Holstered weapons do not count against a character's encumbrance.

Inflatable boat w/ outboard motor

Holds 5; 60 kg, 680 credits, motor powered by power cell, range is 3 kilometers, top speed is 10 kph.



Lantern

Illuminates a 10 meter radius, clip powered; 3 hours light per PU. 3.1 kg, 45 credits.

Laser Aerosol

Disperses laser fire. Laser weapons cannot fire into, out of or through an aerosol cloud. Adds a –1% penalty per meter fired through with High energy weapons. Mass: .45, cost: 150, area of effect: 25 m radius. Single use. Small device.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Load Bearing Equipment (LBE)

This is a harness and belt combination that helps support the weight of the wearer's equipment. There is room on the LBE for 8 small devices, 8 medium devices, and 2 large devices. LBE has a quick release design and can be dropped in 1 turn (4 seconds). Equipment carried on or attached to an LBE counts as ½ it's mass. The LBE costs 130 credits. Mass: 1 kg. Backpack items and rucksacks cannot be mounted or carried on an LBE, use common sense.

Magazine pouch

This pouch can hold 4 weapon magazines and 2 grenades. Weight is .1 kg. Cost is 50 credits. Is considered a medium device for purposes of mounting on an LBE.

Meal, Ready to Eat

30 credits, .5 kg. Package contains a water activated disposable heater and a complete 3,000-calorie meal.

Message Tablet

Similar to a communicator. The operator can send information to another person with a message table simply by writing on his own. Useful as a silent form of communication. The tablet is about 15 x 25 cm and folds in half. Uses microcells. Mass: .5 kg, cost: 60, PU use: 1 per transmission.

Micro Communicator

This mike and transmitter combination device is the size of a button or small lapel pin. They have a range of 2 kilometers. They are powered by microcells. They use 1 PU for every hour of continuous transmission. 120 credits, .2 kg

Micro torch

Lighter, reaches 3900 C, 15 uses, .05 kg, 45 credits.

MOLLE Rucksack

Standard military rucksack. Available in three sizes: small, medium and large. Small rucksacks can hold 30 kg, medium rucksacks can hold 60 kg and large rucksacks can hold 120 kg. They come in olive drab, forest green, yellow / brown, white, dark blue and black. They are also available in camouflage schemes. Designed with many pockets and compartments. The MOLLE is very water resistant. MOLLE has a quick release design and can be dropped in 1 turn (4 seconds).

Equipment in a rucksack counts as ½ it's mass. Cost is 90, 130 and 180 credits, respectively. Mass is 1, 1½ and 3 kg, respectively.

Monocle

This device covers one eye. Monocles can be designed to flip down in front of the eye from a helmet, if desired. Monocles function as scanning goggles except they are not as versatile, but are less conspicuous. The scanning area is limited to the character's line of sight, and a maximum range of 200 meters. Monocles can scan 1 frequency. They are powered by microcells. They burn 1 PU per minute of operation. 800 credits, .1 kg.



Mountain Climbing gear

Contains harness, rope, everything necessary to enable a character with Mountaineering skill to climb a 200 meter rock face; 7 kg, 195 credits.

Multi-tool

Multi-purpose tool. Contains many standard tools, screwdriver, power snips, etc. Mass: $\frac{1}{4}$, cost: 60 credits.

Nanite Patch

Resembles a normal medical bandage, except it contains thousands of fast acting, Short lived nanite reconstruction machines. Game effect: when applied to damaged cybernetics or robots, will heal 1 DP/min for 10 min, as well as reduce fluid loss and prevent impurities from entering hydraulic lines and such. .1 kg, 100 cr.

Neuro Neutralizer

When placed at the primary nerve center of an organism, e.g., base of the neck where the spinal column connects to the brain, it induces a constant "stun" state. Uses ambient power. Mass: .1 Cost: 200.

Parafoil

This is a rectangular parachute. It is very maneuverable. For an additional 150 credits, they can be made of the same material as a camosuit. 9 kg, 125 credits.

[IMAGE 3 x 2 $\frac{1}{2}$] (equipment descriptions) Piece of equipment.

Personal Flyer

This is a small booster pack with large wings that unfold from the back. It will lift 300 kgs. It can move 20 meters per turn. With the booster it can move as fast as 80 meters per turn. It hold 20 units of fuel. It costs 1 unit to take off and 1 to land. Burning 1 unit of fuel in flight will increase the character's speed by 20 meters per turn. Fuel costs 20 credits per unit. The Flyer costs 200 credits., weighs 15 kg.

Pistol Launched Tracking Device

This device is fitted to the muzzle of a holdout, light or heavy pistol (projectile or ramjet). When the weapon is fired, the tracking device is activated and sticks to the target, if the character hits. When firing a PLTD at something, the weapon suffers a - 3 RC penalty. The PLTD has a broadcast range of 1 kilometer and an internal battery life of 3 hours. 120 credits, .1 kg for a case holding 4.

Portable Holoviewer

Holographic television and VCR combination. Has 20 cm display area. Mass: 2 kg, cost: 260, PU use: 10 / hour. Uses power magazines.

Portable Music System

Radio box capable of playing transmitted music or stations, along with several types of recorded media. Mass: 3.2, cost: 190, PU use: 2 / hour. Uses power clips.

Protective mask

Protects wearer from the effects of poisonous gasses. 350 credits, 1 kg. Can be hung on an LBE. Does not interfere with any other equipment on the LBE.

Prybar

1m long, made of lightweight high strength alloy. 1.1 kg, 35 credits.

Radar Proof suit

Invisible to radar; 1 piece suit; 3,200 credits, 5.2 kg.

Radiation suit

Protects against radiation for 90 minutes; 1 piece suit; 3,500 credits, 7.2 kg.

Restraining Bolt / Circuit Paralyser

When placed at the primary cycle transmission center of a robot (any roboticist can properly place a restraining bolt on a robot), it induces a constant "stun" state. Usually used for restraining AIs. Uses ambient power. Mass: .15 Cost: 250.

RF Trans-Unit

Plugs into power systems. Allows RF cell power systems to draw upon the power system that the RF trans-unit is plugged into. 300 credits, .3 kg. An RF cell power system can only draw power from an RF Trans-Unit if they are tuned to the same frequency. To do this, the RF cell is plugged into the trans-unit while it is plugged into a power system. After 3 seconds, the RF cell is set to the frequency of the trans-unit. The RF cell will maintain this setting even if the trans-unit is unplugged or runs out of power. The range of the RF Trans-Unit is a number of meters equal to $\frac{1}{2}$ the Power Rating of the power system.

Rifle Launched Tracking Device

This device is fitted to the muzzle of an autocarbine, rifle, or assault rifle (projectile or ramjet). When the weapon is fired, the tracking device is activated and sticks to the target, if the character hits. When firing an RLTD at something, the weapon suffers a -4 RC penalty. The RLTD has a broadcast range of 2 kilometers and an internal battery life of 1 week. 180 credits, .1 kg for a case holding 2.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Riot Gear

Full plate armor. Covers torso, all limbs and head. Includes face shield (which may be modified with one visor modification). Every location has 80 DP. Riot Gear is BE rated and has a HIND of 2. 4,500 credits, 12 kg.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Rope

150 meters of polymer-nylon line capable of supporting up to 2 tons. 100 credits, 3 kg.

Salt tablets

Reduces need for water in hot environments; packet of 10; .1 kg; 5 credits.

Sea Sled

Pulls a diver along at up to 20 kph. PU use: 3 per minute. Mass: 20 kg, cost: 1,200 credits, DP 15.

Secure Communicators

Available as a wrist watch type device, throat mike and transmitter combination, or hand held unit. Can be mounted on an LBE. They have a range of 2 kilometers. They are powered by microcells. They burn 1 PU for every hour of continuous transmission. 360 credits, 1.2 kg.

Sleeping bag

Insulated; 2 kg, 180 credits.



Space Proofing

Allows standard equipment to function in a vacuum without freezing up. Applying this modification to a complete set of body armor (helmet, jacket and pants) will allow the character limited survivability in a vacuum (5 minutes). Cost is x2.5 normal.

Spot light

Comes with small telescoping tripod, uses 6 PU per minute, 2 kg, 70 credits.

Spray, Anti-dust

Sprays negatively charged helium ions. The ions hit both the dust and the object and bounce off, stealing their charge. Thus, the dust and object both become charged positively and the dust is repelled from the object., .15 kg, 20 credits.

Spray, Anti-EW

When sprayed on a surface, it interferes with signals from surveillance equipment and usually prevents them from passing through. .15 kg, 55 credits.

Spray, Antiseptic

Kills germs, fungus, bacteria; .15 kg, 18 credits.

Spray, Anti-static

Eliminates static electricity from electronics, clothes, etc., .1 kg, 15 credits.

Spray, Bonding

Glue, .15 kg, 15 credits.

Spray, Bug

Kills bugs; .1 kg, 8 credits.

Spray, Electronics cleaning

For cleaning electronics, .1 kg, 24 credits.

Spray, Paint

Available in dozens of colors, including IR and UV, .1 kg, 6 credits.

Spray, sealant

Places a hard coating over surface, usually used to protect electronics, .1 kg, 36 credits.

Spray, UV

For detecting fingerprints and marking; .2 kg, 30 credits.

Spray, Waterproofing

For clothes, boots, equipment, etc.; .15 kg, 20 credits.

Stasis / Preservation Field

Slows character metabolism and healing, etc. to a near standstill. Can be erected around a lethally wounded character and will prevent death so the character can be moved to a hospital. Mass 6kg. PU 9/min, Cost: 2,100 credits.

[IMAGE 3 x 4 ½] (equipment descriptions) Piece of equipment.

Stun collar & "leash"

Collar is powered by an RF cell Xclip; stuns wearer when more than 2 meters from the leash; the leash is a transmitter for the collar; powered by belt-pack w/ RF trans-unit; collar / transmitter combination drain 1 PU per minute; 120 credits, collar is 1 kg, leash is 5 kg. Leash is a medium device.

Stun cuffs

Similar in concept and operation to a Stun collar and leash combination. Stun cuffs are a set of sophisticated handcuffs designed to deliver an incapacitation shock to the wearer under any of the following conditions. 1) an attempt is made to force the locking mechanism without the electronic key, 2) the cuffs move more than 2 meters from the controlling "wand," 3) the cuffs move suddenly in a manner indicative of a strike, 4) on command. The wand is a transmitter for the cuffs and is powered by microcell. The wand and cuff combination drains 1 PU per 5 minutes of operation. The wand is 225 credits, the cuffs are 90 credits per pair. A single wand can control up to 5 pair of cuffs. The wand is .2 kg, the cuffs are 1 kg.

Stun Driver

Absorbs the stun effects of non-EMP shock attacks. Does not affect damage. Uses 1 PU per minute of operation. Uses 6 PU per stun absorbed. Powered by microcell. 1.2 kg, 1,800 credits.

[IMAGE 3 x 2] (equipment descriptions) Piece of equipment.

Sun Visor

Available in black, gold or silver, mass .1 kg, cost 300 credits.

Technician's suit

Has many pockets; 3 kg, 120 credits. Effectively distributes the weight of up to three kits. Game effect: weight of the kits does not count towards encumbrance.

Tent, small

3 man; 10 kg; 90 credits.

Tent, medium

6 man; 15 kg; 135 credits.

Tent, large

12 man; 25 kg; 270 credits.

Thermosuit

Masks body heat; evades IR scanners; 1 piece suit; uses 3 PU per turn; 3,200 credits; 6.1 kg.

UV suit

Invisible to UV; 1 piece suit; 1,800 credits, 2.1 kg.

Video camera, hand held

Microcell powered, 10 hours recording time, image stabilization and light, simple effects. 3.6 kg, 620 credits.

Video camera, muzzle mount

Microcell powered, 4 hours recording time, image stabilization. Availability C. 1.2 kg, 310 credits.

Video camera, shoulder carry

Beltpack powered, 30 hours recording time, image stabilization, light, sophisticated effects, image enhancement, low light, IR, built-in collapsing tripod; 2 hours recording time per PU used. 14.7 kg, 3,000 credits.

VL Disruptive suit

Wearer is 98% invisible when motionless, and 70% invisible when moving. 1 piece suit; 7,500 credits, 4.9 kg., Uses 12 PU per turn. For targeting penalty purposes, the wearer is considered to be "invisible" when stationary and "partially invisible" when moving.

Wet weather gear

Coat and pants; waterproof, lightweight, can be worn over regular clothing; coat: 40 credits, .15 kg; pants: 50 credits, .2 kg.

Water purification device

99.9% effective; 2 quarts of water at once; 4 kg; 60 credits.



[IMAGE 3 x 3] (equipment descriptions) Piece of equipment.

Water purification canteen insert

99% effective; allows water to be purified as it is drunk from the canteen. .1 kg; 5 credits.

Water purification tablets

Eliminates chemical and biological contaminants; 99% effective; 2 quarts of water; packet of 5; .1 kg; 5 credits.

Wetsuit

Good to a depth of 200 meters.; 2 kg, 800 credits.

Zip Cuffs

Disposable; Very Difficult (STR) check to break; dispenser of 30 zip-strip type "hand cuffs;" .4 kg, 50 credits. Small device.

Duty Gear

What follows is a list of recommended items to be issued to the various occupations in Frontier Horizons. Many items on the list have been left vague. These lists are intended to be guidelines and are not set in stone. The DM should feel free to modify or discard these lists as necessary.

Aerospace Fighter Pilot

Cloth armor (shirt and pants), weapon (carbine / pistol), one weapon modification or accessory, filter field, power system, camosuit, holster, multitool, space suit with 3 layers of armor, definable spatial compass, EM boots, endo-skeleton, LSU, magnetic anchor, case of suit patches, power system kit

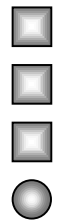
[IMAGE 2 ½ x 4] (Occupation) #1 An Aerospace Fighter Pilot (what race?) walking away from his landed craft. He appears to be on some sort of large aircraft carrier.

Animal Tamer & Trainer

Electron / neuro / stun weapon (pistol / melee) x2, medipack, neuro neutralizer (modified for animals) x2

Archaeologist

Water purification tablets, appropriate kit for any field of study the scientist knows, laptop computer, rope, cargo pouch, flashlight, grapple and gun, holster, gray market pistol, multitool, prybar, lamp, compass, binoculars, canteen (2qt)



Assassin

Anti-surveillance device, camera with telephoto lens, datapad, holster, pistol (gray market) or melee weapon (black market), multitool, microbot programming bay, laptop computer, truth drugs, Light body armor (coat), cloth armor (shirt and pants), camosuit, GPS receiver, secure communicator, two weapon modifications or accessories

Athlete

Weights, uniform x4, pads, gear for their sport

Chef

Palmtop computer, fine cutlery set

Clerk

Palmtop computer, datapad, backpack (small)

Combat Bot Pilot

LBE, body armor (vest), canteen (2qt), helmet, cloth armor (shirt and pants), weapon (rifle / SAW / pistol), sleeping bag, protective mask, power system, camosuit x2, wet weather jacket, cold weather jacket, boots, foam mat, holster, rucksack, multitool, secure communicator, mechanics kit, robotics kit

Combat Medic

LBE (or LBE modification for body armor), body armor (vest), canteen (2qt), helmet, cloth armor (shirt and pants), weapon (carbine / pistol), sleeping bag, protective mask or filter field, power system, camosuit x3, wet weather gear (jacket, trousers, boots), cold weather gear (jacket, trousers), boots x2, GPS receiver, holster, rucksack, communicator, one weapon modification or accessory, helmet with Combat Helmet modification, Image Enhancement Visor, medikit, 20 doses of drugs, Field Dressing x4, Fast Patches x2

Combat Vehicle Commander

LBE, body armor (vest), canteen (2qt), helmet, cloth armor (shirt and pants), weapon (rifle / SAW / pistol), sleeping bag, protective mask, power system, camosuit x2, wet weather jacket, cold weather jacket, boots, holster, rucksack, multitool, secure communicator, mechanics kit

Commercial Pilot

Palmtop computer, chronograph, backpack (large)

Computer Specialist / Hacker

Palmtop, laptop, desktop, pistol (gray market)

Detective

Steel handcuffs, ballistic armor (jacket, pants), heavy pistol (gray market), 2 clips, clip pouch, flashlight, badge, anti-surveillance device, camera with telephoto lens, datapad, holster, microbot programming bay, laptop computer, microbot x1 (fly)

Diplomat

Laptop computer, several business outfits, datapad, communicator, weapon (white market)

Deep Space Construction

Cloth armor (shirt and pants), power system x2, multitool, communicator, space suit with 5 layers of armor, motion visor, definable spatial compass, EM boots, endo-skeleton, DSLSU, EVA unit, Magnetic anchor, case of suit patches x2, various space items



[IMAGE 2 ½ x 4] (Occupation) #6 Deep Space Construction Worker floating in space in a power suit with a couple of tools floating nearby, perhaps he has just stopped using a large tool or something? In the background might be a huge skeletal structure, or perhaps he is working on a deep space satellite or something.

Demolition & EOD Expert

LBE, canteen (2qt), helmet, cloth armor (shirt and pants), pistol (black market), holster, filter field, belt power system, camosuit x3, wet weather jacket, boots, GPS receiver, rucksack, multitool, secure communicator, various explosives and detonators, laptop computer, chronograph, appropriate kit for any field of study the expert knows, demolition's robot (20,000 cr value), Utility Vehicle with d10 improvements (impulse system modification, roll cage, spot light x2, vehicular scanner (IR), amphibious modifications, manipulator arm x2, bustle rack, Off Road kit, Long Range radio, fire extinguisher, 5 gallon water jug, 5 layers of vehicular armor)

Doctor/Nurse

Autodoc, drugs, laptop computer, stasis field, medipack, 10-20 doses of various drugs

Entertainer

Instrument of choice, props, some stage clothes, jewelry, small hand weapon (white market)

Executive

Laptop computer, pistol (gray market), several business outfits, datapad, hover luxury vehicle (1 layer armor, autopilot, UPS, anti-surveillance device)

Explorer

Appropriate kit for any field of study the explorer knows, laptop computer, rope, cargo pouch, flashlight, grapple and gun, holster, gray market pistol, rifle (gray market), multitool, prybar, water purification device, lamp, compass, binoculars with one modification, canteen (2qt), backpack (large), Heavy Van (with wheels, tracks, legs, or anti-gravity impulse system), d10 free vehicular modifications (2 impulse system modifications, roll cage, spot light, UPS, vehicular scanner (IR & density), amphibious modifications, manipulator arm x2, bustle rack, Off Road kit, Long Range radio, fire extinguisher x2, 5 gallon water jug)

Hostage Negotiator

Laptop computer, several business outfits, datapad, armor (jacket), heavy pistol (gray market), 2 clips, flashlight, communicator, badge, stun weapon, standard vehicle (wheeled or hover)

Independent

None

Inventor

Laptop computer, palmtop computer, computer kit, electronics kit, robotics kit, mechanics kit, chemical kit

MA Instructor

Uniform x3, 6 melee weapons (3 modifications to go around), training gear (pads, targets, conditioning tools)

Mechanic

Appropriate kit for any technical skills the character knows, vehicle (costing up to 45,000 cr, must be at least Work Utility size or larger), d10 free vehicle modifications (tow chains, roll cage, autopilot, spot light x2, desert proofing, arctic proofing, amphibious modifications, radiation proofing, 1 impulse system modification, bustle rack, crane & outrigger arms, robotics repair bay), technician's coveralls x2, 550 cord, bolt cutters, fire extinguisher, flashlight, bonding spray

Media Personality

Wardrobe, laptop computer

[IMAGE 2 ½ x 4] (Occupation) #10 Police

Mercenary

LBE, canteen (2qt), helmet, armor (vest), armor (trousers), weapon x2 (gray market), protective mask or filter field, power system x2, camosuit x1, chronograph, combat shelter, field dressing, scanner or visor (1 bandwidth), thermosuit, wet weather jacket, GPS receiver, holster, rucksack, autodoc, bandoleer, binoculars, defensive screen (gray market)

Merchant / Trader

Large fast vehicle or vessel, mechanics kit, weapon maintenance kit, 550 cord, cloth armor (shirt and pants), weapon (gray market), power system, wet weather jacket, cold weather jacket & trousers, boots, GPS receiver, holster, secure communicator

Military Police

VTOL sedan (roll cage, spot light, fire proofing, enhanced control surfaces, super charged thrusters, enhanced aerodynamics), steel handcuffs x2, ballistic armor (jacket, pants, helmet), heavy armor (vest), LBE, heavy pistol (gray market), 4 clips, clip pouch x2, electric tunfa, flashlight, communicator, badge, stun weapon

Military R&D

Desktop computer, laptop computer, palmtop computer, lab equipment, research equipment, chronograph, appropriate kit for any field of study the scientist knows, LBE, canteen (2qt), cloth armor (shirt and pants), weapon (pistol), filter field, power system, camosuit x3, wet weather gear (jacket, trousers, boots), cold weather gear, boots, GPS receiver, holster, rucksack, multitool, secure communicator

Musician

Several music instruments of choice, palmtop computer, wardrobe

Police

VTOL sedan (roll cage, spot light, fire proofing, enhanced control surfaces, super charged thrusters, enhanced aerodynamics), steel handcuffs x2, ballistic armor (jacket, pants, helmet), heavy armor (vest), LBE, heavy pistol (gray market), 4 clips, clip pouch x2, electric tunfa, flashlight, communicator, badge, stun weapon

Reporter

Camera x2, shoulder video camera, lights, power source x2, recording gear, pistol (white market), microbot (fly), palmtop, laptop, microbot programming bay



Rescue

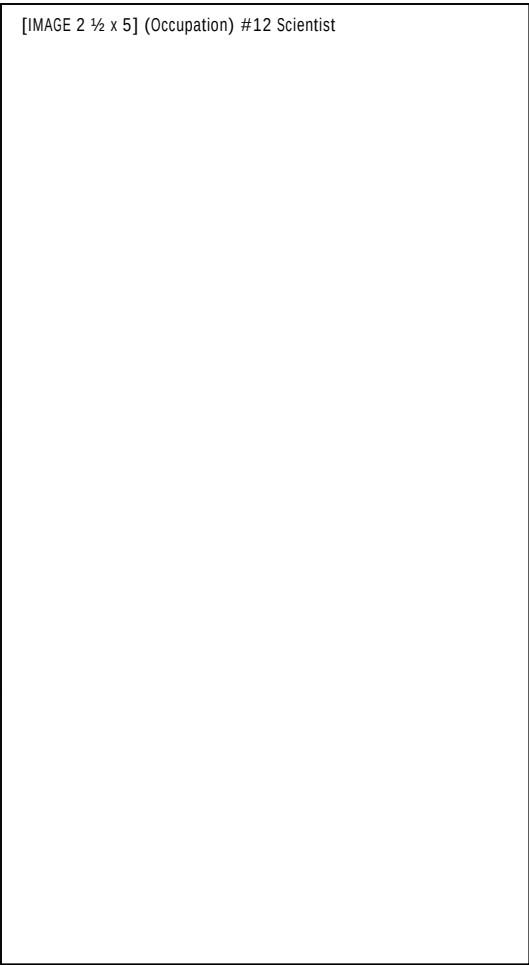
Diving or caving gear, stasis field, filter field, field dressing x2, life saving drugs, IR & density scanner, communicator, red flare, white flare x2, green flare, prybar, autodoc, chronograph

Rogue

Datapad, holster, pistol (gray market), microbot programming bay, microbot x3 (fly), 550 cord, LBE, body armor (coat), cloth armor (jacket), power system, camosuit, rope, cargo pouch, flashlight, grapple and gun, prybar, lockpick kit

Scientist

Desktop computer, laptop computer, palmtop computer, lab equipment, research equipment, chronograph, appropriate kit for any field of study the scientist knows



Smuggler

Mechanics kit, weapon maintenance kit, 550 cord, LBE, body armor (coat), cloth armor (shirt and pants), weapon (gray market rifle or pistol), protective mask or filter field, power system, camosuit, wet weather jacket, cold weather jacket, boots, GPS receiver, holster, rucksack, secure communicator

Soldier

LBE, body armor (vest), canteen (2qt), helmet, cloth armor (shirt and pants), weapon (rifle / SAW / pistol), camping gear (shelter, sleeping bag), protective mask or filter field, power system, camosuit x3, wet weather gear (jacket, trousers, boots), CPOG (trousers, jacket, boots), cold weather gear, boots, etool, foam mat, GPS receiver, holster, rucksack, multitool, secure communicator

Soldier Elite

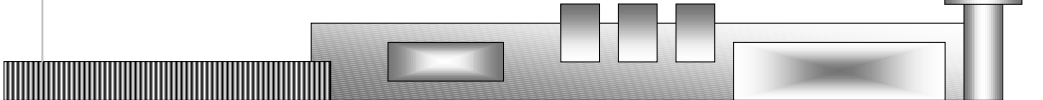
As soldier, with the following additions. Three weapon modifications or accessories, add Combat Helmet modification to helmet, IR & Image Enhancement Visor

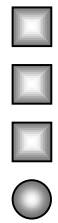
Space Marine

Cloth armor (shirt and pants), weapon (rifle / carbine / pistol), four weapon modifications or accessories, power system x2, camosuit, holster, multitool, secure communicator, space suit with 10 layers of armor, combat helmet modifications for space suit helmet, IR visor, definable spatial compass, EM boots, endo-skeleton, LSU, Magnetic anchor, line sled, case of suit patches.

Spy

Anti-surveillance device, camera with telephoto lens, datapad, holster, pistol (gray market), multitool, microbot programming bay, laptop computer, truth drugs (d10 doses), microbot x3 (fly)





Vari-form Fighter Pilot

Cloth armor (shirt and pants), body armor (vest), carbine (black market), three weapon modifications or accessories, holster, power system, camosuit x2, mechanics kit, robotics kit, power system kit, LBE, canteen (2qt), filter field, belt power system x2, wet weather jacket, cold weather jacket, rucksack, multitool, helmet, Combat Helmet modification for helmet, IR & Image Enhancement Visor, space suit with 3 layers of armor, definable spatial compass, EM boots, endo-skeleton, LSU, magnetic anchor, case of suit patches



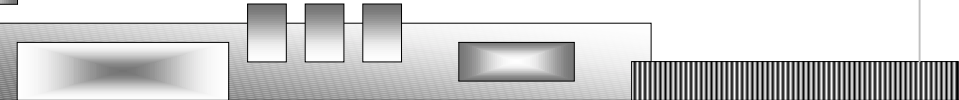
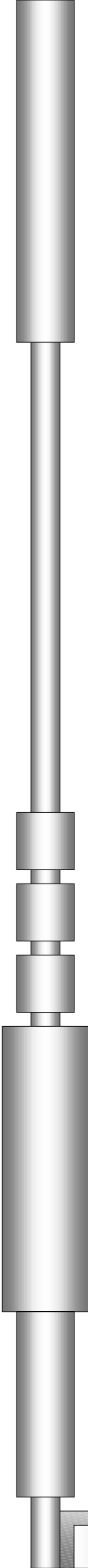
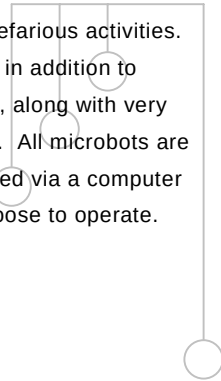
Weaponsmith / Armorer

Desktop computer, laptop computer, palmtop computer, lab equipment, research equipment, chronograph, appropriate kit for any science field of study the character knows, appropriate kit for any technical skills the character knows, technician's coveralls, several sprays

[IMAGE 6 x 4] (microbots) Close up image of a mantis microbot picking through the pieces of another microbot. There are very small gears, cogs, circuit boards, etc. lying all about. The wreckage is of a microbot fly. In the background are objects to give scale. Perhaps everything is occurring on a desk in an office. There might be the blurred outline of people in the office, perhaps turning to leave. They seem unaware of the diminutive robots.

Micro Bots

Microbots are small insect sized robots typically used for clandestine surveillance and other nefarious activities. Masses are given in grams. Lifespans are given in days. All microbots share similar features in addition to those special functions listed below. All microbots are equipped with video and audio pickups, along with very Short range transmitters (15 meters) which they can use to broadcast what they see and hear. All microbots are given simple missions, programmed using near normal language and then converted and loaded via a computer (programming bay weighs 1 kg, cost 120 credits and plugs into a computer) and then turned loose to operate.





Type	(grams)	Cost	(days)	Functions
	Mass		Lifespan	
Fly	1	500	3	Surveillance / photography / video and audio recording
Grasshopper	2	900	6	command and control, ECM
Wasp	2.5	300	3	sting implants drugs / takes blood samples
Spider	3	620	5	theft (hair or skin samples, fluids, etc.)
Beetle	2.5	700	5	electronic theft (can record electronic codes, etc.)
Dragon fly	3	950	2	nanite transport
Preying mantis	12	1250	6	retrieves, recharges and repairs "dead" microbots

Fly can store up to 3 hours of video and audio information.

Grasshopper Can transmit up to 300 meters. Can relay information and transmissions from other microbots to more distant sources via its transmitter. Can Semi-actively jam surveillance detection devices. The jamming radius is 15 m. The jamming causes just barely enough interference to cause all microbots in the jammed area to blend in with the "background" static. Can relay changes of mission to other microbots.

Wasp High speed and very maneuverable. Carries a functioning stinger. The sting can implant minute doses of drugs or take a blood sample.

Spider Can spin a strong polymer web that is no more than several atoms thick. It has a small cargo bay in its abdomen that is useful for stealing very small things, such as hair or skin samples.

Beetle Has a small memory bank in its abdomen. Designed to hold passcodes or information from magnetic strips, etc. It is capable of monitoring electronic locks and snatching the password / code / etc., when the lock is used. Can also "see" finger prints and make digital replications.

Dragon Fly Nanite transport system. Can hold four nanite loads at once. Can also be used to retrieve nanites when their job is finished.

Preying Mantis Contains repair and recharging facilities for other microbots. Can recharge itself by leaching power from other power sources if it can get to them.

Kits

Kits are belt pouches that carry various tools and supplies for a specific purpose, trade, etc. Most kits contain very specialized equipment or devices, these devices are described next to each kit. A character attempting to perform an action with the appropriate kit is considered to be properly equipped for the task. All kits have an Availability of B.

Kit	Mass	Cost	
Lock Picking Kit	6.2	300	Availability D.
Forgery Kit	3.7	500	Availability E.
Weapon Repair Kit	8.7	900	Includes stress-density analyzer that provides information on which parts are wearing out, and can provide accurate estimates of the expected lifetime of each part of the weapon. Includes several small canisters of reusable carbon cleaning and de-ionization nanites along with tools and cleaning supplies.

[IMAGE 3 x 2 ½] (Kits) Loose circuit board, wires, etc.

Weapon Maintenance Kit	5.1	700	Includes cleaning nanites found in weapon repair kit along with more conventional cleaning tools and solvents.
Power System Kit	7.9	1,400	Includes a specialized scanner that will provide detailed information on power systems, including their technology base, their output, radioactivity, common malfunctions and their causes, etc.
Biology / Specimen Kit	3.7	640	Includes micro-analyzer and several miniature stasis-field containers for holding specimens, along with dissection utensils.
Geology Kit	3.9	660	Includes a specialized geological scanner that will provide information on mineral content in soil samples and the surrounding area.
Oceanography Kit	4.2	640	Includes a specialized oceanographic scanner that will provide detailed analysis of ocean water and its contents.
Photography Kit	6.5	700	Includes necessary tools and chemicals for developing a roll of film in 25 minutes. The tools and chemicals are reusable. The chemicals must be replenished after every 20 uses.
Robotics Kit	7.5	600	Includes AI scanner capable of providing information on the psychological state of AI core processors and CYC value. The AI scanner can also help trouble shoot malfunctioning cores, recommend common causes and solutions to malfunctions as well as provide information useful when making repairs and modifications. The kit also includes sonic welder, laser cutters, power snips, multitool, circuit cards, micro power routers and a myriad of other tools and supplies. Suitable for repairing and making modifications to robots.
Computer Kit	5.5	1,240	Similar to Robotics kit, but for computers only. This kit does not contain the larger tools found in the Robotics kit, instead it contains additional micro circuits, a circuit burner and re-writer, and AI-boosted algorithm computer. Includes AI scanner designed for computers.
Cybernetics Kits	6.7	1,560	Designed for the maintenance and repair of cybernetics. Includes AI scanner designed for analysis of cybernetic systems.
Electronics Kit	4.9	600	Similar to Robotics and Computer kit. Does not contain the AI scanner or major tools of the Robotics kit.
Mechanics Kit	3.7	200	Includes adjustable wrenches, power assisted tools (microcell powered), multitools, bonders, cutting tools, stress and torque analyzers, etc.
Chemical Kit	6.5	420	Includes a chemical analyzer that can provide the chemical formula for most chemical samples placed in the sample tray. The analyzer can also provide the chemical properties of the chemical, e.g., combustible, corrosive, boiling point, etc., and recommend information regarding the handling, storage and disposal / neutralization of the chemical.
Hazmat Kit	5.9	1,000	Includes an atmospheric analyzer that detects trace elements of hazardous materials in the air and provides a detailed description and class of the material, its hazards and other important information.



Radiological Kit	6.4	400	Includes a specialized radiological scanner that will detect the presence or emission of many types of radiation. The scanner will also provide information on dosage levels, estimated length of survivability in a contaminated area, etc.
Medical Kit	4.8	340	Includes prepackaged needleshypodermics containing several anti-toxin drugs, anti-bacterial drugs and healing drugs. Includes additional vials suitable for holding doses of other drugs. Also includes three re-useable needleshypodermics along with spray synth-skin, antiseptic, self-bonding bandages, etc.
Disguise Kit	6.4	800	Includes latex polymer material and a programmable laser etcher that can replicate with 99% accuracy any scanned facial image and 100% perfection any "face" designed using its database of facial features.

[Sherina fired and the whole area was smothered in thick black smoke. Visibility dropped instantly to zero and Neb could hear several people coughing in the smoke. Quickly, he reached up and flipped down his visor. As it snapped into place, the display came up giving him a 3D rendering of his surroundings. He could see his teammates off to his side, and the confused pirates ahead of them. He primed his jetgun and took aim.]

Scanners, Jammers and Goggles

Scanners

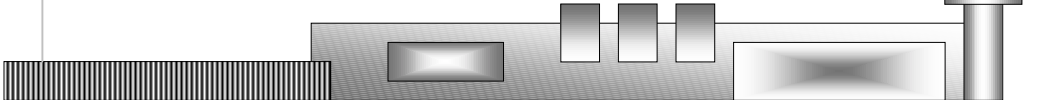
Scanners are hand held devices that have a small screen (about 5cm x 5cm). They are powered by a power magazine, or they can be plugged into a power system. Scanners can operate in two modes: narrow and wide. In the narrow mode, the scanner will scan a 45o cone in the direction it is pointing out to 300 meters. In the wide mode, the scanner will scan a 360o sphere out to a range of 50 meters. Scanners will provide information on bandwidth disruptions. They will tell range to the disruption, magnitude and relative elevation. Scanners can be purchased that scan multiple bandwidths. The character must switch between the bandwidths manually. Since a scanner is a hand held device, character's must actually look at it to get any information. Trying to fire on a target using a scanner is done with a -100% penalty.

Scanners may be mounted on an LBE and are considered medium devices.

Jammers

Jammers are medium devices. They emit a signal that interferes with a specific bandwidth, causing all scanners to go to a flat screen, all goggles and detection systems (robots) go flat. Characters and robots using goggles and detection systems that operate on a jammed frequency are

[IMAGE 2 ½ x 4 ½] (scanners & Jammers, also back cover) A human in body armor. He has a rifle on his back and two low slung thigh holsters with large pistols in them. He wears a loose outfit with many pockets. He has a helmet with a visor and small commo antenna on it. He holds a scanner and appears to be studying it intensely. He wears boots.



effectively blind. Jammers are powered by external power systems. Jammers may operate on low or high power. PU consumption listed is for low power. At this level, a jammer will jam an area 50 meters in diameter. At high power, the consumption is tripled and the jamming area is 150 meters. In either case, scanners outside the jammed range simply detect an indistinguishable cloud in the vicinity of the jammer. Jammers may jam a single frequency or be set to "hop frequencies," in which case it uses PU per minute equal to it's highest frequency, plus an additional 2 PU per minute, and will jam every frequency it has built in.

Goggles

Goggles are worn by characters. They fit over helmets and combat helmets. Goggles are powered by a microcell or by an external power system. Unlike scanners, goggles may only use a single frequency. Goggles are limited to 200 meters range.

Windshields

Windshields are for use on all vehicles. Windshields are powered by the vehicle's power system.

Visors

Visors are for use on combat helmets and spacesuits. Visors must be powered by an external power system. They may scan 2 frequencies, but only 1 at a time, similar to scanners.

Item	Mass	PU	Cost	Effects & notes
Scanner	1	4 / min	600	may scan multiple bandwidths
Jammer	2	6 / min	1,200	may jam multiple bandwidths
Goggles	.5	2 / min	2,400	
Windshield	8	4 / min	1,800	available for all vehicles
Visor	.1	1 / min	3,200	visors may scan up to two bandwidths

Frequencies	Mass	PU	Cost	Avail	Effects & notes
IR	--	x1	+20%	D	
UV	--	x1.5	+30%	C	
MAG	--	x2	+25%	D	
Radar	--	x1	+30%	B	
Microwave	--	x1.3	+15%	D	
Light Amp	--	x2	+35%	C	not available for scanners or jammers
Image Enhancement	--	x2	+20%	E	not available for scanners or jammers
Motion	--	x1	+15%	C	
Surveillance Devices	--	x2	+40%	E	available only for scanners; detects bugs, etc.
Density	--	x2	+10%	D	available only for scanners, can scan up to 15 meters of solid rock.
360 FOV		x1	+50%	D	360 field of view, created through small scanners installed around the helmet. It is an Impossible (LCK) check to surprise or sneak up on the wearer. Visors only.

Visors, Scanners and Jammers that scan multiple bandwidths cost the price of each frequency, plus the base price for the visor, scanner or jammer, plus an additional 10%.

[IMAGE 6 x 4] (explosives) character carrying all sorts of explosives, he is setting / defusing a bomb. There is a starship landed in the near background, or perhaps he is inside the engine room of a starship.

[Ed hurried back toward their hiding position in the tree line. He was holding a large spool of fiber optic wire and reeling it out behind him. He got back and, with several quick moves, clipped the fiber and attached a small device with two buttons onto the end. The powerful plant then turned to face the rest of the group. They looked at him expectantly and Neb could see a look of fright on the young kid's face. Ed motioned for everyone to get down. They did as instructed and the plant turned around to his device. He raised his sophisticated binoculars to inspect his work one final time, then reached down with his other two vine-tentacles and picked up the detonator. He hunched down behind a log and pressed both buttons at the same time. There was no flash, but the wind started picking up and a deep rumbling began building in the distance. It grew in volume until it was deafening, then faded into another different sound. The sound of hundreds of thousands of gallons of water pouring through the shattered damn and rushing down the valley. Over all the cacophony, Neb could hear a single loud roar unlike the others. Ed was laughing with delight.]

Explosives

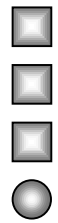
There are several types of explosives available. Anyone within 3 meters of ATNT, c-9, KB7, DCAP, ODX or D9p when they detonate will receive triple damage. All explosives have an Availability of D, with exceptions noted below.

Detcord

Anyone within 2 meters of detcord when it goes off will receive 2d10 points of damage. Detcord will blow through most locks and heavy metals (armors). Detcord is .15 kg and 850 credits per meter.

Boosters

Boosters require an electric charge to detonate. They are required to detonate ATNT, c-9, KB7, DCAP, ODX and D9p (everything except Detcord). Anyone within 2 meters of an exploding booster will take 3d10 points of damage, spread across the entire body. Boosters are .06 kg and 1,150 credits for a box of 10.



Detonators

Detonators supply a charge to Boosters. They are the devices that have the detonating button. Detonators can also have timers and other switches that will detonate the booster when certain conditions are met, e.g., barometric pressure, movement, airspeed, water depth, pressure change, loss of electric current, time period, trip wire, pressure plate, etc. Detonators are .12 kg and 700 credits each.

Fuses

A fuse is a simple time delay detonator. A fuse is .2 kg and 170 credits. Can be set from 1 second to 90 minutes.

Accelerated TNT

Generic multipurpose explosive used for engineering demolition, blowing rock, demolishing buildings, etc. ATNT charges are $\frac{1}{4}$ kg sticks. ATNT does 10d20 damage to all persons within 30 meters, per stick. Damage is halved for every additional 30 meters out from the explosion, to a maximum distance of 200 meters. ATNT is $1\frac{1}{4}$ kg and 800 credits for a box of 4 sticks.

C-9 Plastic Explosive

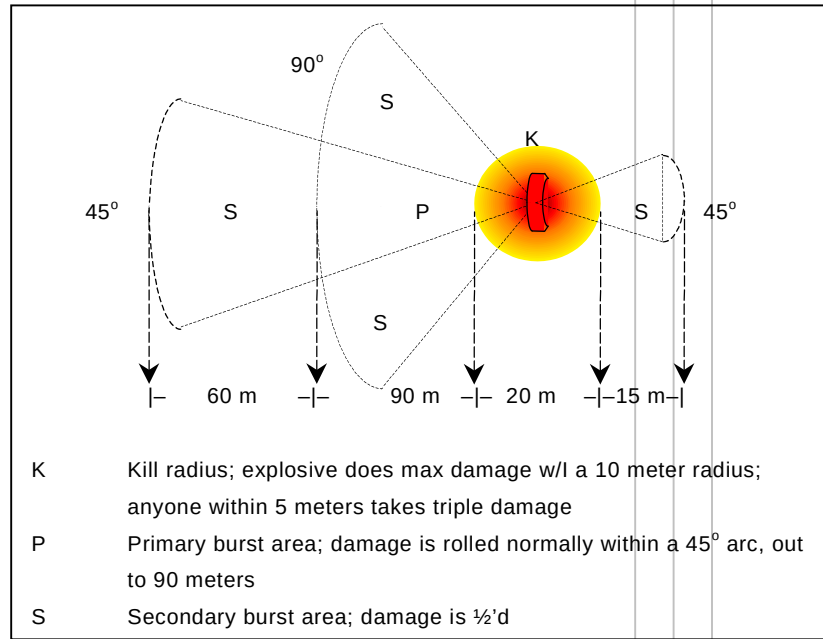
Used for military demolition. Plastic explosive is malleable. C-9 is sold in 20 gram charges. C-9 does 5d20 damage to all persons within 30 meters, per charge. Damage is halved for every additional 30 meters out from the explosion, to a maximum distance of 200 meters. C9 is 1.3 kg and 11,350 credits for a case of 20 charges. Availability E.

KB7 Solid Explosive Bricks

Bricks the size of 2 9-volt batteries; 4d20 damage to structures. Used for demolition of structures, KB7 is less effective at breaching armor. Each brick does d12 x 10 damage to all persons and structures within 30 meters. Damage is halved for every 30 meters out from the explosion, to a maximum distance of 200 meters. Armor Resilience deducts from the die roll normally and the result is multiplied by 10. Thus any structure or armored vehicle with a high Resilience will take little damage from the explosion if the bricks are placed outside. However, if the bricks are placed in an enclosed area, say an opening in a supporting structure created by a large drill or something, then the damage is normal. If the brick is merely sitting on an object, it will take $\frac{1}{2}$ damage. KB7 is 1.7 kg and 5,460 credits per case of 16 bricks.

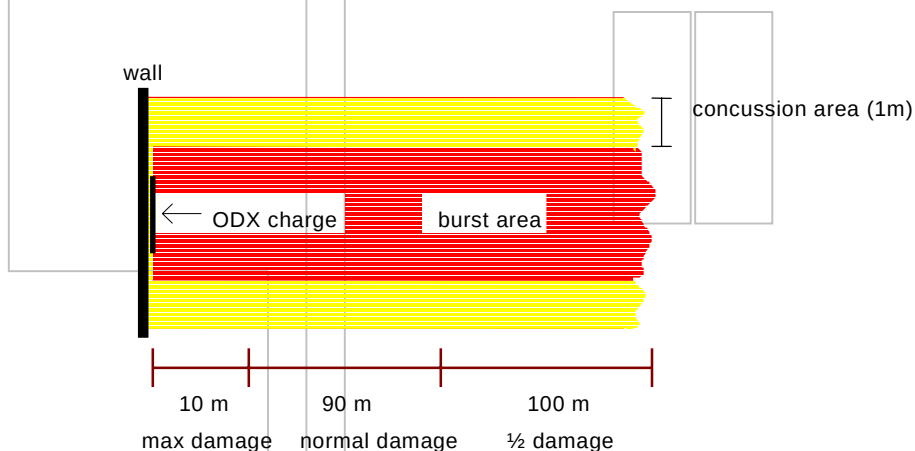
Directional Charge, Anti-Personnel (DCAP) Explosives

This is a cross between plastic explosive and a Claymore AP mine. Its burst effect is modified from standard explosives. Mass: 3 kg. It comes in a satchel and includes a disposable detonator and 30 meters of wire. It takes 6 seconds to arm a DCAP explosive. Cost is 680 credits. Damage: $5d10 + d100$. DCAP does $\frac{1}{2}$ damage to structures, vehicles, etc.. Availability E.



One Dimensional Explosive (ODX)

This is another form of antipersonnel mine. ODX is an improved form of DCAP and was designed primarily for use in urban environments. ODX comes in thin square tiles about the size of a linoleum tile (30 cm x 30 cm). Multiple tiles can be layered to produce devastating effects. Each tile does $d20 + 25$ damage. For every 100 points, the explosion does $+d100$ damage, otherwise, the "bonus" damage is ignored, e.g., an 8 tile ODX charge will do $8d20 + 2d100$. For this reason, ODX tiles are usually used in multiples of 4. ODX explodes in exactly 1 direction, straight out from it's face. The explosive blast is $\frac{1}{2}$ meter wide per tile and 200 m long. There is a mild concussion effect on all individuals w/l 1 meter to either side of the explosion (Moderate FOC check, failure means character is stunned 1 turn). Any reasonably solid object between a character and the concussion blast (like a wall) will prevent the character from being stunned. Any size ODX charge can be detonated with a single booster and detonator. Burst effect is, kill zone: 10m, normal damage next 90 meters, $\frac{1}{2}$ damage next 100 meters. ODX does $\frac{1}{2}$ damage to structures, vehicles, etc.. ODX is 1.3 kg and 7,060 credits per case of 8 tiles. Availability E.



Delta 9 Polymer Explosive

Used to breach armored walls and vehicle hulls. D9p is sold in thin sheets. It is similar to ODX except the blast is focused toward the wall or armor that the charge is mounted on. D9p does $3d20 + 75$ damage to the structure. Every 100 points of "bonus" damage adds $d100$, extra "bonus" damage is ignored. D9p has a concussion radius of 15 meters. Difficult (FOC) check to ignore, otherwise stunned for $d4$ turns. Does full damage to structures. D9p is 1.7 kg and 6,100 credits per case of 8 tiles. Availability E.

[Sloro hacked diligently at the mainframe computer. Ed and the kid were watching back down the hallway they had entered the control room from. Sloro seemed to be making progress when a blast door slammed down 100 meters down the hallway sealing them in. The kid yelped and Sherina screamed "gas, gas," and reached for her gas mask. There was a frantic moment as everyone held their breath, closed their eyes and put on their gas masks. Ed reached down and activated his filter screen. After everyone was safe, they waited for a moment. All was silent, except for a faint hissing coming from the wall vents. "Well," said Neb's muffled voice, "looks like you've found their first line of defense." He patted Sloro on what would have been his shoulder, "keep at it, we need to get access to that data."]

Poisons

Poisons are described with four symbols. The first is either a W, S, or L. This stands for Weak, Strong or Lethal. This indicates the general strength of the poison and also determines the effects of failed and successful resistance checks. The second symbol is an integer value, typically between 1 and 10. This indicates the exact strength of the poison and also is used to determine duration's of effects. The third symbol is either an A, I, D, H or P, indicating Ablater, Illness, Debilitater, Hallucinogen or Paralyser. The fourth symbol is typically between 1 and 10. This indicates the relative duration of the poison.

Availability is D if it is Strong or has a strength of 5 or higher. Availability is E if it is Lethal or has a strength of 9 or higher or a duration of more than 5 minutes. Otherwise, availability is C.

Ablater Character takes damage equal to the poison's strength to every part of his body every turn.

Duration is 1 turn x duration.

Illness The chance the character will be incapacitated due to vomiting, wrenching, etc. each minute is equal to $10\% \times \text{strength}$. Character is nauseated for 1 hour x the duration.

Debilitater	All the character's ability scores are reduced by a value equal to the strength of the poison. Duration is 30 minutes x the duration. If any ability scores are reduced below 2, the character is reduced to a drooling heap for the duration of the poison.
Hallucinogen	Character hallucinates. Character suffers a penalty on everything he attempts to do equal to strength x 10%. Duration is 15 minutes x duration.
Paralyser	Character loses a percent of his facilities equal to strength x 10% each turn until he is completely paralyzed. Character is completely paralyzed for 15 minutes x duration.

Resisting Poisons

Characters may attempt to fight the effects of a poison. This requires an END ability check. The difficulty of the check depends on the general strength of the poison. Weak poisons are Difficult. Strong poisons are Very Difficult. Lethal poisons are Impossible.

Effects of poison resistance

- Weak** a successful check means the character ignores the effects entirely. A failed check indicates the character suffers the listed effects.
- Strong** a successful check means the character halves for the strength and duration of the poison. A failed check indicates the character suffers the listed effects.
- Lethal** regardless of the success or failure of the check, the character will still suffer the listed effects. The resistance check indicates whether or not the character will die when the duration expires.

Common Poisons

Name	Cost	Avail	Symbol	Effects
MegaDeath	500	E	L10P½	100% chance of paralysis; lasts 7.5 turns; results in death
QuickDeath	100	E	L10A1	10 points of damage to every part of the body, death the next turn
SlowDeath	1,000	D	S5A20	5 points of damage to every part of the body every turn for 20 turns.
PurpleKiller	500	D	S5H10	-50% penalty on all actions for 150 minutes.
Devolver	150	E	W3D5	-3 to all ability scores for 600 minutes.
Diz-E	60	C	W2I3	20% chance each minute to be incapacitated by vomiting, etc., for 3 hours.

Costs of Poisons

Cost per dose: Strength x Duration x 10 credits.

Poison Grenades

Cost: 60 credits + cost of 10 doses. On detonation, the grenade fills the kill radius with the poison in a gaseous form.

Poison Needle Rounds

Cost: normal needle cost + ½ dose per round.

Space Equipment

Deep Space Life Support Unit (DSLSU)

Provides enough power, water, oxygen and CO2 scrubbers for the character to survive for 20 hours. The DSLSU fits onto the back of a space suit. The DSLSU has a mount on it for a power backpack. The DSLSU can be upgraded for 2,500 credits. Each level of upgrade (max 2) increases the time the character can survive by 20 hours. DSLSU is 36 kg, 9,600 credits. DSLSU refill and recharge costs 1,000 credits (plus 1,000 per upgrade).

Definable Spatial Compass

This device allows characters to set a local "North" for navigating while space walking, e.g., "North" could be set to point to a nearby spaceship, asteroid, space station, etc. .2 kg, 85 credits.

Electromagnetic Boots

Similar to Magnetic Boots, the difference is that these boots are not always magnetic. They can be turned on and off. They are powered by microcells and burn 1 PU every 10 minutes when turned on. 1.1 kg, 135 credits.

Endo-skeleton

3,700 credits, 9 kg. Mounted inside a Space Suit in order to allow it to be used more easily in gravity normal environments.

The Endo Skeleton increases the character's STR score by 300% for purposes of encumbrance. It

replaces the Space Suit's standard set of power assisted motors and amplifiers with stronger and improved versions. The result is an increase in strength and functionality with a zero increase in power consumption. The Space Suit's weight is increased by 9 kg due to the heavier equipment, however.

EVA Maneuver Unit

Large booster pack that fits over the LSU. Has enough fuel for 5 straight minutes of thrust. 25 kg, 1,600 credits. Refueling costs 110 credits.

Laser Cutting Torch

Mass: 16 kg, 370 credits, PU use: 10 per turn or successful hit. Can cut 2 meters per turn through heavy armor, spaceship hulls, etc. Power source: power backpack. Melee damage: 100 points and is considered an H attack.

Laser Igniter

Burns 2 PU per use. Microcell powered. Produces a 300 degree Celsius "flame." Can be used in space. .1 kg, 90 credits.

[IMAGE 4 x 3] (space equipment)



Life Support Unit (LSU)

Provides enough power, water, oxygen and CO2 scrubbers for the character to survive for 2 hours. The LSU fits onto the back of a space suit. The LSU has a mount on it for a power backpack. The LSU can be upgraded for 1,000 credits. Each level of upgrade (max 4) increases the time the character can survive by 2 hours. LSU is 18 kg, 3,200 credits. LSU refill and recharge costs 30 credits (plus 30 per upgrade).

[IMAGE 4 x 3] (space equipment)

Line Sled

Mass: 6 kg, cost: 200 credits.

Will tow up to 1,000 kg across a line in a weightless environment.

Magnetic Anchor

Magnetic base with a spool, eye-hole and locking mechanism. Spacers can place one on the hull of a ship or station and attach a microline from their suits to the anchor. The spool and eye-hole combination allow excess slack to be taken in or let out. The locking mechanism prevents the line from slipping. 3 kg, 350 credits.

Magnetic Boots

Magnetic soles allow the boots to stick to ferrous metal, e.g., ship hulls and decks. Designed for use with space suits. 6 kg, 120 credits.

Space Suit

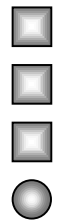
Required for survival in a vacuum. Has RUG of 5. STRUC: 15. 45 kg, 18,000 credits. Requires a Life Support Unit. All physical ability checks are made with a -2 penalty while wearing a space suit, -3 if it is armored (regardless of the armor level). Space suits have special connections on their backs for the LSU. They also have numerous latches all over them for attaching equipment and tools. Space suits may mount 1 vision visor. All space suits come with sun visors. Anytime a space suit takes more than 10% of it's STRUC in damage, it is considered to have been punctured. Characters in a punctured space suit will die of decompression in a number of turns equal to the suit's RUG score.

Space Suit Armor

815 credits, 3.7 kg per level of increase, maximum increase is 15 levels. Each level increases RUG by 1 and STRUC by 5. Armored suits above level 5 are considered military models. Spacesuit armor above level 5 is Availability D.

Sticky Boots

Special soles allow the boots to stick to flat surfaces. Worn while inside space ships, stations, etc. 1 kg, 85 credits.



Suit Patch

A fast bonding patch for sealing tears and punctures in a space suit. The character must make a Simple (COR) check to successfully apply a patch. If the character fails twice, the patch becomes useless. Up to two attempts to apply a patch can be made each turn. Suit patches come in a case which can be fastened to a space suit. The case holds 6. 1.3 kg, 145 credits per case.

[IMAGE 6 x 4] (vehicles) heavy truck, ruggedized for offroad travel, featuring many spot lights, a winch, and protective roll cage bars over the cabin and lights. There are several characters standing on the ground outside the vehicle, talking about something. One of them is pointing to the distant right.

[The powerful AG pods screamed loudly as the truck roared down the mountain side. All Neb could hear over the comm was yelling from the crew in back. They'd been found somehow and the enemy hover vans were closing in fast. "Hold on," he shouted and threw the truck headfirst downhill at full throttle. He could already hear the sharp ping of shredder and slug fire ricocheting off the truck's heavy armor. Someone had opened up with a support weapon of some sort and laser fire was pouring forth from the back of the truck.]

Civilian and Paramilitary Vehicles

Any vehicle not covered by the regular Bot rules, i.e., non combat vehicles and vehicles weighing under 10 tons, is considered a Civilian or Paramilitary vehicle. When purchasing a vehicle, both the vehicle type and the impulse system must be purchased. Impulse systems will modify the vehicle's base statistics.

Purchasing Vehicles

Very few people purchase a vehicle by saving up enough money to buy the vehicle outright and then walking down to the dealership, laying down the money and then driving off. Typically a vehicle sale is orchestrated as follows. The character puts down 20% (1/5) of the vehicle's value in cash. The rest of the vehicle is financed over a number of years (between 3 and 5 years). Multiply the vehicle's cost by .88 (4/5), divide this result by 48. This is the monthly payment the character must make on the vehicle for the next four years. This value includes a 10% financing fee. Naturally, if the referee wants to work out the financing himself, these rules may be disregarded.

Vehicle Statistics

Acc	Acceleration, how fast the vehicle accelerates; meters per turn
Decel	Deceleration, how quickly the vehicle can stop; meters per turn
Top	Top Speed, vehicle's top speed; kilometers per hour
TRAC	Traction, vehicle's tendency to resist skidding; like COR
HAND	Handling, how responsive the vehicle is to the driver; like REF
RUG	Ruggedness, how rugged the vehicles is; like TGH
STRUC	Structure, how much abuse the vehicle can take; Hits
RN	Range, how far the vehicle can travel on a standard capacity charge vehicle battery; in kilometers
Pow	Power Consumption, how many PU the vehicle uses per kilometer traveled.
Pass	Passenger, number of Passengers including the driver
Load	Load, maximum cargo load; in kilograms
Vol	Volume, maximum cargo volume; in cubic meters
Mass	Mass, vehicle mass; how much the entire vehicle weighs; in kilograms
Cost	Cost, given in 1,000's of credits.

	m/t	m/t	kph										
Sport Vehicles	Acc	Decel	Top	TRAC	HAND	RUG	STRUC	RN	Pass	Load	Vol	Mass	Cost
Nova, cycle	270	145	624	7	19	2	30	210	1	15	1/8	330	12
XJ20, car, 2 door	150	200	520	14	15	6	120	165	2	50	½	800	200
F-10, car, 2 door	160	220	535	18	16	5	90	150	2	35	½	670	320
Diablo, car, 2 door	180	210	505	16	16	5	100	135	2	55	1½	780	250
Fury, car, 2 door	130	180	540	15	18	3	85	190	2	60	¼	540	112

	m/t	m/t	kph										
Standard Vehicles	Acc	Decel	Top	TRAC	HAND	RUG	STRUC	RN	Pass	Load	Vol	Mass	Cost
Cycle, light	230	130	452	4	17	3	35	682	1	30	¼	390	3
Cycle, heavy	180	120	343	5	15	4	45	620	2	40	½	450	6
Compact, 2 door	90	120	312	12	13	7	125	840	2	65	1	870	9
Sedan, 4 door	75	100	252	9	10	9	150	700	5	90	2½	1,000	13
Luxury, 6 door	30	90	176	6	6	11	165	630	8	110	2	1,470	26
Wagon	35	95	193	7	8	11	160	665	6	130	4	1,170	11

	m/t	m/t	kph										
Work Utility Vehicles	Acc	Decel	Top	TRAC	HAND	RUG	STRUC	RN	Pass	Load	Vol	Mass	Cost
Pickup, small	90	100	218	10	11	10	200	534	2	1,200	7.25	1,300	13
Pickup, large	70	90	192	8	9	12	230	465	3	1,600	8.75	1,700	15
Van, small	65	75	214	8	8	10	245	465	5	800	6	1,660	14
Van, large	60	70	204	8	8	11	260	435	14	1,300	1½	1,800	16
Suburban	45	110	135	9	8	14	365	585	3	1,500	6	1,740	19
Heavy Van, explorer	50	90	120	10	7	15	430	500	12	650	5½	1,900	18

	m/t	m/t	kph										
Heavy Vehicles	Acc	Decel	Top	TRAC	HAND	RUG	STRUC	RN	Pass	Load	Vol	Mass	Cost
HMMWV, 1¼ ton*	65	85	120	14	9	16	350	530	5	1,250	4	1,400	25
Truck, Cargo, 2½ ton	45	65	120	15	9	17	10,050	636	3	2,500	30	13,000	30
Truck, Cargo, 5 ton	40	60	120	17	8	18	13,000	1,150	3	5,000	45	16,000	38
HEMMT, 10 ton**	30	55	130	18	8	19	20,100	1,060	3	10,000	60	26,000	45
Bus	20	55	150	10	9	14	11,000	680	45	9,000	22½	36,000	250
Rig (HETT)***	15	45	185	10	10	16	38,500	1,420	6	80,000	280	43,200	415

* High Mobility Multi-use Wheeled Vehicle

** Heavy Expanded Mobility Tactical Truck

*** Heavy Equipment Transport Truck

	m/t	m/t	kph									MG	
Aircraft*	Acc	Decel	Top	TRAC	HAND	RUG	STRUC	RN	Pass	Load	Vol	Mass	Cost
Scout	120	130	540	5	16	6	5,025	2,120	3	5,000	8	9	135
Standard	95	130	435	9	12	18	8,040	1,060	5	10,000	10	13.5	270
Large	70	110	315	13	8	18	10,050	1,060	10	15,000	32	18	405
Heavy (dual)**	60	95	260	18	6	27	15,075	1,060	12	30,000	120	36	810
Super Heavy (triple)***	60	75	315	20	6	54	30,150	848	21	60,000	480	54	1,620

* Available only as Rotor, VTOL or Agrav. Due to their design, all Aircraft with Agrav impulse systems have a maximum hover altitude equal to their Accel, in meters. Aircraft masses are listed in 1,000's of kilograms (also known as megagrams or metric tons).

** Heavy aircraft have twin impulse systems.

*** Super Heavy aircraft have three impulse systems.

Vehicle Power Systems

High Performance Sport vehicles and standard vehicles all carry 1 battery. Utility vehicles carry two batteries.

Heavy exploration vans carry 3 batteries. Heavy vehicles carry 4 batteries. Scout aircraft carry 2 batteries.

Standard and large aircraft carry 3 batteries. Heavy aircraft carry 6 batteries and super heavy aircraft carry 12 batteries. All batteries in a vehicles must use the same Power Source, e.g., they must all be Capacity Charge or all Thermocouple, etc..

Vehicle Range

When using alternate battery technology the vehicle's range on a full charge will change. Range can be computed as follows. Divide the vehicle's Range by 7 and multiply by the Power Rating of the Power Source being used. So a performance cycle has a range of 210 kilometers (which assumes a capacity charge battery), if the same cycle were using a Heavy Capacity Charge battery, its range would become $210 / 7 \times 10 = 300$ kilometers.

Impulse Types

Impulse Type	m/t	m/t	kph		Top	TRAC	HAND	RUG	STRUC	RN	Pass	Load	Vol	Mass	Cost
	Acc	Decel													
Wheeled	x1	x1	x1	x1	x1	x1	+0	x1	x1	x1	x1	x1	x1	x1	x1
Skimmer	x.8	Acc	x1.5	x.5	x.5	x.5	-1	x.9	x1.8	x1	x.8	x1	x1.05	x1.1	x1.1
Aquatic, surface	x.7	x.75	x.6	x.6	x.7	x.7	-2	x.85	x.8	x1	x.7	x.9	x.85	x2	x2
Aquatic, submersible	x.5	x.8	x.5	x.3	x.6	x.6	-3	x1.05	x.4	x1	x.6	x.7	x1.25	x4	x4
Tracks	x.5	x1.1	x.4	x1.5	x1.1	x1.1	+5	x1.3	x.6	x1	x2.4	x1	x1.3	x1.7	x1.7
Quadped	x.35	x.5	x.25	x2	x1.6	x1.6	+6	x1.2	x.55	x1	x1.8	x.85	x1.3	x3.5	x3.5
EM Repulsion	x1	Acc	x1.9	x1	x.8	x.8	+0	x1	x1.3	x1	x1.2	x1	x1.2	x6	x6
Rotors	x1.1	x1.3	x3	x1.1	x1	x1	+0	x1	x2.2	x1	x1	x1	x1	x.7	x.7
VTOL	x1.2	1½xAcc	x7	x.8	x.6	x.6	-2	x.8	x.9	x1	x2	x1	x1.2	x5	x5
Agrav	x2	Acc	x3	x1.1	x.8	x.8	-1	x1	x.7	x1	x2.1	x1	x1.3	x8.5	x8.5

Wheeled

Vehicle has wheels. Cycles have 2. HMMWV's have 4, Heavy trucks (2.5 and 5 ton) have 6, HMMT and buses have 8, HETT have 16. Each wheel has STRUC DP equal to 2x RUG. Wheels can be targeted with a -60% penalty to hit.

Hover (Skimmer)

Hovercraft. Fairly quiet. Hover vehicles hover approximately 5 cm above ground and have difficulty crossing rough terrain.

Aquatic, Surface

Ship.

Aquatic, Submersible

Submarine. Vehicle is capable of descending to depths equal to RUG x6 in meters.

Track

Tank tracks. Replaces the vehicle's wheels with a set of two tank tracks. HEMMT, Buses and HETT's have two sets of tracks. Each track has a number of STRUC DP equal to 10x vehicle RUG. A vehicle's tracks can be targeted with a -30% penalty to hit.

[IMAGE 4 x 3] (impulse types for vehicles)

Quadped / Biped

Four legs. Two for cycles. Each leg has a number of STRUC DP equal to 5x RUG. A vehicle's legs can be targeted with a -40% penalty to hit.



EM Repulsion (EMR)

EM Repulsion vehicles levitate 1 to 3 meters off the ground on a faint blue-green glow. Maximum hover altitude is 1% the vehicle's base Accel. So, an EMR Large Pickup has a maximum hover height of .7 meters.

Rotor

Helicopter rotors. Held aloft by either a main rotor blade and a tail rotor or a set of coaxial counter rotating rotors. Rotors have a number of STRUC DP equal to the vehicle's RUG. Rotors may be targeted with a -90% penalty to hit.

VTOL

Ducted Air / vectored thrust vehicle. Not capable of gliding. Flight capable. Vehicle has roughly one ducted thrust nozzle per wheel replaced.

Agrav

Agrav vehicles are flight capable. They have a maximum altitude in meters equal to half their base acceleration. For example, an Agrav HMMWV has a maximum flight altitude of 65 (Accel of a standard HMMWV) (2 = 32.5 meters). AG Pods have a number of STRUC DP equal to 3x RUG. Heavy vehicles have 6 AG Pods, cycles have 3 AG Pods, all others have 4. Aircraft have 3 AG Pods, 6 Pods for Heavy aircraft, and 9 Pods for Super heavy aircraft. AG Pods may be targeted with a -30% penalty to hit.

Vehicle Movement

Acceleration

This is the number of meters per turn the vehicle may accelerate by each turn.

Deceleration

This is the number of meters per turn the vehicle may decelerate by each turn.

Top Speed

This is the vehicle's top speed in Kilometers per hour. To convert to meters per turn, multiply by 1.1. For example, a vehicle with a top speed of 240 kph would have a (240 x 1.1) 264 meter per turn top speed.

Turning

A vehicle may safely turn a number of degrees in one game turn, if it is traveling less than 100 – turn degrees, multiplied by the vehicle's top speed. That is, a vehicle may safely make a 50 degree turn if it is traveling less than 50% of its top speed, likewise, a vehicle may safely make a 90 degree turn if it is traveling less than 10% of its top speed. Sharper turns than this safe limit are considered "Radical Maneuvers" under Vehicle Combat.

[IMAGE 6 x 3] (vehicle combat)

[Ed and Neb are on the run in their AG heavy exploration van. Their assailants are pursuing in a large hover pickup. As they scream down the roads, their speed hits 100 kph. They enter an intersection and whip around a corner. The assailants attempt to pursue. The turn is a 65 degree turn. Maximum safe speed for this maneuver is $100 - 65 \text{ degrees} = 35\%$ of top speed (126 m/t or 113.4 kph). Since they are traveling 100 kph, they safely make the turn. Their pursuers are not so lucky, however. They attempt to make the same 65 degree turn. Their maximum safe speed is 35% of top speed or 90.72 kph. Since the pickup is traveling higher than the maximum safe speed, it is considered to be making a “radical maneuver.” The pursuers must make a Difficult Hover pilot skill check to maintain control. The check has a +4 bonus due to the truck’s TRAC of 4, and a -10 penalty due to the vehicle’s speed (-1 per 10 kph of velocity), for a final penalty of -6. The skill check is made and the pursuers roll very well, a 21. However, the -6 penalty reduces this to a 15, which is less than 17 (a Difficult check). So, the hover truck skids out of control and slams into a building. Ed and Neb escape to safety.]

Vehicle Combat

Small arms (hand weapons) do 1/3 damage to vehicles. Heavy weapons (support rifles, tripod weapons, shoulder weapons) do normal damage to vehicles.

Ruggedness is subtracted from all incoming fire. A vehicle’s RUG value is similar to TGH. Any damage beyond the vehicle’s RUG score is deducted from the vehicle’s STRUC value. If a vehicle has a negative RUG score, this value is added to all incoming fire, e.g., a vehicle with a RUG of -1 would add 1 point to all damage taken. At $\frac{1}{2}$ STRUC the vehicle starts to lose its performance characteristics (Acc, Decel and Top are reduced by 50%, and TRAC and HAND are reduced by 2 points each). When a vehicle has taken 80% of its STRUC in damage, it ceases working. When a vehicle’s STRUC value is reduced to 0 the vehicle is completely destroyed.

Vehicle Hit Locations

When a vehicle is hit by gunfire, roll on the following table. Critical Hit results cause weapons to do full damage if they do not normally do full damage to vehicles, or maximum damage if the weapon normally does full damage to vehicles. Reroll to determine if the critical hit is against the vehicle hull or its impulse system.

Roll	Hit Location
1-3	Impulse System
4-19	Hull Hit
20	Critical Hit

Any time a vehicle takes damage from gunfire or a collision, the driver must make a Difficult skill check to avoid losing control. Add HAND to the roll. Subtract 1 point from the roll for every 15 points of damage taken.

Anytime a vehicle makes a radical maneuver, the driver must make a Difficult skill check to avoid losing control. Add TRAC to the roll. A radical maneuver is defined as anything outside of normal civilian driving, e.g., combat driving. Subtract 1 from the roll for every 5% over the safe maneuver speed the vehicle was traveling.

Crashing

Damage delivered = vehicle mass x speed (meters / turn) / 1,000

RUG is subtracted from damage the vehicle takes.

Barring collision with immobile objects such as buildings, both vehicles' speeds will change after a collision. Average the two vehicles' speeds, then subtract 10%. This is both vehicles' new speed. Also, the slower vehicle will ricochet off the first vehicle at an angle equal and opposite to the angle it hit.

Vehicle Equipment

All equipment, accessories, weapons, etc. that are mounted on a vehicle are deducted from the vehicle's Load. Once a vehicle's load is reduced to 0, its frame can not support any additional equipment on a permanent basis.

[IMAGE 4 x 3] (vehicle equipment)

Tow Chains

Mass: 15 kg, Cost: 320 credits, tow strength: 30 tons, length: 10 m.

Armor

Weight: 4% vehicle mass, cost 3,000 credits per layer.

Increases RUG by 1 per layer. Increases STRUC by 50 per layer. Every two layers of armor reduces HAND by 1.

Roll Cage

Weight 6% vehicle mass, cost 6,500 credits. Prevents vehicle from taking damage in a roll.

Autopilot

A simple feature common to most vehicles midline and above. The autopilot is non-AI but is fairly intelligent. It can be given simple tasks and has a built in timer, so it could be directed to pick a character up at a specific location at a given time, or to return home after dropping off a character somewhere. In addition, the autopilot features all the typical functions, e.g., follow programmed way-points, maintain level flight, follow the road, avoid running over people, etc. Weight: --, Cost: 1,000 credits.

Spot Light

Normal spotlight. Available in IR frequency for 600 credits more. Cost: 230 credits., weight: 5 kg. The spotlight can be aimed by characters inside the vehicle.

Quick Armor

This spray comes in a tank about the size of a helium tank. Each tank comes with an air-jet nozzle and atomizer. The armor can be sprayed onto the outside of a vehicle in less than 10 minutes. After each layer is applied, the armor is "set" or hardened with an electric charge. Up to three layers can be applied to a vehicle. Effects: Increases RUG by 1 per layer. Increases STRUC by 35 points. Weight: 30 kg per layer. The tanks weigh 45 kg. Cost: 600 credits per tank. A standard car requires a single tank. Larger vehicles require more. A single layer of armor is noticeable upon inspection. Two and three layers are more obvious to the casual glance. The armor is available in a variety of colors, including clear, although this will not effect the notability of the armor.

Uninterruptable Power Source (UPS)

The UPS is plugged into the vehicle's power outlets, then all external power using devices (such as computers) are plugged into the UPS. Should the vehicle abruptly loose power for any reason, the UPS will provide enough stored power to safely power down all the systems in the vehicle, thus preventing them from being damaged through improper power down procedures or power surges. Cost: 900 credits, 22 kg.

Vehicular Scanner

Similar to a portable scanner, except it is mounted in a vehicle. May use the same frequencies as a portable scanner. Narrow range: 3 kilometers, Wide range: 500 meters. Mass: 12 kg. PU: 16 per minute. Cost: 2,400 credits.

Fuel Pallet

Hold 500 gallons of liquid. Includes pumps, hoses, nozzles, etc. Mass: 650 kg empty, 1700 kg full. Cost: 1,400 credits.

Dynamic Camouflage Hull

Vehicle is always appropriately camouflaged. Functions like a camosuit. Mass: 1% vehicle mass. Cost: 6,000 credits

Thermal Absorptive Hull

Vehicle is invisible to thermal sensors. Mass: 3% vehicle mass. Cost: 6,000 credits.

Radar-proof Hull

Vehicle is invisible to radar sensors. Mass: 2% vehicle mass. Cost: 9,000 credits.

Dynamic Light Shift Capability Hull

Vehicle hull is modified to incorporate DLSC technology. Power use is 3 PU / minute, per 100 kg of vehicle mass when activated. Vehicle has a 90% chance to be "invisible" when stationary and a 60% chance when moving. Mass: 4% vehicle mass. Cost: 30% vehicle cost.

Arctic Proofing

Vehicle is adapted to function in extreme cold, including operation on ice and packed snow. No mass. Cost: 3,000 credits.

Desert Proofing

Vehicle is adapted to function in extreme heat, including operation in desert environments. No mass. Cost: 1,500 credits.

Amphibious Modifications

Vehicle is adapted to be able to ford water. Vehicle is buoyant and equipped with a small retractable motor for propulsion in water. No mass. Cost: 5,000 credits.

Deep Sea Proofing

Vehicle is adapted to function deep under water. Maximum depth is 20 kilometers. Mass: 6% vehicle mass. Cost: 25% of vehicle cost.

EMP Hardening

Vehicle is hardened against electromagnetic pulses. Normal EMP blasts have no effect on the vehicle, its electronics or its contents. No mass. Cost: 9,000 credits.

Fire Proofing

Vehicle incorporates fire proof materials in its construction. Vehicle will not be affected by ordinary fires. No mass. Cost: 12,000 credits.

Radiation Proofing

Vehicle is radiation proof. Mass: 1% vehicle mass. Cost: 93,000 credits.

Electrified Hull

Power usage is 1 per minute per 1,000 kilograms of vehicle mass. Shock will use 1-10 PU, which is selectable by the vehicle operators. Shock damage is d8 per PU used. Lethal damage is 2 per PU used, the remainder is bruise damage. The vehicle can be set for lethal shocks as well. Power usage per shock is doubled. Damage becomes all lethal. Mass: 1% vehicle mass. Cost: 3,500 credits.

[IMAGE 4 x 3] (vehicle equipment)

Heavy Tracks

For tracked vehicles. Heavier and tougher tracks. +1 RUG, increase vehicle mass by 10%, reduce load by 5%. Cost 5% of vehicle.

Light Tracks

For tracked vehicles. Lighter, faster. -1 RUG, +10% top, reduce vehicle mass by 5%, reduce load by 3%. Cost 8% vehicle.

Rubber Tracks

For tracked vehicles. Silent, very light. +1 TRAC on road, dirt, rock and other solid surfaces, -50% TRAC on snow and ice. Reduce vehicle mass by 12%. Cost is 12% vehicle.

High Performance Tire

For wheeled vehicles. Improved cornering. +1 HAND, 1,000 credits per wheel.

All Terrain Tires

Wheeled vehicles. All terrain, run-flat, puncture resistant tires. +2 TRAC. At speeds greater than 30% Top Speed, -1 TRAC, -2 HAND. 3,000 credits per wheel.

Ground effect and stability package

Wheeled vehicles. Drops vehicle, widens wheel base, increases performance, adds spoiler, airdam, active suspension, etc. +1 HAND, 20% vehicle cost. Load reduced by 5%.

Enhanced Control Surfaces

VTOL vehicles. +2 HAND. +5% Top Speed. Cost 25% vehicle cost. 2% vehicle mass.

Oversized Turbines

VTOL vehicles. +15% Accel, +10% Decel, -10% Top Speed. +2 HAND. Cost is 12% vehicle cost. 3% vehicle mass.

Super Charged Thrusters

VTOL vehicles. Grants +20% to Accel at speeds above 60% Top Speed. Allows vehicle to push past Top Speed by 15%. When in the additional 15% range, Accel is reduced by 50%. +1 HAND. Cost is 15% vehicle cost, mass is 4% vehicle.

Ram-Air Assisted Ground Effects

Hover vehicles. Reduced power consumption. +20% range. 10% vehicle cost.

Pulsed AG Pods

Antigrav vehicles. Rougher ride, OR equivalent. Vehicle rides higher off the ground, maximum hover height is doubled. Treat all terrain as open. Increase vehicle mass by 10%. Cost 15% vehicle cost. Power consumption increased by 50%.

Continuous AG Pods

Antigrav vehicles. Glass smooth ride, power consumption is doubled. Speed is reduced by 20% every turn when off road anytime vehicle speed is over 10% of Top Speed. Increase vehicle mass by 5%. Cost 25% vehicle cost.

Improved Cavitation Screws

Aquatic (surface and submersible) vehicles. Faster. +15% top speed. 10% vehicle cost.

Ion Induction Propulsion

Aquatic (surface and submersible) vehicles. Higher Acceleration and top speed. +30% acceleration, +20% top speed.

Oversized Traction Pads

Quadped vehicles. +2 HAND, -25% Top Speed. Cost 30% vehicle. Vehicle mass +2%, load -3%.

Augmented Hydraulic Actuation System

Quadped vehicles. Smoother ride. +2 HAND, cost 10% vehicle. Load -2%.

EM Shock Absorbers

Quadped vehicles. Smoother ride. +1 TRAC, +1 HAND, cost is 15% vehicle. Load -3%.

Heavy Legs

Quadped vehicles. Slower, tougher. -20% top speed, Leg STRUC DP +30%, vehicle mass increased by 5%, load reduced by 10%. Cost 15% vehicle cost.

Light Legs

Quadped vehicles. Faster, lighter. +30% top speed, vehicle mass reduced by 10%, -20% DP, load reduced by 5%. Cost 5% vehicle cost.

EM Pulse Redirection

EM repulsion vehicles. +2 TRAC, +2 HAND. Allows EM Pulses to be used to help steer the vehicle. 2% vehicle mass. 50% vehicle cost.

Megaconducting EMP Generators

EM Repulsion vehicles. Longer range. Power consumption reduced by 50%. Cost 50% vehicle cost. Mass is 5% vehicle.

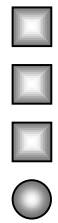
Multi-Blade Rotor System

Rotor vehicles. Tougher, +2 HAND, +2 TRAC. +50% DP. 20% vehicle cost.

Wide Blade Rotors

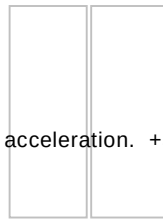
Rotor vehicles. +1 HAND, +1 TRAC, -5% power consumption. Cost 5% vehicle, mass 1% vehicle.

[IMAGE 4 x 3] (vehicle equipment)



Coaxial Counter Rotating Blade System

Rotor vehicles. +2 HAND, +2 TRAC, +50% top speed, +25% acceleration. +50% Rotor DP. Cost is 50% vehicle cost. Mass is 5% load.



Enhanced Aerodynamics / Hydrodynamics

Laminar efficiency. All vehicles. +35% top speed, +9% accel, -7% decel. Cost 65% vehicle.

Frictionless Hull

All vehicles. Cost 200% vehicle, +90% top speed, +12% accel. Vehicle load -4%, mass -3%.

Zero Impedance Fly-By-Wire Control System

All vehicles. +1 HAND. Cost 83,000 credits.

Advanced Maneuver System

All vehicles. +1 HAND. 2% vehicle mass, 45% vehicle cost.

AI Vectronics

All vehicles. +3% accel, decel, top speed, range. 5% vehicle cost.

Spectrum Proofing (IR, UV, Radar, Mag)

All vehicles. 20% vehicle cost per band.

Stealth System

All vehicles. 50% vehicle cost, 2% vehicle mass. Vehicle must operate at less than 30% it's performance characteristics to use this system. Consumes 10 PU / min when active.

Dual Stabilizer System

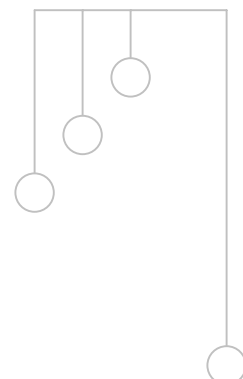
All vehicles. +1 HAND, 40% vehicle cost, 2% load.

Thought Control System

All vehicles. +3 HAND, 375% vehicle cost. 1% load.

Dual Suspension System

Track, Wheel, Quadped vehicles. 25% vehicle cost. +2 RUG, +1 TRAC. 2% vehicle mass.



Vehicular Accessories	Mass	Cost	
Robotics repair bay	65	2,400	uses 4 cubic meters from the vehicle's cargo capacity
Laboratory	30	3,000	uses 5 cubic meters from the cargo capacity.
NBC system	100	20,000	
Heavy Manipulator Arm	120	5,100	can lift 60 kg. 50 DP
Light Manipulator Arm	60	1,700	can lift 20 kg. 30 DP
Bustle Rack	25	100	can carry 15% more cargo volume in the bustle.
Off-road Kit	60	2,000	includes OR suspension, light guards, brush cutters, etc.
Firing port	5	200	allows fire from within the vehicle without exposing firer. Limited to 120 degree arc.
Long Range Radio	6	1,200	Range 30 kilometers.
Outrigger arms	90	900	set of 4, 60 DP each, stabilizes vehicle for use of construction implements
Bulldozer plow	600	2,000	100 DP
Backhoe	500	2,000	200 DP
Forklift	200	1,000	60 DP, can lift 500 kg
Crane	400	1,000	250 DP
Trench digger	90	900	90 DP
Front end loader scoop	500	1,500	150 DP
Hole digger	600	2,000	120 DP
Fire extinguisher	20	1,100	
Vehicular jammer	24	4,800	24 PU per minute. Low power: 500 m, High power: 1,500 m. Otherwise performs as a normal jammer.
5 gallon water jug	½ (10)	30	weighs .5 kg empty, 10 kg when full.

Special Vehicles

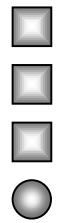
	m/t	m/t	kph									MG	K's
Special Vehicles	Acc	Decel	Top	TRAC	HAND	RUG	STRUC	RN	Pass	Load	Vol	Mass	Cost
Sky Flitter	35	35	115	6	8	5	125	340	1	150	4	2	65
Excavator	14	30	30	34	13	24	23,400	630	1	850	38¼	20.8	133
Digger	15	60	52	27	9	24	52,000	636	1	2100	60	33.8	153
Monorail	60	45	420	--	--	20	3,500	--	40	--	60	10.4	84
HyperStrat Transport	650	405	Mach 22	60	60	20	425K	24K	450	450K	900	180K	1.2K

Sky Flitter

This is a small personal VTOL aircraft.

Excavator

The Excavator is a large heavy vehicle. It moves around on four huge legs and has 2 heavy duty manipulators along with a massive digging arm. The operator sits in the center of the vehicle at the very front, with the 2 heavy duty arms attached on either side. The Excavator is about 4 meters tall, 4 wide and 5 long.



Digger

The Digger is a huge tracked vehicle. On its front it mounts three gigantic digging scoops. Each scoop can be operated independently of each other or all can be operated at the same time. The operator sits in the center of the vehicle, in the front third of the vehicle, but well behind the digger scoops. His high position allows him to see all around the forward 180 degrees of the vehicle. The Digger is about 6 meters tall, 8 wide and 10 long.

[IMAGE 6 x 4] (special vehicles, monorail) Monorail soaring over the characters.

Monorails

Monorails are maglev trains. They run on rails through and between cities. Trains are usually six cars long, increasing to eight during busy periods and dropping to four during slow times. Monorail terminals are located every block within a city, and every 20 kilometers in the country. Express trains have stops every 10 city blocks within a city, and no stops between cities. Fees for riding the monorails vary from planet to planet and sometimes even from city to city on each planet.

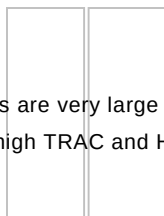
It costs 2 credits to get on and 3 credits per city moved through. Characters can purchase an anonymous fare card at any monorail station. It can be used by anyone so it can be loaned to people. Or they can deduct their fares directly from their personal credit cards. It can be ridden as far as desired. Monorails are occasionally built underground, in which case they are called Subways or Undergrounds.

Statistics listed for monorails are for individual cars. Statistics for the Underground are the same as elevated monorails. A typical car is 25 m long inside and 4 m wide. Each car has a door located fore and aft for transfer from car to car in times of emergencies. There are 2 maps located inside each car, on the wall. These maps show the routes, stops, travel times and distance between stations, in addition to major terrain features (such as rivers) that the train will pass through or near. Normal cruise speed between stations is 150 kph in the city, 225 kph through the country. The trains have a maximum speed of 250 kph.



HyperStrat Transports

Hypersonic stratospheric transports are very large airliners. They can cruise from one side of a planet to the other during a single flight. Their high TRAC and HAND values are due to them being so large that it takes an awful lot to disrupt them.



[Although the land battleship was the smallest of its class, it still towered its 600 ton mass over the land. Three huge gun turrets, one on each section of the hexped vehicle, traversed back and forth scanning for targets. There were several smaller turrets along the sides and front of the vehicle and two large cannon protruded from the front of the vehicle. The group stared in morbid fascination at the monstrosity. The kid was pale. K9 didn't seem to be interested. Sherina and Sloro were shaking their heads. Ed looked at Neb. "I think we should go another way," said Neb quietly.]

Engaging Bots and Military Vehicles

Attacking Bots and Vehicles from the Fusion Death game system

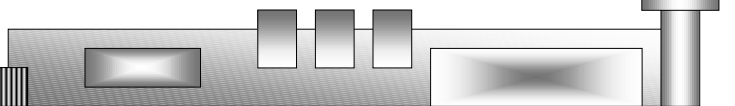
Most weapons will do little or no damage, beyond marring the paint, to the heavy equipment in Fusion Death. Some weapons, however, are specifically designed to penetrate the heavy armor of Fusion Death vehicles and robots. These weapons have the *Anti-Armor / Anti-Tank (AT)* designation. Attacks from these weapons are handled as follows:

1. Damage rolled is used to assess whether or not the shot penetrated the armor, by comparing the damage rolled to the location's armor value. If the damage is greater than the armor value, the shot penetrated. Regardless of penetration, the target will take NO damage to its armor.
2. Armor penetrating shots have a percentage chance to cause a critical hit equal to the amount of damage that penetrated.
3. Critical hits are then resolved normally per the rules in the *Fusion Death* game system.

Attacks from Bots and Vehicles from Fusion Death game system

Fusion Death weapons have Penetration dice, which is roughly equivalent to Damage for Frontier Horizon weapons. When a character or vehicle in Frontier Horizons is attacked by a Fusion Death weapon, roll the weapon's Penetration dice. Every die that rolls greater than 1 is converted to a maximum value. Every die that rolls a 1 is ignored. Against vehicles, robots and other "hard" objects, this damage is multiplied by 10 and applied to an appropriate hit location. Against humans, the races and other "soft" targets, the damage is tripled and applied to every hit location. Armor and screens are only ½ effective against Fusion Death weapons.

[IMAGE 6 x 2 ½] (Engaging Bots and Military Vehicles) Fusion Death vehicle. It's commander riding high from his command hatch. He rides on a huge multi-tracked vehicle, with a single large turret and several smaller turrets. There is a boarding hatch located near the base of the vehicle. There is wreckage all around. The vehicle is very massive. It might be a hovercraft or Grav craft as well. Doesn't matter. It has settled and seems to be part of the ground.



[IMAGE 6 x 3 ½] (repair and jury rigging) Person working on a robot. The robot's access panel is open. There may be other people around. They are waiting for him to finish. It is out in the open field or one a mountain side. Their vehicle is in the background, it is damaged, but works.

Repair And Jury -Rigging

Characters may use any appropriate technical skills to repair, recharge, disassemble, destroy, design and build robots, computers, vehicles, etc. (based on the skill).

Repair

To make a repair, the technician must spend an amount of time working on the robot, vehicle, etc. This time can be determined by the referee based on the damage to the item, or can be rolled randomly (15+ d12x5 minutes). At the end of the allotted time, the character makes a Skill Check to see if the repair attempt was successful. The difficulty of the skill check should be determined by the extent of the damage and by the type of repair being attempted. Some sample repairs are listed below along with their difficulties and time requirements.

Task	Difficulty	Time
Unjam a weapon	Simple	4 turns –1 per level, minimum of 1 turn.
Unjam a heavy weapon	Simple	8 turns –1 per level, minimum of 1 turn.
Repair generic minor damage	Simple	10 +d10 min –1 per level, minimum of 5 min.
Repair 10 points of damage	Moderate	20 min –2 per level, minimum of 8 min.
Repair minor damage to impulse system	Difficult	20 min –1 per level, minimum of 10 min.
Repair severe damage to impulse system	Very Difficult	45 min –2 per level, minimum of 20 min.
Repair damaged power system	Very Difficult	15 +d20 min –2 per level, minimum of 15 min.
Repair damaged sensor system	Very Difficult	25 +d20 min –1 per level, minimum of 25 min.
Repair damaged core processor	Impossible	30 +d100 min –3 per level, minimum of 45 min.



Jury - rigging

Additionally, technicians may attempt to jury-rig robots, computers, etc., in an effort to either cut the time required to perform the repair, or to perform a repair the character wouldn't ordinarily be able to handle. This will either cut the time required in $\frac{1}{2}$, or reduce the difficulty by 2 (player's choice). The difficulty check is one level harder when cutting the time requirement. The jury-rigged system must make a difficult skill check against the character's work every time it is damaged after being jury-rigged to avoid falling apart. If the system fails, roll d10. On a 4-10 the severity of damage to the system is increased by an additional level, i.e., a Difficult repair job will become a Very Difficult repair job.

[IMAGE 3 $\frac{1}{2}$ x 3 $\frac{1}{2}$] (repair and jury rigging) Person working on a robot. The robot's access panel is open. There may be other people around. They are waiting for him to finish. It is out in the open field or on a mountain side. Their vehicle is in the background, it is damaged, but works.

Design

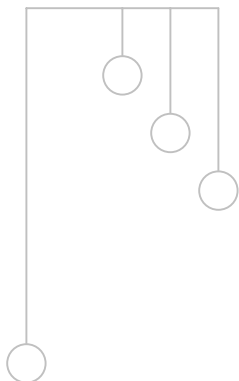
Technicians may design items which they are knowledgeable on. When designing items, the technician may attempt to add new or alternate functionality to the item. In addition, the technician may also elect to design the item using alternate materials. The time it takes to design an item is $100 + d100$ hours. Designing an item with new or alternate functionality is a Difficult task.

Construction

The time it takes to construct an item (assuming necessary facilities, equipment and materials are available) is 2 days per 45 kg of the completed item's mass. Constructing an item is a long and drawn out process. Each day the technician must make a Difficult skill check to successfully complete the day's work.

Disassembly

The time it takes to disassemble an item (assuming necessary facilities and equipment are available) is 1 day / 50 kg (.4 kg per hour) of mass of the item. Each day the technician must make a Moderate skill check to successfully complete the day's work.



Research

"Developing the future.
One failure at a time."

To conduct research, the GM assigns a numeric Task Difficulty (same values used for skill & ability checks). Then, every research period (typically a month, but determined by the Task Difficulty; see below) and any time significant new data becomes available, the scientist makes a Difficult skill check, which is subject to normal modifiers. If the check is a success, the Task Difficulty is reduced by 1. When the Task Difficulty reaches zero, the scientist must make a Very Difficult skill check to make the breakthrough.

Setbacks

Three consecutive failed rolls indicate a research setback. The Task Difficulty remaining is increased by 50%.

Surprise Breakthroughs & Offshoot Discoveries

Anytime the skill check to reduce the Task Difficulty is a maximum roll (10), roll another d10. On a 1, the character has made a surprise breakthrough (reducing the Task Difficulty by an additional point). On a 2, the character has made an offshoot discovery.

XP Awards For Research

Task Difficulty	XP award
Trivial	60
Simple	180
Moderate	540
Difficult	1080
Very Difficult	2200
Impossible	4000
Impossible+	240 x original Task Difficulty
Offshoot Discovery (each)	10 x d10
Surprise Breakthrough	5% full award
Setback (each)	15

XP awards based on the Task Difficulty are awarded upon completion of the research and are divided evenly among all contributing researchers. Offshoot, Breakthrough and Setback XP are awarded each time they occur, and only to the researcher that rolled them.

Multiple Scientists

A number of scientists can work on the same project at a time. Each scientist working on the job makes his own skill check. Each success will reduce the Task Difficulty by one. Failures, after the first one of the month, have no effect unless it is a Setback, in which case the Task Difficulty is adjusted normally. There is a limit to the number of scientists that can work together this way. The limit is 1 for Trivial, 2 for Simple, 3 for Moderate, 4 for Difficult, 5 for Very Difficult and 6 for Impossible. Additional researchers beyond these numbers have a negligible effect.

Note, the *Multiple Scientist* rule can be applied in other situations as well. For example, multiple technicians working on a robot, or multiple mechanics working on a vehicle. In these cases, the Task Difficulty is reduced by 1 per helper (limited by difficulty as above). Only the head technician / mechanic / programmer / etc need make the skill roll.

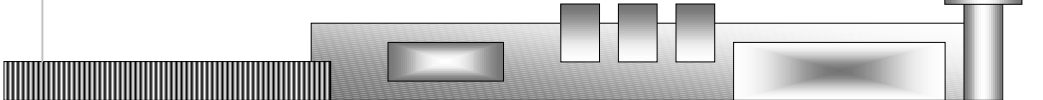
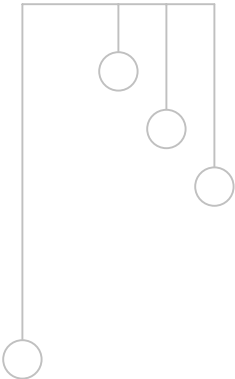


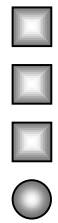
Guidelines for setting Task Difficulty

Unless the GM has specific reasons for determining otherwise, a typical research project should have a Moderate to Difficult Task Difficulty. In parenthesis, after each Task Difficulty, is the research period for that level of research. This is the frequency the scientist may make a research skill check.

Task Difficulty (Research Period)	Description
Trivial (day)	anything less complicated than Simple research.
Simple (week)	developing a variant on known technology.
Moderate (2 weeks)	developing alternate ways, using known science, to do common things with alternate performance characteristics (although not necessarily better), e.g., more environment friendly technology, finding alternate propellants for munitions, etc.
Difficult (month)	improving current technology, developing new simple science, determining alternate methods to accomplish known science with improved results, e.g., designing a better mechanical model for projectile weapons.
Very Difficult (2 months)	creating the fundamentals of new science, e.g., proving FTL or anti-grav is possible.
Impossible (4 months)	developing new science for use with current technology or proving radical science is possible, e.g., teleportation, black hole power systems, or figuring out how to make new science items with current technology.
Impossible+ (year)	proving radical science is possible with current technology.

[Sloro is researching a way to create a larger capacity power cell. The Referee assigns a Research Difficulty of Simple(which is a 7) to this task, since power cells already exist and Sloro is simply trying to design a bigger one. The Research Period is a week. So, every week, Sloro makes a Difficult (Power system) skill check. One week 1, Sloro makes the check and thus the Research Difficulty is reduced to 6. At the end of week 2, Sloro makes another Difficult (Power system) skill check. The check is a success and the Research Difficulty is reduced to 5. At the end of week 3, Sloro makes a Difficult skill check and rolls a natural 10. Sloro has a chance to make a Surprise Breakthrough or Offshoot discovery. Sloro rolls a d10 and gets a 1. This is a Surprise Breakthrough, the referee tells the player that Sloro has inadvertently discovered a new way to miniaturize power cell technology. This reduces the Research Difficulty to 4. This process continues every week until Sloro either gives up on the research, or makes the final breakthrough.]





[IMAGE SPLASH 8 ½ x 11] (Cybernetics and genetics)



Cybernetics and Genetics

Humans are the only race to make frequent use of either cybernetic or genetic replacements. The Graff are the only other race to use cybernetics, and only occasionally. Graff use cybernetics to restore functionality to a damaged or destroyed limb, organ, etc., and rarely to augment or enhance their capability. None of the races, other than humans, make use of genetics at all beyond replacing damaged or destroyed body parts, finding it too eerie to mess with evolution.

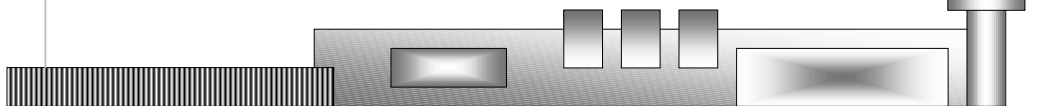
Genetic augmentation and enhancement is more expensive and takes longer to effect than cybernetics. However, it is far more difficult to detect and a lot less prone to "malfunction" than cybernetics. When purchasing a new genetic option for an eye, ear, arm, leg, etc., the whole thing must be re-grown with the new option included. Thus the character must pay the cost for everything all over again.

Cybernetics are used even though genetic engineering exists and is an effective way to create the same abilities in a human. Cybernetics are cheaper and quicker than genetics. Cybernetic limbs, eyes, organs, etc. are relatively "plug-n-play" whereas genetic modifications need to grow or be emplaced from birth. If a soldier or policeman loses an arm, the person can be back in the field in the space of three weeks with a cybernetic arm. If a new one were to be grown and grafted, it could be several months.

In addition to the fact that the cybernetics themselves are cheaper than genetic equivalents, the care of the individual is a little better as well. The soldier above could have the remains of his arm amputated and be on his way towards recovery while the cybernetics are built, customized and shipped. For a genetic limb, the wound would have to be closed, saving as much as possible, and then reopened when the genetic replacement was finished growing 4-5 weeks later. Although genetics are superior to cybernetics in many performance aspects, they are frequently inferior when it comes to necessity.

All enhancements are followed by a (C), (G) or (C/G) designation. This designation indicates that the enhancement may be Cybernetic, Genetic, or either. Mass of cybernetics and genetics does not count against the character's encumbrance limit, but it does increase the mass of the character. All cybernetics and genetics are Availability D, with exceptions noted below. All genetic versions cost triple the listed value.

[IMAGE 3x5] (Cybernetics) Massive Cybernetic juggernaut with heavy cybernetic armor, a mounted cyber-gun, and numerous cybernetic enhancements. Perhaps he is standing in the center of a lab of some sort where he/it has been activated, or it is coming out of a destroyed building on a battlefield.



Cybernetic Power Consumption and Natural PU

The body naturally makes PU. This value is equal to STR + END. This PU is generated every hour and can be used by cybernetics.

Cybernetic Interference with Psionics

By their very nature, cybernetics replace portions of the body with cold metal and electronics. This reduces the quantity of living psionically active material in the character's body. Typically this is referred to as Interference. When a cybernetic character attempts to use a psionic skill, the difficulty check is modified based on the cybernetics the character possesses. For this reason, most psionic characters tend to avoid cybernetics. Note, genetics only cause Interference for the first month after they have been installed. After that, the genetic item has been assimilated into the character's body and has become part of the character.

Cybernetics	Difficulty Modifier
Boosters	+0
Options	+1 for every 2
Skin	+1 for each
Replacement	+1 for each
Other	+1 for each
Armor	+2 for each
Sense	+2 for each

The Difficulty Modifier listed is for each cybernetic of the specified type. That is, each cybernetic Replacement the character possesses will impose a +1 difficulty modifier to all psionic skill checks. Each cybernetic Sense the character possesses will impose a +2 difficulty modifier, etc.

Skins

Chameleon Skin (C/G)

Cybernetic version acts like a camosuit. Genetic version acts like the A'Ghuu ability Natural Camouflage except the chance to be "invisible" is always 60%, and it works in any setting, not just jungle. 8,300 credits.

NBC Resistant Skin (C/G)

Prevents biological and chemical agents from being absorbed through the skin. Protects against the effects of mild radioactivity. 9,000 credits.

Radiation Proof Skin (C/G)

The character can survive up to 15 minutes in a radioactive environment, after which point the character starts to suffer the effects of radiation poisoning. When irradiated, the skin begins to shed its outer layer. Usually this is washed away in a decontamination booth. The skin then grows back over time. 21,000 credits.

Fireproof Skin (C/G)

The character will not be burned by most fires. Cybernetic version laces the skin with fire retardant polymers, which are maintained by nanotech machines in the character's body. Genetic version is similar except the foundation for the fireproofing is based on the genetic code for scar tissue. 18,000 credits.

Thermal Dead Skin (C)

For a maximum of 1 hour at a time, the character's body can mask it's heat signature, giving off no heat. If the character is in water or cold weather, this duration can be extended for an additional hour. The character must spend an equal amount of time unmasked in order to cool down. 15,200 credits.

Electrified Skin (C/G)

The character has a bank of rechargeable cells implanted in his body and his skin is "wired" by nanotech robots. The effect is that three times per day, the character can shock someone as if he were wearing a shocksuit. The cells are recharged by leaching off some of the energy created naturally by the body when the character eats. 32,000 credits. Genetic version is similar to that of an electric eel. In both cases, 6 PU are consumed per shock, and the cells can hold 18 PU.

Osmotic Skin (C/G)

The character absorbs oxygen directly through his skin while underwater, allowing normal breathing when underwater. Cost: 35,000 cr. Availability C.

Replacements

Cybernetic Arm (C/G)

Double the real arm's Hits, e.g., a character with 21 pt arms would have a 42 pt cybernetic arm. Cybernetic arms can have 3 options (one in the bicep, one in the forearm and one in the hand). Cybernetic arms have a TGH equal to the character's TGH score. This is a permanent aspect of the limb and will not change if the character's TGH score changes. 18,000 credits.

Genetic arms are exactly like the original in every respect. They cannot mount options, armor, etc. They simply replace a destroyed arm and do not use PU. Typically cybernetic limbs are covered in real skin that has been grown from a sample of the character's genetic material and grafted over the limb. Consumes 1 PU per hour.

Cybernetic Pseudopod / Tentacle (C/G)

Double the real limb's Hits, e.g., a character with 21 pt tentacles would have a 42 pt cybernetic tentacles. Cybernetic tentacles can have 3 options (two in the mid section, one at the tip). Armor does not count as an option. Cybernetic tentacles have a TGH equal to the character's TGH score. This is a permanent aspect of the limb and will not change if the character's TGH score changes. 28,500 credits.

Genetic pseudopods are exactly like the original in every respect. They cannot mount options, armor, etc. They simply replace a destroyed tentacle and do not use PU. Consumes 1 PU per hour.

Cybernetic Leg (C/G)

Double the real limb's Hits, e.g., a character with 21 pt legs would have a 42 pt cybernetic leg. Cybernetic legs can have 3 options (two in the thigh, one in the shin). Armor does not count as an option. Cybernetic legs have a TGH equal to the character's TGH score. This is a permanent aspect of the limb and will not change if the character's TGH score changes. 19,000 credits.

Genetic legs are exactly like the original in every respect. They cannot mount options, armor, etc. They simply replace a destroyed leg and do not use PU. Consumes 1 PU per hour.

Cybernetic Head (C/G)

Double the real head's Hits, e.g., a character with a 21 pt head would have a 42 pt cybernetic head. Cybernetic heads can be armored with cybernetic armor. Cybernetic heads have a TGH equal to the character's TGH score. This is a permanent aspect of the head and will not change if the character's TGH score changes. 48,000 credits.

Genetic heads are exactly like the original in every respect. They cannot mount armor, etc. They simply replace a badly damaged or scarred head and do not use PU. Has space for one option. Consumes 1 PU per hour.

Cybernetic Torso (C/G)

Double the real torso's Hits, e.g., a character with a 21 pt torso would have a 42 pt cybernetic torso. Cybernetic torsos can be armored. Cybernetic torsos have a TGH equal to the character's TGH score. This is a permanent aspect of the limb and will not change if the character's TGH score changes. 57,000 credits.

Genetic torsos are exactly like the original in every respect. They cannot mount armor, etc. They simply replace a destroyed torso and do not use PU. Has space for two options. Consumes 2 PU per hour.

Skeletal Replacement (C/G)

STR 9, replaces the character's current STR score with a value of 9. No additional increase possible. 16,800 credits.

Dynamic Skeletal Arrangement (C)

Similar to malleable muscles, this allows the character to vary his height, build and posture by +/- 10%. Effectively grants a +10% to Disguise and Impersonate attempts. 32,000 credits.

Cardiovascular Replacement (C/G)

END 9, no additional increase possible. 25,200 credits.

Artificial Lung (C/G)

END +1. Character is able to hold his breath for 20 seconds x END. 12,400 credits.

[IMAGE 4 x 3] (cybernetics)



Senses

Cybernetic Eye (C/G)

A cybernetic eye may have up to 6 modifications. 23,000 credits each. A pair consumes 1 PU per hour.

Cybernetic Ear (C/G)

A cybernetic ear may be modified with up to 2 options. 9,000 credits each.

Thermal Sensor (C/G)

Character has an inherent "sense" of where people and objects are, using IR frequency. Can be jammed by an IR jammer. 19,000 credits. Consumes 1 PU per hour.

Radar (C)

Character can sense radar waves and use them to see. Can be jammed. 21,000 credits. Consumes 3 PU per hour.

Radio Communicator (C)

Standard unscrambled radio communicator implanted near the throat area. Short range. 4,100 credits. Can be made secure for 3,000 credits.

[IMAGE 4 x 3] (cybernetics)

Boosters

The same Booster may be purchased up to 6 times. Each additional purchase after the first doubles the price of the booster. Plastic Surgery is Availability C. All other boosters are Availability E.

Skeletal Augmentation (C/G)

STR +1, per increase. 108,000 credits.

Cardiovascular Enhancement (C/G)

END +1, per increase. 108,000 credits.

Hardened Skin (C/G)

TGH +1, per increase. 216,000 credits.

Joint Replacement (C/G)

FLX +1, per increase. 72,000 credits.

Motor Response Tuning (C/G)

COR +1, per increase. 162,000 credits.

Improved Nerve Impedance (C/G)

SPD +1, per increase. 194,400 credits.

Reflex Amplification (C/G)

REF +1, per increase. 72,000 credits.

Plastic Surgery (C/G)

ATR +1, per increase. 4,320 credits.

Leg Coordination Adjustment (C/G)

MOV +1, per increase. 129,600 credits.

Memory Enhancement (C/G)

INT +1, per increase. 486,000 credits.

Logic & Learning Integration (C/G)

WIS +1, per increase. 486,000 credits.

Neural Amp (C/G)

CLV +1, per increase. 405,000 credits.

Neural Hardwiring (C/G)

WIL +1, per increase. 486,000 credits.

Hunter-Killer Instinct Release (C/G)

FOC +1, per increase. 324,000 credits.

Personality Rewrite (C/G)

CHR +1, per increase. 365,000 credits.

Options

Eye Options

Modification	Cost	Avail	Effects
IR (C/G)	1,000	D	IR vision
Low Light (C/G)	500	C	Night vision
UV (C/G)	1,000	C	UV vision
Magflux (C/G)	1,500	D	Magnetic flux vision
Polarized (C/G)	500	B	Prevents blinding from bright flashes of light
Color control (C/G)	300	B	Change the color of your eyes
Microvision (C/G)	800	B	Microscopic vision
Macrovision (C/G)	900	B	Binocular vision up to 20x power
Image Enhancement (C/G)	1,200	E	Enhanced resolution vision (like an eagle)
HUD info display (C)	700	C	Display information from all your cybernetics in your field of vision
Targeting Reticule (C)	2,700	E	Provides a targeting reticule superimposed on the character's vision, as well as HUD targeting information. Grants +20% to hit.
Micro camera (C)	1,250	C	Records up to 60 still shots in memory; these can be downloaded later for printing, etc.
Video camera (C)	3,200	B	Records up to 30 minutes of footage; this can be downloaded later for viewing, editing, etc.

Eye Option: Range Finder (C)

Available in IR, UV, Radar & Microwave. As long as the operating frequency is not being jammed, the range finder will provide the character with accurate distances to anything the character can see. The maximum range the Range Finder will return is 10 km, distance to objects beyond this range cannot be determined by the Range Finder. In combat, the Range Finder will negate range penalties for the character. Cost: 3,000 cr. Availability D.

Eye Option: Wide angle vision (C/G)

Grants the character a Moderate (Awareness) check to avoid surprise when ambushed and similar circumstances. Cost: 1,200 cr. Availability C.

Eye Option: Autonomic Tracking (C/G)

Allows independent targeting with each eye. Eliminates off hand firing penalty. 7,500 cr. Availability D.

Eye Option: Autonomic Parallax (C/G)

Allows each eye to generate it's own depth perception. Eliminates multiple target penalty. 7,500 cr. Availability D.

Eye Option: Thermal Analyzer (C)

Allows the character to observe minute fluctuations in another person's body temperature. Grants a +2 when attempting to determine if someone is lying to the character. 8,000 cr. Availability E.

Ear Options

Modification	Cost	Avail	Effects
Audio filter	400	C	character does not hear background noise if desired
Audio enhancement	1,000	D	character can hear as well as a cat
Sub-freq.	900	C	character can hear sounds below normal human range
Ultra-freq.	1,800	C	character can hear sounds above normal human range
Voice analysis	2,100	D	character can analyze patterns of speech to detect lies (+2 bonus)
Radio freq.	3,100	C	character can hear common radio transmissions
De-scrambler	4,500	E	character can decrypt friendly radio transmissions
Audio Compensator	3,500	D	mutes deafening sounds and amplifies faint sounds

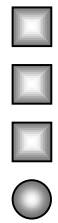
Ear Option: Sonic Range Finder (C)

Available in Ultrasonic and Subsonic. As long as the operating frequency is not being jammed, the range finder will provide the character with accurate distances to anything the character can see. The maximum range the Range Finder will return is 10 km, distance to objects beyond this range cannot be determined by the Range Finder. In combat, the Range Finder will negate range penalties for the character. Cost 15,500 cr. Availability D.

[IMAGE 3 x 3] (cybernetics, options)

Cybernetic Option: Armor (C)

Available for Legs, Arms, Heads, Torsos, and Pseudopods. Cost is a factor of the cost of the limb itself. Light armor is the only kind of armor a limb can have and still maintain the skin graft. Medium and heavier armors cannot have the skin graft on top and are very obvious, as the character has a large metallic limb. Limb armor does not count as an option in the limb. For an additional amount, the armor rating can be improved. +100% to add P rating. +300% to add E rating. +700% to upgrade to K rating. +1500% to upgrade from E to H rating.



Armor	Cost	DP	Rating	Mass	Avail	
Light	+50%	45	B	1.5	D	
Medium	+100%	90	B	2	E	
Heavy	+200%	120	B	3	E	
Assault	+400%	155	B	5	F	

Cybernetic Option: Nanite-Fulerine Composite Replacement (C)

Available for legs, arms and tentacles. Limb is “liquid metal.” The limb may have no other options, as this effectively uses all slots. This modification allows characters to reshape the limb into any simple tool desired, e.g., blades, hammer, scissors, etc. The “tool” may have no more than 1 moving part, as in a pair of scissors. Consumes +2 PU per hour normally, and 12 PU when changing shape. Insufficient power will cause the limb to freeze in place.

Cybernetic Option: Kit Storage (C)

Available for legs, arms and tentacles. This specialized compartment holds one Kit of any type. All devices and tools are secured in place with fasteners and clips. The mass of a stored kit adds to the mass of the character, but does not count towards encumbrance. Cost: 500 cr. Availability C.

[IMAGE 3 x 3] (cybernetics, options)

Cybernetic Option: Grip Crusher (C/G)

Available for arms. Grants a +1 bonus to Control, Lock and Hold martial arts maneuvers. Also allows the character to inflict d4 points of lethal crushing damage with just his hand. Character's with this modification can maintain their grip on an item that has been successfully knocked from their hands on a successful Moderate (STR) check. Genetic version has hand muscles replaced with stronger muscles from other parts of the body and tougher bone structure. 16,000 credits.

Cybernetic Option: Multi-tool Hand (C)

Available for arms. Each finger tip in the hand has an array of three different little tools that can extend out as needed. Character is considered “Partially Equipped” for all technical skill rolls. Cost: 4,000 cr. Availability C.

Cybernetic Option: Surgical-tool Hand (C)

Available for arms. Same as a Multi-tool, but used for surgery. Grants a +1 bonus to Field Medic skill checks, and allows Surgery as if “Partially Equipped.” Cost: 4,500 cr. Availability D.

Cybernetic Option: Knee/Elbow Spikes (C/G)

Available for legs and arms. When employed, elbow spikes add d3 to strike damage, knee spikes add d4 to kick damage. Retractable. 7,000 credits.

Cybernetic Option: Shoulder mount Spot Light (C)

Available for torsos. Retractable. Burns 2 PU per minute of operation. 3,500 credits.

Cybernetic Option: Seismic Sensors (C)

Available for legs and tentacles. Character can tell direction and distance of anything moving on the ground. Can also tell approximate size. 6,000 credits.

Cybernetic Option: Equipment Mount (C)

Available to cybernetic Arms, Legs, Torsos, Tentacles and Heads. Provides room to mount a piece of standard equipment. If the device requires power, this must still be supplied normally. 1,200 credits.

Cybernetic Option: Power System (C)

Available to legs, arms, torsos, tentacles and heads. Provides room and interface to mount a power system. The power system must be appropriate for the location, e.g., only a bicep power pack may be mounted in the bicep. The power system is removable, but normally securely mounted in the limb. 3,800 credits. The power system may power any cybernetics in the characters body, regardless of their location.

[IMAGE 4 x 3] (cybernetics, Options)

Cybernetic Option: Line-Thrower (C)

Available for arms, torsos and tentacles. Character shoots up to 50 meters of triple strand microline. The line is detachable. The line-thrower comes with an internal motor capable of lifting 200 kg. 1,100 credits.

Cybernetic Option: Hydraulic Muscles (C)

Available to legs, arms, torsos and tentacles. The individual limb has an effective STR +1. 2,500 credits.

Cybernetic Option: Polymer Muscles (C)

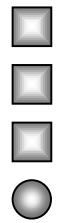
Available to legs, arms, torsos and tentacles. The individual limb has an effective STR +2. 3,500 credits.

Cybernetic Option: Multanium-Cord Muscles (C)

Available to legs, arms, torsos and tentacles. The individual limb has an effective STR +3. 7,000 credits.

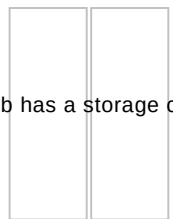
Cybernetic Option: EM Driven Muscles (C)

Available to legs, arms, torsos and tentacles. Uses EM pulses and a battery of magnetic synthetic muscles to trigger movements. Uses 1 PU per minute, per system, e.g., having this option in 2 arms will use 2 PU per minute. The individual limb has an effective STR +3, SPD +3. 21,000 credits.



Cybernetic Option: Cargo Compartment (C)

Available to legs, arms, torsos, tentacles and heads. The limb has a storage compartment in it. Volume is 12,000 cm³ (30 x 40 x 10 cm). 120 credits.



Cybernetic Option: Bio-Fusion Furnace (C)

Available to legs, arms, torsos and tentacles. Increases the natural PU produced by the character's body by 100%. 35,000 credits. Increases character's body mass by 7 kg.

Cybernetic Option: Limb Extension (C)

Available for arms, legs and tentacles. The limb is capable of extending itself up to 2 meters. Availability C. Cost: 1,250 cr.

Cybernetic Option: Chela (C)

Available to arms. Replaces the arm's hand with a claw designed for combat and inflicting damage. Adds +d10 damage to Strike attacks. This limb is not capable of manipulating weapons or object. 3,600 credits.

Cybernetic Option: Weapon Mount (C/G)

Available to arms and tentacles. Availability E. Retractable mount for ranged and melee weapons.

Ranged weapons can be no larger than a heavy pistol. The weapon pops out of the character's forearm or fires through a sponson type turret mount. If the option is purchased twice in the same arm, the arm may mount weapons up to the size of a carbine. If the option is purchased three times in the same arm, the lower arm is replaced by the weapon and the weapon may be as large as a support rifle. In the last case, the weapon is no longer retractable and is very obvious. All weapons still require ammunition and power like normal. Weapons may be retracted as long as they hold nothing larger than standard clips and magazines, they can use larger ammunition holders or be attached to power packs, but they cannot be retracted (and thus hidden), at the same time.

"No hands?! This is news to me! I thought I had fucking hands! How the hell am I supposed to hold my assault rifle?"
- cyborg with new minigun installed in his arm.

Melee weapons are limited in size to daggers. If the option is purchased twice in the same arm, the mount may hold melee weapons up to the size of a long sword (the weapon folds in half). Power must still be supplied to energy using melee weapons. Power can be in the form of power clips or from larger power systems via adapters, like normal. The weapons are not able to retract if they carry anything larger than a standard power clip.

Genetic weapon mount is like a retractable cat claw. The weapon is equivalent to a Forced Carbon Dagger (for 8,000 credits it can be equivalent to a Forced Carbon Long Sword). The genetic version may be "installed" on any non-cybernetic arm and does not require the arm to have been replaced. 4,000 credits.

Armor

These armor modifications protect all **non-cybernetic** parts of the body. That is, this will not protect any limb that is cybernetic, to include heads and torsos.

Body Armor, Light (C/G)

The character has nanotech machines injected into him. They spend two weeks embedding polymer and alloys into his skin tissue. The result is a lightweight armor that is nearly undetectable. This armor is rated B and has 45 DP. Damage to armor does not affect the character. Damage will "heal" at $\frac{1}{2}$ the character's healing rate, i.e., in the time it takes the character to heal 2 points of damage, the armor will heal 1 point. For an additional amount, the armor rating can be improved. +100% to add P rating. +300% to add E rating. +700% to upgrade to K rating. +1500% to upgrade from E to H rating. Cost 2,500 credits, adds 8 kg to the character's mass. Availability D.

Body Armor, Medium (C/G)

The character has nanotech machines injected into him. They spend four weeks embedding polymer and alloys into his skin tissue. The result is an armor that is inconspicuous. This armor is rated B and has 90 DP. Damage to armor does not affect the character. Damage will "heal" at $\frac{1}{2}$ the character's healing rate, i.e., in the time it takes the character to heal 2 points of damage, the armor will heal 1 point. For an additional amount, the armor rating can be improved. +100% to add P rating. +300% to add E rating. +700% to upgrade to K rating. +1500% to upgrade from E to H rating. Cost 7,000 credits, adds 10 kg to the character's mass. Availability E.

Body Armor, Heavy (C)

The character has nanotech machines injected into him. They spend eight weeks embedding polymer and alloys into his skin tissue. The result is a heavy armor that is obvious. This armor is rated B and has 120 DP. Damage to armor does not affect the character. Damage will "heal" at $\frac{1}{2}$ the character's healing rate, i.e., in the time it takes the character to heal 2 points of damage, the armor will heal 1 point. For an additional amount, the armor rating can be improved. +100% to add P rating. +300% to add E rating. +700% to upgrade to K rating. +1500% to upgrade from E to H rating. Cost 11,000 credits, adds 16 kg to the character's mass. Availability E.

Body Armor, Assault (C)

The character has nanotech machines injected into him. They spend sixteen weeks embedding polymer and alloys into his skin tissue. The result is an extremely heavy armor that is conspicuous. This armor is rated B and has 155 DP. Damage to armor does not affect the character. Damage will "heal" at $\frac{1}{2}$ the character's healing rate, i.e., in the time it takes the character to heal 2 points of damage, the armor will heal 1 point. For an additional amount, the armor rating can be improved. +100% to add P rating. +300% to add E rating. +700% to upgrade to K rating. +1500% to upgrade from E to H rating. Cost 16,000 credits, adds 24 kg to the character's mass. Availability F.

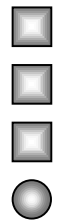
Other

Personality Chip (C)

Contains quirks and habits of common or famous people. Character feels a subconscious "tendency" to exhibit these traits when the chip is in. That is, if the character is not thinking about it, he'll exhibit the personality traits, but if the character wants to, the traits can easily be "overridden." This does not require concentration or anything difficult, just the desire to override the chip traits. Grants +10% to *Impersonate* attempts. 18,000 credits.

Cybernetic Jack (C)

Allows various cybernetic links to be plugged into the character and thought controlled. Required to use a Weapon Link, Vehicle Link, Radio Link, Computer Link or Robot Link. 15,000 credits.



Weapon Link (C)

Physically links the character's mind to a weapon, typically a handgun, with a length of microthin fiber optic line. This line extends from the weapon to a Cybernetic Jack. While linked to the weapon, the character receives a bonus to hit equal to $5\% \times \text{REF}$. Weapon must be modified to accept a weapon link. Cost is 300% base weapon cost. Character suffers a penalty of -45% to hit with all other weapons and a -6 penalty on all skill and ability rolls while the weapon link is activated. 6,000 credits.

Vehicle Link (C)

Physically links the character's mind to a vehicle with a length of microthin fiber optic line, allowing the character hands free operation of the vehicle. This line extends from the weapon to a Cybernetic Jack. Vehicle must be modified to accept a vehicle link. Cost is 1% vehicle cost. Character suffers a penalty of -45% to hit with all weapons and a -6 penalty on all non-driving skill and ability rolls while the vehicle link is activated. 10,000 credits.

Radio Link (C)

Links the character's mind to communication equipment. Allows thought controlled broadcasts, receiving and monitoring of a radio, satellite net, or other communication system. Radio must be modified to accept a radio link. Cost is 100% radio cost. 4,000 credits.

Computer Link (C)

Links the character's mind to a computer system. Allowing thought controlled remote access. If the computer is destroyed while the character is jacked into it, the character is stunned for 2d12 minutes as his mind attempts to recover. Computer must be modified to accept a computer link. Cost is 3% computer cost. Character is unaware of his surroundings while plugged into the computer. Character is unable to perform any tasks other than working with the computer, with the exception of disengaging from the computer. This is instantaneous. 18,000 credits.

Robot Link (C)

Links the character's mind to a robot with an infrared beam. Allows remote operation or communication with a specific robot. Allows the character to operate the robot as if it were his own body. If the robot is destroyed while the character is jacked into it, the character is stunned for 2d12 minutes as his mind attempts to recover. Robot must be modified to accept a robot link. Cost is 1% robot cost. If the character has assumed full remote control of the robot, the character is unaware of his surroundings and consequently unable to move, shoot or perform other actions. If the character is merely using the robot link to communicate with the robot, there is no penalty. 36,000 credits.

[IMAGE 4 x 3] (cybernetics)

Powerframe (C)

Surgically implanted in the character's body, the Powerframe "wraps" around the skeleton. It has stainless steel EMP motors at all joints to assist in movement. The motors are driven by static charge, but can be "activated" by normal PU. When activated, the motors amplify the character's motions. There are three types of Powerframe: A, B and C. When activated, they provide bonuses to STR, SPD, END and MOV. The A Powerframe increases STR, SPD and END by 50% and increases MOV by 1. The B Powerframe increases STR, SPD and END by 100% and increases MOV by 2. The C Powerframe increases STR, SPD and END by 200% and increases MOV by 3. Powerframes increase the character's mass by 4, 7 and 10 kg, respectively. When activated, they use 4, 6 and 10 PU per minute, respectively. Cost is: 3,600, 10,800 and 21,600 cr. Availability E.

Biochemical Battery (C/G)

Stores power inside the character. Up to 5x (STR + END) in PU can be stored, which is the amount produced naturally by the body in 5 hours. Adds .5 kg to the character's mass. Cost: 12,000 cr. Availability D.

Pain Inhibitor (C)

Reduces penalties from wounds. Light Wounds are ignored and all other wounds are effectively "Light Wounds." Grants a +2 bonus on Loss Of Consciousness rolls. 18,000 credits.

Malleable Muscles (C/G)

Helps for disguising yourself; allows the character to change his apparent facial structure, and minor changes to body build, etc. Effectively grants a +5% to *Disguise* and *Impersonate* attempts. 5,600 credits.

Speed Healing (C/G)

Character has nanotech robots inside that aid the healing process. The character heals 1 Hit every 2 hours. 24,000 credits.

Active Reconstructive Nanites (C/G)

Active Reconstructive Nanites (ARN). Character has special nanotech robots inside that aid white blood cells in rebuilding the body. Character heals 1 Hit every 30 minutes. Double this rate if the character is resting. ARN and Speed Healing can work in conjunction with each other. Consumes 1 PU per hour. 64,000 credits.

Regeneration (C/G)

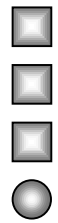
This is highly classified military technology. This modification combines high speed nanites, precision AI architecture and the latest in artificial white cell replication and augmentation. Character heals 1 Hit per minute. Double this rate if the character is resting. Will not work in conjunction with ARN or Speed Healing. Consumes 2 PU per hour. 960,000 credits. Availability G.

Morphine Synthesizer (C/G)

Sub-dermal device. This manufactures morphine from chemicals in the body, one dose can be made per day. Up to three doses can be stored at any given time. Administered at will by the character's thoughts. This will negate penalties from wounds for 45 minutes for each dose. 7,500 credits.

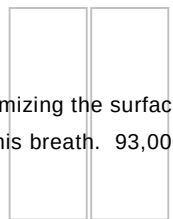
Adrenaline Synthesizer (C/G)

Like the morphine synthesizer. Adrenaline temporarily boosts all physical stats by 1. Boosts Hit Points by 50%. Boosted hits are lost when the drug wears off. Duration is 15 minutes. 22,000 credits.



Honeycomb Alveoli (C/G)

Increase capacity allows longer times holding breath by maximizing the surface area available to absorb oxygen within the lung. END +1, triples time the character can hold his breath. 93,000 credits.



NBC Lung Filter (C)

Uses 6 PU per minute while working. Protects the character against respirating NBC agents. 65,000 credits.

Advanced Antibodies (C/G)

Resistance checks against poisons, diseases and viruses are made easier by 1 level. 17,000 credits.

Detoxifier (C)

Body's ability to remove toxins from itself is improved. Allows the character an extra attempt to fight the effects of poisons. 14,000 credits.

Structural Analyzer (C)

Aids the analysis of targeting structures, vehicles, robots, etc. Allows character, after d6 minutes of concentration, to find and target weak points if they exist, and thus inflict 100% more damage with his weapon. Allows character to inflict 200% more damage with placed explosives. To successfully locate a weak point, the character must make a Very Difficult (INT) check. The character receives a +2 bonus to relevant skills, e.g., Demolitions, when placing explosives. Consumes 3 PU per attempt. 146,500 credits.

Olfactory Chemical Analyzer (C/G)

Allows tracking and identification by scent. 9,000 credits.



Web Feet & Hands (C/G)

Improves swimming capability, +1 MOV when swimming. 4,500 credits.

Gills (C/G)

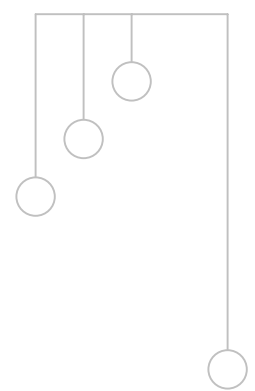
Allows character to breath underwater. 20,000 credits.

Voice Modulator (C)

Allows distortion of the character's voice. Grants a +10% to *disguise* attempts. 12,000 credits.

Voice Synthesizer (C)

Allows mimicry of another persons language (only as well as the character remembers; if combined with a voice analyzer, it will be perfect). Grants a +10% to *impersonation* attempts. 10,500 credits.





Alien Cybernetics and Genetics

This entire section is optional and need not be included in the campaign if the referee decides so.

Humans have always pioneered research in genetic manipulation. With the advent of commerce with aliens, each race has had to adapt to very different philosophies and ways of life. Among these, is the common use of cybernetics and genetic manipulation by humans. Although the cybernetics section lists which races can and cannot or do and do not use cybernetics, there are occasional exceptions. These exceptions are outlined below.

Alien Attitudes

Meylor

The more worldly travelers in the Meylor community have come to recognize and appreciate cybernetics. Typically, these individuals are spacers and other voyagers that have been hurt in an accident of some sort. As such, Meylor characters may purchase cybernetics from the Replacement section of cybernetics. These cybernetics cost 10% more than listed. Meylor may make use of genetic versions of the cybernetics available to them.

A'Ghuu & Nor Sha Mu

A'Ghuu and Nor Sha Mu may make use of the developing fields of Cyberbotanics (still in its infancy) and Allobotanics, which is a field with many recent developments. Cyberbotanics and Allobotanics are addressed below.

Graff

Graff were unique among the non-human races in that they already made use of replacement cybernetic technology before they encountered humans. As such, Graff characters make purchase cybernetics from the Replacement section of cybernetics, as well as make use of any Options that pertain to their Replacements. Graff may make use of genetic versions of the cybernetics available to them.

Lyandithates

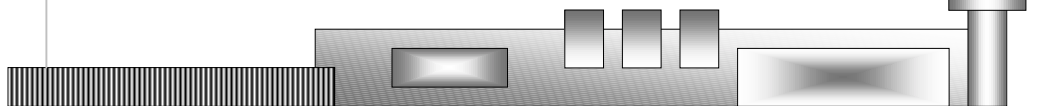
Although few developments relate to them, Lyandithates find the concept of genetic revisitation fascinating. As such, Lyandithates may make use of any genetics they desire, with the exception of Boosters. Lyandithate genetic enhancements cost 50% more than listed.

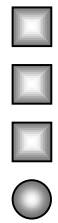
Ferrites

Due to the unique shape changing nature of Ferrites, some amazing developments have occurred as a result of their interaction with human cyberneticists. The field of research called Ferronetics came into being. Although it is difficult for a Ferrite to manipulate its body into shapes with moving parts, they can, with extensive training and computer aid, learn to very slowly form parts of their bodies into a limited range of cybernetic imitations. These cybernetic "growths" have the exact characteristics as their cybernetic equivalents. Ferronetics are addressed below.

Slen Boraka

There is little in the fields of genetics or cybernetics that is of use to the Slen Boraka. They may make no use of either type of enhancements.





Ferronetics

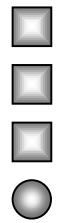
Ferrites may invest XP into training a part of their bodies to perfectly mimic various cybernetics. This process is costly both in terms of time spent training and in XP spent to learn each cybernetic. Number of XP required is equal to the cost of the cybernetic, divided by 250. This will allow the Ferrite to "teach" a part of it's body how to emulate certain cybernetics. The Ferrite then adds that cybernetic to a "list" of capabilities and may spend d10 minutes "conjuring" or growing that cybernetic modification whenever needed.

A Ferrite may simultaneously maintain a number of cybernetic growths equal to it's INT score. Duration of existence for each growth is the Ferrite's END score, in minutes.

Cybernetics pertaining to senses that Ferrites don't have (sight, smell, etc.), metabolic cybernetics (Osmotic skin, Artificial Lung, healing cybernetics, gills, etc.), and Boosters and Armor are unavailable as Ferronetics. Ferronetics do include Option cybernetics and there is no requirement to have the prerequisite cybernetic to "install" an Option.

[IMAGE 4 x 3] (ferronetics) image of a ferrite employing a cybernetic of some type.

[IMAGE SPLASH 8 ½ x 11] (allobotany) image of a super nasty A'Ghuu with some obvious form of genetic enhancement. Very ferocious. The genetic enhancement should probably be some sort of direct combat applicable enhancement.



Cyberbotany

A fusion of cybernetics and botany. Available to A'Ghuu and Nor Sha Mu. Currently, only a field of research, there are few cyberbotany products available on the market.



Cyber Jaws (C/G)

A'Ghuu cyberbotanic item. (There is an exact identical cybernetic item available for Graff.) Capable of making an augmented bite attack every other turn, and a normal bite attack on the intermittent turns. An augmented bite attack has a +1 bonus to strike and does double bite damage. Mass: .25 kg x STR score. Jaws must be upgraded any time the character's STR score changes. The upgrade costs 1,000 cr x new STR score. PU use: 1 per hour normally, 1 per augmented attack. Availability D. Adds to the character's mass. 45,000 cr.

Allobotany

The fusion of genetic manipulation and botanical research. Most allobotanical enhancements are plant specific natural defenses. However, some allobotanical enhancements are very alien in nature. A few of the original genetic enhancements available to A'Ghuu: Knee / Elbow spikes, Weapon Mount and Biochemical battery. Allobotany is a rare and exotic field of research. By default, all allobotanical enhancements are Availability E, unless otherwise stated. Receiving an allobotanical enhancement involves an expensive procedure. In addition to the cost paid for the enhancements listed below, the character must also pay a base cost of 60,000 cr. More than one enhancement can be added during the same procedure, however. Only A'Ghuu and Nor Sha Mu can receive allobotanical enhancements.

Acerose Body Spikes (G)

The longer spikes are very obvious. Character inflicts double damage when attacking unarmed. 4,500 cr.

Agaloch (G)

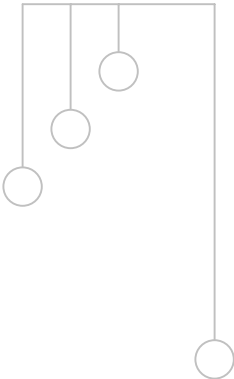
Excrete pheromones / perfumes that reduce hostile intentions in other creatures. Allows the character a roll on the NPC reaction table for NPC's that already dislike or hate the PC. The NPC's will react with the milder result (either their initial feelings, or the table result). Alternatively, allows the character the possibility of talking his way out of a confrontation. This is a Difficult skill check, if the character has any applicable skills, or a Moderate (CHR) ability check, otherwise. 7,000 cr.

Aromatic Scent (G)

Available to A'Ghuu. The creature constantly gives off a faint fragrance that others find pleasant. Grants a +2 bonus to NPC reactions. Availability D. Cost 3,500 cr.

Barbed Limb Tips (G)

A'Ghuu does 50% more damage from punches and kicks. 3,000 cr.





Cauterant Flora (G)

When the A'Ghuu's blood mixes with most atmospheres, it becomes a deadly acid. Anyone that inflicts lethal melee damage upon the A'Ghuu stands a chance of getting splashed by the A'Ghuu's acidic sap. Anyone that delivers more than 5 points of lethal damage to the A'Ghuu without using a melee weapon will be splashed for 3d10 points of damage (roll a separate hit location for each d10 of damage). Anyone that hits the A'Ghuu with a melee weapon will be splashed for d10 points of damage. 16,000 cr.

Chameleon leaves (G)

The leaves will change color according to the terrain they are in so that the character will always appear to be an indigenous plant. 5,000 cr.

Elongated limbs (G)

The character's limbs are twice as long as normal for an A'Ghuu. This grants the character a +3 bonus for Escape, Lock, Control and Disarm martial art maneuvers. 6,500 cr.

Enhanced Photosynthesis (G)

Eliminates meat from the character's diet. The plant no longer needs to eat meat to survive. Enables comfortable living without a carnivorous diet. 2,200 cr.

Excrete poisons (G)

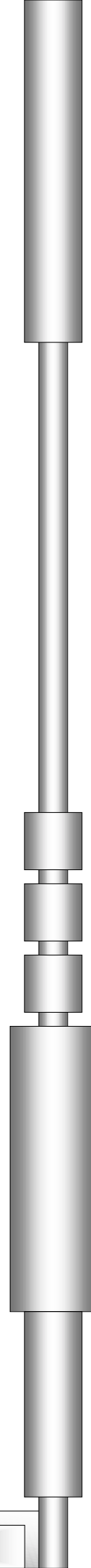
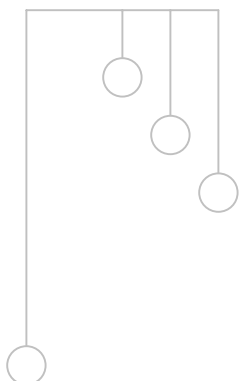
Poisons are contact poison. Anyone that touches the plant, or wrestles with it, will slowly find their whole body going numb. This poison is a mild neuro-paralysis toxin. Anyone touching the plant will loose 1 point from all physical abilities per turn until their SPD is zero. At this point, they will be completely paralyzed. The paralysis will wear off in an hour. A successful Moderate (BOD) check will delay the ability point loss for one turn. This check may be made each turn until the character is paralyzed. 42,000 cr.

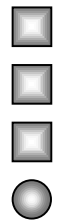
Explosive spore pods (G)

Treat these spore pods as fragmentation marble grenades. They generate at a rate of 1 per three days. Maximum number of pods is equal to the character's BOD score. 18,000 cr.

Gas Pods (G)

Available to A'Ghuu. Character has a number of gas pods equal to BOD. The gas pods grow at a rate of 1 per week. Depending on the strain of DNA used when splicing the gas pods into the A'Ghuu's DNA chains, the specific type of gas will vary. The gas pods may be plucked and thrown as grenades. Individuals caught in the burst of a gas pod may make a Difficult (REF) check to ½ the duration of effects. For Poison gas, this reduces the difficulty of the ability checks by 1 level.





Type	Cost	Effects
Explosive	15,000	Radius: 10 m. Anyone caught within the blast may make a Difficult (REF) check to half the damage. Damage is 2d10, plus the A'Ghuu's BOD score.
Sleep	5,000	Radius: 10 m. Anyone inhaling sleep gas must make a Difficult (FOC) check to remain conscious. Otherwise, they will fall into a comatose state for 2d10 minutes.
Poison	15,000	Radius: 5 m. Anyone inhaling poison gas must make a Difficult (PHY) check to remain conscious. A Moderate (PHY) check is required to avoid dying in 2d10 hours.
Smoke	3,500	Radius: 30 m. This dense cloud of smoke will last for 2d10 minutes. All targets inside or behind the smoke cloud are considered to be in thick cover (-30% to hit).
Stink	3,500	Radius: 15 m. Anyone caught within the Stink cloud must make a Difficult (FOC) check to avoid spending 1 round doing nothing but escaping the stench. The cloud will last d10 minutes. Anyone within the gas cloud will reek of a foul stench. Smelling of Stink gas modifies NPC reactions by -2. Characters will smell of Stink gas for d10 days.
Ink	2,500	Radius: 10 m. Anyone within an Ink gas cloud must make a Difficult (REF) check to avoid being temporarily blinded. Success indicates the character is Partially Blind (-60% to hit); failure means the character is Completely Blind (-150% to hit). The character must spend d10 turns flushing his eyes with water to regain his vision.
Laughing	4,000	Radius: 10 m. Anyone inhaling Laughing gas must make an a Difficult (FOC) check every turn for the next 2d10 turns to avoid spending that turn on the ground in hysterical laughter. If the check is successful, the character still giggles at everything that happens for the next 2d10 turns (-20% to hit).
Rage	6,000	Radius: 15 m. Anyone inhaling Rage gas must make a Difficult (FOC) check to keep a berserk rage in check. Otherwise, they will attack the nearest enemy as if Berserking. The character will Sprint towards his target to attack in melee combat. If there are no enemies within sprinting range, the character will fire as big a weapon as he can find at maximum ROF, using maximum burst capability (if possible), on the highest setting (if possible). The effects last for d10 turns. The ability check must be made each turn to determine the character's behavior. If there are no enemies around, the character will attack the last person that disagreed with him or upset him.
Lust	7,000	Radius: 10 m. Anyone inhaling Lust gas must make a Difficult (FOC) check to keep an insatiable lust in check. Otherwise, they will cease all activity and attempt to seduce the person with the highest ATR in their line of site to sleep with them. This check must be made every turn for the next d10 turns.

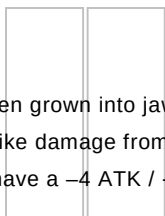
Hardwood (G)

Character is more resistant to physical damage. Character's DP is effectively increased in all locations by an amount equal to his BOD score. FLX is reduced by 1. 9,000 cr.



Jaw-Hand (G)

One of the A'Ghuu's hands has been grown into jaws similar to their mouths. Damage is: 2x STR, no STR bonus. This damage supplants strike damage from that limb. Firing a weapon with this limb is done with a –20% penalty and melee weapons have a –4 ATK / –4 DEF penalty. Cost 3,500 cr.



Mesmerizing color scheme (G)

Available to A'Ghuu. When light reflects off the creature's leaves, it creates a soothing and hypnotic pattern of colors. +2 bonus to Hypnosis skill checks and NPC reactions. Cost 6,500 cr.

Natural Emollient (G)

The character's "blood" (sap) is useful for eliminating rashes and speeding healing. These rare A'Ghuu are commonly hunted on the black market. Their sap can be drawn in small quantities indefinitely, or taken in large quantities once per day. In small quantities, the sap can be used to soothe skin rashes, burns and other irritants. In large quantities, it will heal 10 hits of burn damage, as well as soothe, sanitize and anaesthetize the burn area. 20,000 cr.

Organometallic Metabolism (G)

Plant becomes a metallivore. Plant eats metal and metal only. Plant may make BITE attacks against robots and machines. 35,000 cr.

Osmotic leaves (G)

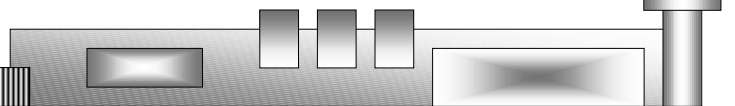
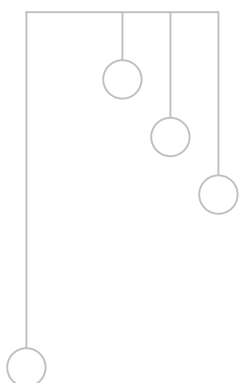
Enables the plant to breath underwater. 3,000 cr.

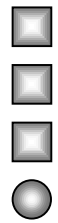
Projectile Spikes (G)

Character can shoot his body spikes. Chance to hit is equal to COR x7%. Spikes regenerate at a rate of 1 volley per three days. Each volley is treated as a shotgun style flechette blast. Damage is 4d6, maximum range is 40 meters. Area of effect is a 3 m wide path. Roll to hit anyone in the path. Each person hit is hit by d3 –1 rounds. Maximum number of volleys is equal to ½ BOD score (round up). 32,000 cr.

Water Retention (G)

A'Ghuu's water requirements are 1/10 normal. Additionally, should the character be willing, other characters may pluck water holding "fruit" from the A'Ghuu's body once a day (the fruit is equivalent to 1 liter of water). 7,000 cr.





Non-Player Characters (NPCs)

General NPC Attitudes Towards Aliens

Humans tend to be frightened by giant snakes, dinosaurs and large carnivorous plants. Along with giant octopii. Humans are inclined to gravitate toward other humans due to familiarity, although they don't mind the company of any of the races.

Genetic engineered humans, with their extremely Short lives, have a very different world view than most humans. They often resent natural humans, being envious of their long life spans. Genetic engineered humans are usually sympathetic with cybernetic humans because they are "flawed" in an advantageous way, like GE humans. GE humans have an inherent bond with other GE humans, due to their recognition that they have so little time. They are less prone to the prejudices and racial fears of normal humans because they just don't have time for such things.

Cybernetic humans naturally share the kindred feeling of humans, but recognize the trauma typically associated with cybernetics and what this can do to the mind. So, they are less open toward other cybernetic humans.

Lyandithates consider all ground bound creatures to be extremely alien. And the space borne nearly metal Ferrites are so far opposite their own nature, that they have difficulty relating to them or dealing with them.

Ferrites' ability to assume the form of any race with which they deal grants them an advantage in interpersonal interactions. Ferrites like humans, although they distrust cybernetics and fail to understand genetics. They have difficulty with Lyandithates due to their inability to assume a lighter than air form. Their ability to shape change aides them in most interactions.

Slen Boraka have difficulty with humans, sensing their predominate fear of serpentine creatures, especially serpentine creatures 3 meters long. This can make dealing with humans a touchy situation. They get along well with A'Ghuu, since they are both natural predators on their home planets and have extremely unique physiology's. Slen Boraka have a brotherhood type of bond with each other, although it is not inflexible nor without exception.

Graff have an inherent inexplicable mild distrust of A'Ghuu.

Voix are as far as they can get from the physiology of all the other races. They are intelligent, though, and approach all encounters with an open mind.

Meylor like Graff, finding them entertaining and friendly. They get along well with both Slen Boraka and A'Ghuu, liking the latter due to their multiple "tentacles," although they frequently remark that A'Ghuu thorns "hurt."

NPC Reactions

The following tables reflect natural prejudices, fears and preferences of each race. Note, that while race A may have no dislike for race B, if the converse is true, there is still a penalty to the reaction since race A has to overcome race B's predisposition against race A.

		Character Race										
		H	GE	C	L	F	SB	A	G	V	M	R
NPC Race	H	+1	-1	+1		+2	-2	-2	-2		-1	
	GE	-1	+2	+1		+1	-1	-1	-1			
	C	+1	+1			+1	-2	-2	-2		-1	
	L					-1	-1	-1	-1	-1		
	F	+2	+1	+1	-1				+1	+1	+1	
	SB	-2	-1	-2	-1		+1	+1			+1	
	A	-2	-1	-2	-1		+1		-1		+1	
	G	-2	-1	-2	-1	+1		-1			+1	
	V				-1	+1						
	M	-1		-1	-1	+1	+1	+1	+1			
	R											

"Say something friendly."

This table reflects prejudices and each race's inherent ability to relate. Robots have a +0 reaction modifier. AI robots and computers have a +d5 -3 modifier because they are wild cards. The modifiers listed are used when checking for NPC reaction to the PCs during normal encounters. If the PC doing the talking and the NPC encountered are of the same race, the PC's ATR social bonus/penalty is added to the reaction roll. Regardless of the PC's race, his CHR social bonus is added to the reaction roll.

Other factors modifying the reaction roll

Modifier

PC's are armed to the teeth

-2

PC's look rough, like they've been in the field for a month

-1

PC's appear to have authority (either due to the presence of
Accompanying authority figures or because they look like military or
federal agents, etc.)

+2

PC's are in a hurry, speaking quickly, or otherwise behaving with an
inexplicable sense of urgency, e.g., behaving as if etiquette is an
ancillary concern

-1

PC's are well groomed and dressed

+1

PC's are making an effort to respect local customs and social attitudes

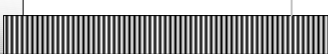
+1

"I hate to be rude,
but I'm in a terrible
hurry."

To determine an NPC's reaction to the characters, add the appropriate modifiers above and roll on the following table.

Morale and Loyalty Checks

Morale checks are for enemy NPC's. The check for the enemy represents their determination, so their pertinent ability is WIL. The Ability check is Moderate or Difficult, determined by how badly the situation is going against the NPCs. A failed check indicates the enemy NPC's are having serious second thoughts about their current course of action and will seek to flee as fast as possible, given the opportunity.





Loyalty Checks

Loyalty checks are for hired NPC's, or henchmen. The Employer (PC) makes a Difficult (CHR or ATR, whichever is higher) check. The character adds as a modifier the bonus or penalty from either CHR or ATR, whichever score is lower. Add the Racial Reaction Modifiers. A failed check indicates the hired NPC's are having second thoughts about their employer's capabilities and the likelihood of success of their mission. The NPC's will attempt to leave the party at the earliest possible opportunity.

Modifiers for Loyalty Checks (NPC hirelings)	Modifier
Have things gone well in general?	±1
Have things gone according to plan?	±1
Have the NPC's been treated well?	±1
Have any NPCs developed a personal interest, e.g., sex, romance, money, etc., in the party?	+2
Employer's personality	±1
Have the NPCs been paid yet?	±1

[Trapped, Ed and Neb turn to fight, once again. In the first several turns of combat in the hangar, Ed and Neb have wasted most of the Empirium agents. The remainder must make a morale check given that these two individuals have laid waste to an entire elite Empirium Seek and Destroy unit. The referee determines that the difficulty of the morale check shall be 13 (a Moderate check because they are well disciplined). The referee rolls the check using the average of the two remaining soldier's WIL scores, which is 8. Rolling a d10, the result is a 16 (the die roll was an 8). So, the two remaining soldiers press the attack and next turn are cut down by Ed and Neb. Oh well, they had their chance.]

[IMAGE SPLASH 8 ½ x 11] (living in the future) some sort of vast image of downtown. Soaring buildings with monorail trains traveling between them, automated taxis move through the road, strange creatures of all types walk the side walks, there should be lots of greenery around, as well as vehicles flying through the air in the distance. Perhaps large floating blimps ala *BladeRunner* with bill boards on them. Image should be of a very busy, very high tech, very futuristic city. There should be a lot of things in the image, all of which are clamoring for attention. Literally, I want to be able to look at the image for a long time and still find new and different things in it.



Living in the Future

Services

Fingerprint (or equivalent) Removal

1,500 credits.

Prevents characters from leaving fingerprints all over scene of the crime, theft, spy mission, etc.

Muzzle Rescratching

150 credits + 20% weapon cost.

Prevents weapon from being traced using its ballistics.

New Barrels for Support and Heavy weapons

35% weapon cost.

After every adventure, characters must purchase new barrels for support and tripod weapons. Barrels may need to be changed during extremely combat intensive adventures, as well.

Body Armor Repair

Only Tile and Plate style armors can be repaired. Cost is 50 credits per point.

Personal Grooming

30 credits.

Includes haircut, manicure / nail or claw trimming, wardrobe consultation, etc. Boosts character's ATR score by 1 for the remainder of the day.

Vehicle Tune-up

600 credits.

Required every 6 months otherwise performance will degrade. Accel, Decel and Top speed are each reduced by 5 m/t each month after 6.

Recharges

10 credits +1 per PU for personal equipment, +5 per PU for vehicles.

Power System Calibration

100 credits. Required once a month for all self-charging power systems, otherwise they will fail to charge properly and will permanently deplete their power.

Commo Service

60 credits per month.

Needed for phones, pagers, internet connections and hypercomm capability.

Public Access Terminals

These are located at prominent intersections in cities, as well as in major commerce centers. From one of these terminals one can make an audio / visual phone call, request a cab, access the city or world wide data net, reference library, get directions, order delivery food, make reservations, or call upon any of a number of other services.

Public Phones

Public phones resemble rugged cordless phones and fly through the air. They are capable of paging the recipient of a phone call. The recipient uses an ID scanner to validate recipient of the phone

Hypercomm Phone Call

2 credits / min.

Interstellar real-time phone call.

Weapon Cleaning

30 credits + 10% weapon cost.

Weapons must be cleaned after each mission otherwise they will be more inclined to jam. (Chance increases by 2% for every mission they are not cleaned.)

Cybernetic Maintenance

.1 % of cybernetics cost.

Cybernetics must be maintained every month or their performance will degrade. This could likely be harmful and possibly be fatal.

Equipment Calibration

5% item cost.

Necessary before every mission. Failure to calibrate such high technology devices such as scanners, jammers, goggles, weapon sights, defensive screens, etc. will result in a 1% error in the results produced, cumulative per mission.

Other Services

Cost

Escort Service	300 credits per night.
Prostitute	30 credits per session.
Masseuse / Masseur	70 credits per hour.
Fine Dinner	90 credits.
Exotic Dinner	180 credits.
Bowling	2 credits per game.
Movies	10 credits per show.
Swimming	5 credits per day.
Amusement Parks	Admission is 60 credits per day.
Skydiving	50 credits per ride.
Video Games	1 credit per game.
Opera	100 credits per show.
Theater	60 credits per show.

Public Transportation

Cab fare	1 credit per kilometer
Bus fare	20 credit per trip
Monorail fare	2 credits per trip, plus 3 credits per city passed through
Plane fare	300 credits per trip
Local Solar fare	900 credits per trip
Full Solar fare	3,200 credits per trip
Interstellar fare	6,000 credits per hop

Interstellar Travel

Superluminal Drives are rarely used for interstellar travel anymore. They are limited to low multiples of light speed. For Short distances they are excellent. They have a low power requirement, and the occupants of the vessel remain in contact with normal space while the drive is engaged.

Hyperspace Drives are faster than super light drives, but also require more power. The occupants of the vessel suffer no disorientation, but contact with the outside is limited to hyperspace communications.

Space Fold drives are very large and require phenomenal amounts of power to operate. They take a long time to charge before use. It is impossible to do anything during a fold operation. A fold cannot be initiated while in a gravity well. When a vessel folds, everything nearby goes as well. Nearly instantaneous, a fold takes less than a second per light year to complete.

Stargates are huge structures generally built in orbit around a planet. Using solar power and multiple gigantic power plants, a stargate can be fully charged by the time a ship is lined up to enter. They are mildly disorienting (if at all), recycle quickly and allow any ship the ability to travel interstellar distances. There must always be two stargates, one to send, one to receive. This, and the fact that building a stargate is a long, expensive, and resource exhaustive process, mean that only major trade systems have stargates. Users are typically subject to a toll (based on ship mass) and regulations imposed by the ruling authority.

Warp Drives are the fastest non-instant form of interstellar travel, moving at geometric increments of light speed. They consume vast amounts of power. They require several engineers dedicated to their maintenance and operation at all times.

Slide Drives are extremely huge and extremely fast, capable of speeds many thousands of times the speed of light. They operate by slipping "sideways" out of normal space and shifting alternately between ultraspace ("above" normal space) and infraspaces ("below" normal space).

Housing

Buy (in 1,000's)

Housing	Rent (per month)	New	Used
2 room apt	250	20	10
3 room apt	400	30	15
4 room apt	500	50	20
6 room apt	80	75	30
3 room house	550	100	50
4 room house	750	150	75
6 room house	1,000	200	100
8 room house	1,500	400	200
Custom house		2 million	

Variations

House or apt on land	x1
On space station	x3
On large ship	x3.5
In underwater city	x5
In domed city	x4



[IMAGE 6 x 4] (getting large sums of money) perhaps a mercenary of some sort, or a gambling / casino shot.

Getting Large Sums of Money

Signature Loans

Characters can acquire money several ways. The first and easiest is a signature loan. Basically, the character walks into a lending institution, usually a bank or credit union, and signs a contract agreeing to pay a specified interest rate on a specified amount of money in a given amount of time. The advantage of a signature loan is there is no need for collateral, the character is basically offering his “word” and promise that he will repay the loan. The disadvantage of a signature loan is the interest rate is usually pretty high (20-30%) and the total amount of the loan is fairly low (100 – 500 credits). But, if the character needs a small amount of money fast, and is going to be able to repay it within a couple of months, a signature loan may be perfect.

Collateral Loans

A collateral loan is a good way for a character to build financial credit and at the same time bring himself into the possession of a fairly large sum of money. The character must offer up the deed or title to something that is equal to or more than the value of the loan, usually the collateral will be whatever the character is purchasing. Should the character default on the loan, the object or property is seized by the lending institution, in addition to the negative credit rating the character will receive. Collateral Loans can be acquired anywhere from 1,000 credits up to 100,000 credits. As long as sufficient collateral can be offered. Of course, the credit standing of the character will effect the amount the institution is willing to lend, as well as the average monthly income of the character for the previous 12 months. Interest rates range anywhere from 6% to 9%, and the duration of the loan can be anywhere from 5 to 30 years.

High Value Loans

This is a very large collateral loan. High Value Loans can be acquired anywhere from ½ to 3 million credits. Typically, these loans are used for purchasing spacecraft. The interest rates tend to be higher than collateral loans. The character must offer up the deed or title to whatever the character is purchasing. Interest rates range anywhere from 9% to 12%, and the duration of the loan can be anywhere from 5 to 10 years.

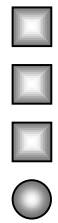
Bounties

Various agencies and organizations offer rewards for the apprehension of criminals, loan defaulters, traitors, etc. The rewards tend to range from 10,000 credits up to 500,000 credits. Depending on the estimated difficulty involved in apprehending the offender. Bounties can be lucrative, but character should expect to spend anywhere from 45 to 75% of the bounty just to recoup the expenses incurred in catching the bounty. Also, bounty hunting can be very dangerous.

Lotteries

For a small amount, a character can have a chance at winning anything from a couple bucks to a small fortune. A typical lottery, odds, and payoffs are listed below. Ticket cost is 2 credits.

d20	Lottery Results	Odds	d100	Huge Win Results	Odds
1-13	lose	13 in 20	1-83	win 25,000	1 in 2409
14-16	win 5 credits	3 in 20	84-93	win 50,000	1 in 20,000
17,18	win 20 credits	2 in 20	94-98	win 200,000	1 in 40,000
19	win 100 credits	1 in 20	99	win 1,000,000	1 in 200,000
20	roll on <i>Large Win</i>		100	roll on <i>Jackpot</i>	
d100	Large Win Results	Odds	d20	Jackpot Results	Odds
1-83	win 250 credits	1 in 24	1-17	win 2,500,000	1 in 235,294
84-93	win 500 credits	1 in 200	18,19	win 5,000,000	1 in 2,000,000
94-98	win 2,000 credits	1 in 400	20	win 20,000,000	1 in 4,000,000
99	win 10,000 credits	1 in 2,000			
100	roll on <i>Huge Win</i>				



If a character wins a lottery and the amount is over 1 million credits, the payoff is not delivered in a single lump sum. The character has two options. The first is a payment plan whereby the character receives 1 360th every month for 30 years, at which point the entire payoff has been awarded. Note, due to taxes, the character may lose approximately 1/3 of each payment. The second option is a lump deposit where the character is required to pay fees, taxes, etc., etc. The drawback is the character usually receives about 35 to 45% of the payoff and no more. The benefit is that the character receives that entire sum immediately.

Government & Paramilitary Organizations

Frequently are willing to put up large sums of cash for individuals to use to purchase things (usually fighting equipment such as giant robots, super tanks, cybernetics, etc.) as long as the individual is willing to employ the purchased goods towards the ends of the organization. The drawback is that it is usually an indefinite arrangement, i.e., the character pulls missions for the organization until the character is killed in action. Sometimes the arrangement is for just a single mission, but in these cases the mission is such a dauntingly overwhelming task that it is clearly a suicide mission and being performed for either terror or political aspects and not because it is expected to succeed. In these cases, the chances of survival are usually less than zero. But, for characters that think they are really good, or that just want to go out in a blaze of glory and have a lot of fun while they're at it, this can be the way for them. Government and paramilitary organizations are usually good for anywhere from ½ to 100 million credits. Of course, the more money the character wants, the faster the trade off moves towards the "until you die / until we're through with you / providing you do this suicide mission for us" end of the spectrum.

[IMAGE 6 x 4] (Availability) A Merchant unloading his wares from a recently landed starship. The ship is large and occupies most or all of the background. Parts of the interior might be seen through open loading doors, etc. Small robots or other devices may be about moving stuff. Whole image is suggestive of a very transient individual, possibly untrustworthy, out to make a sale. Merchant should be well dress (long flowing robes, richly adorned with precious metals and gems?).

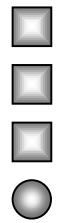
Availability

Not all equipment described in these rules is available to everyone. To reflect this, every item has an Availability rating (ranging from A to G) and every merchant has a Procurement rating (ranging from A to G). If a merchant's Procurement rating is higher than a piece of equipment's Availability rating, then the merchant may have the item available for purchase. In addition, the higher the Availability rating, the more difficult in general to obtain the item. Equipment with ratings of D or higher are restricted, Black Market and frequently military or government agency devices. Common merchants will be unable to procure these things. Merchants with Procurement Ratings of D or higher are considered Black Market, Military Arms dealers or a similar high technology broker. Some D rated items may be purchased and used with the appropriate permits and licenses. The following table lists the percentage chance that any merchant (based on Procurement Rating) will have a given piece of equipment (based on Availability). The values listed are percentages.

Equipment
Availability
Rating

	A	B	C	D	E	F	G
G	**	**	**	**	**	**	35
F	**	**	**	**	**	45	52
E	**	**	**	**	55	63	73
D	**	**	**	65	75	86	99
C	13	43	85	98	112	129	149
B	26	85	98	112	129	149	171
A	85	98	112	129	149	171	197
	A	B	C	D	E	F	G
	Merchant Procurement Rating						

Note, occasionally a reference will be made Availability class X equipment. This is a notation for experimental and unique items, prototypes, custom builds, etc. Availability X equipment is almost never mass produced and is often quite hard to come by.



Cybernetics

Unlisted Cybernetics	D
Medium Armor	E
Heavy Armor	E
Assault Armor	F
Weapon Mounts	E
Regeneration	G
Atr Booster	C
All Other Boosters	E

Detection Technology

IR	D
UVC	
Mag	D
Radar	B
Microwave	D
Light Amp	C
Image Enhancement	E
Motion	C
Surveillance Devices	E
Density	C

Explosives

Unlisted Explosives	D
C-9, DCAP, ODX, D9P	E

Grenades

Unlisted Grenades	D
Incendiary Grenades	E
Phosphorus Grenades	E
Emp Grenades	F
Light Grenades	F
Gravity Grenades	G
Fusion Grenades	G

Body Armor

P Rated Armor	D
H Rated Armor	E
K Rated Armor	E

Availability

Availability

Availability

Availability

C

Miscellaneous Items

Unlisted Equipment	A
GPS Receiver	B
Combat Helmet	C
Video Camera, Muzzle	C
CPOG Suit	D
Lock Picking Kit	D
Poisons	D

Availability

Power Screens

Ballistic	C
Gauss	D
Chromatic	D
Glow	F
Kinetic	F
Sonic	C
Hard	D
Holo	C
Hush	D
Filter	C
Integrity	X

Availability

Power Systems

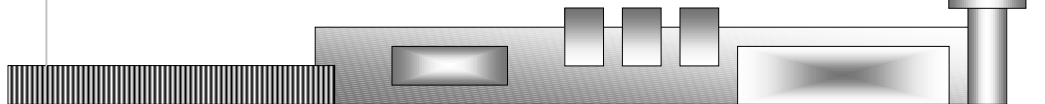
Unlisted Systems	C
Plasma Power Systems	D
Fusion Power Systems	D
AM Power Systems	F
D-Tap Power Systems	F

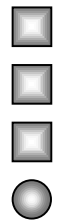
Availability

Robots

Same As Core Processor	Varies

Availability





[IMAGE 6 x 4] (News & Life Events) Reporter with her cameraman. There is a hovervan in the background they are operating from. She has several remote cameras and lights hovering nearby and carries a digital notepad, a slung computer and a directional microphone.

News and Life Events

Check for news and life events each time the characters return from major campaigns, scenarios or trips where the character is out of touch for more than a few days, or randomly at the suggested intervals.

News Events

Chance of a News event: 1 in d10. Check for a News Event once a month.

d12	News Event
1	Natural rights violations
2 - 4	Diplomacy (d5): 1: privateer incident (d2): 1 – government announces sanctioning of privateers, 2 – effects of existing efforts 2: getting critical 3: assassination attempt (d3): 1 – success, 2 – failure, 3 – plot 4: blockade (d5): 1,2 – established, 3,4 – removed, 5 – blockade running incident 5: sanctions (d3): 1,2 – levied, 3 – repealed 6: civilians killed (d2): 1 – mistaken for military units, 2 – casualties from combat
5 - 7	Conflict - Size (d6): 1 – war, 2,3 – major conflict, 4,5,6 – minor conflict - Event (d20): 1,2,3 – broke out, 4,5 – ended, 6,7 – escalated, 8,9 – cease fire, 10,11,12,13 – peace talks, 14,15,16 – treaty violation, 17,18,19,20 – continues unabated
8,9	Piracy, Terrorism or Organized Crime activity
10	Mad Scheme: - Someone (d6): 1 – politician, 2 – scientist, 3 – wealthy independent, 4 – corporation - Plans to (d6): 1: Destroy (d20): 1,2,3,4,5 – a section of the population, 6,7,8,9,10 – whole population, 11,12,13 – specific race, 14,15,16 – planet, 17,18,19 – local star, 20 – galaxy 2,3: Take over (d100): 1-35 – the planet, 36-67 – inner system, 68-88 – solar system, 89-97 – star cluster, 98,99 – star sector, 100 – galaxy 4,5,6: Get rich by robbing (d8): 1,2,3,4 – the planet, 5,6,7 – solar system, 8 – galaxy
11,12	Disaster. Roll on the Disaster Table
d20	Disaster
1	Galactic (d5): 1 – massive space time collapse, 2 – galactic core dying, 3 – dark matter encounter, 4 – black hole super cluster near the galactic core, 5 – galactic collision
2 - 4	Solar (d20): 1,2,3 – star about to nova, 4,5 – star about to super nova, 6,7,8,9 – nearby black hole, 10 – dimensional rift, 11,12,13 – graviton weapon testing went wrong, 14,15,16,17 – passing through nebulae, 18,19,20 – nearby nebula spawns new star
5 - 8	Planetary (d20): 1,2 – asteroid impact, 3 – planet core exploding, 4 – planet imploding (becoming star), 5,6,7 – bioweapon accidentally unleashed, 8,9,10,11,12 – moon in degenerative orbit, 13,14,15,16 – moon destroyed, 17,18,19,20 – passing through super radiation belts
9 - 13	Continental (d10): 1 – continent sinking, 2 – alien engine of war unearthed and activated, 3,4 – fauna bioweapon escapes, 5,6,7,8,9,10 – Natural disaster of epic proportions (use line 14-20, but increase size of disaster)
14 - 20	Natural (d20): 1,2 – flood, 3,4,5,6 – violent storm, 7,8,9 – quake, 10,11 – volcanic activity, 12,13,14 – avalanche, 15,16 – drought, 17 – conflagration, 18 – plague, 19,20 – pestilence

On the Planetary, Solar and Galactic scales, these disasters will almost never be surprises (at least not to the scientific community) since activity at this scale is usually slow compared to the pace of life for the races. However, these disasters represent unexpected developments resulting from the specified phenomena, or the cumulative effects over time have finally reached critical proportions. For example, scientists in a solar system may be aware of the impending formation of a new star in a nearby nebula, but there may be unexpected side effects occurring during the process. Basically the table indicates only the primary event; the actual disaster may spawn from the event as a side effect, aftermath effect or may be a developing effect.

[Ed and Neb are relaxing aboard their ship, when Ed turns on the news. The news reports that a local scientist has hatched a scheme take over the planet (New Event result of 10 (2,3,34)). Looks like there may be another adventure down the road.]

Life Events

Chance of a Life Event: 1 in d20. Check every 3 or 4 months.

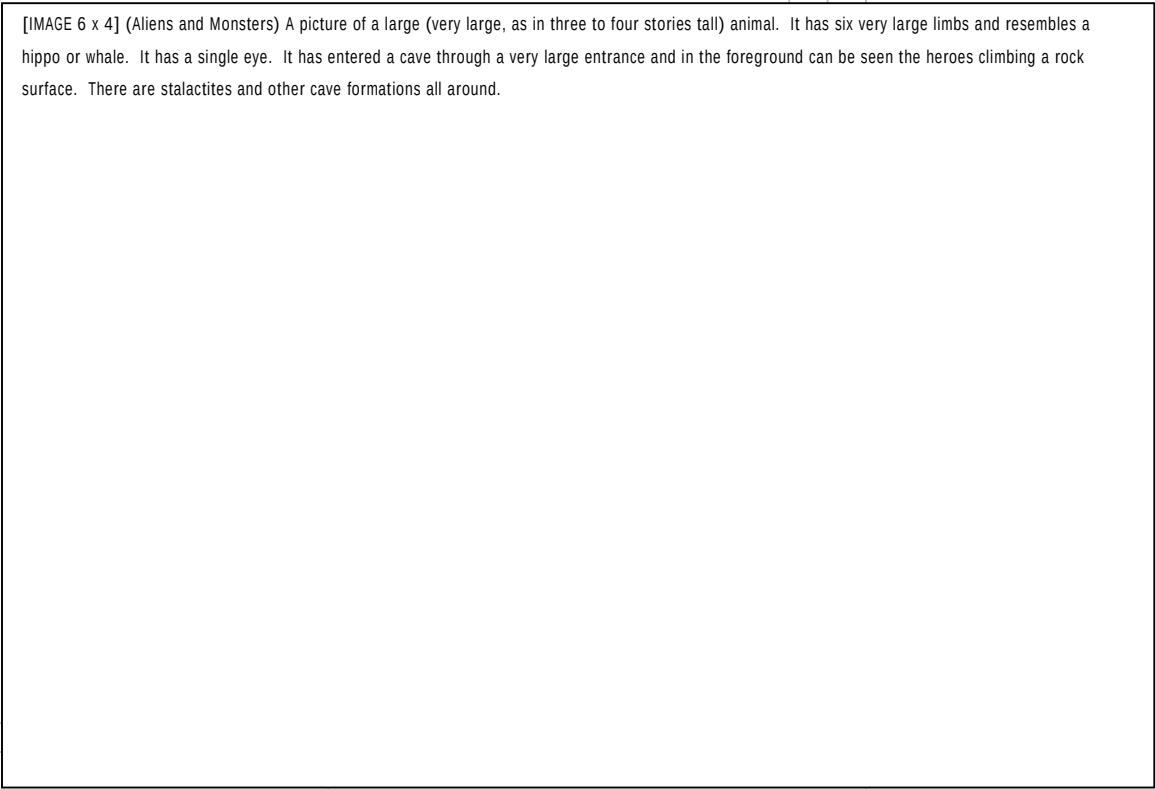
d12	Life Event
1	Death of (d3): 1 – relative, 2 – friend, 3 – contact; Character's presence is (d2): 1 – required, 2 – not required; Effects (d5): 1 – burial arrangements must be made, 2 – there is an inheritance, 3 – debts must be settled, 4 – character must fulfill remainder of a contract, 5 – none
2	Death of an enemy
3	Financial error (d10): 1,2: bank claims you owe d100 x d100 x 100 credits 3: bank is foreclosing on your home 4,5: bank demands immediate repayment of your largest loan, plus 10% 6: your credit is ruined due to computer error 7: you are being sued for d100 x 1,000 credits 8,9: you are entitled to a payment of d10 x 1,000 credits from someone 10: you are entitled to a monthly payment of 2d10 x 50 credits for the rest of your life from someone
4	Legal issue (d4): 1,2,3 – a warrant has been issued for your arrest, 4 – an APB has been flashed across the system for your arrest Cause of Issue (d4): 1,2,3 – it is an error, 4 – it is for something you did while adventuring
5	A bounty of 3d20 x 1,000 credits has been placed on your head
6	You have been implicated in a scandal
7 - 12	A News Event occurs near (d6): 1 – relative, 2 – character, 3 – employer, 4 – friend, 5 – enemy, 6 – contact Near (d3): 1 – home, 2 – place of business, 3 – place of recreation

Optionally, the referee may check the following table regarding the circumstances under which the Life Event occurred.



d8	Circumstances of Events
1,2,3	normal, nothing out of the ordinary, but a chance (1 on d6) it is an effect of an elaborate conspiracy
4,5	unusual, possible foul play indirectly involved
6,7	very unusual, possible foul play involved
8	suspicious, suspected foul play

[Likewise, Neb has just gotten in contact with one of his bounty hunter friends and is informed that a significant bounty has been placed on his head (Life Event table roll of 5).]



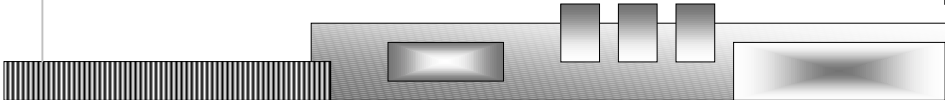
[IMAGE 6 x 4] (Aliens and Monsters) A picture of a large (very large, as in three to four stories tall) animal. It has six very large limbs and resembles a hippo or whale. It has a single eye. It has entered a cave through a very large entrance and in the foreground can be seen the heroes climbing a rock surface. There are stalactites and other cave formations all around.

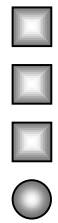
Animals and Alien Creatures

The following table lists the base statistics for standard herbivores, omnivores and carnivores of all sizes. These statistics include both the mental and physical attributes of the animals as well as basic combat information such as Hits, damage done from bite and claw attacks and the number of melee attacks the animal receives per turn.

Table entries are explained below, as well as a number of values that ought to be computed when the animal is likely to be used in combat. In addition, some unusual creatures will have special abilities. Sometimes called "monsters" these creatures can be created using the following tables, combined with the list of special abilities below. The special abilities section has more on this.

"There's hostile aliens on this planet? Where was I when this decision was made?"





Herbivore							Omnivore						Carnivore						Physiology			
	VS	S	M	L	H	G	VS	S	M	L	H	G	VS	S	M	L	H	G	P	M	F	X
STR	1	4	6	8	10	12	5	6	8	9	10	11	7	8	9	10	11	14	-1	+1	0	d4
END	7	6	6	5	4	2	8	7	5	4	3	2	6	5	4	3	2	1	+2	+4	-1	d3
TGH	2	4	6	7	8	9	4	5	6	7	7	8	5	6	7	7	8	10	0	+2	-2	d4
COR	11	9	8	7	6	6	10	9	9	9	8	7	13	12	12	12	11	10	0	0	0	d2
SPD	16	14	12	12	11	10	12	11	10	10	9	8	12	12	11	11	10	9	-1	-2	+1	1
REF	14	13	12	11	10	9	11	10	9	9	8	7	11	10	9	9	8	7	0	-3	+2	d2
MOV	18	14	11	9	8	6	12	11	10	9	8	7	14	12	11	10	9	7	-1	-2	+2	d2

Herbivore							Omnivore						Carnivore						Physiology			
	VS	S	M	L	H	G	VS	S	M	L	H	G	VS	S	M	L	H	G	P	M	F	X
INT	2	2	2	2	2	2	3	3	2	2	2	2	3	2	2	2	2	2	0	0	-1	d3
INS	7	6	6	5	4	3	8	7	5	5	5	4	3	4	5	6	6	7	0	-2	+1	1
CLV	3	3	2	2	2	1	5	5	4	4	5	5	3	2	2	3	3	4	-1	+1	-2	d2
FOC	1	2	3	3	4	5	3	5	7	7	7	9	9	9	10	10	12	12	-1	0	-1	1
LCK	9	8	8	7	7	7	7	6	5	5	4	3	5	5	4	3	2	1	+1	-1	+2	1

	Herbivore						Omnivore						Carnivore						Physiology			
	VS	S	M	L	H	G	VS	S	M	L	H	G	VS	S	M	L	H	G	P	M	F	X
HIT	x.1	¼	½	x1	x5	x10	¾	¾	x1	x1.5	x4.5	x9	¾	½	4/5	x2	x3	x6	¾	x2	½	x½-2
BT	d2-1d3-1	d4	d8	2d10	3d12	d3	d3	d4	d6	2d12	2d20	d8	2d6	2d8	3d12	4d20	8d20	0	-1	-1	d2	
STK	d3-2d2-1	d3	d5	d10	d20	d6	d8	2d6	2d10	3d12	4d20	2d6	2d10	2d12	3d15	5d20	6d20	+1	0	-1	d2	
ATK	2	2	1	1	1	1	4	3	2	3	2	1	4	3	3	3	2	1	0	-1	-1	d3

To randomly generate base statistics, roll d3 for diet and d6 for size. Roll to check for an alternate physiology (19 or 20 on d20). Alternate physiology is (roll d10), 1-4: fish (F), 5-7: plant (P), 8-9: mineral (M), 10: exotic (X).

Physical Attributes

STR	Strength, lifting ability
END	Endurance, distance running
TGH	Toughness, animal's ability to negate or ignore minor damage
FLX	Snakes are very flexible, this score is independent of physiology, size or diet so it is not listed, typically FLX is 5
COR	Seals and monkeys are highly coordinated
SPD	A striking snake has a high speed, but low MOV value
REF	Reflexes, reaction speed, e.g., how fast the animal can react to something like a thrown object, a strike or kick, etc.
ATR	Compared to others of its species, a show dog has a high ATR score, this

[IMAGE 3 x 3] (animals and alien creatures)

score is independent of physiology, size or diet so it is not listed

MOV Movement, walk, jog, run, sprinting speed factor

Mental Attributes

INT Intelligence, knowledge, both accumulated and capacity for accumulation

INS Instinct, animal equivalent of Wisdom, also used as the relevant skill level when computing attack values, etc., during combat.

CLV Cleverness, ability to figure out puzzles

WIL This score is independent of physiology, size or diet so it is not listed, animals that have a low WIL are generally reluctant to put a lot of effort into an endeavor that will not yield immediate tangible results (typically food). Will power tends to be lower for herbivores, they are more than willing to move to another source of food to graze on rather than tough it out with marauding carnivores. Will power is highest in omnivores as they tend to be the most intelligent of all animals.

FOC Focus, ability to concentrate on something specific, puppies and kittens have a low FOC score

CHR How well they are likely get along with the character races, or how well they can be domesticated; dogs have high CHR, this score is independent of physiology, size or diet so it is not listed. Wild animals typically have a CHR of 2. Herbivores typically have a 1 because they are timid, Carnivores typically have a 1 because they are vicious. Omnivores tend to have a 2 because they are more intelligent. Naturally, there are many variations to this.

LCK Luck, is the animal lucky? Herbivores tend to be very lucky because they may escape death many times before finally being eaten by a predator. Conversely, predators will often miss out on a meal before they finally catch an unwary prey.

Other Attributes

SIZE Size, how large is the animal. Longest dimension is: VS = $\frac{1}{4}$ - $\frac{1}{2}$ (d2 /4), S = $\frac{1}{2}$ -1 (d2 /2), M = 1-2 (d2), L = 2-4 (d3 +1), H = 4-8 (d5 +3), G = 8-16 (4d3 +4). Values are given in meters. Fish (F) tend to be 2-4 times the size for their size class.

HITS Hits, how much it takes to kill the animal. Hits are 80 + d4x10, multiplied by the listed value.

BT Bite, if the animal bites, how much damage it does

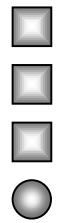
STK Strike, how much damage the animal does when it attacks with its claws, limbs, tail, etc.

ATK Attacks, how many melee attacks the animal gets. Typically an animal attacks once by biting and the remainder of its attacks that turn are strikes of some sort (claw slash, tail slap, etc.)

HAB Habitat, Where the animal lives normally (arid, temperate, tundra, steppe, humid, mountain), animals will have basic non-special abilities pertinent to their habitat, e.g., a camel can go for days without water. Habitat also provides a general indication of the animal's skin coloring. This score is independent of physiology, size or diet so it is not listed.

SKIN Skin color, texture (fur, scale, feathers, hide) This score is independent of physiology, size or diet so it is not listed.

[IMAGE 3 x 3] (animals and alien creatures)



Although, skin color is usually influenced by the animal's habitat, e.g., aquatic animals and fish tend to have blue, gray, white or clear skins. Diet will influence markings, e.g., herbivores and prey animals typically have camouflage type markings, while carnivore and other predators typically have aggressive markings. Naturally, there are always exceptions to this guideline.

- SOC Social Order, The social order of the animal. Does it travel in herds (10+), packs (3-9), pairs (2) or alone (1)? Larger animals tend towards the solitary end of the spectrum as do carnivores, while medium and smaller animals and herbivores tend toward packs and herds. This criterion is frequently independent of physiology, size or diet so it is not listed.
- MET Metabolism, The animal's metabolic structure. Normal animals are flesh and blood (18 or less on d20). Other possibilities include plant (P), mineral (M), fish (F) and exotic (X). The values listed under the P, M, F or X columns are applied to the first three columns based on the animal's diet. The values listed under the X column may be added or subtracted from the base values listed under herbivores, omnivores and carnivores. Modifiers for bite and strike refer to the number of dice used for the listed attack.
- DIET Diet, whether the animal is a herbivore, carnivore, omnivore or something else. The medium omnivore is considered to be the all around statistically average animal; this is recommended for such animals as do not have standard diets. Naturally anything is possible.

“Everything’s trying to eat us.”

Computed Attributes

- INIT Initiative, SPD + REF + INT + d12
- CTH Ranged chance to hit, (COR + REF) x3 + 6x INS %
- ARN Melee attack range, usually 1-2 times the animal's height (add height to average of SPD and MOV)
- AS Melee attack score, COR + SPD + 2x INS + 2d10.
- DS Melee defense score, COR + SPD + REF + 2x INS + d12
- W Walk, 1x MOV meters per turn
- J Jog or Trot, 1.5x MOV meters per turn
- R Run, 2.5x MOV meters per turn, can be maintained for 2 x END minutes.
- S Sprint, 3x MOV meters per turn, can be maintained for ½ x END minutes.

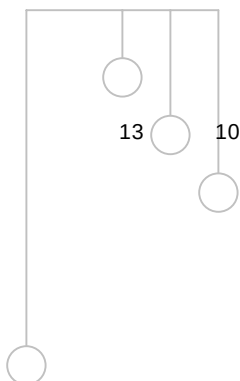
SPCL Special Abilities, While most animals may be unusual in both behavior and perhaps abilities, few will have actual special abilities that can affect the characters. For example, on Earth there are many differences between lions, tigers, panthers, bears, dinosaurs, etc., but special ability wise, they are pretty much all the same. Some can jump more than others, some are faster, some bite harder and of course they all take different amounts of punishment before dying, but that about sums it up. When generating special abilities for animals there are three methods to use. Two are based on the type of ecology the animals are encountered in and the third is to be used if the animal is a terraforming construct (an animal designed to be released on a planet to help the process of terraforming). If the ecology is earth-like or “normal” then the suggested method of generating special abilities is the “predator-prey” method. In this case, the referee decides if the animal is predominantly a Predator, Prey, or equally Predator and Prey. The referee then rolls on the appropriate table to determine the number of Offensive, Defensive and Utility special abilities the animal has. The second method is the Random method and is recommended for very alien ecologies. In this method, the referee rolls on the “Alien Ecology” table and generates the special abilities by rolling on the Alien column. Finally, terraforming constructs are designed by the referee. The referee rolls on the “Alien Ecology” table for number of special abilities, but instead of randomly rolling the abilities, the referee then selects which special abilities the animal is to have.

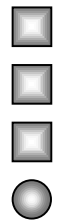


Predator: Offensive special abilities: d4 +1 Defensive special abilities: d3 -1 Utility special abilities: d3 -1.
Prey: Offensive special abilities: d3-2 Defensive special abilities: d4 Utility special abilities: d4.
Predator-Prey: Offensive special abilities: d3 Defensive special abilities: d3 Utility special abilities: d4.
Alien Ecology: Alien special abilities: 2d8-1.

Alien **Offense** **Defense** **Utility**
d100 **d30** **d40** **d60**

				Special Ability
1				Common (animal has no special abilities at all)
2	1	1	1	Extra ability (animal receives +1 special ability beyond the rolled number, this result does not count as an ability)
3	2	2	2	Extra ability (animal receives +2 special abilities beyond the rolled number, this result does not count as an ability)
4	3		3	No Bite (animal's jaws cannot be used to make bite attack because they are too small, etc.)
5	4		4	No Strike (animal can not make strike attacks because its claws are too small, etc.)
6			5	No Bite or Strike (animal has no bite or strike attacks)
7			6	No Special Attack Forms (animal has no special attack forms at all, animal must reroll any offensive special abilities, animal may still have Bite and Strike attacks if they have not been otherwise denied as well)
8	5			Multiple Brains (animal is capable of simultaneously attacking an additional target each turn. Number of attacks is unaffected. The animal is simply capable of fighting multiple opponents at once, without penalty.)
9	6			Gore (a gore attack will do damage equal to 3x STR)
10	7			Trample (characters will take d20 damage per animal in the herd that stampedes)
11	8			Pounce (animal can pounce up to 3x its length. Target is knocked to the ground, effectively a Sweep melee attack.)
12	9			Poisonous (injected through fangs, claws, tail or spines. STR ability check to ½ damage, duration and effects. Strength of poison is d20. Effects: Poisons do d6 damage every d4 turns for d12 cycles. Paralysis poisons cause the character to move at ½ rate and all attack, defense and melee damage values are halved for d10 turns, after which the character is paralyzed for d4 hours. Insanity poisons cause the character to hallucinate, hear voices, fear friends and lose all sense of what is dangerous and what is safe.)
				Shoots darts (can store d3d12 bone darts inside its body. Can shoot up to 10% of this maximum every turn. Darts are created at a rate of d6 per day. Darts do damage equal to d6x STR score.)





14 11

Shoots energy (chance to hit is normal ranged attack, damage is d10 per 10 PU spent, maximum expenditure is d20 x10. Range Class (RC) is equal to size class, e.g., Medium =3, Large =4, Huge =5, Giant =6, etc. Animal can store 2d100 x5 PU in its body.)

15 12 3

Shoots web (chance to hit is normal ranged attack, effects are as a tangle thread grenade except there is no burst radius, only the target is effected.)

16 4

Shell (animal has a turtle like shell. The shell acts as ballistic and sonic armor. Shell DP is d100 x20. A shell is designed to protect against the most common direction of attacks, there is always a vulnerable point, such as the bottom.)

17 5

Invisibility / Perfect camouflage (animal has a 95% chance to be undetected unless it is moving.)

18 13 6

Spiked Tail (animal has large spikes on its tail, damage is STR + SPD + COR +d6 per size class, normal chance to hit, tail swipe is in addition to regular melee attacks.)

19 7

Thick hide (animal takes ½ damage from B)

20 8

Slick hide (animal has an oily slick hide. Attackers suffer a –4 penalty when attacking with melee weapons and a –20% penalty with ballistic ranged weapons.)

21 9

Reflective coat (animal is considered to be E resistant; takes ½ damage)

22 10

Camouflage (animal has a d10 x 10 % chance to be completely camouflaged when in its natural environment.)

23 11

Shark skin (any contact with the animal will result in d10 damage to the character)

24 7

Special hit location (location has 10% hit points of whole animal. The location is considered a Very Small target, location can only be hit from one side of animal, front or back, destroying location renders severe harm to animal either by eliminating its ability to detect things, its ability to attack or its ability to escape)

25 8

360 degree field of vision (not surrisable)

26 9

Night hunter (sees using IR)

27 10

Pollinator (sees using UV)

28 11

Sees using motion

29 12

Prehensile limb (tail, animal can hold and manipulate objects with its tail)

30 14 13

Tentacles (animal has 2d4 tentacles, animal gains 1 melee attack per pair, attack does d6 damage per size class of the animal, i.e., VS does 1d6 per attack, S does 2d6, M does 3d6, etc.)

31 14

Invertebrate (reduced TGH, subtract 2 points or 50%, whichever is greater)

32 12 15

Exoskeleton (increased TGH, increase by 3 points or 25%, whichever is greater)

33 15 16

Coil attack (effectively a Control melee attack)



34		17	Swims (animal can swim exceptionally well. The animal can swim at its normal movement values)
35		18	Afraid of water (will not cross water)
36	16		Improved claws (crab claws, larger or razor sharp claws, etc., +d4 dice of STRIKE damage)
37		13	19 Lays traps (web – effects equivalent to tangle thread grenade but only over area webbed, sand pits – effects equivalent to slick grenade over area of sand pit)
38		14	Mimics flora / fauna (initially appears to be something weaker if it is a strong animal, or stronger if it is a weak animal)
39		15	Quills or spines (attempting to wrestle or handle the animal will result in 3d10 points of damage)
40	17		Crush attack (bear hug, effectively a Stun melee attack)
41		16	Energy Reflection (can immediately redirect energy attacks directly back at the attacker, with a –50% penalty to hit. Animal can reflect a number of attacks per turn equal to d4.)
42	18	17	Static conductive (animal is a static electricity magnet. Every other turn the animal is capable of discharging static electricity to anyone touching it. Damage is d20 per size class, e.g., VS is d20, S is 2d20, M is 3d20, etc., and is split evenly between all targets touching the animal.)
43		18	20 Fauna-symbiosis (animal has a symbiotic relationship with another wild animal. There is a $60 + d4 \times 10\%$ chance the other animal will be near any time this animal is encountered. Typically the animals will be opposites, where one is weak the other is strong, where one cannot fight, the other is fierce, etc.)
44			21 Eats energy (Supplants the bite attack. Drain is triple Energy Drain value, e.g., VS eats 6, S eats 12, M eats 24, etc.)
45			22 Valuable (animal has a pelt or teeth or claw that either is valuable or will be very valuable should it be preserved and taken to market. Value should be commensurate with difficulty of slaying the animal.)
46			EMP disruptive (animal disrupts all magnetic and electrical flow within its vicinity. All computers, robots, cybernetics, electronics, etc. are effected as if hit by an EMP grenade while within two lengths of the animal. Effects are non-permanent and equipment will return to functionality once removed from the range of the animal.)
47			23 Luminescent (animal or part of the animal glows sufficiently to negate darkness modifiers when within 2 lengths of the animal.)
48		19	Fire breather (animal combines natural gasses produced within its body with gasses in the atmosphere to produce a jet of fire. Damage is $4d10 + d10$ per size class of the animal. Range Class is 5, maximum range is 100 m. Animal can breath fire d10 times per day.)
49			24 Photosynthetic (animal is nourished by absorbing sunlight and does not eat)

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25 Intelligent (+d2 INT)

26 Stupid (-d2 INT)

27 Scavenger animal eats carrion, will be found near carcasses, frequently unhealthy to eat unless well cooked. Similar to curious animals, but the animal tends to get into garbage

28 Packrat / thief (attracted to small shiny/warm/soft/etc. objects, will attempt to steal them, chance is 50 % + 5 % per INS per night, the animal will steal d3d6 items per night, secured equipment is not susceptible to theft, nor is equipment larger than the animal) Ferocious (berserks when attacking)

29 Friendly (high CHR, tends to be more passive)

30 Hibernates (sleeps less than normal most of the year, then hibernates for d6 months)

31 Never sleeps

32 Keen smell (can track and hunt via smell, once prey is in sight, it uses its other sense (eyes) to kill)

Stings (stings are usually to deter not to kill, damage is equal to size of animal in d4, e.g., Medium animal is 3d4)

Stench (can emit a noxious cloud of gas, usually invisible gas, the gas "sticks" to those that are sprayed and the smell will not vanish for d6 days)

Ink spray (emits a cloud of colored gas, or ink cloud when under water, the gas tastes putrid although it is harmless)

Spit (spits venom into the targets eyes, chance to hit is as a normal ranged attack, venom blinds the target for d3d6 turns and renders the target partially blinded for d4 hours)

Chemical attack (similar to the bombardier beetle. The animal can spray a stream of chemical a distance equal to its length, normal chance to hit. The chemicals react with the atmosphere and give off intense heat, inflicting lethal damage equal to d6 x animal size, i.e., VS =1, S =2, M =3, etc., and also inflicting d10 per size class in bruise damage)

33 Flight (animal can fly, max normal flight speed is equal to 2x SPRINT, max flight speed is 3x SPRINT)

34 Climb walls and vertical surfaces (animal can move at walking speed along vertical surfaces)

35 Excellent eyesight (animal receives a bonus to hit equal to d4 x 10%)

36 Poor eyesight (animal receives a penalty to hit equal to d6 x 10%)

37 Adjusted attacks (animals number of attacks is adjusted by d3. Roll d2, on a 1 the animal loses this number of attacks, on a 2 the animal gains attacks)

38 Diminutive / exceptional size (roll d2, on a 1 the animal is a size class larger, on a 2 the animal is a size class smaller. Stats remain the same)



70		39	Climb trees (the animal can climb trees and move from limb to limb at ½ walking rate)
71		40	Burrows (digs through dirt at walking rate)
72		41	Brachiate (animal can swing from tree to tree at walking rate)
73	27	42	Sprinter (animal SPRINT multiple is increased by 2, its END is reduced by 2)
74		43	Lethargic (animal movement values are halved)
75	28		Sonic Scream (animal can emit an ear splitting screech. Effects are as a sonic grenade. Animal is immune to sonic attacks. Can be done once every d6 turns.)
76	29		Hypnotic (animal has a hypnotic gaze or skin pattern, etc. All characters must make a Simple ability check (WIS) to ignore the effects. Subtract the character's FOC score from the roll. Add the animal's INS score. Failure indicates the character has been mesmerized by the animal. The character may make no attacks and take no action. Duration is d4 turns. If attacked, the character may move at ½ rate away from the attacker, will suffer a -35% to all actions that turn and will no longer be mesmerized. Character's must make this check every turn they look at the creature.)
77	30		Stamina (END is increased by 3)
78	31	44	Shape changer (animal can assume the physical appearance of any animal it sees. Attributes do not change.)
79		45	Move silently (animal is silent 60 % + 6 % per level of INS of the time)
80	32		Stun immunity
81		46	Voice Mimicry (animal can mimic voices of the characters and other animals. Chance of success is 35 % + 5% for every time the animal has heard the voice or animal call.)
82		47	Amphibious (animal can breath underwater as well as on land.)
83		48	Cold blooded (animal is always the same temperature as its surroundings, therefor it does not show up well on IR scanners, etc.)
84	33		Immunity Adaptation (Animal can cause its immune system to adapt to any form of attack that hits it, rendering it partially immune to that form of attack – animal takes ½ damage. Up to d4 immunities can be maintained at the same time. Required time to adapt to an attack is d8 turns. Types of attacks are B, E, P, S, H, K, Fire and Cold.)
85	34	49	Poison Immunity (Animal's immune system is exceptionally strong. It is unaffected by any kind of poisons or drugs.)
86		50	Energetic Metabolism (If animal eats or drains energy in any way, it gains 1 hit per 3 PU drained. Otherwise, it gains hits from any energy attack that hits it. The number of hits gained is equal to 3 hits per PU fired or used by a successful hit. The animal still takes damage from the hit.)
87		51	Docile non-aggressive, but not friendly

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Pack Animal if tamed and trained or Docile or Friendly, the animal can be used as a pack animal to move heavy loads

Utility tamed and trained or Docile or Friendly, will act as an attack / defense animal, similar to a dog.

Ultra Sonic Sonar Sees using sonar

EM Sight Sees using EM fluctuations

Tool User Animal uses simple tools, e.g., throws rocks, attacks wielding sticks, etc.

Dirigible Animal has internal gasbags and floats through the air

Gaping Maw +d6 dice of Dmg from bite

Super Luminescence effects of flash grenade

Proboscis blah

Curious if left unattended or unwarded the animal will get into camp equipment

Disease Carrier as illness or debilitating poison, non-lethal

Monstrous Ability (roll on table below)

“Ok, well, I think we need to shoot it.”

Alien	Offense	Defense	Utility
d20	d8	d10	d12
1			
2	1	1	1
3		2	2
4			3
5	2		
6	3		
7		3	
8		4	
9		5	

Monstrous Abilities

Not Monstrous (animal has no monstrous abilities at all)

Extra ability (animal receives +1 special ability beyond the rolled number, this result does not count as an ability)

Fantastic Regeneration (The animal is capable of completely healing itself at the expense of all other action. The required number of turns of inactivity is d4. Number of times this ability can be used per day: d4.)

Phoenix Syndrome (Animal can “resurrect” itself up to d3 times per day as long as it is not reduced beyond –20% its original hit points. Resurrection takes d6 x10 minutes.)

Thought Eater (On a successful attack, will devour d10 psychic hit points)

Vampiric (A successful bite attack from the animal will heal a number of hit points equal to the number of points of damage done to the target.)

Doppelganger (animal assumes physical appearance of anything that has touched it within the past week. Animal takes shape, size, physical abilities and special abilities of the new form. Animal keeps its mental attributes.)

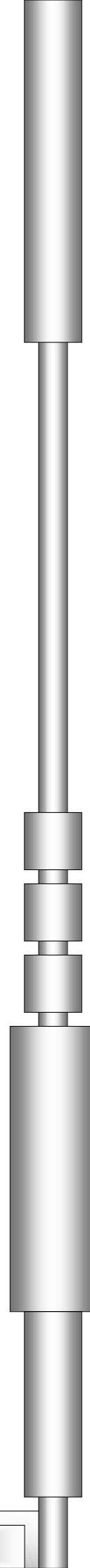
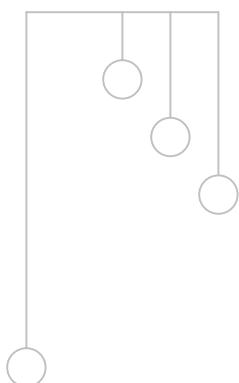
Displaced (animal's image and the image of one of the characters is swapped.)

Bomb dropper (animal has 2d6 droplets it can eject from its body. These droplets react with the atmosphere and combust very quickly. Effectively a Frag grenade. Damage and ranges are ½'d. The droplets will “detonate” d4 turns after they are dropped. The animal always has some way of avoiding the effects.)

Frontier Horizons (by Rick Heney), 08/01/01, page 283 of 334



10	4	6	4	Psionic (d4 psionics, level is INS in each)
11	5	7	5	Cybernetic (animal has d3d6 cybernetics)
12			6	Regenerates (roll 3d6 for regenerative value, animal regenerates this many hit points every turn)
13		8	7	Multiplies (creature splits into d3 creatures every time it takes a certain amount (2d20) of damage from energy weapons. Each creature is 1 size category smaller)
14			8	Mutates (gains additional head or limb every time it is hit by energy weapons, +1 STRIKE or BITE attack)
15	6	9	9	Phenomenal Metabolism (animal's metabolism is highly efficient. All duration's for special abilities are either halved or doubled, in the creature's favor. Limited use special abilities, such as breath fire, are able to be used twice as many times per day. Regenerative and healing special abilities grant twice as many hits.)
16			10	Abnormal growth (animal grows one size class every other turn during combat. Will return to original size when danger has passed. Animal gains physical attributes of the larger size class and retains its original mental attributes.)
17	7	10		Secretes Acid (something nasty)
18			11	Radioactive (all characters within d20 m of the animal take d6 damage every turn. This damage heals at 1/10 normal rate)
19			12	Energy Drain (A drain attack supplants 1 melee attack. The drain drains 2 PU and is doubled per size class, e.g., VS drains 2 PU, S drains 4 PU, M drains 8 PU, L drains 16 PU, etc. Range is equal to animal size in meters)
20	8			Life Draining (Any successful attack from the animal will heal a number of hit points equal to the number of points of damage done to the target.)



Appendix A, Von Neuman Architecture Robots

All Von Neuman Architecture robots and components are Availability D, falling into the “gray area” of robot, military and research technology.

All VN robots require Body-mass, Core Processor and Power Source. They use the same core and power sources as standard robots. VN robots typically to mount very little additional equipment because it inhibits their ability to change shape. Body-mass may be modified to gain beneficial attributes.

Shape Change

Because VN robots are made up of millions of “cells” (tiny semi-conducting interconnecting geometric shapes covered and imbedded with miles of atomic level wiring and switches), all VN robots have the ability to change their shape at will.

Their new form must have the same mass as the robot, minimum dimensions are that of the largest component installed in the robot – usually the power system. Robot changes shape only and does not gain functionality of the new shape, e.g., it does not gain the ability to fire artillery rounds by turning into a field artillery piece. Since all the robot’s movement and motion is generated by it’s cells repositioning themselves with respect to each other, the robot cannot increase its ability scores, e.g., it will not gain a higher MOV by turning into a wheeled robot.

VN robots can change form in 4 seconds. The time it takes a VN robot to change shape is increased 1 second for every kilogram of additional equipment mounted in the robot (including weapons, defenses and miscellaneous equipment; excluding required equipment and modifications listed below). The robot may not do anything (move, fight, talk, etc.) while changing shape.

Body-mass**	Mass	Load	Pow	Cost	Hits	STR	RUG	FV
Light	74	36	40	2,500	72	6	4	8
Medium	82	68	45	3,000	132	9	6	6
Heavy	93	107	60	4,000	216	12	7	5
Molecular*	78	52	60	12,000	108	7	6	7

* Cellular structure is designed at the molecular level – these robots appear to be “liquid metal” and are capable of perfectly mimicking the finest details of a person or object, including color and texture.

** All VN robots move by reconfiguring the lower portion of their bodies into some sort of leg arrangement. They are also capable of causing their bottom surface to “crawl” thus giving them the appearance of slithering or sliding.

Mass How much each body weighs.

Load How much mass the body can have installed; mass of the body does not count against the robot’s load.

Pow How much power the body uses every hour.

Hits How much damage the robot’s body can take before being destroyed. A robot will continue to operate until its body is 95% destroyed, at which point it shuts down if it can.

- STR The robot's strength. Robots can be encumbered, but they suffer only movement penalties. VN robots tend to carry personal and specialized equipment more often than standard robots due to their design.
- RUG The robot's ruggedness. RUG is the robot equivalence of TGH and END. Due to the "cellular" structure of these robots, the only limit to their flexibility is their processor power. A Robot's FLX score is 2x it's CYC.
- FV Friction value. The robot's MOV score is equal to $((FV + CYC) / 2) - 1$. The robot's SPD score is equal to $(FV + CYC) / 2$. Every piece of equipment mounted in the VN robot, other than the robot's primary power source, core processors, sensing and body modifications, will reduce this value by 2, e.g., a VN robot w/ a Light body has an FV score of 8, if the robot mounts 2 weapons, it will have an FV score of 4.

VN robots do not have separate sensors and scanners. Each cell is capable of detecting various bandwidths of energy. In effect, the entire robot's body is a huge "eye." Each bandwidth, available as a modification to the robot's Body-mass, is listed below.

Each of these sensing modifications will allow the robot to operate normally, e.g., move about, shoot, fight, etc. If a system is jammed, the robot is considered blind unless it has an additional sensing modification and that bandwidth is not also being jammed. VN Robots may not have duplicate sensing modifications.

Sensing Modification	Pow	Cost
Radar	25%	26.5%
IR	10%	26.5%
Motion	30%	30%
UV	25%	32%
Magflux	25%	37.4%
Olfactory	30%	33.9%
Ultrasonic	25%	32.4%
Seismic	10%	35.4%

Pow how much additional power each modification causes the body to use every hour. Multiplier is based on the power usage of the robot's Body-mass.

Cost how much it costs to modify all the cells in the robot's body to "see" on the listed bandwidth. Multiplier is based on the cost of the robot's Body-mass.

Modification	Mass	Pow	Cost	Notes
Camo	1%	5%	7	provides the same effects as a Camosuit
Stun	1%	2%	1	provides the same effects as stun gloves, except over the entire body of the robot
Electrified	2%	5%	3	provides the same effects as a shock suit
Sharkskin	5%	-	2	Cells designed similar to shark skin. They can be touched only one direction without taking damage. Robot inflicts +d4 damage in HTH combat, +2d6 when wrestling. Reduces inter-cellular mobility, resulting in an overall reduction in robot Flexibility. -4 FLX.

Sharktooth	9%	—	4	More severe design variant of Sharkskin. Robot inflicts +d8 damage in HTH combat, +2d12 when wrestling. Reduces inter-cellular mobility, resulting in an overall reduction in robot Flexibility. -5 FLX.
Hardened cells	3%	—	15	RUG +1
Synthetic crystal cells	5%	—	32	RUG +3
Thermal damping	—	—	12	robot cells have a reduced IR signature
VL redirection	—	20%	35	robot cells have a light-shift capability, allowing the robot instant to be nearly invisible in any terrain, with only a slight delay in the pattern change (resulting in a blurred effect when the robot moves).
UV damping	—	—	9	robot has a reduced UV signature
Radar damping	—	—	14	robot has a reduced radar signature
Space proofing	—	—	2	robot can survive in a vacuum without its cells freezing and locking up
Water proofing	—	—	½	robot can survive underwater and is corrosion resistant
Desert proofing	—	—	10	robot can survive desert conditions
Arctic proofing	—	—	2	robot can survive arctic conditions
Radiation proofing	2%	—	8	robot can survive in radioactive environments without its cells fusing or becoming damaged
EMP shielding	2%	—	5.5	robot is resistant to EM pulses
EMP synthetic	3%	—	7.5	absorb energy from EM pulses – includes EM shielding; 50 PU per pulse generating event, e.g., nuclear explosion
Photosynthetic	—	—	1	robot can absorb energy from light; 12 PU per hour
Hydrosynthetic	—	—	3.2	absorb free electrons from running water (when submerged more than 50%); 1 PU per gallon
Electrosynthetic	—	—	7	absorb energy from shock and electrical attacks; 1 PU per point of damage or minute of stun
Electrodirective	1%	special	5	can transmit (shoot) energy from it's power source; cost 1 PU per meter to the target, plus 10 PU per d8 of damage inflicted.
Flux induction	—	—	6	absorb energy from magnetic fields; 5 PU per large fluctuation, 15 PU per hour in areas of constant fluctuation.
Auto repair	3%	10%	15	more effective and more power consumptive than conventional robot auto repair systems, can regenerate 1 hit every 5 minutes – special cells in the robot's body work together as a cell factory to produce more from raw material provided by the nearby surroundings.
Imp auto repair	6%	20%	25	can regenerate 1 hit every minute.
Psionic amplifier	2%	5%	25	effects are the same as a normal robot psionic amplifier.

Mass how much the modification weighs. The values listed are percentages of the robot's Body-mass.

Pow how much additional power each modification causes the body to use every hour. Percentage is based on the power usage of the robot's Body-mass.

Cost Values listed are multiples of the cost of the robot's Body-mass.



Robot Hit Locations **d20**

Body 1-19
Critical Hit 20

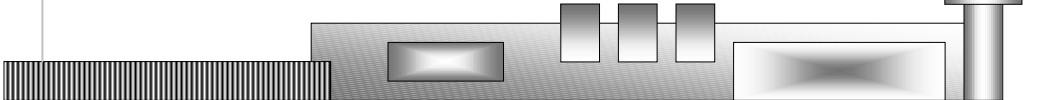
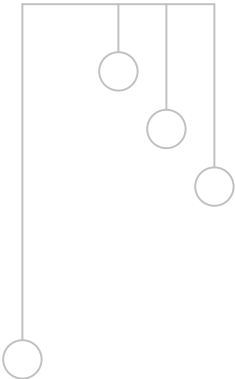


Critical Hit **d20**

Auxiliary System 1-13
Power System 14-18
Core Processor 19 - 20

Critical Hit table results

- Auxiliary system one of the robot's internal pieces of equipment has been destroyed or a weapon system has been destroyed (roll d4, on a 1 it merely jammed).
- Power System the robot's power containment system has been hit. It loses d10 x10% of its remaining power. Thereafter, the robot will drain a full charge in d4 hours until the containment system has been repaired.
- Core processor the robot's brain has been hit. Roll d4, on a 1 the processor has been destroyed, otherwise the processor loses d8 cycles until it is repaired. If damage causes a core processor's cycles to drop below 1, the processor is destroyed.



Appendix B, Military Robots

All military robots (warbots) must have the following pieces of equipment: body, impulse system, power system, core processor, manipulative limbs, detection system. The following pieces of equipment are optional: extra power systems, backup processors, extra detection systems and options. Warbots use the same components as listed in the Robots section, where alternates are not listed below.

Military AI robots must select one of the following Occupation's: Spy, MP, Police, Soldier, Soldier Elite, Space Marine, Assassin, Mercenary, Smuggler, Combat Aerospace Pilot, Combat Bot Pilot, Combat Vehicle Pilot, Military Research and Development. In special situations, Referees may wish to allow the Independent Occupation as well.

Military robots and the components listed below have an Availability of E.

Body	Mass	Load	Pow	Cost	Hits	STR	RUG	
Recon	6.6	132	5	4,000	48	6	6	
Combat	15.4	180	7	4,800	88	9	8	common soldier robot
Assault	27.5	240	14	6,400	144	12	9	
Super assault	38.5	360	27	12,800	208	16	10	
Infiltrator	11	156	14	18,400	72	7	8	shaped like one of the character races; Xenopomorphic combat model

Impulse Systems

Military impulse systems are constructed from higher grade metals than their civilian counterparts and classified materials. As a consequence, their Hits scores are 10 points higher than civilian models and they cost 50% more. All other statistics are the same.

Containment System	CR	Mass	Cost	
Recon pack	96	25	12,960	
Combat pack	288	50	17,280	standard
Assault pack	576	75	92,160	
Super assault pack	1162	100	276,480	

Military robot power systems use the same power sources available to civilian models.

Core Processors	CYC	Pow	Mass	Cost	+/-
Mk VII	7 AI	4	1.4	5,500	1/0
Mk IX	9 AI	6	2	7,500	2/2
Mk X	10 AI	8	2.8	17,250	2/1
Mk XII	12 AI	10	4.8	31,000	2/0
Mk XV	15 AI	15	7.6	53,750	2/3
Mk XVII	17 AI	25	12	94,500	3/2

Military Core Processors are EMP and radiation shielded and they are armored. When hit by a critical hit, they are destroyed on roll of 1 on d10, otherwise they lose d4 cycles.

CYC The number of thought cycles the warbot can complete in a nanosecond. This value is the robot's ability score for COR, SPD, REF+, INT+, WIS-, CLV, WIL+, FOC+ and CHR-. Modified by the values under +/- (see below).

+/- The first value is added to all ability scores with the "+" notation in the description under CYC. The second value is subtracted from all ability scores with the "-" notation in the description under CYC.

AI This notation indicates the robot may be self aware, although not all of them are. Making a core processor AI increases the core processor cost by 100%.

Pow The number of PU used by the core processor every hour.

Manipulative Limbs	Load	Hits	Pow	Mass	Cost	
Combat claw	36	36	12	19	300	a heavy duty arm with a fierce claw designed for attacking soft and hard targets (people and robots); melee damage is doubled
Weapon mount	50	30	9	8	400	an armored limb without manipulators, designed with an enlarged cargo region for mounting weapons; weapons have a 180 degree arc
Heavy Weapon mount	120	50	18	24	1,600	an armored limb without manipulators, designed with an enlarged cargo region for mounting weapons; weapons have a 180 degree arc
Heavy turret	208*	56	9	6	2,100	provides 360o field of fire and full stabilization for mounted weapons, giving them a +90% to hit

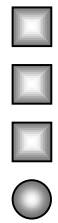
Military robots may use any of the manipulators available to civilian robots (listed under the Robots section). Military versions of civilian manipulators are constructed from higher grade metals, than their civilian counterparts, and classified materials. As a consequence, their Hits scores are 5 points higher than civilian models and they cost 50% more. All other statistics are the same.

Detection Systems

Military robots use the same detection systems as civilian robots. The main difference being that military robots frequently have detection systems with the higher availability ratings.

Modifications and Equipment

Military robots can have the same modifications and equipment installed as civilian robots. Military robots are either extremely specialized, or very adaptable and they tend to mount more weapons than civilian robots. There is one modification available to military robots that is not available to civilian robots: Heavy Metal. When the robot is being constructed, all internal and external structures, as well as armor plates are thickened considerably. These robots subtract their full TGH score from all incoming damage. Cost for this modification is 50% final robot cost. This will increase the final weight of the robot by 35%.



Military Robots as Characters

It is recommended caution be used in allowing players to play military robots as characters. Players character AI military robots may cost $8d10 \times 4,000$ credits and must choose a military or related Occupation. Robots have LCK of 4. ATR is usually not applicable, but for Infiltrator robots it defaults at 4 and can be increased at a cost of 420 credits per point, to a maximum of 10.

Appendix C, Sample Robots

Personal Robot

A typical robot. Personal robots are built for a wide variety of purposes and needs, determined by the owner.

Class: Civilian
Body: Medium
Core Processor: Mantronix AI
Vision: IR
Limbs: Standard Manipulator x2
Impulse System: Biped legs
Power System: Medium, Cap Charge (672 PU)
Height / Weight: 1.35 m, 112.8 kg
Power Consumption: 44 PU / hour
Cost: 5,220 credits
Walk/Sprint/Hourly: 6 m/t, 24 m/t (12 min), 18 kph

[IMAGE 3 x 3 ¼] (personal robot) Custom robot standing behind it's owner.
Maybe acting as muscle?

Attributes (necessary for PC's only)

STR	9	INT	6	MOT	6
END	6	WIS	6	MAG	3
TGH	6	CLV	6	BOD	5
FLX	6	WIL	6	AGI	6
COR	6	FOC	6	SAN	6
SPD	6	CHA	6	PHY	6
REF	6	LCK	4	MEN	6
ATR	--			STA	6
MOV	6				

TGH Reduction:	-1
Hit Location	Roll Hits
Body	1 - 12 55
Appendages	13 - 16 27 (x2)
Impulse System	17 - 19 30 (x2)
Critical Hit	20

Critical	Roll
Weapon	1 - 9
Vision Sys	10 - 13
Power Sys	14 - 18
Core	19 - 20

Ranged Combat Data
Initiative: 6 + d12
Ranged To Hit: 35%
Unskilled to Hit: 24%

FOC Negate: -24%
COR Negate: -24%

Melee Combat Data
Melee Attacks: 2
ATK / DEF: 12 / 918
Strike / Pow Stk: 7 / 14
Kick / Pow Kck: 12 / 24

FOC Negate: -6
COR Negate: -6

+60% +0% -20% -60% -100%

Integral Weapons RC PB SH MD LN EX Dmg ROF Pow % Hit Ammo

1. None



Function Robot

A typical repair, maintenance or janitorial robot.

Class: Civilian
Body: Light
Core Processor: Mindsink
Vision: Ultrasonic
Limbs: Standard Manipulator
Impulse System: Wheels
Power System: Medium, Cap Charge (672 PU)
Height / Weight: .91 m, 90.7 kg
Power Consumption: 33 PU / hour
Cost: 3,870 credits
Walk/Sprint/Hourly: 6 m/t, 24 m/t (8 min), 18 kph

[IMAGE 3 x 3] (Function robot) small janitorial or custodial robot, perhaps with a vacuum or broom. Some sort of automated cleaning robot.

Attributes (necessary for PC's only)

STR 6 INT 3 MOT 3
END 4 WIS 3 MAG 1
TGH 4 CLV 3 BOD 5
FLX 4 WIL 3 AGI 3
COR 3 FOC 3 SAN 3
SPD 3 CHA 3 PHY 3
REF 3 LCK 4 MEN 3
ATR -- STA 5
MOV 6

TGH Reduction: -1
Hit Location Roll Hits
Body 1 – 12 30
Appendages 13 – 16 27
Impulse System 17 – 19 40 (x1)
Critical Hit 20

Critical Roll
Weapon 1 – 9
Vision Sys 10 – 13
Power Sys 14 – 18
Core 19 – 20

Ranged Combat Data
Initiative: 3 + d12
Ranged To Hit: 18%
Unskilled to Hit: 12%
FOC Negate: -12%
COR Negate: -12%

Melee Combat Data
Melee Attacks: 1
ATK / DEF: 6 / 9
Strike / Pow Stk: 4 / 8
Kick / Pow Kck: 7 / 14
FOC Negate: -3
COR Negate: -3

+60% +0% -20% -60% -100%

Integral Weapons RC PB SH MD LN EX Dmg ROF Pow % Hit Ammo
1. None

Service Robot

A typical clerk or valet robot. These robots are frequently Xenopomorphic in design, although some older models are still standard robots built in a rudimentary anthropomorphic design. These robots are most often found performing duties such as waiter, teller, cashier, tour guide, etc. Some of the more advanced service robots are nearly indistinguishable from the races.

Class: Civilian
Body: Xenopomorphic (Meylor)
Core Processor: Cyber700 AI
Vision: Motion
Limbs: Standard Manipulator x4
Impulse System: Quadped legs, heavy
Power System: Light, Therm (216 PU)
Height / Weight: 1.62 m, 202.7 kg
Power Consumption: 93 PU / hour
Cost: 13,460 credits
Walk/Sprint/Hourly: 5 m/t, 20 m/t (12 min), 15 kph

[IMAGE 3 x 4] (Service robot) a valet robot? Butler robot? Holding a tray with tea on it? Use a Xenopomorphic meylor robot.

Attributes (necessary for PC's only)

STR	7	INT	5	MOT	5
END	6	WIS	5	MAG	4
TGH	6	CLV	5	BOD	6
FLX	6	WIL	5	AGI	5
COR	5	FOC	5	SAN	5
SPD	5	CHA	5	PHY	5
REF	5	LCK	4	MEN	5
ATR	4			STA	5
MOV	??				

TGH Reduction:	-1	
Hit Location	Roll	Hits
Body	1 – 12	45
Appendages	13 – 16	27 (x4)
Impulse System	17 – 19	40 (x4)
Critical Hit	20	

Critical	Roll
Weapon	1 – 9
Vision Sys	10 – 13
Power Sys	14 – 18
Core	19 - 20

Ranged Combat Data	
Initiative:	5 + d12
Ranged To Hit:	30%
Unskilled to Hit:	20%
FOC Negate:	-20%
COR Negate:	-20%

Melee Combat Data	
# Melee Attacks:	1
ATK / DEF:	10 / 15
Strike / Pow Stk:	6 / 12
Kick / Pow Kck:	9 / 18
FOC Negate:	-5
COR Negate:	-5

Options

Synthskin, Water proofing, Voice Synthesizer

		+60%	+0%	-20%	-60%	-100%													
Integral Weapons	RC	PB	SH	MD	LN	EX	Dmg	ROF	Pow	% Hit	Ammo								
1. None																			



Vending Robot

A typical vending machine robot.

Class: Civilian
Body: Light
Core Processor: Automatron
Vision: IR
Limbs: none
Impulse System: Wheels
Power System: Medium, Cap Charge (672 PU)
Height / Weight: .99 m, 82.5 kg
Power Consumption: 22 PU / hour
Cost: 3,870 credits
Walk/Sprint/Hourly: 6 m/t, 24 m/t (8 min), 18 kph

[IMAGE 3 x 2 ½] (Vending robot) A vend-a-bot in a mall or outdoor strip mall.

Attributes (necessary for PC's only)

STR 6 INT 4 MOT 4
END 4 WIS 4 MAG 2
TGH 4 CLV 4 BOD 5
FLX 4 WIL 4 AGI 4
COR 4 FOC 4 SAN 4
SPD 4 CHA 4 PHY 4
REF 4 LCK 4 MEN 4
ATR -- STA 5
MOV ??

TGH Reduction: -1
Hit Location Roll Hits
Body 1 – 12 30
Appendages 13 – 16 n/a
Impulse System 17 – 19 40 (x1)
Critical Hit 20

Critical Roll
Weapon 1 – 9
Vision Sys 10 – 13
Power Sys 14 – 18
Core 19 – 20

Ranged Combat Data
Initiative: 4 + d12
Ranged To Hit: 24%
Unskilled to Hit: 18%
FOC Negate: -16%
COR Negate: -6%

Melee Combat Data
Melee Attacks: 1
ATK / DEF: 8 / 12
Strike / Pow Stk: 5 / 10
Kick / Pow Kck: 8 / 16

FOC Negate: -4
COR Negate: -4

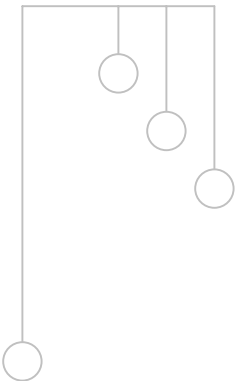
Options

Large cargo bay modified to hold candy and soda.

+60% +0% -20% -60% -100%

Integral Weapons RC PB SH MD LN EX Dmg ROF Pow % Hit Ammo

1. None



Security Robot

A common security robot designed to detect intruders and non-lethally detain them as well as defend itself. They normally carry electric tun-fa's or stun batons.

Class: Civilian
Body: Medium
Core Processor: Mantronix
Vision: Radar, Motion
Limbs: Standard manipulator x3
Impulse System: Wheels
Power System: Heavy, Low Cap Charge (960 PU)
Height / Weight: 1.4 m, 141.6 kg
Power Consumption: 75 PU / hour
Cost: 16,720 credits
Walk/Sprint/Hourly: 7 m/t, 28 m/t (12 min), 21 kph

[IMAGE 3 x 3 1/2] (Security robot)

Attributes (necessary for PC's only)

STR 9 INT 4 MOT 6
END 6 WIS 4 MAG 3
TGH 6 CLV 4 BOD 7
FLX 6 WIL 4 AGI 6
COR 6 FOC 4 SAN 6
SPD 6 CHA 4 PHY 6
REF 6 LCK 4 MEN 6
ATR -- STA 6
MOV ??

TGH Reduction:	-1
Hit Location	Roll Hits
Body	1 – 12 55
Appendages	13 – 16 27 (x3)
Impulse System	17 – 19 40 (x1)
Critical Hit	20

Critical	Roll
Weapon	1 – 9
Vision Sys	10 – 13
Power Sys	14 – 18
Core	19 - 20

Ranged Combat Data	
Initiative:	6 + d12
Ranged To Hit:	36%
Unskilled to Hit:	24%
FOC Negate:	-24%
COR Negate:	-24%

Melee Combat Data	
# Melee Attacks:	2
ATK / DEF:	12 / 18
Strike / Pow Stk:	7 / 814
Kick / Pow Kck:	12 / 24
FOC Negate:	-6
COR Negate:	-6

Options

Speed boost, stun hull, water proofing, communicator, chromatic screen, ballistic screen, chronograph, cap charge backpack for the laser rifle (420 PU)

		+60%	+0%	-20%	-60%	-100%						
Integral Weapons	RC	PB	SH	MD	LN	EX	Dmg	ROF	Pow	% Hit	Ammo	
1. Laser Rifle	24	12	48	192	384	768	3d10	3	3	72	420 PU	

Recon Robot

Reconnaissance Robot. Designed to locate information about enemies. They are not designed for combat and are frequently unarmed.

Class: Military
Body: Recon
Core Processor: Mk XII
Vision: Radar, IR, Motion, Magflux
Limbs: none
Impulse System: Quadped legs
Power System: Recon, Therm (576 PU)
Height / Weight: 1.5 m, 132.7 kg
Power Consumption: 115 PU / hour
Cost: 105,137 credits
Walk/Sprint/Hourly: 8 m/t, 32 m/t (12 min), 24 kph

[IMAGE 3 x 3 ¼] (Recon robot)

Attributes (necessary for PC's only)

STR 6 INT 14 MOT 14
END 6 WIS 12 MAG 6
TGH 6 CLV 12 BOD 6
FLX 6 WIL 14 AGI 13
COR 12 FOC 14 SAN 13
SPD 12 CHA 12 PHY 12
REF 14 LCK 4 MEN 13
ATR -- STA 7
MOV ??

TGH Reduction:	-1	
Hit Location	Roll	Hits
Body	1 – 12	48
Appendages	13 – 16	n/a
Impulse System	17 – 19	35 (x4)
Critical Hit	20	

Critical	Roll
Weapon	1 – 9
Vision Sys	10 – 13
Power Sys	14 – 18
Core	19 – 20

Ranged Combat Data	
Initiative:	14 + d12
Ranged To Hit:	78%
Unskilled to Hit:	52%
FOC Negate:	-56%
COR Negate:	-48%

Melee Combat Data	
# Melee Attacks:	4
ATK / DEF:	24 / 38
Strike / Pow Stk:	9 / 18
Kick / Pow Kck:	12 / 24
FOC Negate:	-14
COR Negate:	-12

Options

Speed boost, camoskin, thermal damping, radar damping, EMP shielding, secure communicator, binoculars, compass, chronograph, holo screen, GPS, handheld video camera

+60% +0% -20% -60% -100%

Integral Weapons RC PB SH MD LN EX Dmg ROF Pow % Hit Ammo

1. None

Warfighter

Fairly clever, these robots form the mainstay of many armies across the galaxy, especially on planets where giant robotic fighting vehicles are uncommon. Generally designed according to the race employing them, e.g., human warfighter robots typically have two arms and legs and stand upright. One could never be mistaken for an actual specimen of the race, though. Warfighters are versatile, either or both weapon mounts can easily be dismounted and a standard manipulator installed in their place. One gaussgun is located in each weapon mount and the torso mounts a laser machine pistol for anti-personnel and self defense work. An up-armed version with tracks and support gaussguns exists as well.

Class: Military
 Body: Combat
 Core Processor: Mk IX
 Vision: IR, UV, Radar
 Limbs: Weapon mount x2
 Impulse System: Triped legs
 Power System: Combat, Therm (1,728 PU)
 Height / Weight: 1.43 m, 178.5 kg
 Power Consumption: 65 PU / hour
 Cost: 95,426 credits
 Walk/Sprint/Hourly: 6 m/t, 24 m/t (16 min), 18 kph

[IMAGE 3 x 5 ½] (WarFighter robot)

Attributes (necessary for PC's only)

STR 9	INT 11	MOT 11
END 8	WIS 7	MAG 3
TGH 8	CLV 9	BOD 8
FLX 8	WIL 11	AGI 10
COR 9	FOC 11	SAN 9
SPD 9	CHA 7	PHY 9
REF 11	LCK 4	MEN 10
ATR --		STA 7
MOV 6		

TGH Reduction:	-2
Hit Location	Roll Hits
Body	1 – 12 88
Appendages	13 – 16 45 (x2)
Impulse System	17 – 19 35 (x3)
Critical Hit	20

Critical	Roll
Weapon	1 – 9
Vision Sys	10 – 13
Power Sys	14 – 18
Core	19 – 20

Ranged Combat Data
Initiative: 11 + d12
Ranged To Hit: 60%
Unskilled to Hit: 40%
FOC Negate: -44%
COR Negate: -36%

Melee Combat Data
Melee Attacks: 3
ATK / DEF: 18 / 29
Strike / Pow Stk: 9 / 18
Kick / Pow Kck: 13 / 26

FOC Negate: -11
COR Negate: -9

Options

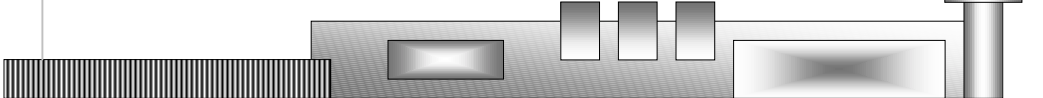
Camoskin, armored hull, water proofing, EMP shielding, auto-repair, lg cargo bay (50 kg capacity), secure communicator, hvy cap backpack (600 PU), all ammunition for the rail rifles is Tungsten-Diamond Sabot (250 rounds total)



Integral Weapons	RC	+60%		+0%		-20%		-60%		-100%		ROF	Pow	% Hit	Ammo
		PB	SH	MD	LN	EX	Dmg								
1. Assault Rail Rifle x2 each	24	12	48	192	384	768	4d12	2	3	114	125 rounds				
2. Laser Machine Pistol	10	5	20	80	160	320	2d10	3 ^{Short}	2	114					



300



Assassin Droid

These spherical robots are extremely dangerous. Optimum deployment is in groups of three, but they are also seen on solo missions. The quad mount of force daggers is located directly on the front of the hull for ramming attacks when they are out of ammunition. Assassin droids are feared across the galaxy. They never miss.

Class: Military
Body: Combat
Core Processor: Mk X
Vision: IR, Olfactory
Limbs: none
Impulse System: Anti-grav pods
Power System: Recon, Therm (576 PU)
Height / Weight: 1.58 m, 197.1 kg
Power Consumption: 242 PU / hour
Cost: 217,400 credits
Walk/Sprint/Hourly: 10 m/t, 40 m/t (16 min), 30 kph

[IMAGE 3 x 4] (Assassin Droid)

Attributes (necessary for PC's only)

STR	9	INT	12	MOT	12
END	8	WIS	9	MAG	3
TGH	8	CLV	10	BOD	8
FLX	8	WIL	12	AGI	11
COR	10	FOC	12	SAN	10
SPD	10	CHA	9	PHY	10
REF	12	LCK	4	MEN	11
ATR	--			STA	9
MOV	10				

TGH Reduction:	-2
Hit Location	Roll Hits
Body	1 - 12 88
Appendages	13 - 16 n/a
Impulse System	17 - 19 70 (x2)
Critical Hit	20

Critical	Roll
Weapon	1 - 9
Vision Sys	10 - 13
Power Sys	14 - 18
Core	19 - 20

Ranged Combat Data

Initiative: 12 + d12
Ranged To Hit: 66%
Unskilled to Hit: 44%

FOC Negate: -48%
COR Negate: -40%

Melee Combat Data

Melee Attacks: 3
ATK / DEF: 20 / 32
Strike / Pow Stk: 9 / 18
Kick / Pow Kck: 14 / 28

FOC Negate: -12
COR Negate: -10

Options

Speed Boost, Stealth, Water proofing, Thermal damping, EMP shielding, Radar damping, VL redirection, Imp auto-repair, Small cargo bay, Chronograph, Heavy Cap Power Cell (1440 PU), Kinetic screen, Glow screen, Gauss screen

Integral Weapons	RC	+60% +0% -20% -60% -100%					Dmg	ROF	Pow	% Hit	Ammo
		PB	SH	MD	LN	EX					
1. Proton Sniper Rifle	30	15	60	240	480	960	d20	1	3	126	
2. Laser Sniper Rifle	26	13	52	208	416	832	3d10	1	4	126	
3. Heavy Bolt Gun x2 each	15	7.5	30	120	240	480	10d20	1	--	126	36 rounds

Siege Unit "Dragon"

Super heavy combat robot. These monsters are super intelligent and self aware, making them one of the most deadly opponents on the battlefield. A single Dragon unit can turn the tide of most battles. The heavy turret carries a long rail cannon and a coaxial support fusion rifle. The right weapon mount carries a support laser rifle and automatic grenade launcher in over/under configuration. The left weapon mount carries a support particle rifle and disruption blazer similarly. The dragon is also electro-directive, thus it can direct raw energy from its power supply at targets.

Class: Military
Body: Super Assault
Core Processor: Mk XVII AI
Vision: Radar, IR, Magflux
Limbs: Heavy turret, weapon mount x2
Impulse System: Quadped legs, heavy
Power System: Combat, Fusion (3,456 PU)
Height / Weight: 4.56 m, 569.64 kg
Power Consumption: 148 PU / hour
Cost: 611,214 credits
Walk/Sprint/Hourly: 5 m/t, 20 m/t (20 min), 15 kph

[IMAGE 3 x 4 ½] (Siege Unit "Dragon" robot)

Attributes (necessary for PC's only)

STR 16	INT 20	MOT 20
END 10	WIS 15	MAG 7
TGH 10	CLV 17	BOD 13
FLX 10	WIL 20	AGI 18
COR 17	FOC 20	SAN 17
SPD 17	CHA 15	PHY 17
REF 20	LCK 4	MEN 18
ATR --		STA 7
MOV 5		

TGH Reduction:	-3
Hit Location	Roll Hits
Body	1 - 12 208
Appendages	13 - 16 56, 30, 30
Impulse System	17 - 19 50 (x4)
Critical Hit	20

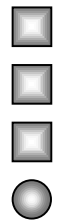
Critical	Roll
Weapon	1 - 9
Vision Sys	10 - 13
Power Sys	14 - 18
Core	19 - 20

Ranged Combat Data	
Initiative:	19 + d12
Ranged To Hit:	111%
Unskilled to Hit:	74%
FOC Negate:	-80%
COR Negate:	-68%

Melee Combat Data	
# Melee Attacks:	5
ATK / DEF:	34 / 54
Strike / Pow Stk:	16 / 32
Kick / Pow Kck:	24 / 48
FOC Negate:	-20
COR Negate:	-17

Options

Camoskin, Thermal damping, Radar damping, EMP synthetic, Electro-synthetic, Electro-directive, Nanite Bay, Hvy armored hull, GPS receiver, Secure communicator, Glow screen, Kinetic screen, Cap charge power cell (1,008 PU) x4



		+60%	+0%	-20%	-60%	-100%						
Integral Weapons	RC	PB	SH	MD	LN	EX	Dmg	ROF	Pow	% Hit	Ammo	
1. Long Rail Cannon	32	16	64	256	512	1024	9d100	1	24	213	18 rounds	
2. Support Fusion Rifle	16	8	32	128	256	512	4d20	1Semi	9	213		
3. Support Laser Rifle	18	9	36	144	288	576	4d12	4Auto	4	213		
4. Grenade Launcher, auto	12	6	24	96	192	384	frag gren	3Semi	--	213	40	
grenades												
5. Support Particle Rifle	32	16	64	256	512	1024	4d10	2	8	213		
6. Disruption Blazer	2	1	4	16	32	64	4d6	1Semi	2	213		

Appendix D, Sample Animals and Creatures

Common Animals

Attributes	Tiger	Horse	Rabbit	Shark	Gazelle	Giraffe	Mega Bear
STR	10	8	1	9	8	10	14
END	3	5	7	4	7	4	1
TGH	7	7	2	7	7	8	10
FLX	5	5	5	5	5	5	5
COR	12	7	11	12	7	6	10
SPD	11	12	16	11	12	11	9
REF	9	11	14	9	11	10	7
MOV	10	9	18	11	9	8	7
INT	2	2	2	2	2	2	2
INS/WIS	6	5	7	5	5	4	7
CLV	3	2	3	2	2	2	4
WIL	5	3	1	7	2	3	12
FOC	10	3	1	10	3	4	6
CHR	2	2	2	1	2	2	1
LCK	3	7	9	4	7	7	1
SIZE	L (2 m)	L (3 m)	VS (¼ m)	M (2 m)	L (2 m)	H (4 m)	G (9 m)
HITS	180	100	9	72	90	450	480
BITE	3d12	d8	d2-1	2d8	d8	2d10	8d20
STRIKE	3d12	d5	d3-2	N/A	d5	d10	6d20
ATTACKS	3	1	2	3	1	1	1
HAB	Jungle	many	temperate	aquatic	plains	plains	varies
SKIN	yellow/ black stripe	varies	varies	gray	brown	orange/ brown spot	
SOC	pack (2d4+1)	pack	pack	solitary	herd (10d10)	pack	solitary
MET	Animal	Animal	Animal	Fish	Animal	Animal	Animal
DIET	Carnivore	Herbivore	Herbivore	Carnivore	Herbivore	Herbivore	Carnivore

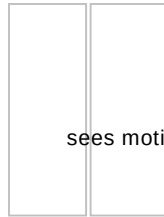
Computed Attributes

INIT +d12	22	25	32	22	25	24	18
CTH	99%	84%	117%	93%	84%	72%	93%
ARN	12 ½ m	13 ½ m	17 ¼ m	13 m	12 ½ m	13 ½ m	17 m
AS +2d10	35	29	41	33	29	25	33
DS +d12	44	40	55	42	40	35	40
Walk	10 m/t	9 m/t	18 m/t	11 m/t	9 m/t	8 m/t	7 m/t
Jog/Trot	15 m/t	13 ½ m/t	27 m/t	16 ½ m/t	13 ½ m/t	12 m/t	10 ½ m/t
Run (min)	25 m/t (6)	22 ½ m/t (10)	45 m/t (14)	27 m/t (8)	22 ½ m/t (14)	20 m/t (8)	17 ½ m/t (2)
Sprint (min)	30 m/t (1 ½)	27 m/t (2 ½)	54 m/t (3 ½)	33 m/t (2)	27 m/t (3 ½)	24 m/t (2)	21 m/t (½)



Special
Abilities

pounce
night hunter
keen smell
climbs trees
move silently

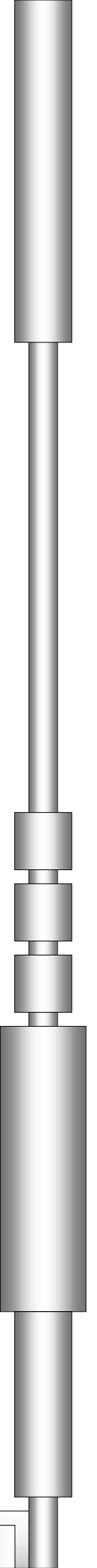


sees motion

ferocious
poor eyesight
no strike

no bite

climbs trees



Alien Creatures

Firyne

The Firyne is both predator and prey in its native environment.

Attributes

STR	7	INT	3
END	6	INS	3
TGH	5	CLV	3
FLX	5	WIL	5
COR	13	FOC	9
SPD	12	CHR	1
REF	11	LCK	5
MOV	14		

Computed Attributes

INIT	26 + d12
CTH	90%
ARN	13½ m
AS	31 +2d10
DS	42 +d12
Walk	14 m/t
Jog/Trot	21 m/t
Run	35 m/t, 24 min
Sprint	42 m/t, 3 min

SIZE	VS (½ m long)
HITS	30
BITE	d8
STRIKE	2d6
ATTACKS	4
HAB	Jungle
SKIN	Black and red fur
SOC	Pack (3-9)
MET	Animal
DIET	Carnivore

[IMAGE 6 x 3] (alien creatures) Firyne

Special Abilities

- Ferocious (berserks in melee)
- Fire Breather, 5d10 damage, RC 5, 100 m range, 2x per day
- Coil attack
- Chemical attack, d10 bruise damage, 1 point lethal, range ½ m
- Psionic, Psychic Vampirism (3d6 damage), Paralysis (6 turns)
- Stench (persists for 6 days)
- Doppelganger
- Keen smell
- Regenerates (+9 hits / turn)
- Valuable
- Sees using motion

Licara

The Licara is a predator in its native environment.

Attributes

STR	10	INT	2
END	3	INS	6
TGH	7	CLV	3
FLX	5	WIL	6
COR	12	FOC	12
SPD	11	CHR	2
REF	9	LCK	2
MOV	10		

Computed Attributes

INIT	22 + d12
CTH	89%
ARN	14 ½ m
AS	35 +2d10
DS	41 +d12
Walk	10 m/t
Jog/Trot	15 m/t
Run	25 m/t, 12 min
Sprint	30 m/t, 1½ min

SIZE	H (4 m long)
HITS	200
BITE	3d12
STRIKE	N/A
ATTACKS	3
HAB	Tropical
SKIN	Glossy red and dark red
SOC	Pairs (2)
MET	Animal

[IMAGE 6 x 3] (alien creatures) Licara

Special Abilities

- Fire Breather, 8d10 damage, RC 5, 100 m range, 1x per day
- Shoots darts, can store up to 6 at one time, ROF 1/turn, regenerates 3 per day, damage per dart is 10 pts
- Slick hide, -4 penalty to melee attacks against the Licara, -20% penalty to ranged attacks with B weapons
- Incapable of making claw attacks
- Stench (persists for 6 days)
- Poor eyesight (penalty already figured in)
- Scavenger
- Energy eater, drains 48 PU, this attack supplants a bite attack

Ros'nak

The Ros'nak is an alien creature of deep space origin. Initially encountered in asteroid belts. The Ros'nak uses its crush attack to stun victims, then uses its 6 attacks per turn to completely drain all the energy from any equipment the target is carrying.

Attributes

STR	14	INT	2
END	4	INS	6
TGH	9	CLV	3
FLX	8	WIL	9
COR	11	FOC	9
SPD	9	CHR	2
REF	7	LCK	3
MOV	8		

Computed Attributes

INIT	18 + d12
CTH	90%
ARN	20 m
AS	32 +2d10
DS	39 +d12
Walk	8 m/t
Jog/Trot	12 m/t
Run	20 m/t, 8 min
Sprint	24 m/t, 2 min

SIZE	G (11 ½ m long)
HITS	180
BITE	N/A
STRIKE	N/A
ATTACKS	6
HAB	Vacuum
SKIN	Gray and hard, resembling rock
SOC	Pairs (2)
MET	Exotic

[IMAGE 6 x 3] (alien creatures) Ros'nak

Special Abilities

- Static conductive, every other turn the Ros'nak can discharge 4d20 in E damage
- Adjusted attacks, +3 (already figured in)
- Burrows at 8 m/t
- No melee attacks, other than Crush
- Energy drain, drains 8 PU from all power sources within 4 m range every turn automatically, each successful "attack" drains an additional 8 PU
- Crush attack, -3 penalty to employ this melee attack
- Energy eater, drains 24 PU, this "attack" drains only from the target



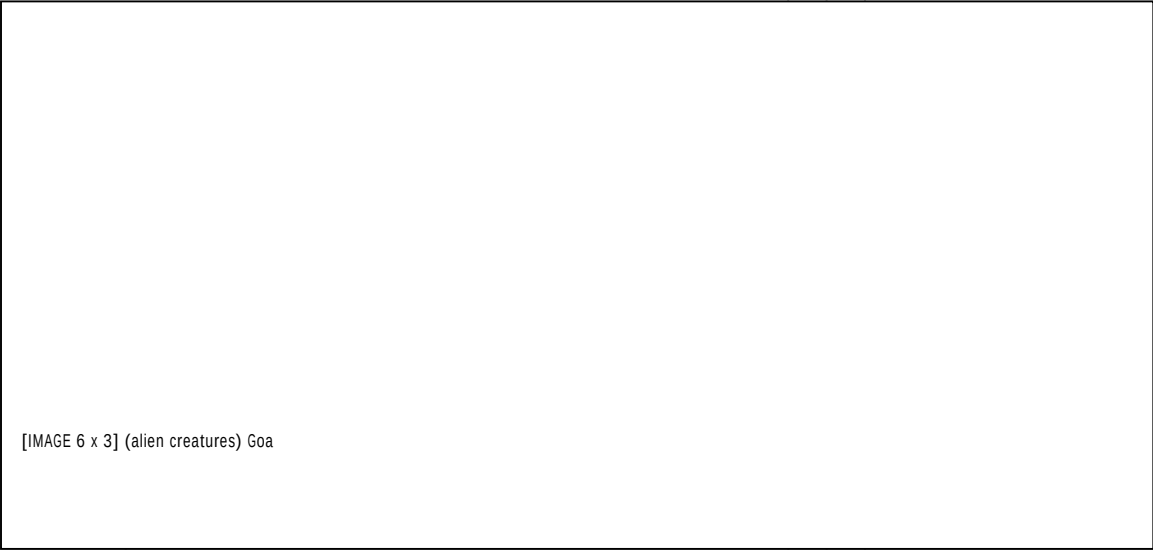
Goa

The Goa is prey in its native environment.

Attributes			
STR	11	INT	2
END	2	INS	4
TGH	8	CLV	5
FLX	5	WIL	7
COR	7	FOC	9
SPD	8	CHR	2
REF	7	LCK	3
MOV	3		

Computed Attributes	
INIT	17 + d12
CTH	66%
ARN	16 ½ m
AS	23 +2d10
DS	30 +d12
Walk	3 m/t
Jog/Trot	4½ m/t
Run	7½ m/t, 8 min
Sprint	9 m/t, 1 min

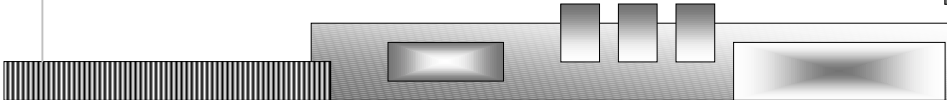
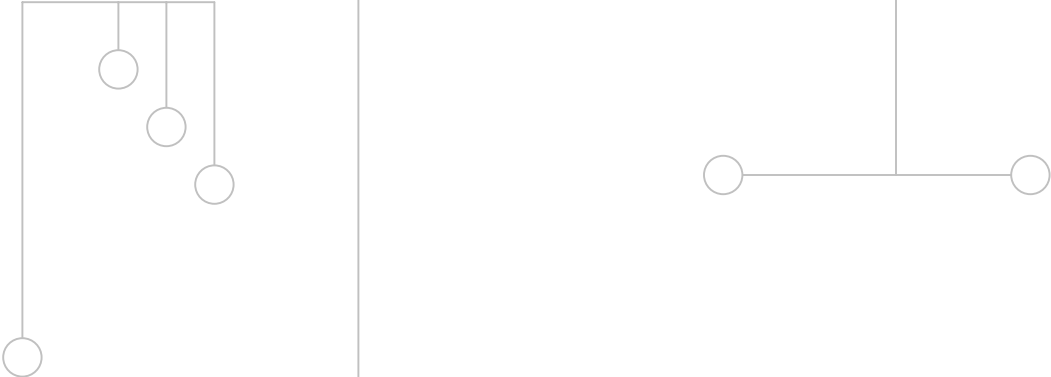
SIZE	G (11 m tall)
HITS	990
BITE	2d20
STRIKE	4d20
ATTACKS	1
HAB	Mountain
SKIN	Gray and white mottled
SOC	Pack (3-9)
MET	Animal



[IMAGE 6 x 3] (alien creatures) Goa

Special Abilities

- Thought eater, devours d10 psychic hit points per attack
- Stings, 6d4 damage
- Reflective coat, takes ½ damage from E attacks
- Burrows 3 m/t
- Flight capable, 18 m/t, maximum speed of 27 m/t
- Climbs trees, moves 1½ m/t from limb to limb



Appendix E, Game Tables

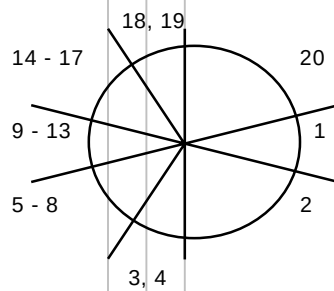
Combat

Combat turn 4 seconds
Initiative Formula $(SPD + REF + INT + WIL) / 4 + d12$
Surprise A surprised party may do nothing that turn.

Grenade Combat

Throw Distance $(STR + COR) \times 5$ meters
Spin Distance $STR \times 1$ meter
Bounce Distance $(10\% \text{ Distance thrown} + STR) \times d6$ meters

Grenade Bounce Table (roll d20)



Direction of throw

Ranged & Melee Combat

Base chance to hit $AGI \times 6 + \text{Weapon Skill Level} \times 6$
Unskilled chance to hit $AGI \times 4$

Weapon Jam Roll within *Jam* distance of 100 (Simple skill check to unjam weapon, takes d4 minutes, fries *Power Linkages*)
Fumble (ranged) Roll a natural 100, roll of 1 on d10 (take $\frac{1}{2}$ damage from 1 round)
Fumble (grenades) natural 100 (Difficult (REF, SPD, COR) to re-throw grenade)
Fumble (melee) natural 2 on attack roll (take $\frac{1}{2}$ damage from a strike)
Critical Hit Roll a natural 1 (double damage)
Automatic Hit / Lucky Shot Roll a natural 1-2 (for automatic misses only)
Accidental Hit (optional) 10% for anyone behind target to take a round

Defending Against Ranged Weapons with Melee Weapons

Impossible skill check to deflect 1 shot, uses 1 melee attack

Defending against Ranged Weapons with Energy Melee Shields

Difficult (REF) check to deflect 1 shot or burst, uses 1 melee attack, shield absorbs the damage from the attack

Unarmed Attacks

Lyandithate	2 per turn
Ferrite	2 per turn
Slen Boraka	2 per turn, bite
A'Ghuu	3 per turn, bite
Graff	3 per turn, bite attack, tail lash
Voix	2 per turn
Meylor	4 per turn
Human	2 per turn
Martial Art Skill	+1 per 3 levels of highest skill

Melee Weapon Attacks

1 + 1 per 3 levels of weapon skill

Attack Roll	COR + SPD + 2xSkill + 2d10
Defend Roll	COR + SPD + REF + 2xSkill + d12
Lethal Damage	1 point if untrained, otherwise equal to highest martial art skill level
Super Damage	+1 point lethal damage per point of STR or SPD above 10

Ranged To-Hit and Melee ATK Modifiers

Ranged Fire	Modifier	Attrib	Melee Attack Type	Modifier	Attrib
Snap Shot	-15	COR	Specific Maneuver	As Per Style	--
Careful Aim (For Single Shot)	+20	--	Multiple Attack *	+1 / Attack	--
Careful Aim (For Control Burst)	+10	--	Combination Attack	As Per Style	--
Consecutive Fire ¥	+10 / Shot	--	Counter Attack	+2	--
Off Hand Firing ¥¥	-20	COR	All Out Attack / Berserk **	+4	--
Firing Multiple Weapons ¥¥	-20	COR	Called Shot / Specific Target	-2	COR
Unstable Firing	-40	COR	Attacking From The Rear	+10	--
Stabilized Firing	+20	--	Attacker Partially Invisible	+4	--
Called Shot / Specific Target ¥¥¥	-50	COR	Attacker Invisible	+6	--
Multiple Targets (Not Spraying)	-20	COR			
Control Burst	+10	--			
Short Burst	+20	--			
Long Burst	+30	--			
Spray Fire ...	-1 x Distance	--			
Suppressive Fire (Per Meter)	6% x Rounds / Width				

¥ Consecutive fire bonuses can be accumulated for 2 shots (receiving a +20 bonus). If the character continues to fire at the target, the bonus remains at +20.

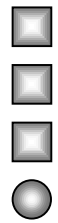
¥¥ Limited ambidexterity will negate Off Hand Firing. Full ambidexterity will negate Off Hand Firing and Firing Multiple Weapons.

¥¥¥ A Called Shot / Specified Target may not be declared when employing burst fire.

... Distance between targets.

* Multiple attack bonus is cumulative and granted to each attack after the first.

** Attacker suffers a -3 penalty to defense.



Attacker Movement

Stationary
In Firing Stance
Walking
Jogging
Running
Sprinting
Dodging
Dodging Acrobatically
Prone
In Moving Vehicle

Ranged Modifier	Melee Modifier	Attrib
+5	n/a	--
+10	n/a	--
-10	-1	COR
-20	-2	COR
-40	-4	COR
-80	-4	COR
-20	n/a	COR
-40	-6	COR
+10	-2	--
-20	n/a	COR

Attacker Camouflage

Attempting To Remain Unseen

Ranged Modifier	Melee Modifier	Attrib
-60	n/a	--

Attacker Wound Level

Light Wound
Moderate Wound
Severe Wound
Head Wound

Ranged Modifier	Melee Modifier	Attrib
-15	-1	FOC
-30	-2	FOC
-45	-4	FOC
-45	-4	FOC

Target Movement

Surprised
Immobilized / Stationary
Slow
Quick
Dodging
Acrobatic Dodge
Prone

Ranged Modifier	Melee Modifier	Attrib
+20	+4	--
+25	n/a	--
-10	n/a	FOC
-30	n/a	FOC
-30	n/a	FOC
-10 x AGI	-2 x AGI	FOC
-15	+3	FOC

Target Cover and Camouflage

Marginal Cover
Half Cover
Full Cover
Camouflaged (Moving)
Camouflaged (Stationary)
Nearly Invisible
Invisible

Ranged Modifier	Melee Modifier	Attrib
-15	n/a	--
-30	n/a	--
-60	n/a	--
-25	n/a	--
-50	n/a	--
-60	-12	--
-90	-18	--



Target Size

	Ranged Modifier	Melee Modifier	Attrib	Examples
Very Small	-40	-10	--	Car tire
Small	-20	-5	--	Tractor trailer tire
Medium	+0	+0	--	People, robots
Large	+30	+5	--	Common vehicle (car, etc.)
Huge	+60	+10	--	Large vehicle (truck, van, rig, etc.)
Giant	+120	+20	--	Ship

Environment and Weather

	Ranged Modifier	Melee Modifier	Attrib
Attacker underwater ~	-30	-6	--
Attacker weightless ^	varies, see below	-12	--
Illuminated By Spotlight	+30	+6	--
Night	-60	-12	--
Dusk / Dawn	-30	-6	--
High Winds	-40	n/a	--
Fog	-40	n/a	--
Rain	-15	-1	--
Heavy Rain / Storm	-45	-3	--
Sand Storm	-60	-1	--
Quake	-100	-20	--

~ -6 to DEF also.

^ -10 to DEF also. Zero G Combat reduces both penalties by an amount equal to the level.

Fog of War

	Ranged Modifier	Melee Modifier	Attrib
Attacker Distracted	-30	-3	FOC
Attacker Confused	-20	-4	FOC
Attacker Partially Blind	-60	-6	FOC
Attacker Blind	-150	-15	--



Ranged Weapon Modifications

Pulse Rifle	+25
Ramjet	+30
Brilliant Ramjet	+35
Genius Ramjet	+40
Super Genius Ramjet	+45
Ai Ramjet	+50
Draft Compression Enhancement	+25
Folding Stock (Folded)	-5
Folding Stock (Extended)	+10
Laser Designator	+20
Muzzle Break	+10 vs Range Penalty
Negative Particle Deflector	+20
Proton Dispersion	+1 x Range (Max +30)
Recoil Compensator	+5 to Consecutive Fire
Selenium Graphite Bore	+15
Static Guard	+15

Ranged Weapon Modifications

Telescoping Stock (Folded)	-15
Weapon Waldo (SAW)	+30
Weapon Waldo (Support)	+20
Weapon Waldo (Tripod)	+10
Weapon Waldo (Heavy Tripod)	+0
Uv Laser	-10

Melee Weapon Modifications

Static Guard	+1
IR Laser Weapon	+1
UV Laser Weapon	-1
Counter Surge Dampening	+2 to Kill
Directed Edge Melee	+2 to Strike
Flux Disruption	+1 to Break
Quantum Harmonic Disrupter	+1 to Parry

Underwater Combat

Hold Breath

SPD & REF

Ranged weapons

Disrupter weapons

Melee weapons

B & K damage

END x 10 seconds (+50% if hyperventilated and inactive)

-1 underwater

lasers, proton, microwave, plasma, fusion weapons (RC -50%)

RC x2, 1/2 damage within 5 m of beam, target takes double damage

solid, vibro, force, laser, proton, fusion melee weapons

1/2'd underwater

Weightless Combat

Weapon ranges (RC)

Projectile, needle, flechette attacks

Ramjet attacks

Rail attacks

Laser, Maser, Ion attacks

Ion weapons

Secure footing (magnetic boots)

1st shot in the turn

Non-energy melee weapons

x3

-30 penalty to hit

-20 penalty to hit

-60 penalty to hit

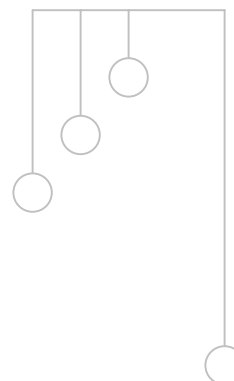
-10 penalty to hit

no lightning attacks

halves *Weightless Combat* penalties

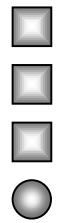
no *Weightless Combat* penalties

1/2 damage without secure footing



Martial Art Maneuver Bonuses

Maneuver	TKD		Kung Fu		Self Defense		Judo		Boxing	
	Wrestling	Aikido	Kick	Boxing	Hap	Ki	Do	Combat		
Strike	--	+3	+2	+4	+3	+1	+1	--	+0	+3
Power Strike	--	+1	+0	+2	+1	--	--	--	+0	+2
Kick	--	+4	+1	+2	+3	+2	--	--	+0	--
Power Kick	--	+2	--	--	+0	--	--	--	+0	--
Block	--	+3	+2	+4	+1	+1	--	+1	+0	+1
Dodge	+1	+1	+3	+2	--	--	--	+2	--	+2
Escape	+3	--	--	+0	--	+2	+4	+3	+0	--
Sweep	+2	+1	--	+2	--	--	--	+3	--	--
Throw	+1	--	+3	--	--	+1	+2	+3	--	--
Lock	+3	+1	+2	--	--	--	+3	+2	--	--
Break	+1	+2	+3	--	+3	+1	+3	+1	+0	--
Kill	+0	+2	+1	+3	+3	+1	+2	--	+0	--
Knockout	+2	+0	--	+2	+3	--	--	+1	+0	+4
Control	+2	+1	+3	--	--	--	+3	+1	+0	--
Stun	--	+1	--	--	--	+3	--	+1	--	--
Disarm	--	+2	+1	+3	--	--	+2	--	+0	--



Martial Arts Combination Attacks

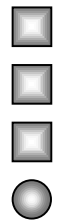
Style	Requisite Attack	Follow up Attack	Bonus
Wrestling	Sweep	Lock	+2
Tae Kwan Do	Strike	Kick, Pow kick	+1
Aikido	Strike	Sweep	+2
	Kick	Kick, Pow kick	+3
	Lock	Break	+1
	Control	Stun, Kill	+1
	Disarm	Kick	+1
	Throw	Break	+1
	Control or Lock	Break	+1
	Control	Throw	+3
	Control	Disarm	+2
	Stun	Kill	+1
Kung Fu	Strike	Strike	+3
Kick Boxing	Strike	Pow strike, Kill	+1
	Strike	Knockout, Disarm	+2
Self Defense	Strike, Pow Strike	Strike, Pow Strike, Kill, KO	+2
	Control or Lock	Disarm	+1
Hap Ki Do	Kick	Stun	+1
	Lock	Break	+2
	Control	Break	+1
Judo	Control	Throw, Stun, Disarm	+2
	Strike	Throw	+1
	Control or Stun	Throw	+3
Boxing	Strike	Strike	+3
	Strike	Pow strike KO	+2

Martial Arts Counter Attacks

Style	Attack Failed	Counter Attack
Wrestling	Sweep	Lock
	Throw or Strike	Control
TKD	Kick	Sweep, Kick
Aikido	Strike	Control, Lock, Break
	Kick	Throw
Kung-Fu	Control	Break, Throw
	Kill	Strike, Kick
	Knockout	Strike, Kick
Kick Boxing	Stun	Strike, Kick
	Strike	Kick
Self Defense	Kick	Strike
	Lock, Break or Control	Stun
Hap Ki Do	Lock or Control	Control, Lock
Judo	Sweep	Break, Lock
Boxing	Throw	Sweep, Throw
	Strike	Strike

Melee Weapon Styles

Weapon Style	LF	Strike	Parry	Disarm	Break	Knockout	Kill
Short sword	2	+2	+4	+1	--	--	+1
Long sword	2	+3	+3	+1	--	--	+2
Two handed sword	2	+2	+2	+1	+1	--	+2
Bastard sword	3	as long sword or two handed sword					
Great sword	2	+3	+2	--	+2	--	+3
Dagger	2	+1	+1	--	--	--	+1
Nunchaku	3	+2	+3	+2	--	+3	+0
Weighted Chain	3	+1	+1	+4	--	+2	--
3 Piece Rod	2	+1	+1	+3	--	+4	--
Bo staff	3	+3	+2	+1	+1	+1	+1
Jo staves	2	+3	+3	+2	--	+2	--
Escrima stick	2	+3	+2	+2	--	+3	--
Battle ax	2	+2	+1	+1	+1	--	+3
Polearm	2	+2	+1	--	--	--	+2
Tunfa	4	+1	+2	+3	--	+4	--
Whip	2	+2	--	+3	--	--	--
Other	3	+2	+2	--	--	--	--



Hit Locations, Aliens

Combat Scores, Robots

Special Combat Rules, Robots

Hit Locations, Robots

Critical Hits, Robots

Special Combat Rules, Vehicles

Damage to vehicles

Control Roles

Handling Roles

Collision Damage

Hit Locations, Vehicles

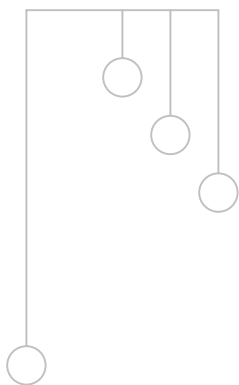
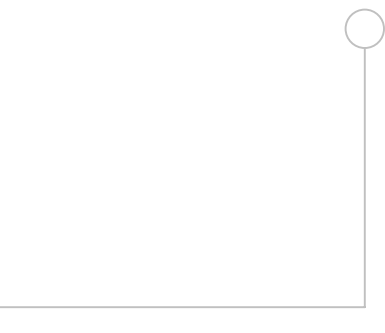
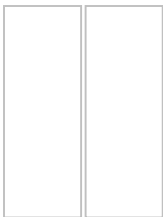
Special Combat Rules, Fusion Death Vehicles

Damage from AT weapons

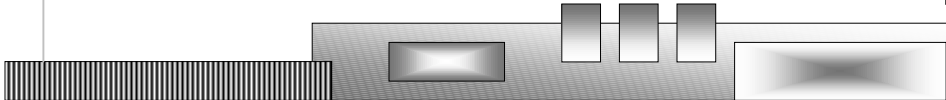
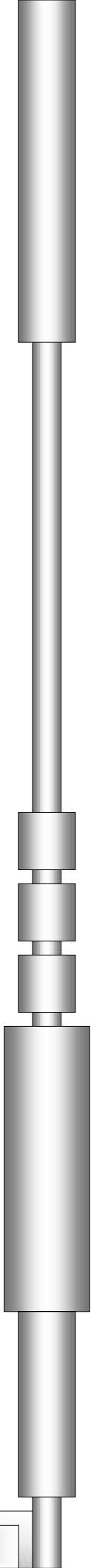
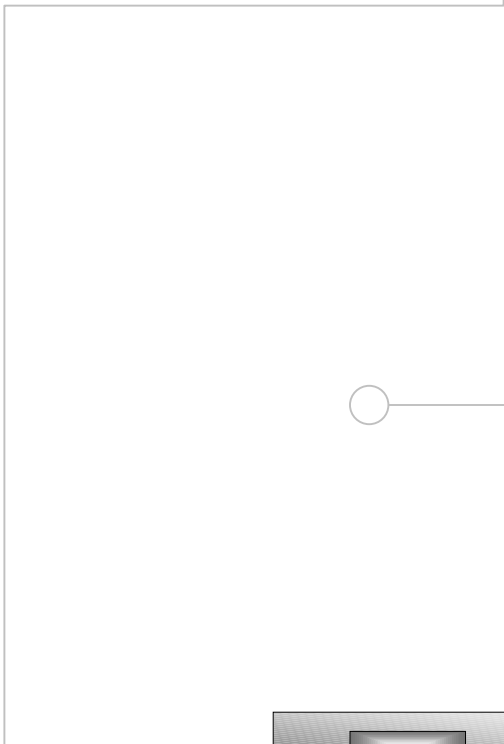
Chance of a critical hit

Damage from Fusion Death weapons, hard targets

Damage from Fusion Death weapons, soft targets



320



Skill & Ability Use

Skill Check Ability + Skill Level + d10
Ability Check Ability + d10
Opposed Check Compare Skill or Ability Checks (higher wins)

Task Difficulty	Target
Trivial	4
Simple	7
Moderate	13
Difficult	17
Very Difficult	22
Impossible	28

Difficulty Modifiers	Mod
Well equipped	-2
Properly equipped	+0
Partially equipped	+1
Unequipped	+2
In field environment	+1
Under fire	+3
Never done it before	+2
Never done it, but seen it +1	
Unskilled	+3

Spending Luck

1 point buys

+10 to hit (ranged combat)

+2 to ATK or DEF (melee combat)

+2 to weapon damage

+1 to skill or ability check

1 reroll of the last die roll (must be spent prior to the initial roll)

Luck replenishes at the end of the adventure

Character Improvement

Experience Point Multiple (XPM)

105 / (INT + FOC)

Improving Ability Scores

max increase is 2 ability points, max ability score is 10, cost is next score x50, requires Ability Improvement Points (AIP) or Experience Points (XP)

Improving Skills

next level x XPM x LF, requires Skill Points (SP) or Experience Points (XP)

Learning Skills

3 x XPM x LF, requires Skill Points (SP) or Experience Points (XP)

Skill Limit

INT x 3 skills

Skill Limit Break

Moderate (INT) to learn a new skill beyond Skill Limit

Level Limit

Pertinent Ability for the skill

Level Limit Break

Moderate (Pertinent Ability) to exceed Level Limit, must pay SP / XP to make check

AIP Awards = difficulty of ability check (if successful)

SP Awards = pertinent ability (if successful)

XP Awards based on *Event* and game style (*Low / Normal / High*)

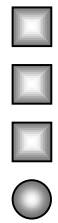
XP Awards

Event	Low Award	Normal Award	High Award
Entering Combat	5	10	30
Each opponent Neutralized or Killed	5	10	30
Avoiding Combat	15	30	90
Preventing henchmen or NPC from dying	7	15	20
Recovering or reviving a dead PC	8	15	35
Dying	10	20	90
Executing an elaborate plan	15	30	90
Executing a simple plan	5	10	20
Obtaining vital information	10	20	50
Generating large rewards for the group	10	25	70
Meeting a primary mission goal	20	40	100
Meeting a secondary goal	10	20	40
Role-playing & staying in character	5 – 15	10 – 30	30 – 70
Successful completion of the mission	30	60	250

Movement

Race	Walk	Jog	Run	Sprint	Cross Country	Swim
Human	1	2	3 (2.5)	3.7 (1/4)	2/3	1.5 (1.875)
Ferrite	1/3	1	2 (2)	2.5 (1/8)	2/9	1 (1.5)
Slen Boraka	2/3	2.5	4 (3.5)	4.5 (1/2)	1	2 (2.625)
A'Ghuu	1.2	2.3	2.8 (3)	3.3 (.4)	4/5	1.4 (2.25)
Graff	1.3	2.1	5.1 (2)	7.4 (1/2)	8/9	2.55 (1.5)
Voix	1	2.5	3 (10)	n/a	2/3	1.5 (7.5)
Meylor	1	1.5	2.4 (1.5)	3.1 (1/4)	2/3	1.2 (1.125)
Lyandithate	1/2	1	1.2 (10)	n/a	½	.6 (7.5)

Walk, Jog, Run, Sprint and Swim are multiplied by MOV and give the number of meters per turn. Values in parenthesis are multiplied by END and give the number of minutes the activity can be maintained. Cross Country is multiplied by END and gives the number of kilometers per hour.



Encumbrance

Load	END	COR	SPD	MOV	WILL	FOC	CHR	
<- 1x				+1				
<- 3x				+0				
<- 4x				-1				
<- 5x		-2	-1	-2				No sprinting
<- 6x ☹	-1	-4	-2	-4			-1	No running or sprinting
<- 7x ☹☹	-1	-6	-3	-6	-1	-1	-1	No jog, run or sprint
<- 8x ☹☹☹	-2	-8	-4	-9	-2	-2	-2	No jog, run or sprint
<- 9x ☹☹☹☹	-2	-10	-5	-12	-3	-3	-2	No jog, run or sprint

- ☹ Character fatigues at 2x normal rate
- ☹☹ Character fatigues at 3x normal rate
- ☹☹☹ Character fatigues at 4x normal rate



Index

1

12-Guage Breacher · 143

5

550 cord · 187

A

A'Ghuu · 27
Ability Checks · 80
Ability Improvement Points · 81
Ability Scores · 40
Accelerated Fusion · 135
Accelerated TNT · 210
Accidental Hits · 97
Acerose Body Spikes · 254
Acrobatic Dodge · 102, 113
Active · 72
Active Reconstructive Nanites · 249
Adrenaline Synthesizer · 249
Advanced Antibodies · 250
Advanced Maneuver System · 228
Aerospace Fighter Pilot · 65, 199
Agaloch · 254
Age · 53
AI Vectronics · 228
Air Assault · 75
Air Borne · 75
Alien Creatures · 309
Alien Cybernetics and Genetics · 251–57
 Alien Attitudes · 251
 Allobotany · 254
 Cyberbotany · 254
 Ferronetics · 252
All Terrain Tires · 226
Allobotany · 254
All-out Attacks / Berserking · 113
Alternate Improvement System · 84
Ambidexterity · 99
Ammunition · 141–43
Amphibious Modifications · 225
Animal Tamer & Trainer · 65, 199
Animal Telepathy · 87
Animals and Alien Creatures · 275–85
Anti-Surveillance Device · 187
Appearance · 54
Aquakinesis · 87
Archaeologist · 199
Archeologist · 65
Arctic Proofing · 225
Armor · 223
Armor Modifications · 160–61
Armor Piercing Rounds · 143

Aromatic Scent · 254
Artificial Lung · 240
Artisan · 72
Assassin · 45, 48, 65, 200, 291, 303
Assassin Droid · 303
Astro-Assault · 76
Athlete · 46, 66, 200
Attack Roll · 107
Attacker Camouflage · 102, 315
Attacker Fire · 97, 101
Attacker Movement · 102, 115, 315
Attacker Wound Level · 103, 116, 315
Attacking Bots and Vehicles from the Fusion Death
 game system · 231
Attacks *from* Bots and Vehicles from Fusion Death
 game system · 231
Attractiveness · 41
Audiokinesis · 87
Augmented Hydraulic Actuation System · 227
Aura Reading · 87
Autodoc · 188
Automatic Hits and Misses · 96
Automech · 188
Autopilot · 224
Availability · 269–71

B

Ballistic Screen · 162
Bandoleer · 135
Bandoleer Sling · 135
Barbed Limb Tips · 254
Beetle · 205
Binoculars · 188
Biochemical Battery · 249
Biology / Specimen Kit · 206
Blind · 87
Block / Parry · 108
Body Armor · 157–60
 Armor Modifications · 160
 Ballistic Polymer · 158
 Forced Carbon · 159
 Gauss Polymer · 158
 Graffian · 159
 Slen Borakan · 160
 Therm Laminate · 159
 Therm Polymer · 159
Body Armor Repair · 263
Body Armor, Assault · 247
Body Armor, Heavy · 247
Body Armor, Light · 247
Body Armor, Medium · 247
Bolt Cutters · 188
Boosters · 209, 251, 270
Bot Combat Skills · 73
Bot Melee Combat · 76
Bot Technical · 73
Bounties · 267
Break · 109
Breakdown Modifications · 135

Burst Fire · 99
Buzz Screen · 162

C

C-9 Plastic Explosive · 210
Called Shot · 98
Camera · 188
Camera, simple · 188
Camosuit · 188
Camouflage Net · 189
Canned air · 189
Canteen · 189
Cardiovascular Enhancement · 241
Cardiovascular Replacement · 240
Careful Aim · 98
Cargo Loader, Goliath · 189
Cargo Loader, Hulk · 189
Cargo Loader, Monolith · 189
Cargo pouch · 189
Cargo pouch, small · 189
Cauterant Flora · 255
Caving gear · 190
Ceramic Weapons · 135
Chain Feed · 135
Chameleon leaves · 255
Chameleon Skin · 238
Character Generation · 44
 Alien Races · 48
 Cybernetic Humans · 46
 Genetic Engineered Humans · 44
 Humans · 44
Character Improvement · 81–84
Character Level · 84
Charisma · 42
Chef · 66, 200
Chemical detector paper · 190
Chemical Kit · 206
Chemical Protective Over Garments (CPOG) · 191
Chemlights · 190
Chromatic Armor · 160
Chromatic Screen · 162
Chronograph · 190
Civilian and Paramilitary Vehicles · 217–31
Civilian Camouflage Armor · 160, 161
Clerk · 66, 200
Clip pouch · 190
Coax Memory · 87
Coaxial Counter Rotating Blade · 228
Cold weather gear · 190
Collateral Loans · 267
Combat · 95–119, 313
 Grenade Combat · 105
 Melee · 106
 Ranged · 95
 Underwater · 116
 Weightless · 118
Combat Aerospace Pilot · 291
Combat boots · 190
Combat Bot Pilot · 66, 200, 291
Combat helmet · 190
Combat Medic · 66, 200
Combat Shelter · 190
Combat Vehicle Commander · 66, 200
Combat Vehicle Pilot · 291

Combination Attacks · 111
Commercial Pilot · 67, 200
Commo Service · 263
Common Animals · 307
Common Sense Hits · 96
Common Sense Misses · 96
Common XP awards · 83
Communicator · 191
Compass · 190
Computer Accessories & Modifications · 181–82
Computer Aided Design Software · 182
Computer Kit · 206
Computer Link · 248
Computer Software · 182–83
Computer Specialist / Hacker · 67, 200
Computers · 180–83
 EMP Hardening · 181
 External Device Interface · 181
 Physical Security · 181
 Ruggedisation · 181
 Sample Analyzer · 182
 Self Defense System · 181
 Vacuum Proofing · 181
 Virtual Reality Interface · 182
Concussion Grenades · 152, 155
Consecutive Fire · 98
Construction · 233
Containment Systems · 165
Continuous AG Pods · 226
Control · 110
Coolant Suit · 191
Counter Attacks · 112
Counter Surge Dampening · 148
Creating Characters · 40–64
Critical Hits · 97
Cross Country · 92
Cultural · 73
Cyber Jaws · 254
Cyberbotany · 254
Cybernetic Arm · 239
Cybernetic Ear · 241
Cybernetic Eye · 241
Cybernetic Head · 240
Cybernetic Jack · 247
Cybernetic Leg · 239
Cybernetic Maintenance · 264
Cybernetic Options
 Armor · 243
 Bio-Fusion Furnace · 246
 Cargo Compartment · 246
 Chela · 246
 EM Driven Muscles · 245
 Equipment Mount · 245
 Grip Crusher · 244
 Hydraulic Muscles · 245
 Kit Storage · 244
 Knee/Elbow Spikes · 244
 Limb Extension · 246
 Line-Thrower · 245
 Multanium-Cord Muscles · 245
 Multi-tool Hand · 244
 Nanite-Fulerine Composite Replacement · 244
 Polymer Muscles · 245
 Power System · 245
 Seismic Sensors · 245
 Shoulder mount Spot Light · 245



Surgical-tool Hand · 244
Weapon Mount · 246
Cybernetic Pseudopod · 239
Cybernetic Torso · 240
Cybernetics · 237–57, 264, 270
Cybernetics and Genetics
Armor · 246
Boosters · 241
Interference with Psionics · 238
Natural PU · 238
Options · 242
Other · 247
Power Consumption · 238
Replacements · 239
Senses · 241
Skins · 238
Cybernetics Kits · 206
Cyclic Accelerator · 135

D

Damage · 107
Database Software · 182
Datapad · 191
Deep Sea Diving Suit · 191
Deep Sea Proofing · 225
Deep Space Construction · 67, 200
Deep Space Life Support Unit (DSL SU) · 214
Defend Roll · 107
Defending Against Ranged Weapons with Melee
Weapons · 115, 313
Defenses · 157–63
Defensive Screens · 161
Definable Spatial Compass · 214
Delta 9 Polymer Explosive · 212
Demographics · 53
Age · 53
Duty Gear · 54
Employment · 54
Equipment Fund · 54
Handedness · 53
Height · 53
Salary · 53
Savings · 53
Sex · 53
Weight · 53
Demolition & EOD Expert · 201
Demolitions · 76
Demolitions & EOD Expert · 67
Desert Proofing · 225
Design · 233
Detcord · 209
Detective · 67, 200
Detonators · 210
Detoxifier · 250
Die Rolls · 10
Digger · 230
Diplomat · 34, 46, 67, 200
Directed Edge · 149
Directional Charge, Anti-Personnel (DCAP) · 211
Disarm · 110
Disassembly · 233
Disguise · 76
Disguise Kit · 207
Disruption Weapons · 132

Diving gear · 191
Doctor / Nurse · 67
Doctor/Nurse · 201
Dodge · 108
Draft Compression Enhancement · 136
Dragon fly · 205
Drawbacks and Special Abilities · 50
Dream Roam · 87
Drum Magazines · 136
Dual Stabilizer System · 228
Dual Suspension System · 228
Duct Tape · 191
Duty Gear · 54, 199–204
Dynamic Camouflage Hull · 224
Dynamic Light Shift Capability Hull · 225
Dynamic Skeletal Arrangement · 240

E

Ear Options · 243
Sonic Range Finder · 243
Ease Fatigue · 87
Effulgence · 88
Electric Weapons · 146
Electrified Hull · 225
Electrified Skin · 239
Electrokinesis · 88
Electromagnetic Boots · 214
Electron Weapons · 128
Electronics Kit · 206
Elongated limbs · 255
EM Pulse Redirection · 227
EM Shock Absorbers · 227
EMP Grenades · 153, 155
EMP Hardening · 225
Empathy · 88
Employment · 54
Encumbrance · 93
Endorflow · 121
Endo-skeleton · 214
Endure · 88
Energy bar · 191
Energy drink · 191
Energy Melee Shields · 162
Energy State Armor · 160
Enervate · 88
Enhanced Aerodynamics / Hydrodynamics · 228
Enhanced Control Surfaces · 226
Enhanced Photosynthesis · 255
Entertainer · 68, 201
Environment & Weather · 116
Environment and Weather · 104, 316
Epidermal Injector · 191
Equipment · 185–99
Equipment Calibration · 264
Equipment Descriptions · 187–99
Equipment Fund · 54
Equipment List · 185–87
Equipment Pod Limb · 173
Escape · 109
ESP · 88
E-tool · 191
EVA Maneuver Unit · 214
Excavator · 229
Exceptional Skill Levels · 82

Excrete poisons · 255
Executive · 68, 201
Exoskeleton · 192
Exotic Weapons · 149–52
Experience Point Multiple · 82
Experience Points · 83
Experimental · 46
Explorer · 68, 201
Explorer / Adventurer · 68
Explosive Rounds · 143
Explosive spore pods · 255
Explosively Formed Penetrator (EFP) · 143
Explosives · 209–12, 270
Eye Options · 242
 Autonomic Parallax · 243
 Autonomic Tracking · 243
 Range Finder · 242
 Thermal Analyzer · 243
 Wide angle vision · 242

F

Fast Burst Damage · 100
Fast Hit Locations · 119
Fast Patch · 192
Fast Spray Fire · 100
Fast Suppressive Fire · 101
Ferrites · 19
Ferronetics · 252
Field Thickening · 149
Fighting Position · 192
Filter Field · 162
Fingerprint (or equivalent) Removal · 263
Fire Extinguisher · 192
Fire Proofing · 225
Fire retardant Grenades · 155
Fire Retardant Grenades · 154
Fire Retardant suit · 192
Fireproof Skin · 238
Firing Multiple Weapons · 98
Firing Stance · 102
Firyne · 309
Flare · 192
Flash Grenades · 152, 155
Flash light · 192
Flash Suppressor · 136
Flechette Ammunition · 142
Flechette Grenades · 153, 155
Flechette Weapons · 129
Florescent chalk · 192
Flux Disruption · 149
Fluxsuit · 192
Fly · 88, 205
Foam mat · 192
Fog of War · 104, 116, 316
Foist Intellect · 88
Folding Bipod · 136
Folding Stock · 136
Force Melee Shield · 163
Force Weapons · 146
Forced Carbon Melee Shield · 163
Forced Carbon Weapons · 145
Forced Overpower · 149
Forgery Kit · 205
Fragmentation Grenades · 152, 155

Frequencies · 208
Frictionless Hull · 228
Fuel Pallet · 224
Fumbles · 96
Function Robot · 296
Fuses · 210
Fusion Grenades · 154, 155
Fusion Melee Weapons · 148
Fusion Weapons · 133

G

Game and Entertainment Software · 182
Game Tables (Appendix E) · 313–25
Gas Pods · 255
Gauss Screen · 162
Gauss Shielding · 160
Gelid Beam · 88
General NPC Attitudes Towards Aliens · 258
Genetic Engineered Humans
 Character Generation · 44
Genetics · 237–57
Geology Kit · 206
Getting Large Sums of Money · 266–68
Gills · 250
Glow Screen · 162
Goa · 312
Goggles · 207–8
Government & Paramilitary Organizations · 268
GPS receiver · 193
Graff · 31
Grapple · 193
Grapple gun · 193
Grasshopper · 205
Grav Weapons · 134
Gravity Grenades · 153, 155
Grenade Bandoleer · 136
Grenade Bounce · 105, 313
Grenade Combat · 105, 313
Grenade Launcher, Barrel Mount · 136
Grenades · 152–55
Grenades Varieties · 155
Ground effect and stability package · 226

H

HALO/HAHO · 76
Halon Grenades · 152, 155
Hand UV light · 193
Handcuffs · 193
Handedness · 53
Hard Screen · 162
Hardened Skin · 241
Hardwood · 256
Hazmat Kit · 206
Heal · 88
Heavy Capacitance · 136
Heavy ion · 136
Heavy Legs · 227
Heavy Tool Limb · 173
Heavy Tracks · 226
Height · 53
Hide in Shadows · 76

High Performance Tire · 226
High Value Loans · 267
High Velocity Rounds · 143
History · 57
Hit Locations · 119
 A'Ghuu · 119
 Ferrites · 119
 Graff · 120
 Humans · 120
 Lyandithates · 119
 Meylor · 120
 Robots · 179
 Slen Boraka · 119
 Vehicles · 222
 VN Robots · 290
 Voix · 120
Hollow Point Rounds · 143
Holo Screen · 162
Holoprojector · 193
Holster, Energy Melee Weapon · 193
Holster, Melee, Small · 193
Holster, Pistol · 193
Holster, Rifle · 193
Holster, Sword · 193
Honeycomb Alveoli · 250
Honeycomb Armor · 160
Hostage Negotiator · 68, 201
Housing · 265
Humans · 12
 Character Generation · 44
Hunter-Killer Instinct Release · 242
Hush Screen · 162
Hydrogenated Ammunition · 143
Hyper-Charged Particles · 136
Hypercomm Phone Call · 264
HyperStrat Transports · 231
Hypnosis · 76

I

Improved Cavitation Screws · 227
Improved Nerve Impedance · 241
Improving Skills · 82
Incendiary · 270
Incendiary Grenades · 154, 155
Independent · 68, 201, 291
Inflatable boat · 193
Initial Training · 64
Initiative · 95
Integral Midwall Cooled (IMC) · 137
Integrity Screen · 162
Intelligence · 42
Intelligent Rounds · 144
Interference · 43
Interpersonal · 73
Inventor · 68, 201
Invisibility · 88
Ion Induction Propulsion · 227
Ion Weapons · 131

J

Jammers · 207–8

Jaw-Hand · 257
Jejune Wave · 88
Joint Replacement · 241
Jury-rigging · 233

K

KB7 Solid Explosive Bricks · 210
Kick · 108
Kill · 109
Kinetic Reinforcement · 160
Kinetic Screen · 162
Kits · 205–7
Knockout · 110

L

Lantern · 194
Lase Melee Shieldr · 163
Laser Aerosol · 194
Laser Aerosol Grenades · 154, 155
Laser Cutting Torch · 214
Laser Designator · 137
Laser Igniter · 214
Laser Ignition System · 137
Laser Melee Weapons · 147
Laser Reactive Propellant · 144
Laser Tuning · 140
Laser Weapons · 128
Learning Skills · 82
Leg Coordination Adjustment · 242
Lethiferous Blast · 88
Levitate · 88
Licara · 310
Life Events · 274
Life Support Unit (LSU) · 215
Light capacitance · 137
Light Grenades · 153, 155
Light Legs · 227
Light Tracks · 226
Line Sled · 215
Living in the Future · 263–71
Load Bearing Equipment (LBE) · 194
Load Bearing Modification · 161
Lock · 109
Lock Picking Kit · 205
Logic & Learning Integration · 242
Long Barrel · 137
Long Range Ramjet Round · 144
Loss of Consciousness · 121
Lotteries · 267
Loyalty Checks · 261
Luck · 42, 81
Lumikinesis · 88
Lyandithates · 15

M

MA Instructor · 201
Magazine pouch · 194
Magnetic Anchor · 215

Magnetic Boots · 215
Malleable Muscles · 249
Martial Art Styles · 110
Martial Arts (Combat Style) · 77
Martial Arts Instructor · 69
Martial Arts Weapons · 114
Maser Weapons · 130
Meal, Ready to Eat · 194
Mechanic · 69, 71, 202
Mechanics Kit · 206
Media · 75
Media Personality · 69, 202
Medical Drugs · 121
Medical Kit · 207
Medipack · 122
Mega Grenades · 156
Megaconducting EMP Generators · 227
Melee Attack Modifiers · 115
Melee Combat · 106, 313
Melee Weapon Accessories and Modifications · 148–49
Melee Weapon Skills · 77
Melee Weapons · 144–48
Memory Enhancement · 242
Memory Shape · 89
Memory Void · 89
Mental Attributes · 41
Mercenary · 69, 202, 291
Merchant / Trader · 69, 202
Mesmerizing color scheme · 257
Message Tablet · 194
Meta Attributes · 43
Metabolic Control · 88
Metabolic Harmony · 88
Metal Skin · 89
Meylor · 37
Miasmic Presence · 89
MICLIC, Barrel Mount · 137
Micro Bots · 204–5
Micro Communicator · 194
Micro torch · 194
Micropulse · 137
Military Police · 69, 202
Military R&D · 70, 202
Military Research and Development · 291
Military Robots (Appendix B) · 291–93
 as Characters · 293
 Containment System · 291
 Core Processors · 291
 Detection Systems · 292
 Impulse Systems · 291
 Manipulative Limbs · 292
 Modifications and Equipment · 292
Military Specialist · 75
Mini Grenades · 155
Missiles · 142
Mixing Unarmed and Melee Weapon Attacks · 107
MOLLE Rucksack · 194
Monocle · 194
Monorails · 230
Morale Checks · 260
Morphine Synthesizer · 249
Motor Response Tuning · 241
Mountain Assault · 77
Mountain Climbing gear · 195
MOUT · 77

Move Silently · 76
Movement · 91
Multi-Blade Rotor System · 227
Multiple Targets · 99
Multi-tool · 195
Multitool Limb · 173
Musician · 70, 202
Muzzle Break · 137
Muzzle Mount · 137
Muzzle Rescratching · 263

N

Nanite Patch · 195
Natural Emollient · 257
Natural Talent · 84
NBC Lung Filter · 250
NBC Resistant Skin · 238
Needle Ammunition · 141
Needle Weapons · 126
Negative Particle Deflector · 138
Neural Amp · 242
Neural Hardwiring · 242
Neural Mine · 154
Neuro Mine · 155
Neuro Neutralizer · 195
Neuro Weapons · 132, 148
New Barrels for Support and Heavy weapons · 263
News and Life Events · 272–75
News Events · 272
Non-Linear Cycle · 138
Non-Player Characters (NPCs) · 258–61
 Morale and Loyalty Checks · 260
 NPC Reactions · 259
NoTox · 122
NPC Reactions · 259
Nucleokinesis · 89
Number of Melee Weapon Attacks · 107
Number of Unarmed Attacks · 107

O

Occupation · 65–72
Oceanography Kit · 206
Off Hand Firing · 98
Olfactory Chemical Analyzer · 250
Omphalos Vacuum · 89
One Dimensional Explosive (ODX) · 211
Opposed Ability Checks · 81
Opposed Skill Rolls · 81
Optacoustic Focusing Chamber · 138
Organic computer · 181
Organometallic Metabolism · 257
Osmotic leaves · 257
Osmotic Skin · 239
Other Modifiers · 104
Over Grenades · 155
Oversized Traction Pads · 227
Oversized Turbines · 226

P

P Rating · 86
Pain Amplification · 89
Pain Inhibitor · 249
PainStop · 122
Paint Rounds · 144
Paired Melee Weapons Skill · 77
Parafoil · 195
Paralysis · 89
Particle Weapons · 131
Pernicious Word · 89
Personal Combat · 74
Personal Flyer · 195
Personal Grooming · 263
Personal Robot · 295
Personal Technical · 74
Personality · 63
Personality Chip · 247
Personality Rewrite · 242
Phantom projection · 89
Phase Emulator · 149
Phobia Detection · 89
Phosphorus · 270
Phosphorus Grenades · 154, 155
Photography Kit · 206
Physical Attributes · 40
Pick Locks · 76
Pick pockets · 76
Pistol Launched Tracking Device · 195
Plasma Melee Shield · 163
Plasma Weapons · 133
Plastic Surgery · 241
Plastic Weapons · 138
Poisons · 212, 270, 279
 Common types · 213
 Costs of · 213
 Grenades · 213
 Needle Rounds · 213
 Resisting · 213
Police · 46, 48, 70, 202, 291
Portable Holoviewer · 195
Portable Music System · 195
Power Assist Enhancement · 161
Power Kick · 108
Power Linkage · 167
Power Sources · 166
Power Strike · 108
Power System Calibration · 263
Power System Kit · 206
Power Systems · 165–67
Power Transfer · 166
Powerframe · 249
Preying mantis · 205
Projected Energy · 149
Projectile Ammunition · 141
Projectile Spikes · 257
Projectile Weapons · 125
Protective mask · 195
Proton Dispersion · 138
Proton Melee Weapons · 147
Proton Weapons · 129
Prybar · 195
Psionic Combat · 86
Psionic Focus · 89

Psionic Talents · 87–90
Psionicist · 86
Psionics · 85–90
 Combat · 86, 87
 Curative · 87
 Devotions · 86
 Learning · 85
 Manipulative · 87
 Metabolic · 87
 P Rating · 86
 Psionicist Occupation · 86
 Sensory · 87
 Using · 86
Psychic Drain · 89
Psychic Symbiosis · 89
Psychic Vampirism · 89
Public Transportation · 264
Pulsed AG Pods · 226
Purify · 89
Pyrokinesis · 89

Q

Quantum Harmonic Disrupter · 149
Quick Armor · 224

R

Races · 12–39
Radar · 241
Radar Proof suit · 195
Radar-proof Hull · 224
Radiation Proof Skin · 238
Radiation Proofing · 225
Radiation suit · 196
Radio Communicator · 241
Radio Link · 248
Radiological Kit · 207
Rail Ammunition · 143
Rail Weapons · 130
Ram-Air Assisted Ground Effects · 226
Ramjet Ammunition · 142
Ramjet Weapons · 127
Range · 97
Ranged Combat · 95
Ranged Weapon Accessories and Modifications · 135–40
Ranged Weapon Skills · 77
Ranged Weapons · 124–35
Ranged Weapons in Melee · 115
Ranger · 77
Rate of Fire · 95
Read Area · 89
Read Object · 89
Recharges · 263
Recognition Grip · 138
Recoil Compensator · 138
Recon Robot · 300
RecoverAid · 122
Recovery · 121
Reference Software · 182
Reflex Amplification · 241
Regeneration · 249

Regenerative Armor · 161
Reloading · 97
Remote Sight · 138
Repair · 232
Repair And Jury-Rigging · 232
Reporter · 70, 202
Rescue · 46, 48, 70, 203
Research · 234–35
 Guidelines for setting Task Difficulty · 235
 Multiple Scientists · 234
 Offshoot Discoveries · 234
 Setbacks · 234
 Surprise Breakthroughs · 234
 XP Awards For · 234
Restraining Bolt · 196
Revive · 122
RF Trans-Unit · 196
Rifle Launched Tracking Device · 196
Riot Gear · 196
Rip Psyche · 90
Robot Combat · 179–80
Robot Link · 248
Robotics Kit · 206
Robots · 169–80
 as Characters · 177
 Body Type · 169
 Containment Systems · 171
 Core Processors · 171
 Core Specialization · 172
 Core Transplants · 172
 Critical Hit · 179
 Demographics · 177
 Design · 169–76
 Detection Systems · 174
 Hit Locations · 179
 Hit Percentages (For NPC Robots) · 179
 Hit Percentages (For PC Robots) · 179
 Impulse Systems · 170
 Maintenance · 176
 Maintenance & Repair · 176–77
 Manipulative Limbs · 172
 Multiple Core Processors · 172
 Options · 174
 Power Consumption · 177
 Power Systems · 171
 Repairs · 176
 Retrofitting Equipment · 176
 Skills · 177
Rogue · 70, 203
Roll Cage · 223
Rope · 196
Ros'nak · 311
Rubber Rounds · 144
Rubber Tracks · 226
Running · 77, 91

S

Salary · 53
Salt tablets · 196
Sample Animals and Creatures (Appendix D) · 307–12
Sample Robots (Appendix C) · 295–305
Sapper · 78
Savings · 53

Scanners · 207–8
Sciences · 74
Scientist · 46, 71, 203
Sea Sled · 196
SEAL · 78
Secure Communicators · 196
Security Robot · 299
Selenium Graphite Bore And Chamber · 138
SERE · 78
Serrated Barb Needle Rounds · 144
Service Robot · 297
Services · 263
Sex · 53
Shape Change · 90, 287
Short Barrel · 138
Short Range Ramjet Round · 144
Siege Unit "Dragon" · 304
Signature Loans · 266
Silenced Receiver Assembly · 139
Silencer · 138
Simulation and Training Software · 182
Sixth Sense · 90
Skeletal Augmentation · 241
Skeletal Replacement · 240
Skill Checks · 80
Skill Descriptions · 75–79
Skill Focus · 79
Skill Limits · 82
Skill Points · 82, 84
Skill Software · 183
Skills · 72–75
Sky Flitter · 229
Sleeping bag · 196
Sleight of Hand · 76
Slen Boraka · 22
Slick Grenades · 154, 155
SlowMetab · 122
Smoke Grenades · 155
Smuggler · 71, 203, 291
Snap Shots · 97
Sniper · 78
Soldier · 45, 71, 203, 291
Soldier Elite · 48, 71, 203, 291
Solid · 271
Solid Grenades · 153, 155
Sonic Grenades · 152, 155
Sonic Melee Shield · 163
Sonic Screen · 162
Sonic Shielded Armor · 160
Sonic Weapons · 147
Soothe Psyche · 90
Space Equipment · 214–16
Space Marine · 71, 203, 291
Space Proofing · 197
Space Suit · 215
Space Suit Armor · 215
Special Abilities · 52
Special Munitions · 143–44
Spectrum Proofing · 228
Speed Healing · 249
Spider · 205
Spot light · 197
Spot Light · 224
Spotting · 95
Spray Fire · 100
Spray, Anti-dust · 197



Spray, Anti-EW · 197
Spray, Antiseptic · 197
Spray, Anti-static · 197
Spray, Bonding · 197
Spray, Bug · 197
Spray, Electronics cleaning · 197
Spray, Paint · 197
Spray, sealant · 197
Spray, UV · 197
Spray, Waterproofing · 197
Sprinting · 91
Spy · 46, 48, 71, 203, 291
Stabilized Firing · 98
Stasis / Preservation Field · 197
Static Guard · 139
Statistic Automatic Hits · 96
Statistic Automatic Misses · 96
StayWound · 122
Stealth System · 228
Steel Reinforced Aluminum Weapons (STRAP) · 139
Sticky Boots · 215
Strength · 40, 90
Strike · 108
Strobe Grenades · 153, 155
Structural Analysis · 78
Structural Analyzer · 250
Stun · 110
Stun collar & “leash” · 197
Stun cuffs · 198
Stun Driver · 198
Subsonic Magnetically Propelled modification (SMP) · 139
Suit Patch · 216
Sun Visor · 198
Super Charged Thrusters · 226
Suppressive Fire · 100
Surgery · 121
Surprise · 95, 103, 235
Sweep · 109
Swimming · 77, 92
Symbiotic Armor · 160, 161
Synergism · 43

T

Tail / Follow · 76
Taking Damage · 120
Tangle Thread Grenades · 153, 155
Target Cover and Camouflage · 103, 116
Target Movement · 103, 116, 315
Target Size · 104, 116, 316
Targeting Modifiers · 95
Technician's suit · 198
Telekinesis · 90
Telepathy · 90
Teleport · 90
Teleport Another · 90
Teleprojection · 90
Telescopic Eyepiece · 139
Telescoping Stock · 139
Televiewing · 90
Tent, large · 198
Tent, medium · 198
Tent, small · 198
Terrakinesis · 90

Thermal Absorptive Hull · 224
Thermal Dead Skin · 239
Thermal Lamination · 160
Thermal Screen · 162
Thermal Sensor · 241
Thermosuit · 198
Thought Control · 90
Thought Control System · 228
Throw · 109
To-Hit Roll · 95
Toughness · 41
Tow Chains · 223
Tungsten-carbide plated Armor · 160
Tungsten-Diamond Sabot Rounds · 144
Turbocycle · 139
Types of Melee Attacks · 108

U

Under Barrel Weapons · 134
Underwater Combat · 116, 317
Underwater Welding · 46
Uninterruptable Power Source (UPS) · 224
Unique Abilities
 A'Ghuu · 28
 Ferrites · 20
 Graff · 31
 Humans · 13
 Lyandithates · 16
 Meylor · 39
 Slen Boraka · 24
 Voix · 34
Unstable Firing · 98
UV suit · 198

V

Vaporkinesis · 90
Vari-form Fighter Pilot · 71, 204
Vehicle Combat · 221
Vehicle Link · 248
Vehicle Tune-up · 263
Vehicles
 Combat · 222
 Crashing · 223
 Engaging Bots and Military Vehicles · 231
 Equipment · 223–29
 Hit Locations · 222
 Impulse Types · 220
 Movement · 221
 Power Systems · 219
 Purchasing · 217
 Range · 219
 Special Types · 229–31
 Statistics · 218
Vehicular Scanner · 224
Vending Robot · 298
Vibro Weapons · 145
Video camera, hand held · 198
Video camera, muzzle mount · 198
Video camera, shoulder carry · 198
Visors · 208
VL Disruptive suit · 198

Voice Modulator · 250
Voice Synthesizer · 250
Voix · 34
Von Neuman Architecture Robots (Appendix A) ·
287–90

W

Warfighter · 301
Warp-Particle Technology · 139
Wasp · 205
Water purification canteen insert · 199
Water purification device · 198
Water purification tablets · 199
Water Retention · 257
Weapon Cleaning · 264
Weapon Jams · 96
Weapon Link · 248
Weapon Maintenance Kit · 206
Weapon Pod Limb · 173
Weapon Repair Kit · 205
Weapon Specialization, Melee · 78
Weapon Specialization, Ranged · 78
Weapon Stock Compartment · 140
Weapon Support Waldo Unit · 140
Weapons · 124–56

Weaponsmith / Armorer · 72, 204
Web Feet & Hands · 250
Weight · 53
Weightless Combat · 118, 317
Wet weather gear · 198
Wetsuit · 199
Wide Area Munition (WAM) · 144
Wide Blade Rotors · 227
Willpower · 42
Windshields · 208
Wounds · 120

X

Xeno Empathy · 90
Xeno Telepathy · 90

Z

Zero G carbide-aluminum Armor · 160
Zero Impedance Fly-By-Wire Control · 228
Zip Cuffs · 199

What is it!?

Frontier Horizons is a science fiction role-playing game featuring many original and unique character races, dozens of character archetypes or 'classes,' a percentile based combat system, an innovative and advanced martial arts combat system, 1000's of pieces of equipment and more.

Features

- 10 different character races.
- Cybernetics & genetics.
- Super in-depth character generation system allows players to learn realms of history about their characters
- 42 major character archetypes or "classes."
- 11 skill sections featuring 200+ different skills, skill specialization and skill focus options.
- Psionics.
- A fluid and sophisticated combat system.
- A cutting edge martial arts system that is the most sophisticated and accurate combat system ever developed (covering 10 different styles and including special maneuvers, combinations and counter attacks).
- Over 1,000+ weapons, defenses and miscellaneous equipment.
- An advanced robot design system featuring player character robots and artificial intelligence's.
- Explosives, gasses, poisons, drugs, etc..
- Over 240 vehicle types (from wheeled trucks, hover bikes, to walking cars), 70+ vehicle customization options.
- Integrated life system that addresses income, housing, financing, making money, loans, services, lotteries, travel, etc.
- Black market/white market "availability" scheme covering the acquisition of exotic and dangerous items.
- A sophisticated animal and creature generation and design system that addresses predator-prey differences, creature adaptability and probability of evolution of special characteristics, as well as animal physiology.
- An innovative "News" and "Life Event" system to generate adventure opportunities as well as provide the characters with "real world" situations.

What do you need to play?

The rulebook, a couple sets of dice (d4, d6, d8, 2d10, d12, d20), a calculator, some paper and pencils, an adventurous spirit and an imagination.