

AFTERMATH

TECHNOLOGY!



Dinosaur Games

MARK POOLE
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AFTERMATH!

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AFTERMATH! TECHNOLOGY! is an authorized game supplement for the **AFTERMATH!** role playing game, which is required for play.



Dinosaur Games

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AFTERMATH! TECHNOLOGY!

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AFTERMATH! TECHNOLOGY!

Foreward

In 1981, Robert Charrette and Paul Hume created a Role Playing Game system called AFTERMATH! The system is designed around role-playing characters in a world that has suffered some form of major calamity, be it nuclear war, devastation caused by plague, or any number of possible disasters that result in the complete or near-complete breakdown of governments.

The game system is comprised of three books. Book One contains the basic rules for the AFTERMATH! system. Book Two, entitled "Survivors of the Aftermath," is the player's handbook. Book Three, entitled "The World of the Aftermath," is the gamemaster's guide.

In order to use this supplement, you will need to have all three books, published by Fantasy Games Unlimited and available at most gaming-oriented retailers.

In 1987, David S. Harner set out to enhance the AFTERMATH! system by designing two supplements. The first was centered around introducing magic and new character races, while the second was to be focused on expanding the existing technology of the original system.

AFTERMATH! MAGIC! was finished and test-marketed in 1990 at several Southern Conventions and was met with great enthusiasm. The supplement is currently under editorial review by Fantasy Games Unlimited and is scheduled for public release by the end of 1993.

AFTERMATH! TECHNOLOGY! is the latest supplement to be designed by David S. Harner and is being published by Dinosaur Games.

About AFTERMATH! TECHNOLOGY!

AFTERMATH! TECHNOLOGY! is a rules expansion and technology supplement designed for use with the AFTERMATH! role playing game system.

Included in this supplement are modifications to the original AFTERMATH! combat system, a Universal Character Generator with an expanded list and descriptions of various humanoid races, details on cybernetics, space travel (including faster-than-light travel), a detailed listing of new skills, High Tech and exotic equipment, detailed breakdowns on several hundred weapons, and net running.

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Modifications to the AFTERMATH! rules

TECHNOLOGY!, as an expansion for the AFTERMATH! game system requires that a few modifications be made in the AFTERMATH! rules. These modifications are designed to allow role playing in any milieu without modifications to the game system.

First, a new Talent needs to be added to the Psychological profile: Magic Affinity (MA). This talent represents the character's facility in dealing with magical concepts, workings, and manifestations. This is outlined in greater detail in AFTERMATH! MAGIC!.

Combat System

AFTERMATH! utilizes a slightly different combat system than many gamers are familiar with. Below is an explanation of "house rules", that make the AFTERMATH! combat system easier to referee.

Prelude to Combat: A phase breakdown should be prepared for each character, prior to play, and noted on their character sheet. A phase breakdown details the phases in which a character can act within a combat turn. Example: Slash The Orc has a BAP of 15 and a MNA of 5, giving him an PCA of 3. This means that Slash can act in phases 15, 12, 9, 6, and 3.

When to Act: The Gamemaster, at the start of each combat round, begins an action phase countdown, starting at the highest character's Base Action Phase (BAP). The GM calls out the number of the phase and any characters that act in that phase resolve all actions within that phase. A character acts on each phase in his phase breakdown. Example: The GM calls out, "phase twelve." The player controlling Slash says, "I acts in phase twelve. I wants ta smash da puny widdel dwarf wif my axe!" (Hey, he's an Orc. What did you expect, Shakespeare?)

How to Act: This is a roleplaying game. This means roleplay everything, including combat. Make physical actions act faster than verbal actions. If a player dives under the table, then rolls over and tells the GM that his character dives for cover, that player is roleplaying appropriately, and the GM should reward such actions. Example: When a player controlling a healer in a tournament wanted to save his comrades from a grenade, he dove out of his chair and did a belly flop on a concrete floor, rolled over, and groaned, "I throw myself on the grenade to save my friends."

Aerial Movement

Aerial movement is only slightly different from normal movement, in that altitude can be readily changed. A flying creature may expend 1 point of BMA to either gain .5 meters of altitude, or lose 2 meters of altitude (safely).

The Stopping Forward Motion rules (Aftermath! Book 1, page 24) apply fully to aerial descent, and any descent in category 3 (charging down) is considered a fall by a flying creature (normal falling rules apply, with a height equivalent to that where category 3 was reached).

A falling flying creature trying to recover from a dive must climb against the fall, with 1 BMA per Action Phase canceling the downward acceleration, and each additional BMA per action phase reducing the category of motion by 1/10. This means that a falling creature with an aerial BMA of 6 would take 6 Action Phases to land safely.

If the flying creature wants to "swoop" out of a dive, and is in any motion category less than 3, the downward motion can be converted to horizontal, with BMA/12 of BMA in forward movement, and the rest in downward movement, as the creature "swoops" out of the dive. Flying creatures with a falling category of 3 must reduce their category to 2 by the above means before performing a "swoop".



The Attribute Group Chart is modified to appear as this:

ATTRIBUTE GROUP CHART

Attribute Rating	45- 54	55- 64	65- 74	75- 84	85-94	95- 104
Group Number	6	7	8	9	10	11
Effect Die	2D10+1	2D10+1D6	2D10+2D6	2D10+3D6	2D10+4D6	2D10+5D6

This is to allow the generation of "super races" who are much better in one area than humans. Ursoids, for example, have the strength to rip a human limb from the body with their bare hands.

Universal Character Generation

This system will allow generation of characters in any milieu. The first step is to determine the character's age group by rolling a d20 on this table. The three Ape races are from AFTERMATH! Book 3 page 29.

d20	AGE GROUP	RACE CLASS							
		A	B	C	D	E	F	G	H
1-5	0	5	8	13	26	46	50	80	160
6-10	1	11	15	22	46	132	90	110	220
11-14	2	17	24	31	66	180	130	150	300
15-17	3	23	31	40	86	300	170	250	500
18-19	4	29	37	49	106	370	200	325	650
20	5	35	43	58	126	450	230	625	750

Race Class A

Orc; Goblin; Scorpion; Kobold; Serpentine; Canine; Insectoid, Wasp; Android

Race Class B

Felidare, Tiger; Saurian; Toridare; Hawk-man; Muridian; Insectoid, Worker-Ant; Ape, Gorilla

Race Class C

Human; Felidare, Lion; Hobgoblin; Rhinoceri; Insectoid, Queen Ant; Ape, Chimpanzee; Ape, Orang-utan

Race Class D

Felidare, Cheetah, Puma/Leopard; Ursoid; Groll; Minotaur

Race Class E

Dwarf; Ogre; Kireean

Race Class F

City Dwarf; Insectoid, Mantis

Race Class G

Aquatic Elf; City Elf; Halfling

Race Class H

Elf

The following chart gives the skill points for a given age group.

Age Group	Skill Points
0-	13 + 2d10 skill points+initial skills
1-	22 + 2d10
2-	31 + 2d10
3-	40 + 2d10
4-	49 + 2d10
5-	58 + 2d10

The second step is to choose a race. The race will determine aging, bonus and minuses to attributes and talents, and any special abilities (infravision, flight, etc.). These modifications to attributes are to be applied before the allocation of initial attribute points.

The occurrence of "Changed" or mutated characters will vary from campaign to campaign, and it is up to the Gamemaster to decide the probabilities of this occurring to a character. Note that it is not only a post-holocaust world that will contain characters who are "Changed". Usually mutations occur one time in 1000. (Roll 3d10, and a 30 results in mutation) The Gamemaster should not feel forced into allowing changed characters into the game, but should use it only if it fits his image of his world.

It is suggested that a beginning player try a human character, until the player understands the system of bonuses and minuses. Below are the race descriptions.

Humanoid Race Descriptions

Numbers in parenthesis are racial maximums, and numbers in brackets are racial minimums, with the racial bonus included.

Android

Wit:	0 (100)
Will:	0 (100)
Strength:	35 + Options
Deftness:	35 + Options
Speed:	35 + Options
Health:	0 (100)
Charismatic:	-2
Combative:	0
Communicative:	+1
Esthetic:	-3
Mechanical:	+4
Natural:	-3
Scientific:	+3
Magic Affinity:	N/A



An Android is a machine that mimics human form and actions. The only way for an Android to increase its Strength, Deftness, or Speed is with cybernetic implants. Androids cannot ever use magic. They are also incapable of reproduction, as they are a manufactured life form. Androids are available as a player character at tech level 24. Androids are immune to the effects of aging.

Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 5'7"	below 140 lb
Low	5'7"-5'8"	141- 150 lb
Below Average	5'9"-5'10"	151- 160 lb
Average	5'11"-6'1"	161- 180 lb
Above Average	6'2"-6'3"	181- 190 lb
High	6'4"-6'5"	191- 200 lb
Very High	over 6'5"	over 200 lb

Arachnid, Scorpion

Wit:	-5 (20)
Will:	-5 (20)
Strength:	-5 (25)
Deftness:	0
Speed:	+5 (50)
Health:	0 (25)
Charismatic:	-2
Combative:	+3
Communicative:	-1
Esthetic:	+1
Mechanical:	-1
Natural:	+5
Scientific:	-1
Magic Affinity:	+1
Skin AV	5
Claw WDM	1.3 L
Sting WDM	1.6 L + poison



Physical Aspects Chart

<u>Size & Bulk</u>	<u>Height</u>	<u>Weight</u>
Very Low	Below 5'10"	below 160 lb
Low	5'11"- 6'	140- 160 lb
Below Average	6'1"- 6'2"	161- 180 lb
Average	6'3"- 6'5"	181- 200 lb
Above Average	6'6"- 6'7"	201- 220 lb
High	6'8"- 6'9"	221- 240 lb
Very High	over 6'9"	over 240 lb

The Scorpion-man is an example of arachnid derivative evolution. Standing about 1.9 meters tall, the Scorpion-man has pale tan to brown chitinous (leathery) skin, but an internal structural skeleton. The Scorpion-man's tail is still fully functional, and has a striking range of 2 meters with a WDM of 1.6L. Poison is coded as thus: S-L-DFT-2D3 hours-per unit injected-4 hr.-nausea. The Arachnoid's skin has an AV of 5, with a claw WDM of 1.3L. The Arachnoids have no hair, and have insectoid multi-lensed eyes, giving them a 270 degree field of vision.

Ape

Ape, Chimpanzee

Wit:	+3
Will:	0
Strength:	0
Deftness:	+2
Speed:	-1
Health:	+1(45)
Charismatic:	0
Combative:	-2
Communicative:	0
Esthetic:	+3
Mechanical:	+4
Natural:	0
Scientific:	+3
Magic Affinity:	0
Skin AV	2
Bite WDM	1.2L
Claw WDM	1.2L



Physical Aspects Chart

<u>Size & Bulk</u>	<u>Height</u>	<u>Weight</u>
Very Low	Below 4'	below 105 lb
Low	4'-4'1"	105- 114 lb
Below Average	4'2"-4'3"	115- 124 lb
Average	4'4"-4'6"	125- 145 lb
Above Average	4'7"-4'8"	146- 155 lb
High	4'9"-4'10"	156- 165 lb
Very High	over 4'10"	over 165 lb

The Chimpanzee is taken from AFTERMATH! book 3.



Ape, Gorilla

Wit:	-5 (30)
Will:	-5
Strength:	+8 (50)
Deftness:	0 (30)
Speed:	0 (30)
Health:	0 (50)
Charismatic:	-3
Combative:	+4
Communicative:	0
Esthetic:	-2
Mechanical:	-2
Natural:	0
Scientific:	-2
Magic Affinity:	-2
Skin AV	2
Bite WDM	1.2L
Claw WDM	1.2L



Physical Aspects Chart

<u>Size & Bulk</u>	<u>Height</u>	<u>Weight</u>
Very Low	Below 5'8"	below 330 lb
Low	5'8"-5'10"	330- 350 lb
Below Average	5'11"-6'1"	351- 370 lb
Average	6'2"-6'4"	371- 390 lb
Above Average	6'5"-6'7"	391- 410 lb
High	6'8"-6'10"	411- 430 lb
Very High	over 6'10"	over 430 lb

The Gorilla is taken from AFTERMATH! book 3.

Ape, Orang-utan

Wit:	+5
Will:	+2
Strength:	+2
Deftness:	-5 (30)
Speed:	0
Health:	+2 (40)
Charismatic:	0
Combative:	-4
Communicative:	0
Esthetic:	+3
Mechanical:	+3
Natural:	0
Scientific:	+4
Magic Affinity:	+1
Skin AV	2
Bite WDM	1.2L
Claw WDM	1.2L



Physical Aspects Chart

<u>Size & Bulk</u>	<u>Height</u>	<u>Weight</u>
Very Low	Below 5'1"	below 120 lb
Low	5'1"-5'2"	120- 135 lb
Below Average	5'3"-5'4"	136- 150 lb
Average	5'5"-5'7"	151- 180 lb
Above Average	5'8"-5'9"	181- 195 lb
High	5'10"-5'11"	196- 215 lb
Very High	over 5'11"	over 215 lb

The Orang-utan is taken from AFTERMATH! book 3.



Canine

Wit:	- 4 (30)
Will:	0
Strength:	+4 (45)
Deftness:	- 2 (35)
Speed:	+3 (45)
Health:	0
Charismatic:	+1
Combative:	+1
Communicative:	- 2
Esthetic:	+1
Mechanical:	0
Natural:	+3
Scientific:	- 2
Magic Affinity:	- 2
Skin AV	2
Bite WDM	1.2L
Claw WDM	1.2L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 5'6"	below 160 lb
Low	5'6"-5'7"	160- 180 lb
Below Average	5'8"-5'9"	181- 200 lb
Average	5'10"-6'	201- 220 lb
Above Average	6'1"-6'2"	221- 240 lb
High	6'3"-6'4"	241- 260 lb
Very High	over 6'4"	over 260 lb

The Canine, or Dog-man, is commonly called a werewolf, though the stories of the transformations from wolf to human are based on fear, falsehood, and basic misunderstandings. The average Canine stands 1.8 meters tall, with fur and facial features similar to any of the standard breeds of dog. Beagle, German Shepherd, and Siberian Husky are the most common breeds of Canine.

Dwarves

Dwarves are one of the oldest of the humanoid races. Over the years, the Dwarven race has developed into 5 distinct sub-races. These represent the different areas in which the dwarves developed. All Dwarves stand 1.3 meters tall on the average, and all have active infravision. Dwarves are short, stocky, and both sexes have full beards.

Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 3'11"	below 140 lb
Low	3'11"-4'	140- 160 lb
Below Average	4'1"- 4'2"	161- 180 lb
Average	4'3"-4'4"	181- 200 lb
Above Average	4'5"-4'6"	201- 220 lb
High	4'7"-4'8"	221- 240 lb
Very High	over 4'8"	over 240 lb

Mountain Dwarf

Wit:	0
Will:	0
Strength:	+5 (45)
Deftness:	0 (30)
Speed:	0 (30)
Health:	+5 (50)
Charismatic:	- 2
Combative:	+3
Communicative:	+1
Esthetic:	+2
Mechanical:	+3
Natural:	0
Scientific:	0
Magic Affinity:	- 3



The Mountain Dwarf, or "True Dwarf" is the most common of all the Dwarven races. Living underground, their infravision has been developed to the fullest extent. The Mountain Dwarves have white hair and greyish skin, with blue eyes, having lost most of their pigmentation.

City Dwarf

Wit:	0
Will:	0
Strength:	+5 (45)
Deftness:	0 (30)
Speed:	0 (30)
Health:	0 (50)
Charismatic:	- 2
Combative:	+2
Communicative:	+1
Esthetic:	+1
Mechanical:	+2
Natural:	- 2
Scientific:	0
Magic Affinity:	- 3



The City Dwarf is the most "civilized" of the Dwarven races. They usually stand a few centimeters taller than their brethren, due to the better balanced diet they enjoy. They have black to light brown hair, with blue to brown eyes.



Desert Dwarf

Wit:	0
Will:	0
Strength:	0 (45)
Deftness:	0 (35)
Speed:	0 (35)
Health:	0 (50)
Charismatic:	-2
Combative:	+3
Communicative:	0
Esthetic:	0
Mechanical:	+1
Natural:	+1
Scientific:	-1
Magic Affinity:	-3



The Desert Dwarf evolved in the deep desert, with little water or shelter. A little less bulky than his brethren, the Desert Dwarf masses 5 to 10 kilograms lighter on the average than other Dwarfish races, with black hair, dark skin, and dark brown eyes.

Forest Dwarf

Wit:	+1
Will:	+1
Strength:	+5 (45)
Deftness:	0 (30)
Speed:	0 (30)
Health:	0 (50)
Charismatic:	-2
Combative:	+3
Communicative:	0
Esthetic:	0
Mechanical:	+1
Natural:	+3
Scientific:	-1
Magic Affinity:	0



The Forest Dwarf is the more tribal of the Dwarfven races, having developed in the steamy jungles and rain forests of the equatorial belt. Standing 5 to 10 centimeters shorter than the average Dwarf, the forest dwarf, or Pygmy Dwarf, is the shortest of the Dwarfven races, having dark skin, hair, and eyes.

Arctic Dwarf

Wit:	-5
Will:	-5
Strength:	+5 (45)
Deftness:	0 (30)
Speed:	0 (30)
Health:	+10(60)
Charismatic:	-2
Combative:	+3
Communicative:	0
Esthetic:	0
Mechanical:	+1
Natural:	+2
Scientific:	-1
Magic Affinity:	-2



The Arctic Dwarf developed on the glaciers and tundra of the far North. The Arctic Dwarf has dark skin and black to dark brown hair with blue eyes.

Elves

The Elven races, oldest of all humanoid races other than Man himself, have developed much as the Dwarves have, developing into 5 independent races. All Elves stand an average of 1.8 meters tall, and all have passive infravision, except Earth Elves. All Elves are moderately tall and slender, with pointed ears, and they appear very beautiful to Humans.

Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 57"	below 80 lb
Low	57"- 58"	80- 100 lb
Below Average	59"- 5'10"	100- 120 lb
Average	5'11"- 6'1"	121- 140 lb
Above Average	6'2"- 6'3"	141- 160 lb
High	6'4"- 6'5"	161- 180 lb
Very High	over 6'5"	over 180 lb

Aerial Elf

Wit:	+5
Will:	+5
Strength:	0 (30)
Deftness:	0 (50)
Speed:	0
Health:	0 (25)
Charismatic:	+1
Combative:	0
Communicative:	+2
Esthetic:	+4
Mechanical:	-5
Natural:	+2
Scientific:	0
Magic Affinity:	+3



The Aerial Elves long ago moved to cities in the air, even though the Elves themselves are incapable of flight. They are usually lighter than the rest of the Elven races (-30 to bulk roll), and have pale skin, and silvery blond hair with blue to steel grey eyes.

Aquatic Elf

Wit:	0
Will:	0 (30)
Strength:	0 (30)
Deftness:	0 (45)
Speed:	0
Health:	0 (25)
Charismatic:	-1
Combative:	0
Communicative:	+1
Esthetic:	+4
Mechanical:	-4
Natural:	+1
Scientific:	0
Magic Affinity:	+1



The Aquatic Elves developed under water, and have both lungs and internal gills, with an automatic air/water/food selection reflex. They have pale skin with blond hair, and green eyes, and have slightly webbed fingers and toes, allowing for better swimming abilities. (+3 to BCS)

Earth Elf

Wit: +5
Will: +5 (50)
Strength: 0 (35)
Deftness: 0 (50)
Speed: 0
Health: 0 (25)
Charismatic: -1
Combative: 0
Communicative: -1
Esthetic: +3
Mechanical: -2
Natural: -4
Scientific: -2
Magic Affinity: +4



The Earth Elves, or "Dark Elves", developed underground, and have active infravision as a result. They have ebony black skin with silvery blond hair and steel grey eyes.

Mountain Elf

Wit: -5
Will: -5
Strength: 0
Deftness: 0 (55)
Speed: 0
Health: 0 (30)
Charismatic: 0
Combative: +1
Communicative: +1
Esthetic: +4
Mechanical: 0
Natural: -1
Scientific: +2
Magic Affinity: +2



These Elves are the barbarian Elves, having developed on the steppes and plateaus of the high mountains. Because of the thinner air, they have larger chests, and a large lung capacity. These Elves have pale skin with dark hair and eyes.

Wood Elf

Wit: 0
Will: 0 (30)
Strength: 0 (30)
Deftness: +5 (50)
Speed: 0
Health: 0 (25)
Charismatic: +3
Combative: 0
Communicative: +1
Esthetic: +4
Mechanical: -4
Natural: +3
Scientific: +1
Magic Affinity: +2



The Wood Elf, or Common Elf comprises almost 65% of the Elven population. They have platinum blond to light brown hair, with pale eyes and skin. Having evolved in the forests, they seem to prefer living amidst the trees and are sometimes mistaken for Dryads.

Felidare

The Felidare, or cat people, are examples of feline derivative evolution. They still have fur on their bodies, pronounced canines, claws, and tails. All Felidare have fur with an AV of 3, and a bite WDM of 1.3L.

Felidare, Cheetah-man

Wit: -5
Will: -5
Strength: 0
Deftness: +5 (50)
Speed: +20(60) [30]
Health: -5
Charismatic: -2
Combative: +2
Communicative: -1
Esthetic: +1
Mechanical: 0
Natural: +4
Scientific: -3
Magic Affinity: -8
Hide AV 3
Bite WDM 1.3 L
Claw WDM 1.3 L



PHYSICAL ASPECTS CHART

<u>Size & Bulk</u>	<u>Height</u>	<u>Weight</u>
Very Low	Below 5'8"	below 140 lb
Low	5'8" - 5'9"	140 - 160 lb
Below Average	6' - 6'1"	161 - 180 lb
Average	6'2" - 6'4"	181 - 210 lb
Above Average	6'5" - 6'6"	211 - 240 lb
High	6'7" - 6'8"	241 - 270 lb
Very High	over 6'8"	over 270 lb

The Cheetah-man is a humanoid evolved from the cheetah, and has similarly patterned fur. They have eyes that range from green to blue, retracting claws, and stand an average of 1.9 meters tall. Like their wild cousin, the Cheetah-man has very short fur which is kept very clean and neatly trimmed.

Felidare, Lion-man

Wit: 0
Will: -10
Strength: +5 (50)
Deftness: 0
Speed: +5 (50)
Health: +10(60)
Charismatic: +1
Combative: +2
Communicative: -1
Esthetic: -1
Mechanical: -2
Natural: +3
Scientific: 0
Magic Affinity: 0
Hide AV 3
Bite WDM 1.3 L
Claw WDM 1.5 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 67"	below 190 lb
Low	67"- 69"	190- 220 lb
Below Average	6'10"- 7'	221- 250 lb
Average	7'1"- 7'4"	251- 280 lb
Above Average	7'5"- 7'7"	281- 310 lb
High	7'8"- 7'10"	311- 340 lb
Very High	over 7'10"	over 340 lb

The Lion-man, the largest of all the Felidare, stands 2.2 meters tall on the average, has golden fur, with the males having a full mane after age 22 (mane AV 4). A Lion-man's eyes range from brown to green, with the rarest case of blue eyes. A Lion-man's claws have a WDM of 1.5 L, and are non-retractable.

Felidare, Puma-or-Leopard-man

Wit:	- 5
Will:	- 5
Strength:	0
Deftness:	0
Speed:	+5 (50)
Health:	+5 (60)
Charismatic:	- 1
Combative:	+1
Communicative:	- 1
Esthetic:	0
Mechanical:	+5
Natural:	+2
Scientific:	+5
Magic Affinity:	- 8
Hide AV	3
Bite WDM	1.3 L
Claw WDM	1.3 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 57"	below 120 lb
Low	57"- 58"	120- 140 lb
Below Average	59"- 5'10"	141- 160 lb
Average	5'11"- 6'1"	161- 190 lb
Above Average	6'2"- 6'3"	191- 210 lb
High	6'4"- 6'5"	211- 230 lb
Very High	over 6'5"	over 230 lb

The Puma or Leopard men, distinguished from each other only by fur patterning, stand an average of 1.8 meters tall, with green eyes. Puma men have single color fur ranging from light brown to black, while Leopard men have light brown fur with black patterning. The Puma or Leopard man's retracting claws have a WDM of 1.3 L.



Felidare, Tiger-man

Wit:	- 5
Will:	- 5
Strength:	0 (50)
Deftness:	+5 (50)
Speed:	0 (50)
Health:	0
Charismatic:	- 2
Combative:	+3
Communicative:	0
Esthetic:	0
Mechanical:	+4
Natural:	+1
Scientific:	+1
Magic Affinity:	- 7
Hide AV	3
Bite WDM	1.3 L
Claw WDM	1.6 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 65"	below 170 lb
Low	6'5"- 6'6"	170- 200 lb
Below Average	6'7"- 6'8"	201- 230 lb
Average	6'9"- 6'11"	231- 260 lb
Above Average	7'- 7'1"	261- 290 lb
High	7'2"- 7'3"	291- 320 lb
Very High	over 7'3"	over 320 lb

The Tiger-man stands an average of 2.0 meters tall, with tawny orange fur with black striping. Eyes are usually green, but blue and brown have occurred. The rarest fur patterning is white with black stripes, occurring approximately one time in 100,000. The Tiger-man's retracting claws have a WDM of 1.6L.

Insectoid

The Insectoids are intelligent humanoids evolved from smaller insects. Insectoids have 6 limbs, segmented bodies, and multifaceted eyes. The Insectoid's eyes are not good at any range beyond 100 meters, but give a 240 field of vision. All Insectoids have exoskeletons, with only rudimentary internal skeletons composed of cartilage.

Insectoid, Worker Ant

Wit:	- 10(20)
Will:	- 10(20)
Strength:	+5 (35)
Deftness:	+1
Speed:	+3
Health:	- 2 (35)
Charismatic:	- 3
Combative:	+2
Communicative:	- 2
Esthetic:	- 4
Mechanical:	+1
Natural:	+2
Scientific:	- 4
Magic Affinity:	- 5
Skin AV	3
Bite WDM	1.3 L
Claw WDM	1.6 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 5'	below 110 lb
Low	5'- 5'11"	110- 130 lb
Below Average	5'2"- 5'3"	131- 150 lb
Average	5'4"- 5'6"	151- 170 lb
Above Average	5'7"- 5'8"	171- 190 lb
High	5'9"- 5'10"	191- 210 lb
Very High	over 5'10"	over 210 lb

The male Ant, or Worker, stands an average of 1.6 meters tall, with black to red chitinous skin. The 6 limbs are organized as 2 legs, 2 primary arms, and 2 secondary arms (-2 to BCS). The Worker Ant has a skin AV of 3, a bite WDM of 1.3L, and a claw WDM of 1.6L.

Insectoid. Queen Ant

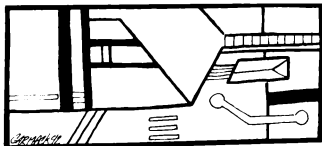
Wit:	+5
Will:	+5
Strength:	- 10 (25)
Deftness:	+2
Speed:	+1
Health:	+1 (35)
Charismatic:	- 2
Combative:	- 2
Communicative:	+1
Esthetic:	- 2
Mechanical:	- 3
Natural:	0
Scientific:	- 3
Magic Affinity:	+1
Skin AV	4
Bite WDM	1.3 L
Claw WDM	1.2 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 6'9"	below 210 lb
Low	6'9"- 6'11"	210- 230 lb
Below Average	7'- 7'2"	231- 250 lb
Average	7'3"- 7'6"	251- 270 lb
Above Average	7'7"- 7'9"	271- 290 lb
High	7'10"- 8'	291- 300 lb
Very High	over 8'	over 300 lb

The female of the Ant species, the Queen, stands an average of 2.2 meters tall when standing on her hind legs, and 1.6 meters tall otherwise. She has black to red chitinous skin with the 6 limbs organized as 2 arms and 4 legs. The Queen Ant has a skin AV of 4, a bite WDM of 1.3L, and a claw WDM of 1.2L.



Insectoid. Mantis

Wit:	+5
Will:	+5
Strength:	0
Deftness:	+1
Speed:	+5 (45)
Health:	0 (30)
Charismatic:	- 2
Combative:	+1
Communicative:	- 2
Esthetic:	- 3
Mechanical:	- 2
Natural:	+1
Scientific:	- 2
Magic Affinity:	+3
Skin AV	3
Bite WDM	1.2 L
Claw WDM	2 B



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 6'3"	below 190 lb
Low	6'3"- 6'5"	190- 210 lb
Below Average	6'6"- 6'8"	211- 230 lb
Average	6'9"- 6'11"	231- 250 lb
Above Average	7'- 7'2"	251- 270 lb
High	7'3"- 7'5"	271- 300 lb
Very High	over 7'5"	over 300 lb

The Mantis stands 2.1 meters tall, with green to brown skin. The Mantis' limbs are 2 manipulative arms, 2 sword shaped secondary arms (no manipulation), and 2 legs. The Mantis has a skin AV of 3, a bite WDM of 1.2L, and a claw WDM of 2B with the sword shaped arms.

Insectoid. Wasp

Wit:	- 5
Will:	- 5
Strength:	0 (30)
Deftness:	+5
Speed:	+5
Health:	0 (30)
Charismatic:	- 3
Combative:	+1
Communicative:	-1
Esthetic:	+2
Mechanical:	+1
Natural:	+1
Scientific:	- 2
Magic Affinity:	- 4
Skin AV	1
Bite WDM	1.2 L
Sting WDM	1.9 L
Flight BMA	5



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 5'4"	below 70 lb
Low	5'4"- 5'5"	70- 90 lb
Below Average	5'6"- 5'7"	91- 110 lb
Average	5'8"- 5'9"	111- 130 lb
Above Average	5'10"- 5'11"	131- 150 lb
High	6'- 6'1"	151- 170 lb
Very High	over 6'1"	over 170 lb

The Wasp is the flying insectoid, having 4 manipulative arms, 2 wings, and 2 legs. The Wasp's skin varies from being brightly patterned to a solid brown or black. The average Wasp stands 1.7 meters tall. Wasps have a skin AV of 1, a bite WDM of 1.2 L, and a sting WDM of 1.9 L. A Wasp has a BMA of 5 while flying.

Gnoll

Wit:	- 10(20)
Will:	- 10(20)
Strength:	+5 (50)
Deftness:	0
Speed:	0
Health:	+5 (50)
Charismatic:	- 3
Combative:	+5
Communicative:	+1
Esthetic:	- 3
Mechanical:	- 2
Natural:	+2
Scientific:	- 4
Magic Affinity:	- 3
Skin AV:	1
Bite WDM:	1.2 L
Claw WDM:	1.1 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 6'7"	below 200 lb
Low	6'7"- 6'9"	200- 220 lb
Below Average	6'10"- 7'	221- 240 lb
Average	7'1"- 7'3"	241- 260 lb
Above Average	7'4"- 7'5"	261- 280 lb
High	7'7"- 7'9"	281- 300 lb
Very High	over 7'9"	over 300 lb

The Gnoll, or Jackal-man, stands an average of 2.2 meters tall, with greenish-brown skin, yellow eyes, and dirty brown to black hair. The body is that of a man, with the head and neck of a jackal. All Gnolls have passive infravision. Gnolls have a skin AV of 1, a bite WDM of 1.2 L, and claws with a WDM of 1.1 L.

Goblin

Wit:	- 5 (10)
Will:	- 5 (15)
Strength:	0 (35)
Deftness:	0 (25)
Speed:	- 1 (35)
Health:	+1 (45)
Charismatic:	- 2
Combative:	+1
Communicative:	- 5
Esthetic:	- 2
Mechanical:	- 1
Natural:	+3
Scientific:	- 5
Magic Affinity:	- 5
Skin AV:	1
Bite WDM:	1.2 L
Claw WDM:	1.2 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 5'1"	under 130 lb
Low	5'1"- 5'2"	130- 150 lb
Below Average	5'3"- 5'4"	151- 170 lb
Average	5'5"- 5'7"	171- 190 lb
Above Average	5'8"- 5'9"	191- 210 lb
High	5'10"- 5'11"	211- 230 lb
Very High	over 5'11"	over 230 lb

Goblins have greenish skin and stand an average of 1.6 meters tall. They have black hair, pointy ears and nose, and yellowish-green eyes. All goblins have passive infravision. Goblins have a skin AV of 1, a bite WDM of 1.2L, and a claw WDM of 1.2L.

Halfling

Wit:	+1
Will:	+1
Strength:	- 5 (30)
Deftness:	+5 (45)
Speed:	- 2
Health:	+1 (50)
Charismatic:	0
Combative:	- 1
Communicative:	+1
Esthetic:	+2
Mechanical:	+1
Natural:	- 2
Scientific:	- 3
Magic Affinity:	- 1



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 3'11"	below 120 lb
Low	3'11"- 4'	120- 130 lb
Below Average	4'1"- 4'2"	131- 140 lb
Average	4'3"- 4'4"	141 - 160 lb
Above Average	4'5"- 4'6"	161- 170 lb
High	4'7"- 4'8"	171- 180 lb
Very High	over 4'8"	over 180 lb

The Halfling is a hairy humanoid with light brown skin, green to brown eyes, and lots of dense brown hair, including the tops of their feet. Halflings stand 1.3 meters tall on the average, and all have passive infravision.



CACMEX 90

Hawkman

Wit:	0
Will:	0
Strength:	-7 (30)
Deftness:	-5
Speed:	+5
Health:	-5 (35)
Charismatic:	-1
Combative:	-1
Communicative:	+1
Esthetic:	0
Mechanical:	0
Natural:	+1
Scientific:	0
Magic Affinity:	-1
Wings AV	1
Flight BMA	6



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 5'11"	below 80 lb
Low	5'11" - 6'	80- 90 lb
Below Average	6'1" - 6'2"	91- 100 lb
Average	6'3" - 6'5"	101- 120 lb
Above Average	6'6" - 6'7"	121- 130 lb
High	6'8" - 6'9"	131- 140 lb
Very High	over 6'9"	over 140 lb

Hawkmen are humans with golden brown feathered wings. They stand an average of 1.9 meters tall, and sport the full range of human features. Hawkmen can see clearly out to one mile. The Hawkman has a BMA of 6 while flying.

Hobgoblin

Wit:	-5 (15)
Will:	-5 (10)
Strength:	+15(60)
Deftness:	-5 (30)
Speed:	-5 (25)
Health:	+5 (45)
Charismatic:	-2
Combative:	+3
Communicative:	-2
Esthetic:	-4
Mechanical:	-1
Natural:	+1
Scientific:	-3
Magic Affinity:	-4
Skin AV	1
Bite WDM	1.3 L
Claw WDM	1.4 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 7'1"	below 200 lb
Low	7'1" - 7'3"	200- 230 lb
Below Average	7'4" - 7'6"	230- 260 lb
Average	7'7" - 7'10"	261- 290 lb
Above Average	7'11" - 8'1"	291- 320 lb
High	8'2" - 8'4"	321- 350 lb
Very High	over 8'4"	over 350 lb

The Hobgoblin, a relative of the Orc and Goblin, stands an ugly 2.3 meters tall on the average, with greenish skin, yellow eyes, pointy nose, floppy ears, and scraggly black hair. Hobgoblins have active infravision, and have a skin AV of 1, a bite WDM of 1.3L, and a claw WDM of 1.4L.

Kireean

Wit:	0 (30)
Will:	+5
Strength:	-5 (30)
Deftness:	+5 (50)
Speed:	+5
Health:	+5 (30)
Charismatic:	+5
Combative:	-3
Communicative:	+1
Esthetic:	+4
Mechanical:	-3
Natural:	+1
Scientific:	-4
Magic Affinity:	+1



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 5'10"	below 90 lb
Low	5'10" - 5'11"	90- 110 lb
Below Average	6' - 6'1"	111- 130 lb
Average	6'2" - 6'4"	131- 150 lb
Above Average	6'5" - 6'6"	151- 170 lb
High	6'7" - 6'8"	171- 190 lb
Very High	over 6'8"	over 190 lb

The Kireean is well known for its athletic prowess and beauty. A Kireean stands an average of 1.9 meters tall, with light brown skin, pointed ears, platinum blond hair, and unusual eyes. The Kireean's eyes are black in the center, with the rest of the iris being stark white. Kireeans have low light vision class 1 colored through the normal human spectrum. The Kireean's hands are also unique, as they have dual opposable thumbs, allowing for the high deftness of this race. Kireeans appear very beautiful, and are said to be the most attractive of all races.

Kobold

Wit:	-5 (10)
Will:	-5 (10)
Strength:	-5 (25)
Deftness:	0 (35)
Speed:	0 (30)
Health:	+10 (50)
Charismatic:	-2
Combative:	+1
Communicative:	+1
Esthetic:	-2
Mechanical:	-3
Natural:	+1
Scientific:	-1
Magic Affinity:	-6
Bite WDM	1.4 L
Claw WDM	1.4 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 4'11"	below 130 lb
Low	4'11"-5'	130 - 150 lb
Below Average	5'1"-5'2"	151 - 170 lb
Average	5'3"-5'5"	171 - 190 lb
Above Average	5'6"-5'7"	191 - 210 lb
High	5'8"-5'9"	211 - 230 lb
Very High	over 5'9"	over 230 lb

The Kobold, one of the goblin races, stands 1.6 meters tall on the average, with greenish-brown skin, sparse black matted hair, shriveled ears, flattened nose, and yellowish eyes. All Kobolds have active infravision. Kobolds have a bite WDM of 1.4L, and a claw WDM of 1.4L.

Minotaur

Wit:	- 10 (25)
Will:	- 10 (30)
Strength:	+15 (60) [35]
Deftness:	- 5 (35)
Speed:	- 5 (35)
Health:	+5 (60)
Charismatic:	- 2
Combative:	+5 (25)
Communicative:	- 3
Esthetic:	- 3
Mechanical:	- 4
Natural:	+1
Scientific:	- 3
Magic Affinity:	0
Skin AV	4
Bite WDM	1.6 C
Horns WDM	2.5 B



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 7'2"	below 200 lb
Low	7'2"- 7'4"	200- 230 lb
Below Average	7'5"- 7'7"	231- 260 lb
Average	7'8"- 7'10"	261- 290 lb
Above Average	7'11"- 8'1"	291- 320 lb
High	8'2"- 8'4"	321- 350 lb
Very High	over 8'4"	over 350 lb

The Minotaur stands an average of 2.3 meters tall, with a muscular man's body and a bull's head, brownish skin and fur, and black eyes. Minotaurs have active infravision. The Minotaur has a skin AV of 4, a bite WDM of 1.6C, and a horn WDM of 2.5B. Minotaurs have a natural sense of direction, and are at home in a maze.

Angus: Jet Black coloring.
Brahman: Overall gray coloring.
Charolais: Solid white coloring.
Galloway: +1 Strength, -1 Deftness
Hereford: Has +10 to bulk.
Holstein: Black and white coloring.
Latvian Brown: -1 Charismatic, +1 Esthetic
Short-Horn: Horn WDM 2.2 B
Welsh Black: Standard Minotaur, no modifiers.

Muridian

Wit:	- 10 (30)
Will:	- 10 (30)
Strength:	- 10 (30)
Deftness:	+10 (50)
Speed:	+10 (50)
Health:	+5 (50)
Charismatic:	- 4
Combative:	+2
Communicative:	- 1
Esthetic:	+4
Mechanical:	+1
Natural:	+3
Scientific:	- 4
Magic Affinity:	- 2
Skin AV	3
Bite WDM	1.2 L
Claw WDM	1.6 L

Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 3'8"	below 70 lb
Low	3'8"- 3'9"	70- 80 lb
Below Average	3'10"- 3'11"	81- 90 lb
Average	4'- 4'1"	91- 100 lb
Above Average	4'2"- 4'3"	101- 110 lb
High	4'4"- 4'5"	111- 120 lb
Very High	over 4'5"	over 120 lb

The Muridian, or Rat-man, is an example of rat derivative evolution. They stand an average of 1.2 meters tall with hairless tails, brown fur, and yellowish eyes. Muridians have passive infravision. The Muridian has a skin AV of 3, a bite WDM of 1.2L, and a claw WDM of 1.6L.

Ogre

Wit:	- 10 (10)
Will:	- 10 (10)
Strength:	+20 (65) [45]
Deftness:	- 10 (30)
Speed:	- 10 (30)
Health:	+10 (60)
Charismatic:	- 3
Combative:	+4
Communicative:	- 3
Esthetic:	- 2
Mechanical:	- 3
Natural:	- 1
Scientific:	- 2
Magic Affinity:	0
Skin AV	2
Bite WDM	1.3 L
Claw WDM	2.5 C

Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 7'10"	below 240 lb
Low	7'10"- 8'	240- 270 lb
Below Average	8'1"- 8'3"	271- 300 lb
Average	8'4"- 8'7"	301- 330 lb
Above Average	8'8"- 8'10"	331- 360 lb
High	8'11"- 9'1"	361- 390 lb
Very High	over 9'1"	over 390 lb



The Ogre stands an average of 2.5 meters tall, with brown skin, black hair, and yellowish eyes. All Ogres have active infravision. Ogres have a skin AV of 2, a bite WDM of 1.3L, and a punch WDM of 2.5C.

Orc

Wit:	- 10 (20)
Will:	- 10
Strength:	+15 (50)
Deftness:	0 (30)
Speed:	+5 (30)
Health:	0 (50)
Charismatic:	- 5
Combative:	+4
Communicative:	- 2
Esthetic:	- 2
Mechanical:	- 2
Natural:	+1
Scientific:	- 2
Magic Affinity:	- 2
Skin AV	2
Bite WDM	1.1 L
Claw WDM	1.1 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 6'6"	below 200 lb
Low	6'6" - 6'8"	200- 220 lb
Below Average	6'9" - 6'11"	221- 240 lb
Average	7' - 7'2"	241- 260 lb
Above Average	7'3" - 7'5"	261- 280 lb
High	7'6" - 7'8"	281- 300 lb
Very High	over 7'8"	over 300 lb

The Orc stands an average of 2.1 meters tall, with greenish skin, piglike nose, sometimes tusks, pointed ears, sparse scraggly black hair, and yellowish eyes. All Orcs have passive infravision. Orcs have a skin AV of 2, a bite WDM of 1.1L, and a claw WDM of 1.1L.

Rhinoceri

Wit:	- 5
Will:	0
Strength:	+8 (45)
Deftness:	+5 (45)
Speed:	- 5 (30)
Health:	+10 (45)
Charismatic:	- 1
Combative:	+4
Communicative:	0
Esthetic:	- 1
Mechanical:	+2
Natural:	+5
Scientific:	- 1
Magic Affinity:	+3
Skin AV	4
Horn WDM	special



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 7'1"	below 250 lb
Low	7'1" - 7'3"	250- 270 lb
Below Average	7'4" - 7'6"	270- 290 lb
Average	7'7" - 7'10"	291- 320 lb
Above Average	7'11" - 8'1"	321- 340 lb
High	8'2" - 8'4"	341- 360 lb
Very High	over 8'4"	over 360 lb

The Rhinoceri have been mistakenly called Unicorn men, as they have one horn in the middle of their forehead, which is commonly adorned with engraving, jewels, and gold, and other precious metals.

The average Rhinoceri stands 2.3 meters tall, with very powerful flanks and shoulders, grey leathery skin, steel grey eyes, and black hair. The Rhinoceri's horn WDM is equal to 1.5 + (.5 x Stopping Forward Motion Category), which gives it a 3 WDM at full charge. [See AFTERMATH! Book 1, page 24]

Saurian

Wit:	- 5 (20)
Will:	0
Strength:	+10 (50) [35]
Deftness:	- 5
Speed:	0
Health:	+5
Charismatic:	0
Combative:	+3
Communicative:	0
Esthetic:	0
Mechanical:	- 2
Natural:	+3
Scientific:	- 3
Magic Affinity:	- 3
Skin AV	STR GRP



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 7'4"	under 250 lb
Low	7'4" - 7'6"	250- 270 lb
Below Average	7'7" - 7'9"	271- 390 lb
Average	7'10" - 8'1"	291- 320 lb
Above Average	8'2" - 8'4"	321- 340 lb
High	8'5" - 8'7"	341- 360 lb
Very High	over 8'7"	over 360 lb

The Saurian, or lizard man, stands an impressive 2.4 meters tall on the average, with green, scaly, hairless skin, no external ears, slitted nose, and vertically slitted pupils. Saurians have passive infravision. Lizard Men have a skin AV equaling their strength group.

Serpentite

Wit:	- 10 (25)
Will:	- 5 (35)
Strength:	0
Deftness:	+1 (45)
Speed:	+5 (50)
Health:	- 5 (35)
Charismatic:	0
Combative:	+3
Communicative:	-1
Esthetic:	- 3
Mechanical:	- 2
Natural:	+1
Scientific:	-1
Magic Affinity:	+1
Skin AV	STR GRP
Bite WDM	1.8 L



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 6'5"	below 180 lb
Low	6'5"-6'7"	180 - 200 lb
Below Average	6'8"-6'10"	201 - 220 lb
Average	6'11"-7'1"	221 - 240 lb
Above Average	7'2"-7'4"	241 - 260 lb
High	7'5"-7'7"	261 - 280 lb
Very High	over 7'7"	over 280 lb

The Serpentite has a man's body with the head of a cobra. The Snake-man, as he is commonly known, stands an average of 2.1 meters tall, with green scaly skin and vertically slitted green eyes. The Serpentite's hood is fully extendable, but is commonly worn closed. Serpentites have passive infravision. A Serpentite has a skin AV equaling their Strength Group, and a bite WDM of 1.8L.

Toridare

Wit:	-10 (15)
Will:	-10 (15)
Strength:	+5 (50)
Deftness:	- 5
Speed:	0 (20)
Health:	+10(60) [35]
Charismatic:	- 3
Combative:	+4
Communicative:	-1
Esthetic:	- 2
Mechanical:	- 1
Natural:	+3
Scientific:	- 2
Magic Affinity:	0
Skin AV	HLH GRP
Bite WDM	2 L
Tail WDM	2 C



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 6'	below 190 lb
Low	6'-6'1"	190 - 210 lb
Below Average	6'2"-6'3"	211 - 230 lb
Average	6'4"-6'6"	231 - 250 lb
Above Average	6'7"-6'8"	251 - 270 lb
High	6'9"-6'10"	271 - 290 lb
Very High	over 6'10"	over 290 lb

The Toridare, or Alligator-man, is an example of alligator based evolution. The Toridare stands an average of 1.9 meters tall, with a tough leathery greenish-brown hide, yellow eyes, and a large tail. Toridare have poor ranged vision, but good night vision (Light Level 3). The Toridare have a skin AV equaling their Health Group, a bite WDM of 2L, and a tail WDM of 2C.

Ursoid

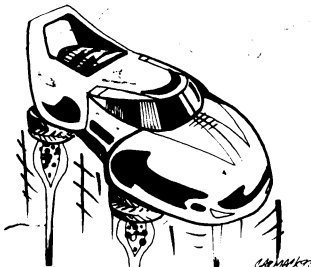
Wit:	-5
Will:	-5
Strength:	+20 (60) [35]
Deftness:	-5 (30)
Speed:	-5 (30)
Health:	+5 (50)
Charismatic:	-2
Combative:	+5
Communicative:	0
Esthetic:	0
Mechanical:	-3
Natural:	+3
Scientific:	-2
Magic Affinity:	-5
Skin AV	3
Claw WDM	1.8 B



Physical Aspects Chart

Size & Bulk	Height	Weight
Very Low	Below 7'5"	below 190 lb
Low	7'5"-7'7"	190 - 220 lb
Below Average	7'8"-7'10"	221 - 250 lb
Average	7'11"-8'2"	251 - 280 lb
Above Average	8'3"-8'5"	281 - 310 lb
High	8'6"-8'8"	311 - 340 lb
Very High	over 8'8"	over 340 lb

The Ursoid, or bear derivative humanoid, stands an average of 2.4 meters tall with fur ranging from white to black but most commonly brown. Ursoids have low light vision level 2. The Ursoid has a skin AV of 3, a bite WDM of 1L, and a claw WDM of 1.8B.



TECHNOLOGICAL LEVEL CHART

TECH LEVEL	TIME PERIOD	REFERENCE
0	Early Stone Ages	
1	Late Stone Ages	
2	Early Bronze Age	Ancient Egypt
3	Late Bronze Age	Classical Greece
4	Iron Age	Roman Empire
5	Early Dark Ages	Fall of the Roman Empire
6	Dark Ages	Norman Invasion of Briton
7	Middle Ages	Crusades
8	Late Middle Ages	Pre Gunpowder
9	Late Middle Ages	Advent of Gunpowder
10	Early Renaissance	
11	Renaissance	
12	Colonization	Revolutionary War
13	Early Industrial Revolution	American Civil War
14	Industrial Revolution	Zulu War
15	World War I	
16	World War II	
17	Korean War	
18	Vietnam War	
19	Computer Era	
20	Fall of the Communist Bloc	
21	Moonbase Established	
22	Solar System Exploration	
23	First Warp Drives	
24	First Galactic Empire	Blasters
25	First Galactic Dark Age	
26	Second Terran Empire	
27	Fall of Terra	
28	SpaceFleet Confederation Established	
29	Age of Peace in Space	
30	?????	

The Gamemaster may place restrictions on the available skills and races in the campaign. For Example, a spy campaign on earth during the 1980's would be Tech Level 19, no magic, no non-human races.

INITIAL SKILLS FOR CHARACTERS

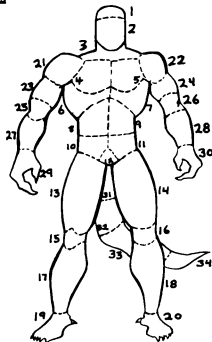
The character receives a number of initial education skill points equal to his age group plus the technological level of the campaign, plus the value number of a reaction roll. (Aftermath! Book One, P.56) The character also receives a number of initial development points equal to his base age skill point number plus 2d10. Guideline technological levels are given in the chart above. The technological level is defined as the average education level of a 20 year old person in skill points

Initial Equipment

Initial Equipment for characters will vary from campaign to campaign. The Gamemaster must decide what equipment is reasonable for the characters. Simple, eh? Generally, however, it is usually feasible to have a player roll a D10 for each of his skills, to determine the Utility number of the equipment that the character has for the skill. It is still up to the gamemaster to decide what, if any, items that the character has, but this system can be used as a guideline.

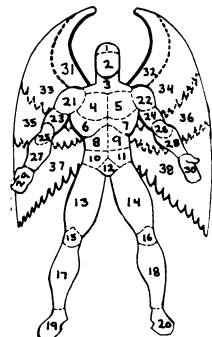
Hit Location Tables

Bipedal Tailed	LOC
D100	LOC
1-4	1
5-8	2
9-11	3
12-19	4/5
20-27	6/7
28-35	8/9
36-43	10/11
44-48	12
49-53	21/22
54-58	23/24
59-62	25/26
63-66	27/28
67-71	29/30
72-76	13/14
77-81	15/16
82-86	17/18
87-88	19/20
89-91	31
92-94	32
95-97	33
98-00	34

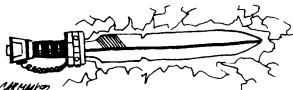


Use this chart for Arachnid, Canine, Felidae, Muridian, Saurian, Serpentine, and Toridae.

Bipedal Winged	LOC
D100	LOC
1-3	1
4-6	2
7-8	3
9-15	4/5
16-22	6/7
23-29	8/9
30-36	10/11
37-40	12
41-44	21/22
45-48	23/24
49-51	25/26
52-55	27/28
56-59	29/30
60-63	13/14
64-68	15/16
69-72	17/18
73-74	19/20
75-78	31/32
79-85	33/34
86-92	35/36
93-00	37/38



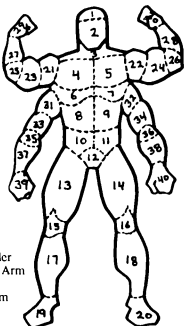
Use this chart for Hawkmen.



**Bipedal
4 Arms**

D100	LOC
1-3	1
4-6	2
7-8	3
9-15	4/5
16-22	6/7
23-29	8/9
30-36	10/11
37-41	12
42-46	21/22
47-51	23/24
52-55	25/26
56-58	27/28
59-63	29/30
64-68	13/14
69-74	15/16
75-78	17/18
79-80	19/20
81-85	31/32
86-90	33/34
91-93	35/36
94-97	37/38
98-00	39/40

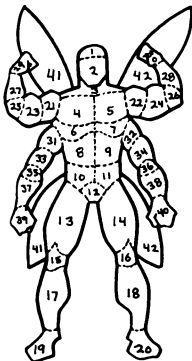
Shoulder
Upper Arm
Elbow
Forearm
Hand



Use this chart for Insectoid, Worker-Ant, Mantis.

**Bipedal
Winged, 4 Arms**

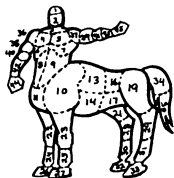
D100	LOC
1-3	1
4-6	2
7-8	3
9-14	4/5
15-20	6/7
21-26	8/9
27-32	10/11
33-36	12
37-40	13/14
41-45	15/16
46-48	17/18
49	19/20
50-53	21/22
54-57	23/24
58-60	25/26
61-63	27/28
64-67	29/30
68-71	31/32
72-75	33/34
76-78	35/36
79-81	37/38
82-85	39/40
86-00	41/42



Use this chart for Insectoid, Wasp.

**Centaur
4 Legs, 2 Arms**

D100	LOC
1-3	1
4-6	2
7-8	3
9-14	4/5
15-20	6/7
21-26	8/9
27-32	10/11/12
33-38	22/23
39-44	24/25
45-47	26/27
48-51	36-37
52-55	38-39
56-58	40-41
59-61	42-43
62-65	44-45
66-71	13/14/15
72-77	16/17/18
78-83	19/20/21
84-89	28/29
90-95	30/31
96-98	32/33
99	34
00	35



Use this chart for Insectoid, Queen-Ant, Centaur.

Vision Types

The following is a description of the vision types available to character races.

Low Light Level 1: The race can see in any light better than darkness.

Low Light Level 2: The race can see normally in light of dim or better.

Low Light Level 3: The race has normal Human vision.

Passive Infravision: The race can see into the infrared spectrum, and has a 30 foot vision range in total darkness.

Active Infravision: The race emits infrared light from its eyes. It can see normally regardless of the lighting, though transitions can be distracting.



Cybernetics for *AFTERMATH!*

In *Aftermath!* cybernetics must be handled carefully by the gamemaster. As any experienced *Aftermath!* gamemaster knows, the greater the quantity of technological items that a party of players has, the more powerful they are, and cybernetics are no exception. The distribution of cybernetics is broken down into two areas: during play and before play. During play, it is up to the gamemaster to limit the availability of cybernetics, and control their cost. This is aided by the high barter point values of cybernetics, and also sociological factors. As most of us are aware, a person who is "handicapped" or "challenged" is treated differently than other people. For example, a person who is missing his lower leg can currently have it replaced with an artificial leg that nearly restores full ability, however when people find out about the leg, they treat the person differently. Sporting large amounts of visible cybernetics will cause other people to treat you differently, especially if the cybernetics are military in nature. This excludes the treatment by police and security forces, setting off metal detectors, and generally being treated as a menace to society. Before play, during character generation, this control becomes more complicated. The basic *Aftermath!* rules handle the disbursement of firepower by the use of random rolls. This does not work as well for cybernetics. Therefore, the availability of cybernetics during character generation is handled by charging the players skill points for the cybernetics. As cybernetics are generally a permanent addition to the character, this makes sense.

Cybernetics, especially cybernetic limbs, have their own set of statistics. For example, a cybernetic arm could have a Strength of 55, a deftness of 35 and a speed of 40. The strength of a cybernetic part defines its lifting and damaging strength as if it were the user's strength. The Deftness of a cybernetic part represents its agility, and limits the number of actions allowed with that part accordingly. The speed of a part defines its Maximum BAP, though this cannot exceed the user's normal BAP. Cybernetic legs are a special case. A high speed in both legs will allow the user to run very fast. To find the wearer's running move per action phase, divide the leg's speed by the user's BAP. A person with cybernetic legs can run a distance equal to the leg's speed per combat turn.

Cybernetic parts also have two new statistics: structure and spaces. The structure of a part is its ability to take damage. A cybernetic part can take damage equal to its structure before it is disabled (damage level 5), double the structure before it is crippled (damage level 25), and triple the structure and it is destroyed (damage level 100). Repairing a cybernetic part is a task with a task point value equal to (number of points of damage x level of damage), with a task period of 1 hour. The skill required is Cybernetic technician. If the damage taken is less than the part's structure, the multiplier is 1. The spaces of a cybernetic part is the number of features it can hold. The spaces of an feature is how many spaces it takes up. Some features can be placed remotely from the part that they affect. For example, a scrambler system for an ear could be housed in the arm, and connected to the ear by a cable. Generic features can be installed in any cybernetic part.



Cybernetic Descriptions

Ear, standard: This Cyberware replaces one ear. It duplicates normal human hearing.

Ear Options

Radio Splice: This is an internal two-way radio contained within the cybernetic ear. It has a range of around 2.5 miles.

Amplified Hearing: This cybernetic ear option gives the user the ability to discern sounds as quiet as 3dB. (A mouse's belch at 30 meters). Sudden loud sounds will act as a distraction to the person using this, unless they also have level dampers.

Phone Link: This is an internal 3 watt cellular phone contained within the ear.

Scrambler: This is a two way scrambling system that will work with a Phone Link, Radio Splice, Throat/Larynx, or micro recorder.

Bug Detector: This scans for the presence of bugs. It has a search BCS of 8.

Tape Player: An audio tape player in your head. Will play any standard audio tape.

Micro Recorder: A microchip audio recorder. Records sounds heard by the ear, with a 2 hour recording time per chip. The recording will only be in stereo if the user has two cybernetic ears.

Wide Band Reception: Gives the user hearing from either 12 Hz to 20,000 Hz (low sounds) or from 40 Hz to 40,000 Hz (high sounds).

Full Band Reception: Allows the user to hear sounds from 10 Hz to 40,000 Hz. (Dog whistles, sound based alarms, sonar).

Sonar (requires 2 ears): Gives the user sonar. This will map out the solid objects within 30 meters. (100 meters under water).

Parabolic Microphone: This cyberware allows the long range reception of sound; with this the user can clearly hear a normal conversation at a mile. However the area listened to is quite small. (2 meter radius at 1 mile range).

Pressure Sensor: Allows the user to accurately measure the barometric pressure.

Atmospheric Sampler: This cyberware samples the atmosphere, giving a detailed report to a LCD screen or HUD located elsewhere.

Inertial Tracker: This device maps out the inertial changes that the user experiences, giving a very accurate map of the user's travels. The wearer has a +16 to Wit saving throws to retrace any pathway the user has traveled.

Voice Stress Analyzer: Acts as a lie detector, giving the user the ability to tell if a person is lying. (8 BCS)

Sound Editing: Allows the user to selectively ignore any specific sounds (gunfire, music, mother, etc.)

Radar Detector: X, K, and Q band radar detector. Know when those speedtraps are coming. This will also pick up motion sensor doors, alarms, etc.

Tight Beam Radio Link: Gives secure battlefield communication that is usually bounces off a satellite. The user can perform no other actions, including motion, while transmitting or receiving.

Eye, standard: Replaces the normal function of the human eye.

Eye Options

Color Shift: Allows the user to change the color of his eyes at will.

Thermograph Sensor: This feature allows the user to see heat patterns. Hot areas appear as bright colors, while cool areas are dark.

Infrared vision: Allows the user to see in the Infrared spectrum. This will give a 30 foot vision range from ambient infrared radiation, or the user can select active mode, giving normal vision, but to any other infrared seeing beings, the user's eyes will appear to glow.

Ultraviolet vision: Allows the user to see in the ultraviolet spectrum. This will give a 30 foot vision range from ambient UV radiation, or the user can select active mode, giving normal vision, but to any other ultraviolet seeing beings, the user's eyes will appear to glow. This is UV-Alpha rays, and will not cause tanning.

Targeting Sight: Will place a crosshair in the user's field of vision where a coded laser beam impacts (+1 BCS), usually a laser sight, or, with a cyberweapon splice, will give ranging and crosshairs. (+2 BCS)

Telescopic Vision: Lenses in the cybereye give the wearer 2-12x telescopic vision.

Microscopic Vision: This feature has lenses which give 100x magnification of items within 6 meters.

Micro Laser: A laser with a collimation of 3, and a MCS of 1, with 10 charges.

Camcorder: Video camera with 10 minutes of recording time per microchip.

Micro Camera: 10 exposure still camera contained within the eye.

Heads Up Display: Gives the user full heads-up-display of information from internal computers, netlink plugs, or other cyberware.

Low Light Enhancement: Amplifies ambient light levels, allowing normal vision in near total darkness, at the cost of the loss of color sense. Light Level 3.

Image Intensifier: Computer enhancement of images, increasing resolution. Gives +1 to all Sight based BCS rolls.

Telescopic/Microscopic Vision: Electronic alteration in the visual processor allows 2-10x telescopic vision, or 75x microscopic vision.

Range Finder Monocular: Gives +1 to all ranged weapon BCS's at long and extreme range.

Range Finder Binocular: Gives +2 to all ranged weapon BCS's at long and extreme range. Requires two cybernetic eyes.

EMR Scanner: Gives a display of electromagnetic radiation superimposed on the vision of the user. This allows seeing lasers, electrical currents, etc.

Hand, std. Statistics 15: A standard cybernetic hand (location 29 or 30), duplicating normal function. It has STR 15, DFT 15, and SPD 15.

Lower Arm, std. Statistics 25 : A standard cybernetic lower arm (locations 25,27,29 or 26,28,30), duplicating normal function. It has STR 25, DFT 25, and SPD 25.

Full Arm, std. Statistics 35 : A standard cybernetic arm and shoulder (locations 21,23,25,27,29 or 22,24,26,28,30), duplicating normal function. It has STR 35, DFT 35, and SPD 35.

Foot, std. Statistics 15 : A standard cybernetic foot (location 19 or 20), duplicating normal function. It has STR 15, DFT 15, and SPD 15.

Lower Leg, std. Statistics 25 : A standard cybernetic lower leg (locations 15,17,19 or 16,18,20), duplicating normal function. It has STR 25, DFT 25, and SPD 25.

Full Leg, std. Statistics 35 : A standard cybernetic leg (locations 13,15,17,19 or 14,16,18,20), duplicating normal function. It has STR 35, DFT 35, and SPD 35.

Arm and Leg Options

Strength Boost, Definess Boost, Speed Boost, per group: Gives a bonus of one group (10 points) to a cybernetic limb in the given attribute. Each group boost takes up one space.

Weapon (gun), hidden: A concealed gun (or other weapon) enclosed in the limb. It is concealed until use, when it pops out and must be drawn or readied, etc.

Weapon (gun), mounted: A gun or other weapon mounted in a limb, ready for use. The extra spaces compose the operating mechanism, and the gun is always completely contained within the cyberlimb.

Cyberclaws: Cybernetic claws mounted at the tips of the fingers. WDM 1.5L

Razor Nails: Razorbladed fingernails. WDM 1.7L.

Retractable Blades: Retractable blades concealed within the cyberlimb. WDM 2.1 L.

Monofilament Wire: A garotte or whip of monofilament wire 2 meters long. WDM 1.6L.

Taser: Concealed Taser within the cybernetic limb. Functions as per Aftermath! book 3, p. 43.

Cattle Prod: An electric shock weapon with the contacts on the surface of the Cyberlimb. The Cattle prod has 50 charges contained within it, each doing 1d10 of subdual damage. The user can put up to 15 charges in a single attack, and must contact the target using surprise, Unarmed Combat, or brawling.

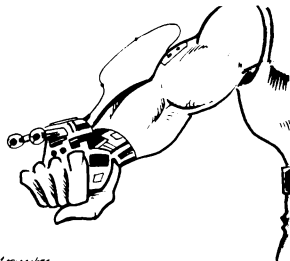
Electro Magnetic Pads: Magnetic pads usually installed in the soles of cybernetic feet to allow the user to walk normally on any magnetic surface in zero g. If the Pads are placed on the knees and hands, the user can crawl on any magnetic surface, even under the influence of gravity.

Jets (15 lbs thrust): These jets, usually installed in the feet, will lift up to 15 enc. including the user's P.ENC and all equipment. There is enough fuel to lift this about 100 feet in the air. These are designed more for jumps and airborne drops than flying.

Weapon Hand: Replaces the whole hand with a weapon. Normal function of the hand is lost.

Weapon Lower Arm: Replaces the lower arm with a weapon. Normal function of the lower arm is lost.

Weapon Arm : Replaces the whole arm with a weapon. Normal function of the arm is lost.



Nose/ Sinuses: Replaces normal function of the nose and sinuses.

Nose/Sinus Options

Filters: Chemical filters that will filter out most combat agents and smog.

Chemical Sniffer: Chemical sensor will analyze any chemicals in the air, with an accuracy of detecting as little as one part in ten million.

Mouth: Duplicates normal function of the mouth.

Mouth Options

Tongue (weapon): Bladed tongue, WDM 1.5 L

Poison Sensor: Will detect poison or contamination in food or drink.

Net Link: Allows the user to link directly into the net.

Cyber Weapon Splice: Allows the user to link directly with a cyber weapon through a Cyberscope, bestowing a +3 to BCS.

Torso: A replacement torso, replacing locations 4 to 12.

Torso Options

Weapon Arm Deluxe: An extra arm mounted on the torso cyberlinked automatically. It will Pop out of a concealed space in the torso and is ready to fire. It is fully contained, leaving the user's hands free.

Wings: A pair of wings mounted on the base of the shoulder blades. These give the user flight capability, though they are bulky. (Encumbrance of wings equals the user's personal encumbrance). The user has a BMA of 3 while flying. See page 6 for details about flying.

Extra Arm Adaptor: An extra shoulder mounted on the torso, to allow the addition of multiple arms.

Lung: An artificial cybernetic replacement lung, duplicating normal function, but immune to some (30%) gases.

Heart: A replacement cybernetic heart, duplicating normal function.

Digestive Tract: A replacement cybernetic digestive system, almost duplicating normal function. Some harsher foods cannot be tolerated by the system.

Kidneys: Replacement cybernetic kidneys, duplicating normal function.

Lymphatic System: Cybernetic lymphatic system, giving heightened immune efficiency. The wearer gets an extra save to resist disease at 15 or less on a d20. The system will also reduce the effects of alcohol and drugs, reducing their strength by 1.

Gills: Cybernetic gills, allowing the wearer to breathe (clean) water.

Rebreather: Rebreather apparatus, giving the wearer the ability to hold his breath for 15 minutes.

Oxygen Tanks (30 minutes): Internal refillable tanks good for 30 minutes. If these are combined with rebreathers, the person can last for up to 8 hours without air.

Shoulder Weapon Mount: A standard tripod mount affixed to the shoulder, allowing fire of tripod mounted weapons while walking.

Grafted Muscle, + 1 STR GRP: Muscle grafted into the body, adding 1 to the user's strength group, and raising the user's strength by 10.

Blood Filter: Cybernetic blood filter, used to filter out poisons and drugs. (75% effective)

Throat/Larynx: Cybernetic throat and/or larynx, duplicating normal function.

Throat/Larynx Options

Air Filter: Filters in the cybernetic throat, filtering out most (90%) aerosol agents.

Voice Modulation: Allows the user to alter his voice to sound like another.

Independent Air Link: Hose connections in the throat allowing connection directly to external air tanks.

Throat Snake: Cybernetic snake imbedded in the throat, used as a weapon (dam 2d10, WDM 1.8 L)

Tail: Cybernetic tail, fully prehensile.

Reinforced EndoSkeleton: Reinforced skeleton, giving +5 to DRT.

Super Reinforced EndoSkeleton: Reinforced skeleton gives +10 to DRT, +1 to STR GRP, and reduces critical effects by 1 level.

Powered EndoSkeleton: This high tech addition gives a full powered skeleton inside the body, replacing the user's strength, deftness, and speed with its own. STR 35, DFT 35, SPD 30. Each extra 5 points of statistics for the powered endoskeleton costs 2 skill points, and must be purchased when the skeleton is installed initially. The user's HR is also reduced by 1 due to the lack of bone marrow.

Vital Signs Monitor: Gives blood pressure, pulse temperature, and other vital signs that are displayed on a cybereye.

Microsurgeons: Genetically manipulated viruses that repair damage to the body. This will add +3 to the user's Healing Rate.



Generic Features

Generic Features can be added to any cybernetic part or feature.

Disguised Part: Hides the fact that a part is cybernetic.

Remote Cable, per part: Links a feature outside the cybernetic part with the part. For example, a video recorder housed in the torso linked to a cybernetic eye video camera.

Computer Link: Links a part or feature with an internal computer.

Container, per Encumbrance Capacity: Can store up to its encumbrance in stuff.

Tape Recorder: Audio tape recorder. Will record up to 60 minutes per tape.

Kevlar Armor: Kevlar protection on a body location, has an AV of 3 and a BV of 30.

Body Armor, per location AV9: Mesh Armorplast armor protection of body locations.

Tool Kit: Concealed basic toolkit in a cybernetic part. Efficiency factor of 1.5.

Extra Spaces (up to 2x cap): Increases the capacity of a cybernetic part. This also increases its physical size,

revealing it as cybernetic.

Computer (5 Banana): An internal computer with 5 bananas of memory. Software must be purchased separately. (Or can be obtained on an initial equipment roll. The Utility is the number of bananas the program can be. Only one program can be obtained in this way.)

10 Bananas Memory: 10 extra bananas of memory for the internal computer.

Poison Spike: A retractable combat spike equipped to deliver poison.

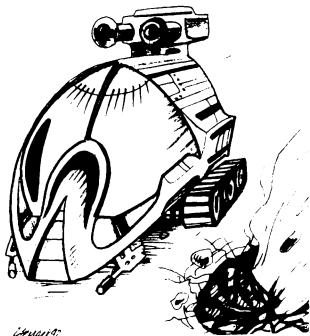
Chemical Spray: A chemical sprayer (5 charges) that can be used to deliver fire extinguishing foam, napalm, acid, or any combat agent.

Interchangeable Part: Quick release fittings that allow changing of cybernetic parts to allow easy replacement with one with different features.

Chameleon Skin: Computer controlled Chameleon camouflage.

Cosmetics: Looks augmentation (increase looks up to 100), colored skin (green, blue, etc.), fur, if it's just cosmetic, this is it. Use your imagination.

Adrenal Booster: Direct bloodstream adrenaline injector. Adds 50% to strength, deftness, and speed, although the strength bonuses do not affect DRT. Wounds are resisted as per the effects of neo-heroin (Aftermath! book 3, p. 51) the effects last for 3 combat turns, and the booster can be used a number of times per day equal to the user's health group.



CYBERNETIC PART	SKILL POINTS	SPACES	REMOTE	CYBERNETIC PART	SKILL POINTS	SPACES	REMOTE
Ear, Standard	1	2 cap	no	Weapon Arm	3 + UT	2.5 enc	no
Radio Splice	1	1	no	Nose/Sinus	1	1 cap	no
Amplified Hearing	1	0	no	Filters	1	1	no
Phone Link	1	1	no	Chemical Sniffer	1	1	no
Scrambler	1	0	yes	C/Maspec	1	4	yes
Bug Detector	1	1	yes	Mouth	1	1 cap	no
Tape Player	1	1	yes	Tongue (weapon)	1	1	no
Micro Recorder	1	1	yes	Poison Sensor	1	0	no
Wide Band Reception	1	0	no	Net Link	1	0	no
Sonar (requires 2 ears)	1	1	no	Cyber Weapon Splice	1	0	no
Parabolic	1	0	no	Torso	1	20 cap	no
Pressure Sensor	1	0	no	Weapon Arms Deluxe	4 + UT	4	no
Atmospheric Sampler	1	1	yes	Wings	3	0	no
Inertial Tracker	1	2	no	Extra Arm Adaptor	1	1	no
Full Band Receptor	2	1	no	Lung	2	4	no
Voice Stress Analyzer	1	0	no	Heart	2	2	no
Sound Editing	1	0	no	Digestive Tract	1	2	no
Radar Detector	1	0	no	Kidneys	1	1	no
Tight Beam Radio Link	1	1	no	Lymphatic System	1	2	no
Eye, standard	1	1 cap	no	Gills	1	2	no
Color shift	1	0	no	Rebreather	5	10	no
Thermograph Sensor	1	0	no	Oxygen Tanks (30min)	7	13	no
Infrared Vision	1	0	no	Shoulder Weapon Mount	1	2	no
Ultraviolet Vision	1	0	no	Grafted Muscle +1 STR GRP			
Targeting Sight	1	0	yes		3	0	no
Telescopic Vision	1	1	no	Blood Filter	1	0	no
Microscopic Vision	1	1	no	Throat/Larynx	1	2 cap	no
Dart Gun	1	1	no	Air Filter	1	1	no
Micro Laser	2	1	no	Voice Modulation	1	0	no
Camcorder	1	3	yes	Independant Air Link	1	1	no
Micro Camera	1	1	no	Throat Snake	2	2	no
Heads Up Display	1	0	no	Tail	1	2 cap	no
Low Light Enhance	1	0	yes	Reinforced EndoSkeleton			
Image Intensifier	1	0	yes		1	0	no
Telescopic/Microscopic Vision	2	2	yes	Super Reinforced EndoSkeleton			
Range Finder Monocular	1	1	no		6	0	no
Range Finder Binocular	2	0	no	Powered EndoSkeleton	15	8	yes
EMR scanner	5	1	yes	Vital Signs Monitor	1	0	no
Hand, std. Stat 15	1	1 cap	no	Microsurgeons	3	0	no
Lower Arm, std. Stat 25	1	4 cap	no	Generic Features			
Full Arm, std. stat 35	2	8 cap	no	Disguised Part	1	0	no
Foot, std. stat 15	1	2 cap	no	Fancy Disguised Part	2	0	no
Lower Leg, std. stat 25	1	5 cap	no	Remote Cable, per part	1	0	special
Full Leg, std. stat 35	2	12 cap	no	Computer Link	1	1	yes
Strength Boost, group	1	1	no	Container per Enc cap	1	2	no
Deftness Boost, group	1	1	no	Tape Recorder	1	1	no
Speed Boost, group	1	1	no	Kevlar Armor	1/loc	1/loc	no
Weapon (gun), hidden	1 + UT	6 x Enc	no	Body Armor per loc	AV9		
Weapon (gun), mounted	2 x UT	8 x Enc	no		1/loc	0/loc	no
Scratchers	1	0	no	LCD screen	1	0	no
Rippers	2	1	no	Tool Kit	1	2	no
Wolvers	3	2	no	Extra Spaces (up to 2x cap)			
Monofilament Wire	1	1	no		1	+1	no
Taser	2	2	no	Computer (5 Banana)	1	2	yes
Cattle Prod	1	1	no	10 Bananas Memory	1	1	yes
Electro Magnetic Pads	1	2	no	Poison Spike	2	1	no
Jets, 15lb. Thrust	1	4	no	Chemical Spray	2	1	no
Chameleon Skin	1	1/2 loc	no	Interchangeable Part	1	0	no
Weapon Hand	1 + UT	.5 enc	no	Cosmetics	1	0	no
Weapon Lower Arm	2 + UT	1.5 enc	no	Adrenal Booster	1	0	no

Cybernetic Part	Structure
Ear	3
Eye	3
Hand, std	5
Hand, STR 25	7
Hand, STR 35	9
Hand, each additional STR group	+1
Lower Arm, std	10
Lower Arm, STR 35	14
Lower Arm, each additional STR group	+2
Arm, std	20
Arm, each additional STR group	+5
Foot, std	6
Foot, STR 25	8
Foot, STR 35	10
Foot, each additional STR group	+1
Lower Leg, std	12
Lower Leg, STR 35	16
Lower Leg, each additional STR group	+2
Leg, std	25
Leg, each additional STR group	+5
Torso	30
Nose/Sinuses	2
Tail	10
Mouth	3
Throat/ Larynx	2

Computer Programs

Below are some sample computer programs, along with a table describing their size (in Bananas) and hardware requirements.

Translate Single Language: Gives the user a BCS of 16 in a single language.

Recognize Object: Each unit gives the user a 10% chance to recognize a certain type of object: Military Vehicles, Spacecraft, etc.

Direction Indicator: Uses advanced triangulation techniques to give the direction to a specific object.

Automatic Map (1 country): Gives the user a full mental map of the country in question, equivalent to a good road map.

Star Map: A map of the user's star system, allowing stellar navigation.

Mapping Program: Allows the user to make new maps of the areas that they have traveled or seen.

Text Display: Gives the user a text display in the field of vision, that can be interfaced with another program.

Remote Directions: Essentially a remote control program, this gives the user the ability to receive directions from an outside source.

Net Link: Allows the user to download information directly into an internal computer.

Inertial Tracking Program: Builds maps with information given by an inertial tracker.

Sound Sampling: Allows the user to record, alter, and play back (internally) any sound that is heard.

Voice Analysis: Allows the user to make or compare voiceprints of any person heard.

Sonar Mapping: Allows the mapping of an area with sonar. This will detect all physical objects. Will not work in vacuum.

Sound Matching: Allows the user to compare any two sounds, to determine source type and similarity.

Decibel Meter: Gives the user a quantitative value for the level of sound.

Atmospheric Pressure Interpret: Allows the user to interpret atmospheric changes, give weather forecasts, and other such tasks.

Skill Chip: Gives the user a BCS of 15 in a given skill. No improvement is possible.

Database (linked with program): Allows the user to have an existing database for any program mentioned above.

Computer Programs	Bananas	Hardware
Translate Single Language	3	ear/eye
Recognize Object per 10%	1	eye
Direction Indicator	3	no
Automatic Map (1 country)	2	no
Each Additional Country	1	no
Star Map	2	no
Mapping Program	2	eye
Text Display	1	eye
Remote Directions	1	no
Net Link	1	no
Inertial Tracking Program	1	inertial tracker
Sound Sampling	1	car
Voice Analysis	1	car
Sonar Mapping	1	sonar
Sound Matching	1	car
Decibel Meter	1	car
Atmospheric Pressure Interpret	1	atmosphere sampler
Skill Chip	2xcost	no
Database (linked with program)	var	maybe

Cybernetic Barter Point Values

The Barter Point Value of a cybernetic part can be computed as follows: 1000 x skill point cost. This number is halved if the part is simply a replacement for normal function (example: basic eye), and doubled if the part is combative (example: weapon arm). The barter point value of a computer program is 50 times the number of bananas of memory that it requires.

Space Travel

Space travel in AFTERMATH!TECHNOLOGY! falls into four categories:

Powered Intrastellar: powered flight within a solar system
Unpowered Intrastellar: flight within a solar system using the solar wind or gravity well "skipping"
Interstellar: powered or non powered
Hyperspace or F.T.L. travel: travel to other systems or galaxies using the parallel dimension of "hyperspace"

There are two skills that govern the piloting of a space ship, *Pilot, Spacecraft*, and *Pilot, Hyperspace*. Spacecraft pilot governs the use of a ship in non hyperspace flight, or Newtonian space flight. Hyperspace pilot governs the transition to and from hyperspace flight.

Newtonian Spaceflight

Space flight in Newtonian space obeys the standard laws of physics. I will not recount all of these, as any physics textbook will relay them as well as I could. However, I will discuss the applicable laws as they apply to the rules of space travel.

First, let's look at the top speed of a ship. 3000000 kps: it's the law! In Newtonian space, a solid mass cannot exceed the speed of light. Period. Tachyons are a special case of hyperspace particles, and will be explained below.

Basically, the top speed of a ship is computed by: $SPEED = T/M \times FUEL\ CAPACITY / (MILEAGE)$. This is the speed reached by full acceleration until 1/2 the fuel is used up. The acceleration of a ship is its thrust to mass ratio (T/M) this computation is explained more in the Spacecraft Design section below. The acceleration of a spaceship also defines

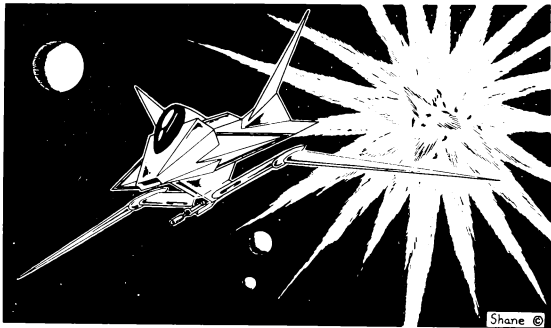
its agility. A spaceship must cancel all forward motion and accelerate in the new direction to make a 90 degree turn.

On a two dimensional grid, the lines should be labeled as x and y , and a velocity in the x component of the grid is $SPEED(\cos(\text{ANGLE OF FLIGHT}))$ and the y component is: $SPEED(\sin(\text{ANGLE OF FLIGHT}))$. The x and y components of acceleration are computed in the same way, and the x components are added together to get the new x component, and the y components are added together to get the new y component. The new forward velocity is equal to: $\sqrt{x^2+y^2}$. This is relative to a theoretical fixed point in space. The "fixed" point does not have to be stationary, but can be moving, such as the surface of a spaceship or planet. It generally works best to have the point on an object that will keep a constant speed during the maneuver.

Note that this means that earlier tech level ships have a very limited maneuverability, as they tend to run out of fuel on fancy maneuvers (like dogfighting). While high tech ships have an advantage in this regard, they still must take fuel into consideration, and most space combat occurs either with giant battleships slugging it out, or with boarding actions. Because of the danger of explosive decompression, most spacers limit their personal weapons to melee weapons and low penetration projectiles (lasers and energy weapons). This is except for major military boarding actions, where the boarders are all equipped with battlesuits, EVA harnesses, and heavy weapons. In this case, explosive decompression may even be desirable for the boarders to achieve.

The Effects of Vacuum

Vacuum is an important consideration in space, especially for humanoids. The effects of vacuum on a living being are pretty consistent.



An unprotected humanoid will experience the unpleasant effects of low pressure, and will generally die in 45 seconds or less. An unprotected humanoid will suffer 1d6 points of lethal damage per combat turn until pressure is restored. Skin armor will help protect against this damage, giving 1 point of protection per 5 points of armor, and each open wound will add 1 to the damage due to the increased blood loss. Arachnids and Insectoids are a special case, as their rigid chitinous exoskeletons will protect them from most of the damage; however, they still will suffer from hypoxia as if drowning (book 1), unless they are wearing a respirator or helmet, in which case they take no damage. If a humanoid has the chest pressurized and an oxygen supply, only the limbs will take damage, taking 1 point of subdual damage each every other turn.

Weapons act slightly differently in vacuum. Older guns (muzzle loaders) will not work. Guns using metallic cartridges or caseless ammunition will work better than normal. Quadruple the BDG for a gun fired in vacuum while the projectile remains in vacuum. This may make you think that a gun is the ultimate weapon in space, and it could be except for one fact: gravity. In zero-g or low gravity, a gun's recoil becomes so significant that it creates a T/M ratio for the firer.

The firer's final velocity per shot equals (modified BDG \times (1-(size/200)))p.ENC in meters per turn. To find the movement per combat turn, divide that number by 10. To find the meters per action phase, assume a BAP for drifting movement of 20, and divide the meters per combat turn by 20. Understand also that a firer will now be rotating at a speed equal to BDG \times (size/500) rotations per combat turn. Again assume a BAP of 20 for non controlled motion, and only if the firer's BAP happens to coincide with when he is facing his target can he get off another shot.

In gravity, a firer can handle an amount of recoil equal to the gravity times either his strength group or his aim, whichever is greater. In earth's gravity this rule becomes the same as that in AFTERMATH! book 2.

Interstellar Newtonian Spaceflight

This is also known as the "slow boat" approach to space travel. A ship from Terra flying to Alpha Centuri would take around 500 years to arrive. Top interstellar cruising speed in newtonian space is around .95 C. This means it takes 1 chronological year to travel 1 light year. The same distance can be covered in Hyperspace in less than an hour.

Spaceflight in Hyperspace

Travel in Hyperspace can be more hazardous than Newtonian Spaceflight. Hyperspace is an alternate, parallel non-relativistic dimension. This allows a ship to travel a short distance in Hyperspace and cover a large distance in realspace. However, because Hyperspace is non-relativistic, strange occurrences can happen. You can run into yourself leaving your own stateroom, invite yourself in, and play cards with yourself, even kill the other you (not a recommended action). Time is not necessarily linear in Hyperspace, so no adverse effects might result from the above actions. You might not even get to be the other you in



the card game. Things can also become temporarily real just by thinking of them. This effect can be quite dangerous and usually occurs "deep" in Hyperspace. The non-relativistic effects vary in intensity, and some theorists like to use analogy of rivers and lakes. The "deeper the water," the less relativistic Hyperspace becomes. Most Hyperdrive ships have a sensor which constantly tests "the depth of the water," and sounds an alarm if the ship drifts too "deep" into Hyperspace. These effects usually increase with time in hyperspace, so travel distances are limited by this factor. The chance of a drastic non-relativistic effect is about 1% per 24 hours in Hyperspace, cumulative. This effectively limits the safe journey time to about 96 hours. Most pilots consider a greater than 5% chance of adverse effects too high to risk.

Travel times in Hyperspace vary, but usually are about 1 hour of Hyperspace per 10 realspace light-years traveled. However, travel times can vary by up to 75%.

There are currents in Hyperspace, and occasionally a ship will be swept along the stream of hyperspace and into another galaxy.

To offset the dangerous effects of hyperspace, most pilots will immediately drop out of hyperspace into realspace

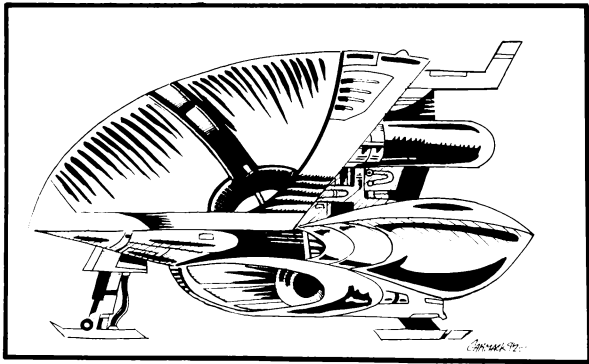
when the alarm sounds. This is called bailout. Bailout is considered a great deal safer than dealing with the hazards of hyperspace, even though it is not without its own hazards. There is a small chance (about 1 in a billion billion) that the ship could bailout into a star or planet, but it is small enough that any pilot is willing to risk bailout. The next great risk of bailout is the risk of being lost. If a ship gets caught in a hyperspace stream, it can be swept thousands of light years away from its destination. Since bailout is nonprecise, the first thing that happens upon return to realspace is that the ship's computer will devote itself to the task of determining its location in space. This can only be done with an exhaustive search, and depending on computer speed, can take up to 6 months. During this time, the crew of the ship will do maintenance on the craft, and repair any damage sustained in hyperspace.

To determine the effects of travel in hyperspace, add the effect numbers (positive or negative) of both the Pilot, Hyperspace and Astrogator rolls to a d100, and then add 1 for each 24 hours planned in hyperspace, and consult the chart below.

Tachyons are particles which travel faster than the speed of light. They are created by disturbances in hyperspace due to objects moving in hyperspace. Tachyons are used for interstellar communication at tech levels 23 and above. They must be beamed directly at a receiver, due to the special relativity of their nature. Tachyons allow instantaneous interstellar communication. If tuned properly, a tachyon transmission can arrive before it is sent. This can be used for transmission into the past, if you decide to allow time travel in your game. If not, put a limiter on all the tachyon transmitters that will keep them from transmitting into the past.

Hyperspace Mishap Chart

1D100 roll	Mishap
1-50	None. Trip is uneventful.
51-90	Weird occurrences. Meet yourself, etc. Harmless but interesting.
91-95	Temporal Echo - repeat the same time segment 1D10 times.
95-100	Off course! Miss destination by 1D100 light years.
101-110	Alarm! Pi is no longer constant. Things change shape.
111-114	Stuff randomly disappears from the ship
115-120	All people onboard ship become two dimensional for duration of trip.
121-123	All people onboard ship lose all skin pigmentation permanently.
124	Weight of random person(s) onboard ship increased or decreased by 6D10x10 lbs.
125	Height of random person(s) onboard ship increased or decreased by 3D20%
126	Random person onboard ship undergoes permanent sex change.
127-130	Random person onboard ship rendered invisible for 1D10 hours.
131-135	Alarm! Upon return to realspace, everything changes color.
136-140	Alarm! Mutagenic effects. Each passenger or crewmember has a 5% chance of receiving 1D3 mutations.
141-160	Alarm! Caught in Hyperspace stream. Off course by 1D100 x 1000 lightyears or more.
161+	Ship falls through interdimensional rift transported to unknown location.



Spacecraft Design

Spacecraft are mixtures of several components: Crewspace, Consumables, Drives, and Cargo. Any ship can be designed from these attributes.

Crewspace

Each crewmember and passenger takes up a certain amount of space on a craft, which is defined by the class of passage. The more time a crewmember spends in space, the more space is needed. Space is given in cubic meters of living space, weight is given in metric tons, and Maximum Time is the maximum time the crewmember can spend on the craft without leave. The limiting factors are amount of space and movement restrictions. For example, the Apollo mission specialists rode in "monkey" class, and had about 3 cubic meters per person to maneuver. They could not have stayed in space for an extended flight without adverse effects.

Class of Passage	Space	Weight	Maximum Time
Monkey	3	0.4	14 days
Experiment	5	0.5	21 days
Basic	12	1.2	30 days
Tourist	15	1.6	30 days
Business	19	1.9	45 days
Luxury	30+	2.5+	60 days+

Consumables

Consumables are the items that define the maximum stay of the ship in space: food, oxygen, power, fuel, water, etc. To determine the quantity of consumables required for a ship, use the following formula:

$$\text{Tons of consumables} = (\text{Crew} \times \text{Max days in space} \times 0.05) + (\text{Max days in space} \times 3)$$

Drives

The drives of a ship fall into 2 categories, realspace and hyperspace. A ship may have either, both, or none. Fuel is required for the drives based on the length of the longest journey. This is detailed on the chart below.

Realspace Drives

Tech Level	Drive Type	Drive Mass	Thrust	Fuel Tons Per A.U.	Fuel Type
18	Chem	.1	100	.1	chemical
22	Atomic	.1	500	.05	atomic
23	A/M	.05	2500	.002	antimatter
25	Grav	.04	10000	.004	electric
27	P/M	.02	75000	.001	antimatter

Hyperspace Drives

Tech Level	Drive Type	Drive Mass	Shift Tons	Fuel Tons Per Shift	Fuel Type
23	A/H	.1	100	1	antimatter
26	N/H	.1	250	.5	antimatter

Definitions:

A/M: Antimatter Mass thrower Drive. Uses antimatter to throw mass out the rear of the ship for thrust.

Grav: Gravitics drive. Uses gravitics to push against gravity wells. Loses efficiency the farther from a system that the craft moves.

P/M: Photon Drive. Uses the light from an antimatter/matter reaction to thrust the ship.

A/H: Antimatter Hyperspace Drive. An antimatter reaction based hyperspace transition drive.

N/H: Neutrino Hyperspace Drive. A hyperspace transition drive that uses neutrinos to effect the transition.

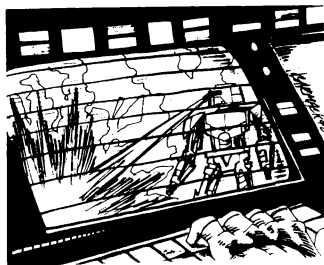
A ship must have more Shift Tons than total tons of mass to shift into Hyperspace.

Cargo

Cargo is all other parts of a ship. Space can be allotted here for carryable modules, weapons, shields, and many other options. Some sample options are detailed below. More can be invented easily by the gamemaster.

Tech Level	Option	Notes
19	7.62mm gun	VDG in space of 25
20	Laser cannon	VDG 45
24	Blast Cannon	VDG 75
19	Hard Armor	.1% of total ship mass per point
27	Force Screens	.05% of total ship mass per 100 points
19	ECM	.1 Ton

As you can see, these design rules are quite simple, but they are intended to keep from complicating play. This is a roleplaying game, and super detailed ship design is not necessary. However, there are many other starship design systems that can be used and easily converted to these rules with the guidelines given above. If you desire more detailed design, use your favorite system and convert the ships from there to the system presented here.



NEW SKILLS

Acrobatics 3 STR + DFT + Esthetic 3

This skill governs the abilities of tumbling, climbing, etc. This skill improves leaps by a multiplier of 1 + (first 100 pts of skill/100) and allows falls of up to (first 100 pts of skill score/20) meters without damage, and on higher falls reducing the effective height by the same number. This skill includes flipping over an opponent's head, assuming the leaps are high enough.

Advanced Interrogation 2 WILL + WIT + Charismatic 1
(Interrogation, Advanced Medical)
This skill can be used to sustain an interrogation, providing maximum persuasion.

Advanced Stealth 2 DFT + WILL + Natural SP
(Stealth, DFT 35+)
This is the rice walk technique, allowing full movement at normal stealth, or if moving slow, a Wit CST is required to notice the disturbance. If an Advanced Stealth BCS fails, normal Stealth can still be attempted.

Aerial Beast Riding 2 DFT + WIT + Natural 1
Aquatic Beast Riding 2 DFT + WIT + Natural 1
These skills cover the riding of exotic beasts- griffins, rocs, dragons, etc. Note that not just anyone can sit atop a dragon without falling, and usually a saddle is required in any case.

Animal Training 2 WIT + WILL + Natural 1
This skill covers the taming, breaking, and tracking of animals. Taming is task with a value equal to the DRT of the animal times its mass. Breaking, or the teaching of one trick is a task equal to the DRT and must be done on a tamed animal.

Armorskin 2 SPD + STR + Combative 1
Gives an added armor value vs subdual damage per location of the user's strength group. However lethal damage equal to the AV Bonus negates the bonus at that location until the damage is healed. This skill is the training of muscles to absorb blows. Lethal damage is not stopped by armorskin.

Astrogator 3 Wit + Wit + Scientific 1
(Computer Science, Astronomy)
This is the skill of plotting courses through Hyperspace. A failed BCS roll will result in the ship ending up far from its destination.

Astronomy 2 Wit + Wit + Scientific 1
(mathematics)
Astronomy is the study of the stars.

Battlesuit 4 DFT + Wit + Combative 3
(High Tech Use)
This skill covers the use and operation of powered assault armor suits. These suits cannot be used by an untrained user.

Brachiation 1 DFT + STR + Natural 1
Brachiation is the skill of "swinging" through trees. It governs the finding of suitable pathways, and the actual leaping from branch to branch.

Cybernetic Design 3 DFT + Wit + Mechanical 1
(Cybernetic Technician, Computer Science)
The skill of designing new cybernetics.

Cybernetic Technician 3 DFT + Wit + Mechanical 1
(Advanced Medical, Electronics, High Tech Use)
This is the skill of repairing and installing cybernetics. The task values for repairing cybernetics are detailed above. The task value for installation is (8 x skill cost of part) with a task period of 8 hours.

Disguise/ Acting 2 WIT + DFT + Charismatic 1
Allows the character to make a disguise. A Wit AST is required to notice that anything is amiss unless the actor's BCS roll is a 1, when a CST is required to notice. A minus is made to the Wit ST equal to the effect number/5, nearest.

Dodge & Parry 1 DFT + SPD + Combative 1
With this skill, an area of specialization in a hand to hand combat skill must be chosen as the trained area of study. This skill bestows an additional (skill score/20, down) to the user's WDA when a defend action is taken with the chosen skill. On a critical defend success, the defender may make a free strike against the attacker, without the attacker having the benefit of his WDA. If unarmed combat is chosen, this skill can be used to parry weapons without damage to the user.

Dodge Missiles 3 DFT + SPD + Combative 1
(Dodge and Parry)
This skill can be used to dodge muscle powered weapons. If combined with heightened perception, one can dodge bullets at an average BCS with a -5 modifier for each bullet dodged. The dodging BCS is rolled before the attacker's BCS. If dodger makes BCS and attacker misses, attacker rolls again at half previous BCS to hit. (dodging into the missile)

E-Weapon 1 DFT + Wit + Combative 3
(Modern Pistol or Rifle) (Pistol, Rifle)
This skill governs the use and operation of energy weapons.

Fast Draw 2 SPD + DFT + Combative 3
On a successful BCS, as per AFTERMATH! Book 2, pages 30-31. Also, on a successful BCS per action, allows 1 extra shot per action. Holsters give modifiers based on type.

<i>Flap</i>	-1
<i>Standard</i>	0
<i>Western fast draw</i>	+1
<i>Modern fast draw</i>	+2

Force Field Physics 2 Wit + Sci + Mechanical 1
(Physics)
The physics of force fields.

Forgery 2 Wit + DFT + Esthetic 1
Forgery is the art of duplicating documents. A forged document will be rated by the forger's effect number. This skill succeeds even if the BCS fails, simply resulting in a poor document. The effect number is the difficulty of noticing that the document is forged.

Forgery Difficulty Chart

Effect Number	Ease of Noticing
-19 or less	Wit AST x 2
-10 to -18	Wit AST x 1.5
-5 to -10	Wit AST +2
-1 to -5	Wit AST
0 to 5	Wit CST
6 to 10	1/2 Wit CST
11 to 15	1/4 Wit CST
16 to 18	1/8 Wit CST
19+	Impossible.

Forgery skill can also be used to counterfeit money, with success as above.

Heavy Energy Projectors 1 DFT + Wit + Combative 3
(Direct Fire Cannon)
This skill governs the use of large battlefield energy weapons.

Hyperdimensional Physics 2 Wit + Scientific + Scientific 1
(Physics)
The study of the physics of Hyperspace.

History 1 Wit + Wit + Communicative 2
The study of the history of a culture. The specialization must be specified.

Pilot, Hyperspace 4 DFT + Wit + Mechanical 1
(Pilot, Spacecraft)
This skill governs the transition of a ship from "real space" into hyperspace and back again.

Psychology 3 Wit + Will + Charismatic 2
The study of the mind and thinking of a given race. The race of specialization must be specified.

Mining 2 DFT + WIT + Mechanical 1
This skill covers tunneling through ground, reinforcing tunnels, required air ventilation, etc.

Navigation 2 WIT + WIT + Natural 1
This is the skill of navigation. The form must be specified: Seagoing, Airborne, Stellar. The prerequisites are as follows:

Seagoing : Seamanship
Airborne : Aerial Recon Interpretation
Stellar : High Tech Use, Mathematics, Physics, and Computer Science

Net 2 DFT + STR + Combative 3
The user is trained in the use of the net, which may be swung or thrown. Maximum range of a net throw is 5 meters. Net BCS roll effect number equals the number of locations covered on the target. Roll location and distribute as evenly as possible on both sides of target location. Consult the ENTANGLEMENT CHART (AFTERMATH! Book 2, page 9) once for each portion (leg, head, arm, torso) covered. Effect number equals (Strength effect die x net factor) + number of locations on the area covered - 1.

NET	NET FACTOR	ENC	SURV	STR	UT
STD	.5	1.8	6	3	3
HOOKED	.6 (WDM 1.1)	2.0	7	3	4

Netrunning 2 Wit + Wit + Scientific 2
(Computer Science, Encryption, Netlink)
This is the skill of "hacking" through the virtual-reality, direct brain stimulation computer net. Netrunning is described in more detail on page 47.

Nuclear Physics 2 Wit + Sci + Mechanical 1
(Physics)
The physics of nuclear reactions.

Running 2 SPD + HLH + Natural 1
This skill covers the Zulu's ability to run 3 days to a battle and still be ready to fight. With this skill, a character can run at normal full speed for a number of hours equal to their Health attribute, sprint at (skill score + 100)% of normal full speed for a number of hours equal to their HLH CST, or jog at 1/2 normal full speed for 3 times their Health attribute in hours. Normal full speed is (Speed/2.6838) M.P.H..

Pick Pockets 2 DFT + SPD + Charismatic 1
This is the thief's skill of lightening a target's purse, and routines for getting away with it. The following is a list of modifiers for picking pockets. Use all that apply.

Situational Modifiers for Picking Pockets

<i>Pouch</i>	0
<i>Pocket</i>	-2
<i>Metal Chain attaching item to belt</i>	-2
<i>In target's hand</i>	-8

Spacecraft Armaments 4 DFT + Wit + Combative 3
This skill governs the use of mounted weapons in space.

Spacecraft Mechanic 3 DFT + Wit + Mechanical 1
(High Tech Use)
The skill of fixing spaceships. Zero-G Training is suggested, but not required.

Streetwise 1 Wit + Will + Charismatic 1
Streetwise is the skill of living on the streets, making deals, and finding the black market. A successful BCS roll will result in the finding of a contact to the market. Streetwise is used in place of commerce for black market deals.

Temporal Physics 2 Wit + Scientific + Scientific 1
(Wit 35, Hyper Dimensional Physics)
The study of the physics of time.

Walking Vehicle Driver 2 DFT + Wit + Mechanical 1
(Technology Use)
This skill governs the operation of walking based vehicles.

Xeno-zoology 2 Wit + Scientific + Natural 1
(Zoology)
The skill of analyzing alien life forms.

High Tech Equipment

Energy Weapons

Blasters

Blasters are high energy plasma weapons, firing bolts of super-heated plasma. A blaster is rated with a blaster value, based on the number of charges it uses per shot. Blasters are available at Tech Level 24.

Light Blast Pistol

BDG: 28 BBL: std BV: 4
ENC: 35 Blast: 1 Mag: box (10)
ROF: AL/AB DUR: 3
Features: none.

Heavy Blast Pistol

BDG: 35 BBL: long BV: 5
ENC: 45 Blast: 1 Mag: box (20)
ROF: AL/AB DUR: 4
Features: none.

Light Blast SMG

BDG: 28 BBL: xlong BV: 4
ENC: 55 Blast: 1 Mag: box (40)
ROF: AL/AB (supermachinegun ROF)
DUR: 3
Features: Autoburst at d6 rounds per burst, folding stock.

Light Blast Carbine

BDG: 28 BBL: Carbine BV: 4
ENC: 85 Blast: 1 Mag: box (40)
ROF: AL/AB DUR: 3
Features: Sling, Folding Stock.

Blast Rifle

BDG: 35 BBL: Rifle BV: 7
ENC: 1.1 Blast: 2 Mag: box (40)
ROF: AL/AB DUR: 3
Features: Sling, folding stock.

Blast LMG

BDG: 35 BBL: Machinegun BV: 7
ENC: 4.5 Blast: 2 Mag: box (100)
Rate: 800 Rpm DUR: 3 Rate Factor: D10 x .5
Features: Bipod.

Blast MMG

BDG: 45 BBL: Machinegun BV: 9
ENC: 7.1 Blast: 3 Mag: box (250)
Rate: 800 Rpm DUR: 3 Rate Factor: D10 x .5
Features: Tripod or Bipod mounted.

Blast HMG

BDG: 85 BBL: Machinegun BV: 17
ENC: 12.5 Blast: 5 Mag: box (150)
Rate: 800 Rpm DUR: 4 Rate Factor: D10 x .5
Features: Tripod mounted.

Blast Cannon

VDG: 75 BBL: Cannon Blast: 25
Mag: box (100) Rate: 800 Rpm DUR: 3
Rate Factor: D10 x .5
Features: Vehicle Mounted only.

Stunners

Stunners do shock damage to the target's system. Each stunner is rated with a SDG, or Stun Damage Group. The target receives subdual damage equal to (SDG/10, down) d10, plus a number of points equal to (SDG/10, nearest). Stun Weapons have no recoil. Stunners are available at Tech Level 21.

Light Stun Pistol

SDG: 15 BBL:SHT ENC: 0.25
Mag: box(20) Action: DA DUR: 4

Features: User adds his Deftness group to his BCS in energy weapon when firing this weapon.

Medium Stun Pistol

SDG: 25 BBL:STD ENC: 0.32
Mag: box(20) Action: DA DUR: 4

Features: User adds his Deftness group to his BCS in energy weapon when firing this weapon.

Heavy Stun Pistol

SDG: 35 BBL:LNG ENC: 0.4
Mag: box(20) Action: DA DUR: 4

Features: User adds his Deftness group to his BCS in energy weapon when firing this weapon.

Stun Carbine

SDG: 35 BBL: Carbine ENC: 0.7
Mag: box(20) Action: DA DUR: 4

Features: User adds his Deftness group to his BCS in energy weapon when firing this weapon. Folding Stock.

Stun Rifle

SDG: 45 BBL: Rifle ENC: 0.9
Mag: box(30) Action: DA DUR: 4

Features: User adds his Deftness group to his BCS in energy weapon when firing this weapon. Folding Stock. Integral Laser Sight, powered from magazine..

Stun Grenade

SDG: 55 Enc: 0.2

This weapon explodes with a blast of stun energy, for a radius of 55 meters. To compute radius of effect, treat SDG as Blast of a normal grenade.

Field-Effect Weapons

Field-Effect Weapons have settings for "stun", "kill", and "destroy". When set on "stun", they do damage as Stunners. When set on "kill", they do damage as lasers, and when set on "destroy", do damage as Blasters. They have no recoil in any setting. They us up 1 "shot" in the magazine when set on "stun", a number equal to the charges when set on "kill", and 3 when set on "destroy". Field-Effect Weaponry becomes available at Tech Level 28.

F-E Light Pistol

SDG: 20	BBL: SHT	ENC: 0.27
BDG: 30	DUR: 3	Action: AL/ FA
Mag: box(20)	MCS: 3	Collimation: 2.5

Features: none.

F-E Medium Pistol

SDG: 30	BBL: STD	ENC: 0.35
BDG: 35	DUR: 3	Action: AL/ FA
Mag: box(20)	MCS: 3	Collimation: 2.5

Features: none.

F-E Heavy Pistol

SDG: 40	BBL: LNG	ENC: 0.45
BDG: 40	DUR: 3	Action: AL/ FA
Mag: box(20)	MCS: 3	Collimation: 2.5

Features: none.

F-E Carbine

SDG: 30	BBL: Carbine	ENC: 0.75
BDG: 35	DUR: 3	Action: AL/ FA
Mag: box(30)	MCS: 4	Collimation: 2.5

Features: Folding Stock, sling.

F-E Rifle

SDG: 40	BBL: Rifle	ENC: 0.8
BDG: 45	DUR: 3	Action: AL/ FA
Mag: box(40)	MCS: 5	Collimation: 2.5

Features: Sling, folding stock.

Miscellaneous High Tech Gear

Electromedikkit

This small (.1 enc) item is commonly worn on the belt or wrist, though they can be carried for use on other patients. It has a small battery of drugs and diagnostic routines, and will automatically inject the patient upon diagnosis (Advanced Medical BCS 8). The unit has the following drugs: Polycell 3, 3 doses; Tailored Antibiotics, 50% chance of having the proper one; Superior Broad Band Antibiotics, 10 doses; Stimulants, 10 doses; Neo-Heroin, 5 doses; Cardiacine, 2 doses. Tech Level 21.

ElectroBinoculars

These binoculars combine Starlight, Ultra-violet, Infrared, and Thermograph technology with a sophisticated image processor giving a 30 degree field of vision at 35x magnification. ENC .5, Tech Level 22.

Infrared Goggles

These goggles allow the user to see in the infrared spectrum, giving good night vision. Tech Level 19, ENC .3.

Tachyon Communications

Tachyon communicators use Tachyons to transmit messages, since they move at faster than the speed of light.

Tachyon Communicator

ENC: 1.0 Power: 1 E-5
This device provides instant communication between star systems. It has a focused beam, so only one communicator can receive the message. Tech Level 24.

Computerized Translator

This small device has a database of different known languages. It has a Natural Language based processor, which will "listen" to the input language, and either repeat it in another language, or display the text on a small screen. The different models are detailed below.

Translator, Tech Level 20

Languages : 8 Language BCS : 8
ENC : .3 Power : E-5

Translator, Tech Level 21

Languages : 16 Language BCS : 12
ENC : .35 Power : E-5

Translator, Tech Level 22

Languages : 32 Language BCS : 16
ENC : .25 Power : 2 E-1

Translator, Tech Level 23

Languages : 100 Language BCS : 18
ENC : .15 Power : E-1

Translator, Tech Level 25

Languages : 1000 Language BCS : 14
ENC : .1 Power : E-1



High Tech Melee Weapons

Chain Sword

This devastating device combines the whirling teeth of a chainsaw in a wieldable form. This item becomes available at Tech Level 23.

Light Chain Sword

ENC: 1	Utility: 6	STR: 3	Format: S
Hand: 1	Length: A	Sec.: N	Skills: SW, LS
WDM: 3.0	Surv.: 15		

Heavy Chain Sword

ENC: 1.5	Utility: 6	STR: 4	Format: S
Hand: 2	Length: L	Sec.: N	Skills: SW, LS
WDM: 4.0	Surv.: 16		

Vibroblades

Vibroblade technology, available at tech levels 22 and above. They are high tech versions of standard bladed melee weapons, but have an E-1 in the hilt to power a field vibration unit that vibrates the cutting edge of the blade, increasing the cutting potential of the weapon. This bestows an additional .5 to the WDM of the weapon.

Laser Swords

Laser Swords use a focused beam of high intensity light as a cutting device. They are incapable of parrying other weapons, but can cause damage to normal melee weapons. Tech Level 24.

Laser Sword

ENC: 0.4	Utility: 6	STR: 2	Format: S,T
Hand: 1	Length: L	Sec.: Y	Skills: SW, LS
WDM: 3.5			

Force Swords

Force swords use a focused force field as a blade, allowing them to cut through anything except another force field. They are invisible normally but are commonly fitted with an illumination device which lights up the blade so the user can see where his weapon is. Force Swords are available at Tech Level 26 and above.

Force Sword

ENC: 0.7	Utility: 6	STR: 3	Format: S,T
Hand: 1 1/2	Length: L	Sec.: Y	Skills: LS
WDM: 4.5	Surv.: 150		



Grimm

Monofilament Weapons

Monofilament Weapons are bladed melee weapons with a cutting edge of only a single molecule in thickness. At tech level 22, they are modifications of normal weapons, gaining their structural stability from the mass of the weapon. These weapons will have their WDM doubled, and are powered by an E-1 in the hilt. At tech level 25, field devices are used to enhance the structure of the blade, allowing them to stand free.

Tech Level 25 Monofilament Sword

ENC: 0.5	Utility: 6	STR: 2	Format: S
Hand: 1	Length: L	Sec.: Y	Skills: SW, LS
WDM: 4.0	Surv.: 21		



Personal Force Fields

There are three types of personal force field, the first is an ablative damage absorption field, the second is a "chameleon" field that makes it harder to hit the wearer, and the third is a screen that stops all high energy damage from affecting the user.

Absorption Field

ENC: 0.5	Barrier Value: 75
Power: 2 E-5	Recharge Rate: 5 barrier per combat turn
Tech Level: 27	

Chameleon Field

ENC: 0.7	CDA Bonus: +5
Power: 1 E-5	Tech Level: 28

The Chameleon Field CDA bonus is applied at full value to all ranged attacks but is only a bonus of 2 to the user's CDA against melee attacks. A chameleon field distorts the light waves around the wearer, making him harder to see. This also has the effect of reducing the collimation of lasers by 3.

Personal Screen

ENC: 0.5 Screen Threshold: 5

Power: 2 E-5 Screen Limit: 150

Tech Level: 29 Dissipation: 75

The personal screen stops all attacks whose actual damage before armor is greater than the Screen Threshold value. If a screen stops more damage than its Screen Limit in one attack, it temporarily shuts down until it can dissipate the absorbed energy. A screen dissipates its Dissipation value in damage per combat turn. This means that the screen described above can absorb up to 150 points of damage per attack indefinitely, but if it absorbed 750 points in one attack, would stop that attack, and then shut down for 10 combat turns until it had dissipated the energy from the overload attack.

Gravitics Devices

Gravitics devices are available at Tech Level 25 and above. They work by applying a variable gravitic field to suspend and propel mass. The same principles are used for inertial compensators.

Anti-Grav Belt

ENC: 0.5 Flight BMA: 12 Power: 1 E-5

Mileage: 50 km per charge

This device is used as a means of personal transportation.

Anti-Grav Plate

ENC Capacity: 50 Flight BMA: 12 Power 1 E-10

Mileage: 100 km per charge

This device is used to carry equipment. It is a flat disk 3 meters in diameter.

Cyberscope

The cyberscope is a weapon accessory that combines video camera technology with a Heads Up Display and a cybweapon Splice to give the firer firing information in his field of vision. This will give a +3 to BCS when used. If a cybweapon Splice is not available, the Cyberscope functions as a laser sight.

Cyberdecks

Cyberdecks are Direct Neural Interface computer devices that allow the user to experience the virtual reality of the computer net. They are described in more detail on page 48.

Personal Computers

Desktop

The desktop computer becomes available at tech level 19, and has an encumbrance of 10. Later models do not decrease in size, as much as increase in power.

Laptop

The laptop computer becomes available at Tech Level 20, and has an ENC of between 0.3 and 1.5.

Pocket

The pocket computer becomes available at tech level 21, and has an ENC of 0.3 or less. At higher tech levels, these can be very sophisticated.

Laser Sights

Laser sights are described in AFTERMATH! book 2, page 74. This is a Tech Level 19 model. The Tech Level 20 model functions the same in all respects, except that it is powered by an E-1, and has an ENC of 0.1.

Video Camera

The video camera is a magnetic media audio-visual recording device that can record both sound and visual images on a tape that will store up to 6 hours of information. Tech Level 19, ENC varies, from 0.4 to 2.

Motion Scanner

The motion scanner is a device that uses ultrasonic vibrations, proximity radar, and air density measurements, coupled with an inertial compensator to give motion detection information to the user about his current location. The item's range is about 50 meters, but an air pathway, or a direct line of sight must exist between the unit and the moving target for it to be detected. Tech Level 22, ENC 0.5.

Telephone Technology

Cellular Telephone

A cellular telephone is available at tech level 19 and above. It allows communication with the standard telephone network, but the phone must be within range of a tower. This limits the range of a cellular phone to major population areas.

Zone Phone

A zone phone is a Tech Level 20 cordless phone that can make calls when near a base station, usually in the home or an office building. A zone phone cannot receive calls, but it is cheaper to operate.

Satellite Phone

A satellite phone is a Tech Level 21 device that allows the transmission to be bounced off a satellite. It can be used from anywhere on the surface of a planet, or in space in a system with the phone satellites.

Silencers

Silencers are a firearm feature available only for ballistic weapons. They muffle the sound of the weapon to prevent detection by dispersing the gas of the propulsion. This has the effect of reducing the BDG of the round by 5%. Autofire through a silencer will destroy it, unless it has been specially designed. Tech level 15, ENC 0.1, Autofire silencer Tech Level 17, Enc 0.15.

Auto Wrist Holster

This device stores a small (.3 Enc or less) pistol attached to the forearm, and when a release is pressed, or the arm is shaken or moved in a certain way, the gun is delivered into the hand, ready for use. This is commonly called a "rail." Tech Level 13, Enc .2.

Space Suits

T.L. 18 "hard suit"		Enc. 0.69		
Garment	locations	code	AV	
Helmet	1-3	DP	11	
coverall	4-18, 21-28	PX	6	
gloves	29-30	PX	6	
boots	19-20	MP	9	

This is the familiar bulky suit like those used on the early spacelights before the space shuttle. The air supply is a separate unit, either a 3.5 enc. backpack unit lasting 1 hour, or a 0.3 enc "briefcase" AC unit good only in atmosphere. thermal factor of 5.

T.L. 19 "soft suit"		Enc. 0.36		
Garment	locations	code	AV	ENC
Helmet	1-2	DP	11	0.06
coverall	3-18, 21-28	SY	5	0.24
gloves	29-30	SY	5	0.02
Boots	19-20	PX	6	0.04

This is equivalent to the current space suit worn during EVA by the U.S. Space shuttle crews. It has a thermal factor of 4. The life support system is an ENC 3.0 backpack, and lasts for 1.5 hours.



CARMARK 99

T.L. 21 "skin suit"		Enc. 0.38		
Garment	locations	code	AV	ENC
Helmet	1	DP	11	0.056
visor	2	MP	9	
gorget	3	SY	4	
Inner Torso	4-12, 21-24	NX	3	0.024
coverall	4-18, 21-28	SY	4	0.24
Gloves	29-30	SY	5	0.02
Boots	19-20	PX	6	0.04

This is a revolutionary design, in that it is actually two space-suits in one. The inner torso cover is a form fitting spandex-neoprene combination that protects the wearer from the adverse effects of vacuum by physical pressure. A person can survive with only this garment, an air bottle (enc. 1) and the helmet, though he would not be very comfortable, and in deep space would suffer adversely from the cold on all exposed skin locations. The coverall, gloves, and boots are recommended for user comfort. Because of the low encumbrance of the torso guard, it is commonly worn by spacers as "underwear." the backpack for this unit is ENC 2.5, and will provide 1 hour of life support. The torso guard has a thermal factor of 1, and the coverall has a thermal factor of 4.

EXOTIC WEAPONS

Raven's Beak

ENC: 1	Utility: 3	STR: 3	Format: S
Hand: 1.5	Length: L	Sec.: S	Skills: SW/PL
WDM: 1.8L	Surv.: 8		

Cat O'9 Tails

ENC: 0.6	Utility: 3	STR: 3	Format: S/C
Hand: 1	Length: L	Sec.: N	Skills: FW
WDM: 2 B	Surv.: 5		

Scythe

ENC: 1.5	Utility: 3	STR: 2	Format: S
Hand: 2	Length: XL	Sec.: N	Skills: PL
WDM: 2.3L	Surv.: 10		

Cinquedea

ENC: 0.5	Utility: 3	STR: 2	Format: S
Hand: 1	Length: S	Sec.: S	Skills: SW
WDM: 1.5L	Surv.: 9		

Katar

ENC: 0.6	Utility: 4	STR: 2	Format: T
Hand: 1	Length: S	Sec.: S	Skills: SW/BR
WDM: 1.6L	Surv.: 9		

Hui-Tho

ENC: 0.7	Utility: 4	STR: 2	Format: S
Hand: 2	Length: XL	Sec.: N	Skills: FW
WDM: 2 L	Surv.: 9		

Description: Malaysian bladed rope.

Naginata

ENC: 1.3	Utility: 4	STR: 2	Format: S/T
Hand: 2	Length: XL	Sec.: S	Skills: PL
WDM: 2.8 L	Surv.: 8		

Lance

ENC: 1.5 Utility: 3 STR: 3 Format: T
 Hand: 1.5 Length: XL Sec.: N Skills: PL
 WDM: 2.L Surv.: 9

Pike

ENC: 1.6 Utility: 3 STR: 2 Format: T
 Hand: 2 Length: XL Sec.: S Skills: PL
 WDM: 2.1L Surv.: 10

Kris

ENC: 0.6 Utility: 3 STR: 2 Format: S/T
 Hand: 1 Length: S Sec.: S Skills: SW/KN
 WDM: 1.7.L Surv.: 9

Gauntlet Sword

ENC: 1.5 Utility: 3 STR: 2 Format: S/T
 Hand: 1 Length: A Sec.: S Skills: LS
 WDM: 2.5.L Surv.: 9

ATL-ATL

ENC: 0.5 Utility: 3 STR: 2 Format: S/T
 Hand: SP Length: S Sec.: N Skills: TH
 WDM: +0.3 Surv.: 8

The ATL-ATL is a spear throwing device, used to obtain greater velocity and range. Use of an ATL-ATL doubles normal throwing ranges for the spear. The ATL-ATL may also be used in close combat as a club with a WDM of 1.1C.

Caltraps

Caltraps do damage equal to the mass of the victim stepping on one, times the WDM of the caltraps.

	#/ENC	HT	WDM
Small Caltraps	20	2"	1.2L
Large Caltraps	10	3"	1.8L

OVERSIZED WEAPONS

To compute the statistics for an oversized weapon, for every .1 increase in ENC, the WDM is increased by 0.1, and both the STR (Strength rating) and SURV (survival value) are increased by 0.2. Round STR fractions nearest, and round SURV fractions down. If the original weapon is designed for one-handed use, subtract 1 from the initial strength group, and consider it two handed. All oversized weapons are considered two handed for the purposes of strength group required for use.

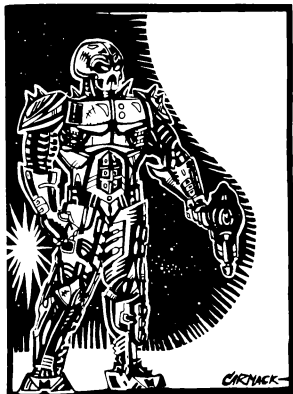
Battlesuit

Item	Locations	ENC	AV	Material
	Covered			
Upper Suit	1-11, 21-30	31.5	25	HPS
Lower Suit	12-20	31.5	25	HPS

Average AV: 25

Total ENC: 1.0

Features: Provides 48 hours of life support. Vacuum hardened. Can only be worn by someone with Battlesuit skill, custom made for user. Radio, Satellite tactical maps, HUD with targeting computer, 7x telescopic rangefinding, parabolic microphone hearing, doubles user's strength, only 1.0 ENC when worn as a full suit, Atomic powered, Heel jets with 50 lbs. of thrust (T/M ratio of 0.025, 30 seconds fuel), StarLight scope, infrared filter built into visor standard. If the user is netlinked into the suit, the ENC is reduced by 0.2. Tech Level 22.



Guns

Name: Tannenburg Cannon	BBL: LNG	Action: SS
MAG: Muzzle 1	DUR: 1	ENC: 42
Caliber: 17mm	BDG: 2	Tech Level: 9
Features: Fired 6 .33 caliber balls. Basically a small cannon on the end of a stick.		
Name: Wheelock Pistol	BBL: LNG	Action: SS
MAG: Muzzle 1	DUR: 1	ENC: 44
Caliber: 17mm	BDG: 2	Tech Level: 10
Features: none.		
Name: Snaphaunce Pistol	BBL: LNG	Action: SS
MAG: Muzzle 1	DUR: 2	ENC: 4
Caliber: .54	BDG: 11	Tech Level: 11
Features: Flintlock.		
Name: .54 Flintlock	BBL: LNG	Action: SS
MAG: Muzzle 1	DUR: 2	ENC: 41
Caliber: .54	BDG: 16	Tech Level: 12
Features: None.		
Name: Allen's No. 40	BBL: SNUB	Action: SS
MAG: Break 1	DUR: 2	ENC: 2
Caliber: .22	BDG: 2	Tech Level: 13
Features: Silver plated frame, rosewood stock.		
Name: Allen's no. 41	BBL: SHT	Action: SS
MAG: Break 1	DUR: 2	ENC: 23
Caliber: .22	BDG: 2	Tech Level: 13
Features: Heavy plated silver frame, shell extractor.		
Name: Allen's Derringer	BBL: SNUB	Action: SS
MAG: Break 1	DUR: 3	ENC: 2
Caliber: .41	BDG: 6	Tech Level: 13
Features: none.		
Name: Allen's No. 32	BBL: SHT	Action: SA
MAG: Port-cyl 7	DUR: 3	ENC: 24
Caliber: .32 long	BDG: 4	Tech Level: 13
Features: none.		
Name: Remington Pocket	BBL: SHT	Action: SA
MAG: Snap-cyl 5	DUR: 2	ENC: 3
Caliber: .31	BDG: 4	Tech Level: 13
Features: Black Powder Firearm.		
Name: S & W No. 1	BBL: SHT	Action: SA
MAG: Break 7	DUR: 4	ENC: 22
Caliber: .22	BDG: 2	Tech Level: 13
Features: Shell Extractor.		
Name: S & W No. 1 1/2	BBL: STD	Action: SA
MAG: Break 5	DUR: 4	ENC: 34
Caliber: .32 short	BDG: 2	Tech Level: 13
Features: Shell Extractor.		
Name: S & W No. 2	BBL: STD	Action: SA
MAG: Break 6	DUR: 4	ENC: 36
Caliber: .32 long	BDG: 4	Tech Level: 13
Features: Shell Extractor.		
Name: S & W No. 3	BBL: STD	Action: SA
MAG: Break 6	DUR: 4	ENC: 22
Caliber: .22	BDG: 2	Tech Level: 13
Features: Shell Extractor.		
Name: Enterprise No. 3	BBL: SHT	Action: SA
MAG: Port-Cyl 5	DUR: 3	ENC: 32
Caliber: .38 long	BDG: 5	Tech Level: 13
Features: none.		
Name: Enterprise No. 4	BBL: SHT	Action: SA
MAG: Port-Cyl 5	DUR: 4	ENC: 35
Caliber: .41 long	BDG: 11	Tech Level: 13
Features: none.		
Name: Colt Cavalry Pistol	BBL: LNG	Action: SA
MAG: Port-Cyl 6	DUR: 4	ENC: 41
Caliber: .45 long colt	BDG: 6	Tech Level: 13
Features: none.		
Name: Colt Army Pistol	BBL: LNG	Action: SA
MAG: Port-Cyl 6	DUR: 4	ENC: 42
Caliber: .44	BDG: 15	Tech Level: 13
Features: none.		
Name: Webley Bull Dog	BBL: SHT	Action: DA
MAG: Port-Cyl 5	DUR: 4	ENC: 32
Caliber: .44	BDG: 15	Tech Level: 13
Features: none.		
Name: Magazine Pistol	BBL: SHT	Action: SA
MAG: Tub-Mag 5	DUR: 2	ENC: 22
Caliber: .32 long	BDG: 2	Tech Level: 13
Features: none.		
Name: Derringer	BBL: SNUB	Action: SA
MAG: Break 2	DUR: 3	ENC: 23
Caliber: .41	BDG: 11	Tech Level: 13
Features: none.		
Name: Henry Rifle	BBL: Rifle	Action: LA
MAG: Tub-Cyl 15	DUR: 3	ENC: 1.1
Caliber: .44	BDG: 30	Tech Level: 13
Features: none.		
Name: Spencer Rifle	BBL: Rifle	Action: LA
MAG: Tub-Cyl 8	DUR: 3	ENC: 1.45
Caliber: .50 ball	BDG: 40	Tech Level: 13
Features: Bayonet lug.		
Name: Spencer Carbine	BBL: Carbine	Action: LA
MAG: Tub-Cyl 8	DUR: 3	ENC: 1.08
Caliber: .50 ball	BDG: 40	Tech Level: 13
Features: Bayonet lug.		
Name: Remington Sporting Rifle	BBL: Rifle	Action: SS
MAG: Falling Block 1	DUR: 4	ENC: 1.45
Caliber: .44	BDG: 2	Tech Level: 13
Features: None.		
Name: Sharp's New Military Rifle	BBL: Rifle	Action: SS
MAG: Break 1	DUR: 4	ENC: 1.4
Caliber: .45 government	BDG: 24	Tech Level: 13
Features: Match Weapon, peep sight.		

Name: Remington's Revolving Carbine	Action: SA	Name: Beretta M-34	BBL: STD	Action: AL	
MAG: Port-Cyl 6	DUR: 4	MAG: Box 7	DUR: 3	ENC: 37	
Caliber: .38 long	BDG: 5	Caliber: 9mm Short	BDG: 2	Tech Level: 16	
Features: Removable Cylinder.	Tech Level: 13	Features: none.			
Name: Greener's Shotgun 12 ga.	Action: SA	Name: Beretta M92D	BBL: STD	Action: AL	
MAG: Break 2	DUR: 3	MAG: Box 9	DUR: 5	ENC: 39	
Caliber: 12 gauge	BDG: 32	Caliber: 40 S&W	BDG: 10	Tech Level: 18	
Features: none.	Tech Level: 13	Features: 3 dot LED sight.			
Name: Greener's Shotgun 10 ga.	Action: SA	Name: Beretta M92F	BBL: STD	Action: AL	
MAG: Break 2	DUR: 3	MAG: Box 13	DUR: 5	ENC: 39	
Caliber: 10 gauge	BDG: 36	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18	
Features: none.	Tech Level: 13	Features: none.			
Name: 10 gauge sawed offshotgun	Action: SA	Name: Beretta M92F Slim	BBL: STD	Action: AL	
MAG: Break 2	DUR: 3	MAG: Box 8	DUR: 5	ENC: 35	
Caliber: 10 gauge	BDG: 36	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18	
Features: Riot gun.	Tech Level: 13	Features: none.			
Name: 1874 Gatling Gun	BBL: Rifle	Action: FA	Name: Beretta M92S	BBL: STD	Action: AL
MAG: Box (40)	DUR: 3	ENC: 10.7	MAG: Box 15	DUR: 5	ENC: 39
Caliber: .45 long colt	BDG: 5	Tech Level: 13	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18
Features: Tripod mount only.			Features: none.		
Name: American Derringer Model 1	BBL: SNUB	Name: Bersa Model 86	BBL: SHT	Action: AL	
Action: SA	MAG: Break 2	MAG: Box 13	DUR: 3	ENC: 25	
ENC: 41	Tech Level: 18	Caliber: .380 ACP	BDG: 5	Tech Level: 18	
Caliber:		Features: none.			
.22LR(1-10)		Name: Browning BDM	BBL: STD	Action: AL	
.25 ACP (11-20)		MAG: Box 15	DUR: 4	ENC: 38	
.256 magnum (21-22)		Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18	
.32 short (23-28)		Features: none.			
.32 long (29-33)		Name: Colt Delta Elite	BBL: STD	Action: AL	
.357 magnum (34-40)		MAG: Box 14	DUR: 4	ENC: 44	
9mm Parabellum (41-50)		Caliber: 10mm ACP	BDG: 15	Tech Level: 19	
.38 Special (51-57)		Features: Recoil Reduction of 3.			
.38 Super Auto (58-61)		Name: Colt Double Eagle	BBL: SHT	Action: AL	
.40 S&W (62-66)		MAG: Box 8	DUR: 5	ENC: 29	
.41 Magnum/ .410 gauge (67-75)		Caliber: .45 ACP	BDG: 11	Tech Level: 18	
.44 special (76-80)		Features: none.			
.44 Magnum (81-85)		Name: Colt Lightweight	BBL: SHT	Action: AL	
.45 long colt (86-91)		MAG: Box 8	DUR: 5	ENC: 25	
.45 ACP (92-99)		Caliber: .45 ACP	BDG: 11	Tech Level: 18	
5.56 Nato (100)		Features: none.			
Features: none.		Name: Colt Model 2000	BBL: STD	Action: AL	
Name: American Derringer Model 1	BBL: SNUB	MAG: Box 15	DUR: 5	ENC: 38	
Action: SA	MAG: Break 2	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18	
ENC: 41	Tech Level: 18	Features: none.			
Caliber:		Name: Coonan Arms	BBL: STD	Action: AL	
.45-70 / .45 long colt (1-5)		MAG: Box 7	DUR: 4	ENC: 42	
.45-70 / .410 gauge (6-9)		Caliber: .357 magnum	BDG: 11	Tech Level: 18	
.50-70 (10) (BDG 28)		Features: High security safety, recoil reduction of 2.			
Features: none.		Name: Desert Baby Eagle	BBL: STD	Action: AL	
Name: AMT Hardballer	BBL: STD	MAG: Box 16	DUR: 3	ENC: 4	
MAG: Box 7	DUR: 4	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 19	
Caliber: .45 ACP	BDG: 11	Features: none.			
Features: none.	Tech Level: 18				
Name: AMT On Duty	BBL: STD				
MAG: Box 13	DUR: 4				
Caliber: .40 S&W	BDG: 10				
Features: none.	Tech Level: 18				

Name: Desert Baby Eagle	BBL: STD	Action: AL	Name: Mauser M1896	BBL: LNG	Action: AL
MAG: Box 11	DUR: 3	ENC: .4	MAG: Strip 10	DUR: 3	ENC: .41
Caliber: .41 AE	BDG: 5	Tech Level: 19	Caliber: .30 Mauser	BDG: 6	Tech Level: 14
Features: none.			Features: none.		
Name: Desert Baby Eagle	BBL: STD	Action: AL	Name: P-08 Luger	BBL: STD	Action: AL
MAG: Box 10	DUR: 3	ENC: .4	MAG: Box 8 or drum (32)	DUR: 3	ENC: .39
Caliber: .40 S&W	BDG: 10	Tech Level: 19	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 14
Features: none.			Features: none.		
Name: Desert Eagle	BBL: LNG	Action: AL	Name: SIG P-210-2	BBL: STD	Action: AL
MAG: Box 8	DUR: 3	ENC: .43	MAG: Box 8	DUR: 5	ENC: .39
Caliber: .44 magnum	BDG: 21	Tech Level: 19	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 17
Features: Convertible to .357 magnum (9 round magazine). Fires standard .357 and .44 rimmed rounds.			Features: Match Weapon.		
Name: Freedom Arms	BBL: LNG	Action: SA	Name: SIG/Sauer P-220	BBL: STD	Action: AL
MAG: Port-Cyl 5	DUR: 4	ENC: .45	MAG: Box 7	DUR: 5	ENC: .38
Caliber: .454 Casull	BDG: 31	Tech Level: 19	Caliber: .45 ACP	BDG: 11	Tech Level: 19
Features: none.			Features: none.		
Name: Glock 17	BBL: STD	Action: AL	Name: SIG/Sauer P-225	BBL: SHT	Action: AL
MAG: Box 17	DUR: 5	ENC: .37	MAG: Box 8	DUR: 5	ENC: .28
Caliber: 9mm Parabellum	BDG: 5	Tech Level: 19	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 19
Features: High security safety.			Features: none.		
Name: Glock 19	BBL: SHT	Action: AL	Name: SIG/Sauer P-226	BBL: STD	Action: AL
MAG: Box 15	DUR: 5	ENC: .27	MAG: Box 15	DUR: 5	ENC: .38
Caliber: 9mm Parabellum	BDG: 5	Tech Level: 19	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 19
Features: High security safety.			Features: none.		
Name: Glock 20	BBL: STD	Action: AL	Name: SIG/Sauer P-228	BBL: SHT	Action: AL
MAG: Box 15	DUR: 5	ENC: .38	MAG: Box 13	DUR: 5	ENC: .28
Caliber: 10mm ACP	BDG: 15	Tech Level: 19	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 19
Features: High security safety.			Features: none.		
Name: Glock 21	BBL: STD	Action: AL	Name: SIG/Sauer P-229	BBL: SHT	Action: AL
MAG: Box 13	DUR: 5	ENC: .38	MAG: Box 12	DUR: 5	ENC: .29
Caliber: .45 ACP	BDG: 11	Tech Level: 19	Caliber: .40 S&W	BDG: 10	Tech Level: 19
Features: High security safety.			Features: none.		
Name: Glock 22	BBL: STD	Action: AL	Name: SIG/Sauer P-230	BBL: SHT	Action: AL
MAG: Box 15	DUR: 5	ENC: .37	MAG: Box 7	DUR: 5	ENC: .25
Caliber: .40 S&W	BDG: 10	Tech Level: 19	Caliber: .380 ACP	BDG: 5	Tech Level: 19
Features: High security safety.			Features: High security safety.		
Name: Glock 23	BBL: STD	Action: AL	Name: S&W Model 39	BBL: STD	Action: AL
MAG: Box 13	DUR: 5	ENC: .36	MAG: Box 8	DUR: 4	ENC: .37
Caliber: .40 S&W	BDG: 10	Tech Level: 19	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 17
Features: High security safety.			Features: none.		
Name: Grizzly Win Mag	BBL: STD	Action: AL	Name: S&W Model 59	BBL: STD	Action: AL
MAG: Box 8	DUR: 4	ENC: .44	MAG: Box 14	DUR: 4	ENC: .38
Caliber: .45 Win Mag	BDG: 28	Tech Level: 19	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18
Features: Recoil reduction of 3.			Features: none.		
Name: H&K P-9S	BBL: STD	Action: AL	Name: S&W Model 915	BBL: SHT	Action: AL
MAG: Box 9	DUR: 5	ENC: .39	MAG: Box 15	DUR: 4	ENC: .28
Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18	Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18
Features: none.			Features: none.		
			Name: S&W Model 1006	BBL: STD	Action: AL
			MAG: Box 9	DUR: 4	ENC: .41
			Caliber: 9mm Parabellum	BDG: 5	Tech Level: 18
			Features: none.		

Name: S&W Model 3914 MAG: Box 8 Caliber: 9mm Parabellum Features: none.	BBL: SHT DUR: 4 BDG: 5	Action: AL ENC: .37 Tech Level: 18	Name: Zastava CZ40 MAG: Box 11 Caliber: 40 S&W Features: none.	BBL: STD DUR: 3 BDG: 10	Action: AL ENC: 39 Tech Level: 18
Name: S&W Model 4003 MAG: Box 11 Caliber: .40 S&W Features: none.	BBL: STD DUR: 4 BDG: 10	Action: AL ENC: .38 Tech Level: 18	Name: VZ61 Skorpion MAG: Box (10) or (20) Caliber: 7.63mm Features: Folding Stock.	BBL: SHT DUR: 3 BDG: 2	Action: AL/ FA ENC: .329 Tech Level: 17
Name: S&W Model 4006 MAG: Box 11 Caliber: .40 S&W Features: Tritium night sight, click sight.	BBL: STD DUR: 4 BDG: 10	Action: AL ENC: .38 Tech Level: 18	Name: Mauser M32 MAG: Box (10) or (20) Caliber: .30 Mauser Features: May use Mauser M1896 Removable Stock.	BBL: LNG DUR: 3 BDG: 6	Action: AL/ FA ENC: .48 Tech Level: 16 stripper clips,
Name: S&W Model 4013 MAG: Box 8 Caliber: 9mm Parabellum Features: none.	BBL: SHT DUR: 4 BDG: 5	Action: AL ENC: .27 Tech Level: 18	Name: Beretta M-93R MAG: Box 20 Caliber: 9mm Parabellum Features: Recoil Reduction of 2, folding stock.	BBL: STD DUR: 5 BDG: 5	Action: AL/ AB ENC: .41 Tech Level: 18
Name: S&W Model 4516 MAG: Box 8 Caliber: .45 ACP Features: none.	BBL: SHT DUR: 4 BDG: 11	Action: AL ENC: .28 Tech Level: 18	Name: Bushmaster MAG: Box (20),(30),(40) Caliber: 5.56 Nato Features: Bullpup, uses M-16 magazines, fired with one hand.	BBL: Carbine DUR: 4 BDG: 20	Action: AL/ FA ENC: .7 Tech Level: 18
Name: S&W Model 4566 MAG: Box 8 Caliber: .45 ACP Features: none.	BBL: STD DUR: 4 BDG: 11	Action: AL ENC: .38 Tech Level: 18	Name: H & K MP-5 SD3 MAG: Box (15)or (30) Caliber: 9mm Parabellum Features: Folding stock, integral silencer.	BBL: XLNG DUR: 4 BDG: 5	Action: AL/ FA ENC: .95 Tech Level: 19
Name: Sphinx AT-2000 MAG: Box 15,13,10 Caliber: 9mm Parabellum Features: none.	BBL: SHT DUR: 3 BDG: 5	Action: AL ENC: .27 Tech Level: 18	Name: H & K VP-70 MAG: Box 18 Caliber: 9mm Parabellum Features: Detachable stock.	BBL: SHT DUR: 4 BDG: 5	Action: AL/ AB ENC: .38 Tech Level: 18
Name: Steyr GB-80 MAG: Box 18 Caliber: 9mm Parabellum Features: none.	BBL: STD DUR: 4 BDG: 5	Action: AL ENC: .42 Tech Level: 18	Name: PPsh-41 MAG: Box (35),Drum (71) Caliber: .30 Mauser Features: none.	BBL: Carbine DUR: 4 BDG: 5	Action: AL/ FA ENC: 1.05 Tech Level: 16
Name: Walther PPK MAG: Box 7 Caliber: 9mm Short Features: none.	BBL: STD DUR: 5 BDG: 2	Action: AL ENC: .37 Tech Level: 16	Name: AMD-65 MAG: Box 30 Caliber: 7.62 Soviet Features: Folding stock, foward handgrip, recoil reduction of 2.	BBL: Rifle DUR: 4 BDG: 20	Action: AL/ FA ENC: 1.0 Tech Level: 18
Name: Walther P-38 MAG: Box 8 Caliber: 9mm Parabellum Features: none.	BBL: STD DUR: 5 BDG: 5	Action: AL ENC: .37 Tech Level: 16	Name: Barret M82 "Light 50" Rifle MAG: Box (5) Caliber: .50 BMG Features: Bipod, 2-12x variable Scope, can be fitted with infared or StarLight scope, Recoil reduction of 3.	BBL: Rifle DUR: 5 BDG: 90	Action: AL ENC: 2.75 Tech Level: 19
Name: Webley-Fostbury MAG: Break 6 Caliber: .455 Webley Features: Self-cocking revolver. Manual Safety.	BBL: STD DUR: 2 BDG: 11	Action: AL ENC: .425 Tech Level: 14	Name: Calico M-100 MAG: Box (100) Caliber: .22 Long Rifle Features: Folding Stock, helical magazine.	BBL: carbine DUR: 5 BDG: 4	Action: AL/ AB ENC: .89 Tech Level: 19
Name: C.O.P. .357 MAG: Break 4 Caliber: .357 magnum Features: 4 barrels with a rotating firing pin.	BBL: SNUB DUR: 4 BDG: 11	Action: DA ENC: .27 Tech Level: 18	Name: Calico M-951 MAG: Box 50 or 100 Caliber: 9mm Parabellum Features: Folding Stock, helical magazine.	BBL: carbine DUR: 5 BDG: 5	Action: AL/ AB ENC: .92 Tech Level: 19

Name: Intratec TEC-9 **BBL:** XLNG **Action:** AL/ FA
MAG: Box (20),(32) **DUR:** 3 **ENC:** .83
Caliber: 9mm Parabellum **BDG:** 5 **Tech Level:** 19
Features: none.

Name: Galil ARM **BBL:** rifle **Action:** AL/ FA
MAG: Box (35) **DUR:** 4 **ENC:** 1.46
Caliber: 5.56 Nato **BDG:** 20 **Tech Level:** 19
Features: Folding Stock, bipod, 22mm grenade launcher in flash hider, bayonet lug.

Name: H&K SR9 **BBL:** rifle **Action:** AL
MAG: Box (5) **DUR:** 5 **ENC:** 1.4
Caliber: 7.62 Nato **BDG:** 27 **Tech Level:** 19
Features: Recoil Reduction of 3.

Name: KAR 98K **BBL:** rifle **Action:** BA
MAG: Tub-mag 5 **DUR:** 4 **ENC:** 1.4
Caliber: 8mm Mauser **BDG:** 25 **Tech Level:** 16
Features: none.

Name: Parker-Hale M85 **Action:** BA
MAG: Box 10 **DUR:** 4 **ENC:** 1.6
Caliber: 7.62 Nato **BDG:** 27 **Tech Level:** 19
Features: Bipod, scope standard.

Name: Ruger Mini-14 **BBL:** carbine **Action:** AL
MAG: Box (20) **DUR:** 5 **ENC:** 1.1
Caliber: 5.56 Nato **BDG:** 20 **Tech Level:** 18
Features: Folding Stock, can be converted to Full Auto fire.

Name: Steyer AUG **BBL:** rifle **Action:** AL/ FA
MAG: Box (30) **DUR:** 5 **ENC:** .9
Caliber: 5.56 Nato **BDG:** 20 **Tech Level:** 18
Features: Integral 1.5x sight, bullpup, ambidexterous bolt, 22mm grenade launcher in flash hider, bayonet lug.

Name: BAR M1918A2 Rifle **Action:** FA
MAG: Box (20) **DUR:** 4 **ENC:** 1.9
Caliber: 30-06 **BDG:** 26 **Tech Level:** 15
Features: Bipod.

Name: PTRS-41 Rifle **Action:** AL
MAG: Strip (5) **DUR:** 3 **ENC:** 3.0
Caliber: 14.5 mm **BDG:** 240 **Tech Level:** 15
Features: Fires armor piercing incendiary ammo, Bipod.

Name: M-214 minigun **Rate:** 400 or 4000rpm
MAG: 2-cassette (500) **DUR:** 4 **ENC:** 11
Caliber: 5.56 Nato **BDG:** 20 **Tech Level:** 18
Rate Factor: D6 x .5 or
6 x 2D3 x .5

Features: High rate of fire only when vehicle-mounted.
Fires 180 rounds per action when on high rate of autofire.
Battery pack of 2 E-10's lasts for 3000 rounds.

Name: M-249 SAW **Rate:** 750 or 950 rpm
MAG: Belt (200) or Box(30) **DUR:** 4 **ENC:** 1.7
Caliber: 5.56 Nato **BDG:** 20 **Tech Level:** 19
Rate Factor: 2D3 x .5 or
D10 x .5
Features: Bipod, folding stock.

Name: MG-08 Machinegun **Rate:** 400 rpm
MAG: Belt 250 **DUR:** 3 **ENC:** 7.6
Caliber: 8mm Mauser **BDG:** 25 **Tech Level:** 14
Rate Factor: D6 x .5
Features: Tripod mount only, water cooled.

Name: AGS-17 Grenade Launcher **Action:** AL/ FA
MAG: Belt or drum (29) **DUR:** 3 **ENC:** 2.1
Caliber: 30mm grenades **Tech Level:** 18
Features: Grenades have a Blast and Frag of 4, Tripod mounted.

Name: Falconet Grenade Launcher **Action:** AL
MAG: Box (5) **DUR:** 3 **ENC:** 1.6
Caliber: 24mm Grenades **Tech Level:** 18
Features: Grenades have a Blast of 4 and Frag of 2, Bipod, Barrel can collapse into receiver for storage.

Name: M-79 Grenade Launcher **Action:** SS
MAG: Break 1 **DUR:** 3 **ENC:** 97
Caliber: 40mm grenade **Tech Level:** 17
Features: none.

Name: M-203 Grenade Launcher **Action:** SS
MAG: Break 1 **DUR:** 4 **ENC:** 14
Caliber: 40mm Grenade **Tech Level:** 18
Features: Must be mounted under rifle (usually M-16).

Name: M174E3 Grenade Launcher **Action:** AL/ FA
MAG: Drum 12 **DUR:** 3 **ENC:** 2.2
Caliber: 40mm Grenades **Tech Level:** 18
Features: none.

Name: Mk-19 Grenade Launcher **Action:** FA
MAG: Belt (50) **DUR:** 4 **ENC:** 5.3
Caliber: 40mm Grenades **Tech Level:** 19
Features: Must be tripod or vehicle mounted to be fired.

Grenade Launcher Ranges

	PBR	SHT	EFF	LNG	EXT	MAX
AGS-17	60	150	300	600	1200	2400
Falconet	30	75	150	300	600	1200
M-79	20	40	90	175	350	700
M-203	20	40	90	175	350	700
M174E3	25	50	100	200	400	800
Mk-19	80	200	400	800	1600	3200



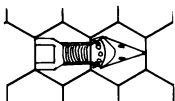
ARMY 90

High Tech Vehicles

Vehicle: Sky Cycle

The Sky cycle is a gravitics powered VTOL motorcycle. The skill used for driving it is Variable Wing Pilot. It has a top speed in excess of 300 mph. and can carry one crew plus up to 500 kg of cargo and passengers. For every 10 kg over capacity, the vehicle is slowed by 20 mph.

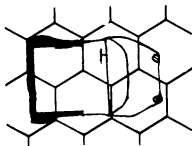
Classification: aircraft soft target
 Fuel system: gravitics generator
 Fuel capacity: E-500
 Fuel consumption: 50km/charge
 Structure: 3
 Area: 1x3: 3
 Damage Resistance: 20
 Maximum speed: 325 KpH
 Safety Devices: inertial compensator, seat belts
 Crew: 1 + 1 passenger
 Tech Level: 21



Vehicle: Grav Car

The Grav car is a gravitics-powered VTOL transport. The skill used for driving it is Variable Wing Pilot. It has a convertible top.

Classification: aircraft soft target
 Fuel system: gravitics generator
 Fuel capacity: 2 E-500
 Fuel consumption: 50km/charge
 Structure: 4
 Area: 2x3: 6
 Damage Resistance: 30
 Maximum speed: 300 KpH
 Safety Devices: inertial compensator, seat belts, Airbags
 Crew: 1 + 3 passengers
 Cargo Capacity: 25 ENC
 Tech Level: 21

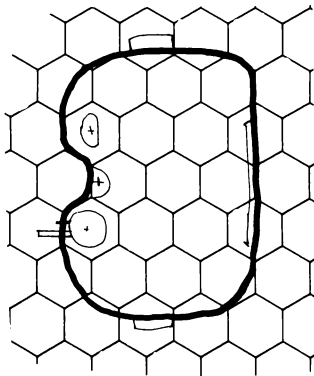


Vehicle: Walker APC

The Walker APC is a walking-based armored personnel carrier. The skill required to drive it is Walking Vehicle Driver.

Classification: Heavy Combat
 Fuel system: Electric
 Fuel capacity: 3 E-500
 Fuel consumption: 5 km/charge
 Structure: 4
 Area: 4x4: 16
 Damage Resistance: 30
 Maximum speed: 50 KpH
 Safety Devices: Seat belts, Airbags
 Crew: 3 (driver, gunner, commander) + 25 passengers
 Cargo Capacity: 150 ENC
 Tech Level: 20

Special Features: 20mm Autocannon, 450 rounds; co-axial 7.62mm LMG 2000 rounds. Can be sealed against biochemical agents, water, and vacuum. Military radio, radar, sonar, HUD standard. Fully amphibious, submersible to 50 meters.



Alien Creatures

Many alien creatures can be encountered in the galaxy, and here are just a few that you may encounter. Aliens are only limited to the imagination of the Gamemaster and the players.

Silicon-Based Life Forms

Silicon-based life requires a body temperature of around 600 degrees centigrade. This means that any contact with "normal" creatures with body temperatures around 30 degrees (like humans) will be hazardous.

BAP: 16	MNA: 8	PCA: 2	BMA: 3
AV: 3	WDA: 1	CDA: 3	
DRT: 2D10 (+6)x1.4	SF: 13	MASS: 6	

Notes: Skin has a fire group of 3

Martians

Natives of the planet Mars, these aliens are bipeds with four arms, dark red skin, and no body hair. Martians are extremely hostile to humanoid life and are oriented around planetary conquest.

BAP: 12	MNA: 3	PCA: 4	BMA: 1
AV: 3	WDA: 0	CDA: 0	
DRT: 16+3D6	SF: 16	MASS: 4+1D3	

Notes: Uses technology; has skills; highly susceptible to human disease.

Razorbeast

A large, reptilian alien with scaly hide and large claws. Use the Quadroped table. Razorbeasts are offensive carnivores and the extreme challenge for interstellar hunters.

BAP: 18	MNA: 6	PCA: 3	BMA: 4
AV: 7	WDA: 3	CDA: 2	
DRT: (36+4D10)x2	SF: 21	MASS: 12	

Notes: Medium intelligence; expert at stealth; dismembers prey before feeding.

Kla-Kli

An insectoid bipedal carnivorous alien with four arms. The Kla-Kli are very solitary nest-breeding aliens. Very protective of their young, they lay their eggs in the body of another animal to provide nourishment upon hatching.

BAP: 14	MNA: 7	PCA: 2	BMA: 4
AV: 4	WDA: 2	CDA: 2	
DRT: (20+2D10)x2.5	SF: 16	MASS: 5	

Claw BCS: 16	Bite BCS: 14
Claw WDM: 2.0	Bite WDM: 1.5

Centaur

This alien provides the basis for the Mythological Centaur of human fable. The Centaur as a man whose hips spring from the shoulders of a horse-like being. The blood of the Centaur acts as an acid when applied to human flesh, with a strength equaling the Centaur's Health Group.

BAP: 12	MNA: 3	PCA: 4
BMA: same as horse		AV (10:35): 3
WDA: 3	CDA: 2	DRT: (2D10+20)x2
SF: 13	MASS: 35	

Kick BCS: 10	Weapon BCS: 10+2D6
Kick WDM: 1.5C	Weapon WDM: as per weapon

WTT: 10	WILL: 10	STR: 25	SPD: 24
DFT: 15	HLTH: 20		

Notes: Intelligent; has skills; knowledge of weapon use; Ability to withstand higher-than-normal ranges of heat and cold

Tripellar

Extremely rare alien with three arms, three legs, three eyes, and three ears. The Tripellar are seldom seen in normal space, spending most of their time traveling through hyperspace. Very little information exists about this race, other than their extreme hostility to alien contact.

BAP: 12	MNA: 6	PCA: 2	BMA: 4
AV: 2	WDA: 1	CDA: 2	
DRT: (3D6+20)x1.5	SF: 14	MASS: 3	

Notes: Highly intelligent; advanced knowledge of FTL travel and hyperspace navigation. Tripellar have a 360 degree range of vision and hearing and are extremely agile.

Crystalli

The Crystalli are carbon-based aliens that are more akin to rock than to soft tissue. Their skin is extremely hard and they move very slowly. Their thought processes move much slower than most other races, and they tend to cluster together in loose formations, communicating through small changes in their skin.

BAP: 1/3	MNA: 1	PCA: see below	
BMA: 0.01	AV: 25	WDA: 0	CDA: 0
DRT: (4D10+40)x3.5	SF: 75	MASS: 600	

Notes: Medium intelligence; few skills; highly impervious to damage other than from laser based weapons. A Crystallus acts only once every three combat rounds on action phase zero. Exterior digestive system has an acid value of 1; Crystalli have an affinity for refined metals.

Net Running

Net Running is both a skill and a way of life for tech level 22 and beyond. It is the art of direct computer manipulation through the use of electrodes connected to the neural pathways in the character's brain, interfaced to a computer for extremely fast manipulation of computer-based information. This is commonly known as Direct Neural Interface, or DNI.

The skill for Net Running is a format 2 skill and is based on your Wit and Scientific attributes. The formula is Wit + Wit + Scientific. The sub-skills are Invasion, Evasion, Attack, Defense, and Design. Invasion is the skill of breaking into a system, Evasion is the ability to avoid detection by a system, Attack is the skill of making programs that destroy other programs, Defense is the skill of defending oneself from attack, and Design is the designing of new programs.

The art of Net Running is not for the slow-of-thought. All attack, defense, code breaking, etc. is done in the mind. The memory of your interface holds no pre-programmed attacks and defenses, but instead you develop them on the run. If you need to get away from a fireball, for example, you must quickly "think up" a fire extinguisher program.

Netrunners are used onboard a ship to track and work on software and daily functions. They also work interactively with the shipboard computer, regulating it and troubleshooting problems.

How it all works

The Net is a vast network of electronic pathways that are directly linked with each other. The netrunner's job is to use these pathways to find, turn off, turn on, etc. what the party (or the netrunner) needs done. The way is almost always guarded by some sort of barrier (anything from an Artificial Intelligence to a Zenon Code Gate).

Essentially, any type of information system with an access to the outside world is prey to the netrunner. Whether it is to get information, to open a electronic door in a building, or to take control of a new cryotank, the easiest way to achieve your task is by utilizing a netrunner.

Netrunning vs. Normal Adventuring

The major difference between netrunning and normal adventuring is the time scale. Netrunning takes place at the speed of thought, and as such, happens much faster than normal actions. The new time scale breakdown for AFTERMATH! is given below:

1 Combat Turn	= 60 seconds	= 10 Combat Rounds
1 Combat Round	= 6 seconds	= 20 Action Phases
1 Action Phase	= 0.3 seconds	= 1 Net Turn
1 Net Turn	= 0.3 seconds	= 20 Net Phases
1 Net Phase	= 0.015 seconds	

To determine the characters Base Net Phase (BNP), take the characters Wit and divide it by two. The maximum number of net actions (MNNA) is based on the netrunning skill score divided by twenty and rounded up. The netrunners speed in the net is based on the netrunners Wit score.

Example: Harry the Hacker has a Wit of 16 and Scientific score of 10. That would give him a Netrunning score of 42 as a base. His BNP is equal to 16 (his Wit) divided by 2 which gives him a BNP of 8. His MNNA is 42 (his Netrunning skill score) divided by 20 and rounded up which gives the runner a MNNA of 3, a PCA of 2 (8/3, rounded down). Harry will act in Net Phases 8, 6, and 4. This means that Harry gets 3 Net actions per realtime Action Phase.

How To Run The Net

The method of running a player in the net can be done four different ways.

The first way is the quick system. With the quick system, the GM gives each task a task difficulty rating and the player then rolls for completion, as per the task resolution rules on page 8 of AFTERMATH! book 2. The netrunner rolls once per realtime action phase, and adds his effect numbers until the sum is greater than the task difficulty rating.

Example: Wiz Kid has a Netrunning score of 70 (BCS 14) and is trying to gain information on a corporation based in a city near the party. The GM thinks that any information about the corporation would be easy to find and assigns the task a difficulty level of 10. Wiz Kid's score is 70 so the GM decides that the runner would have to roll a 4 or better to succeed (an effect number of 10). Wiz Kid rolls a 8 and gains information on the tribe.

The second method is the unopposed task system. This system is used when the runner is trying to do something unopposed such as a search of records or sorting information in a file. This would also be based on the roll of a single die. The player needs to make a BCS roll to succeed.

Example: Arvid wants to do a search of the articles on the New York Electronic Times computer for any articles that mention a specific person. The player simply needs to roll below their BCS to find any information.

The third resolution system is the opposed task system. This is how net combat is resolved. Each combatant rolls an averaged BCS roll of their Attack and Defense specialties, and compares effect numbers. The party with the greater effect number wins the combat. The precise results are given on the chart on the next page.



Difference in Effect	Result
0-5	Standoff
6-10	Loser must "jack out"
11-15	Loser takes difference in effect numbers in damage
16 +	Loser loses consciousness for 1D10 seconds.

The fourth resolution system is the interactive system. This is the most like normal AFTERMATH! role playing. The GM runs the netrunning sessions just like normal role play in the fact that there is full interaction between the characters and all other characters in the net. Combat in the full interactive mode takes place in the net breakdown of phases.

How to Play a Netrunning Session

The average AFTERMATH! character suits up with a kevlar jacket and a M-16, but not the netrunner. The staples for a netrunner are a few interface cables, a cyberdeck, and a lot of thought. The interface cables are the gateway to the world of the net. All work in the net is done in the mind of the runner. When the runner goes up against any other combatant or barrier, he creates the programs directly on the spot. There is no limit to the number of programs a netrunner can execute, instead the runner is only limited by how long he can stay in the net.

There are many problems the netrunner can face in a average session. The pitfalls are numerous, but very colorful. In the net, anything is possible. It is not limited to 3 dimensional views, nor is it limited to any person. It is an unlimited area to explore and conquer. Each system defines its own virtual reality with specialized rules of nature that are used to achieve its primary function. Each virtual reality is its own private universe.

The session in the net is much like that in regular game play. The netrunner starts off by "jacking" into the net. This is a simple task and should be treated as such. The chances of anything dangerous happening to a netrunner while jacking into the net are about 1 in 100. Once he jacks in, he must first form his icon by making his BCS roll as an unopposed task, and then he may do as he will.

From there it is left to the imagination. The pathways are like the roads of today. The different systems hooked to the net appear as different kinds of shelters (depending on the design) while other netrunners appear as their icon representation. There are many ways to access the real world, such as surveillance monitors, robotic controls, controller screens, and the like. Once again it is only limited by the imagination of the player.

Netrunning Equipment

Interface Cables: Cables (usually made of a superconductive material) that lead from the Net Link cyber option to the net outlet that allow the runner to actually link into the net.

Cyberdeck: A computer that translates brain signals into computer currents to facilitate netrunning.

Options Adapter: A computer-like box (almost like a laptop computer) that allows the runner to hook up to the following options:

Video Link: This allows someone at the Options Adapter to see all that is seen through the runner's eyes.

Audio Link: Allows someone at the Options Adapter to hear both the runner and all that is heard by the runner as well as communicate to the runner.

Radio Link: This allows the runner to talk via radio with anyone via radio (according to radio rules) on their own frequencies including scrambled frequencies.

Cellular Link: This allows the runner to connect to the net via cellular phone. The option uses a standard cellular phone (not included).

Base Storage: Storage (in Gigs) that allows the runner to store data (records, information, etc.) for later use.

Cellular Modem: Allows the runner (without the Options Adapter) to link into the net via a standard cellular phone.

In Line Storage: Allows the runner (without the Options Adapter) to store information for later use.

Sample Programs

Blocker: Sets up an electrical field that will derez most electronically based programs. Looks like arcs of electricity in the shape of a disk. The size of the icon varies.

Shocker: Sends a powerful bolt of electricity with the intentions of frying the intended recipient's brain.

Hunter: Will find and follow a netrunner, tracing him by his electrical aura.

Stalker: Similar to a Hunter, but will also attack its prey until it is derezed or its prey is dead.

Metamorphosis: Changes the players icon.

Eye in the Sky: Allows a two dimensional aerial view of the immediate area around the netrunner. Looks like a eye with wings and flies up and away from the netrunner.

Cloak: Disguises the electrical aura of the netrunner.

Teleport: Will transfer the netrunner to any location that he is fairly familiar with. Has the appearance of being "beamed" up and "beamed" down.

Stunner: Like Shocker but does no physical damage to the recipient. If successful, it renders the victim stunned.

Doppelganger: Creates a duplicate of the netrunner which travels away from the netrunner and attempts to trick any followers to follow it. It looks exactly like the netrunner (including the electrical aura).

Book Worm: Used to corrupt record files by randomly removing characters from the record structure.

Exoskeleton: Forms a suit of powered armor around the netrunner which protects the netrunner from Stunner or Shocker. Lasts from when programmed until it is defeated.

Hot Glue Gun: Used to temporarily disable other netrunners or AIs. A glue gun appears on the side of the netrunner and he "hot glues" the victim to the floor. Lasts for one shot.

Scout: Sneaks ahead of the netrunner to look for other individuals or countermeasures.

Whirlwind: Acts like teleport, but against other netrunners or AIs. It transports the victim to a random area of the net. Looks like a small tornado.

Remote Control: Once programmed, allows a netrunner to control any device that is controlled by a computer from any area in the net that the runner has access to.

Random Access: Randomly sends passwords to any locked barrier in an attempt to find the correct one.

Program Critical Failure Chart

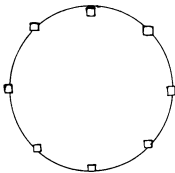
1-10	Program works normally for 1 net action phase, but then fails
11-20	Program looks like it is working but only gives the illusion of working
21-30	Program works full strength for the intended victim
31-40	Program appears to work normally for intended victim but only gives the illusion of working
41-50	Program works with one major flaw
51-60	Program works with 1d4+1 major flaws
61+	Program simply fails

Program Critical Hit Chart

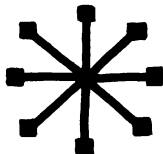
1-10	Program automatically forces immediate derez of opponent
11-20	Program works with one random bonus (GM's choice)
21-30	Program works with 1d4+1 random bonuses
31-40	Program becomes invincible
41+	Program simply works at full capacity

The Architecture of the Net

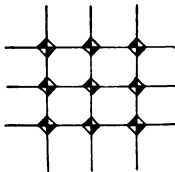
The net is not limited to the same dimensions as realspace, but can have as many dimensions as desired. This may sound complicated, but it is actually simple. The net is constructed of a number of nodes, or systems, that are connected in different patterns. The patterns are described below. They are the ring, star, nearest neighbor, tree, and hypercube.



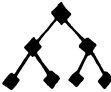
The Ring topology is a variant of the daisy-chain. To get to any other node, the netrunner has to travel through up to half of the nodes in the system. This is generally used in office systems.



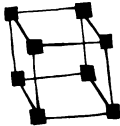
The star is used when many smaller computers are connected to a single host. With this system, all communication between nodes must travel through the host. This means all security will be contained within the host computer. The star system is normally used by communication companies.



The Nearest Neighbor design is based on the neural net processors of early AI construct. It is most commonly used in AI-oriented systems such as military and government computer systems. Each node is equally as capable of defense as any other.



The tree topography is an expansion of natural language processing tasks and is used in highly word oriented and game-oriented systems, such as news information distribution systems and gaming systems.



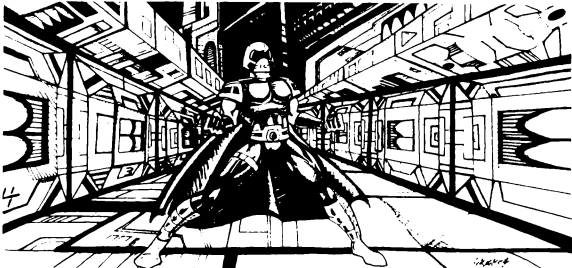
The hypercube is used primarily in major installations such as computer manufacturers, military weapons contractors and the like. It is considered the most difficult system topography to break into. In a relatively small hypercube of only 12 dimensions (which is pretty small) there are over 4,000 separate rooms for the netrunner to encounter. The total number of nodes in a hypercube is equal to 2 to the power of the dimension of the hypercube. Some of the larger systems are known to have somewhere in the neighborhood of 48 dimensions (or more). In such a system, there are over 281,474,976,700,000 separate rooms for the brave (or just stupid) netrunner to explore. But, if you know the pathway, you only have to go through 48 rooms to reach the room you seek. The trick is in learning the correct pathway. "Like taking a pebble from the blind man's hand, Grasshopper."

Overall, the most common form of the open net is the nearest neighbor mesh, while a hypercube is more common in large systems. The major benefit of a hypercube is that, if you had 64,000 interconnected systems in a hypercube topology, each node would appear as a room with 16 doors, and to go from any node to any other node in the system, you would only have to go through 16 doors if you knew the right pathway.

There are many tricks, traps, dead ends, and ways to get lost in the net, so getting into a system (especially a remote one) can sometimes be a problem. The rule of thumb is "The more remote a system, the harder it is to get to it." The net does not necessarily have a set "road map" on how to go and is almost always in a constant state of growth. The access ways are forever becoming more intertwined and maze-like. This can pose a problem for a netrunner who does not keep up with changes in the net.

Once the netrunner gets where he is going, it may be harder getting in and around than one may think. The traps and countermeasures are just as sneaky and dangerous as anything that can be found in the real world. The real fun starts when you start running into unfriendly AIs.

AI stands for an Artificial Intelligence. It is a being that exists only in the net and takes orders from his base system. The AI's skills and Wit scores are based on the number of bananas in its base system. For every banana in the base system, the AI gets a Wit of one and five points in its Netrunning skill. For example, an AI with 15 bananas of memory would have a Wit of 15 and a netrunning BCS in only one specialty of 15 (skill score of 75). AIs treat each separate specialization of netrunning as a separate skill. The AI's Netrunning skill score is still limited to a maximum of 100 in each specialty, but its Wit is unlimited. This means a strong AI may be the death of even the best netrunner.



Robots and Wardroids

Robots are described in **AFTERMATH!** Book 3, page 39. Animatrons are a subclass of robot, but do not have to be humanoid. First Generation animatrons are available at Tech Level 18, Second Generation at Tech Level 19, and Third Generation at Tech level 21. The Fourth Generation of animatron is an Android, and is described in the Race Descriptions section at the beginning of this book. Some sample Third Generation animatrons are listed below.

Terran Wardroid, Mark I

The Mark I wardroid is a tracked robot with mounted weapons. It is non-anthropomorphic (non-humanoid).

Tech Level: 21
BAP: 15
MNA: 5
PCA: 3
BMA: 2
AV: 10
WDA: 3
CDA: 1
DRT: Head 22
Body 50
Tracks 25

Skills: Autoweapon (16); Energy Rifle (16); Grenade Launcher (10)

Weaponry: 2 SIG 710-3 GPMG with 500 rounds each, 1 Mark 19 Grenade Launcher with 50 rounds, Stun Rifle powered from internal batteries.

Terran Wardroid, Mark II

The Mark II wardroid is a tracked robot with mounted weapons. It is non-anthropomorphic (non-humanoid).

Tech Level: 24
BAP: 18
MNA: 6
PCA: 3
BMA: 3
AV: 15
WDA: 3
CDA: 1
DRT: Head 25
Body 60
Tracks 35

Skills: Autoweapon (18); Energy Rifle (18); Heavy Energy Projectors (18)

Weaponry: 2 Blast MMGs on side turrets, a dorsal mounted Blast Cannon, 4 Stun Rifles mounted on remote turrets. All weapons are powered from internal batteries.

Ursoid Wardroid

The Ursoid wardroid is an anthropomorphic robot with mounted weapons. It is designed for both training and combat.

Tech Level: 24
BAP: 15
MNA: 5
PCA: 3
BMA: 2
AV: 10
WDA: 3
CDA: 1
DRT: Head 22
Body 50
Tracks 25
Strength Group: 9

Skills: Autoweapon (15); Energy Rifle (15); Energy Pistol (16); Unarmed Combat (12); Brawling (16); Single Weapon (16)

Weaponry: 2 Heavy Chain Swords on forearms. Internal Heavy Blast Pistol in forehead. All weapons are powered from internal batteries. Can use other weapons in hands.

Terran Valet Robot

The Valet Robot is an anthropomorphic robot designed for general tasks. It is also intended for use as a translator.

Tech Level: 23
BAP: 10
MNA: 2
PCA: 5
BMA: 1
AV: 5
DRT: Head 15
Body 30
Limbs 25

Skills: Culture, alien (20); Foreign Language (20) [pick 20]; Handicraft, cooking (20); Tailor (20); First Aid (16); Zero-G training (20)

Notes: This animatron has full Artificial Intelligence, but is designed under Asimov's Three Laws of Robotics.

<u>Armor/Clothing</u>	<u>Tech Level</u>	<u>Melee Weapon</u>	<u>Tech Level</u>	<u>Melee Weapon</u>	<u>Tech Level</u>
Crash Suit	19	Ax, hand	1	Sword, Tulwar	4
Fatigue Pants	2	Ax, hatchet	2	Tonfa	3
FedPol Coverall	18	Ax, lumber	4	Trident	4
FedPol Jumpsuit	17	Baseball Bat	13	Whip, Leather	2
FedPol Thigh Guards	17	Baseball Bat with nails	13		
FedPol Upper Arm Guards	17	Bayonet, long	12		
Field Infantry MK I Arms	21	Bayonet, short	12	<u>Item</u>	<u>Tech Level</u>
Field Infantry MK I Boots	21	Belt Buckle	3	8-Gamma-PCP-III	19
Field Infantry MK I Helmet	21	Brass Knuckles	3	ATL-ATL	1
Field Infantry MK I Hips	21	Cat o' Nine Tails	4	Advanced Cyberdeck	21
Field Infantry MK I Legs	21	Chain	3	Anagathon	22
Field Infantry MK I Torso	21	Cinqueneda	9	Arrows, Fiberglass	18
Field Infantry MK I joint	21	Club	0	Arrows, Improvised	1
Field Jacket	15	Cudgel	0	Arrows, Improvised shaft	4
Fire Protection Suit	17	Dagger	4	Arrows, Standard	6
Flak Jacket	15	Flail, Metal	4	Auto Repair Kit MK II	15
Flak Jacket, Plastic	18	Flail, Wood	2	Auto Repair Kit MK III	16
Greek Breastplate	2	Glaive	5	Auto Repair Kit Mk. I	14
Greek Greaves	2	Halberd	5	Backpack Tactical Nuke	20
Greek Helmet	2	Hammer, tool	2	Bandage	2
Greek Sandals	2	Hui-Tho	4	Basic Cyberdeck	21
Heavy Inf. MK III Helmet	22	Knife, Bowie	6	Bicycle	14
Hardened Leather Bdy Arm.	2	Knife, Kukri	5	Binoculars	13
Heavy Infantry MK IIIb	22	Knife, Switchblade	14	Blacksmith's Forge	4
Heavy Infantry MK IIIa	22	Knife, Throwing	4	Blowgun, Short	1
Infantry Chainmail	4	Knife, Trench	15	Blowgun, long	2
Infantry Helmet	4	Knife, belt	1	Bola, 2 ball	1
Infantry Plate	7	Knife, jack	11	Bola, 3 Ball	1
Kogusoku-kote	8	Knife-Spear	3	Bola, 4 Ball	1
LRU Intruder Body Armor	22	Lance	6	Bow, 30 lb. pull	1
LRU Intruder Boots	22	Mace, Ball	5	Bow, 40 lb. pull	2
LRU Intruder Fatigues	22	Mace, Spiked	6	Bow, 60 lb. pull	2
LRU Intruder Gauntlets	22	Main Gauche	10	Bow, 90 lb. pull	4
LRU Intruder Helmet	22	Maul, Ball	5	Bronzed Banana	0
LRU Intruder Hip Protection	22	Maul, Spiked	5	CPC	21
Leather Jacket	4	Net, Standard	3	Calculator	19
Maximillian Plate	8	Nunchaku, Metal	5	Camper's Flashlight	16
MetPol Boots	18	Nunchaku, Wood	4	Camper's Floodlight	16
MetPol Flak Jacket	18	Pick Ax	4	Cardiacine	17
MetPol Gloves	18	Pipe, Heavy	4	Cards	4
MetPol Patrolman Gorget	18	Pipe, Heavy	4	Cattle Prod	4
MetPol Patrolman Helmet	18	Pipe, Light	4	Chemical Lab III	14
MetPol SWAT Breastplate	19	Pipe, Light	4	Chemical Lab MK I	12
MetPol SWAT Coverall	19	Pitchfork	4	Chemical Lab MK II	13
MetPol SWAT Helmet	19	Raven's Beak	6	Chemical Lab MK IV	15
MetPol SWAT Hinguards	19	Sai	5	Chemical Scanner, binary	19
MetPol SWAT Joint Guards	19	Scythe	4	Chemical Scanner, detailed	20
Miner's Helmet	15	Shuriken	4	Compact Car (1986)	19
Motorcycle Helmet	17	Sledge Hammer	4	Crude Lockpicks	6
Norman Chainmail	6	Spear, Boar	4	CyberScope	21
Norman Helmet	6	Spear, Yari	4	Defibrillator	17
Padded Armor	2	Staff, Crude	0	Disguise Kit	6
Pikeman's Armor	11	Staff, Hardened	1	Dynamite, 1 stick	13
Pikeman's Helmet	11	Straight Razor	13	Electrician's Kit MK I	14
Police Riot Helmet	17	Sword, Broad	4	Electrician's Kit MK II	15
Scale Armor	4	Sword, Ceremonial	13	Electrician's Kit Mk III	15
Street Suit	21	Sword, Great	4	Engineer's Demolition Kit	16
T-shirt	15	Sword, Katana	4	Flame Rifle	18
Three-quarter Plate suit	8	Sword, Long	4	Flamethrower, Military	15
		Sword, Machete	8	Geiger Counter	16
		Sword, Rapier	10	HDAP	19
<u>Melee Weapon</u>	<u>Tech Level</u>	Sword, Saber	12	Hand Grenade, Concussion	18
Ax, Battle	4	Sword, Trench	15	Hand Grenade, Mace Gas	16
Ax, fire	4			Hand Grenade, Retch Gas	16

<u>Item</u>	<u>Tech Level</u>	<u>Item</u>	<u>Tech Level</u>	<u>Small Arms</u>	<u>Tech Level</u>
Hand Grenade, Smoke	15	Rifle Grenade, 22mm CL gas	18	P1 - Pistol	14
Hand Grenade, Tear Gas	16	Rifle Grenade, 22mm CN gas	18	P2 - Pistol	14
Hand Grenade, US Mk. 1	15	Rifle Grenade, 22mm Frag	18	P3 - Pistol	14
Hand Grenade, US Mk. 6	16	Rowboat	11	P4 - Pistol	14
Hand Grenade, US Mk. 7	18	Saddle, Eastern	3	P5 - Pistol	14
Hand Grenade, US Mk. 8	18	Saddle, English	13	P6 - Pistol	14
Hand Grenade, WP	17	Saddle, Jousting	4	P7 - Pistol	14
Handcuffs	10	Saddle, Western	13	P8 - Pistol	14
Handloading Kit, Pistol	14	Scuba Gear	16	P9 - Pistol	14
Handloading Kit, Rifle	14	Sewing Kit	2	P10 - Pistol	14
Handloading Kit, Shotgun	14	Shield, 1/2" plywood Class 1	4	P11 - Pistol	14
Heavy Cloth Tent	5	Shield, 1/2" plywood Class 2	4	P12 - Pistol	14
Heavy Flashlight	16	Shield, 1/2" plywood Class 3	4	P13 - Pistol	14
High Quality Lockpicks	12	Shield, 1/2" plywood Class 4	4	P14 - Pistol	14
Holster, Flap	13	Shield, 1/2" plywood Class 5	4	P15 - Pistol	14
Holster, Modern	17	Shield, 1/2" wicker Class 1	2	P16 - Pistol	14
Holster, Standard	14	Shield, 1/2" wicker Class 2	2	P17 - Pistol	14
Holster, Western	13	Shield, 1/2" wicker Class 3	2	P18 - Pistol	14
Horse	2	Shield, 1/2" wicker Class 4	2	P19 - Pistol	14
Infrared Scope	20	Shield, 1/2" wicker Class 5	2	P20 - Pistol	14
Inflatable Splints	18	Shield, 1/4" bronze Class 1	2	P21 - Pistol	14
Jeep	16	Shield, 1/4" bronze Class 2	2	P22 - Pistol	14
Laptop Computer	20	Shield, 1/4" bronze Class 3	2	P23 - Pistol	14
Laser Sight, TL 19	19	Shield, 1/4" bronze Class 4	2	P24 - Pistol	14
Laser Sight, TL 20	20	Shield, 1/4" iron, Class 1	4	P25 - Pistol	13
Leatherworking Kit	1	Shield, 1/4" iron, Class 2	4	P26 - Pistol	13
Lockpicks	7	Shield, 1/4" iron, Class 3	4	P27 - Pistol	14
M-113 APC	18	Shield, 1/4" plywood Class 1	2	P28 - Pistol	12
M60A3 Main Battle Tank	16	Shield, 1/4" plywood Class 2	3	P29 - Pistol	15
Magic Cuffs	0	Shield, 1/4" plywood Class 3	4	P30 - Pistol	17
Magnatuner	20	Shield, 1/4" plywood Class 4	4	P31 - Pistol	15
Medical Supplies	6	Shield, 1/4" plywood Class 5	4	P32 - Pistol	15
Medikit 1	9	Shield, 3/4" plywood Class 1	4	P33 - Pistol	15
Medikit 2	12	Shield, 3/4" plywood Class 2	4	P34 - Pistol	15
Medikit 3	21	Shield, 3/4" plywood Class 3	4	P35 - Pistol	15
Motorized Generator	19	Shield, 3/4" plywood Class 4	4	P36 - Pistol	16
Neo-Heroin	20	Shield, 3/4" plywood Class 5	4	P37 - Pistol	18
Neutron Grenade	21	Single Engine Plane	17	P38 - Pistol	19
Panomycin	17	Sky Cycle	23	P39 - Pistol	15
Passenger Helicopter	17	Sleeping Bag	15	P40 - Pistol	15
Personal Computer	19	Sling	1	P41 - Pistol	16
Plastic Police Shield Class 2	18	Slingshot, Elasticity .5	13	P42 - Pistol	15
Plastic Police Shield Class 4	19	Slingshot, Elasticity 1	14	P43 - Pistol	17
Plastic Repair Kit 1	18	Slingshot, Elasticity 2	15	P44 - Pistol	16
Plastic Repair Kit 2	19	Slingshot, Elasticity 3	16	P45 - Pistol	18
Plastic Repair Kit 3	20	Slingshot, Elasticity 4	17	P46 - Pistol	16
Plastique, 1 kg.	17	Small Fire Extinguisher	16	P47 - Pistol	16
Pocket Computer	21	Small Flashlight	17	P48 - Pistol	16
Pocket Flashlight	18	Spear Gun	17	P49 - Pistol	15
Polycell-3	21	Spinning Kit	2	P50 - Pistol	15
Polycell-4	21	StarLight Goggles	20	P51 - Pistol	15
Portable Blacksmith Forge	15	Starlight Scope	19	P52 - Pistol	15
Powered Spinning Kit	14	Stethoscope	12	P53 - Pistol	15
Quality Lockpicks	7	Taser, Double Barrel	19	P54 - Pistol	15
Radio, CB	15	Taser, Single Barrel	19	P55 - Pistol	15
Radio, CB Base station	16	Van (1990 model)	20	P56 - Pistol	14
Radio, CB Handheld	16	Video Camera	19	P57 - Pistol	13
Radio, Military Base Station	16	Watch, Military	16	P58 - Pistol	16
Radio, Military handheld	16	Weaving Kit	2	P59 - Pistol	16
Radio, Police BaseStation	16	Will Battery	0	P60 - Pistol	17
Radio, Police handheld	18			R1 - Rifle	16
Radio, Short-wave	15			R2 - Rifle	18
Rifle Grenade, 22mm C-gas	18			R3 - Rifle	16

Small Arms	Tech Level	Small Arms	Tech Level	Small Arms	Tech Level
R4- Rifle	16	R46- Rifle	16	SG19- Shotgun	13
R5- Rifle	15	R47- Rifle	16	SG20- Shotgun	13
R6- Rifle	15	R48- Rifle	16	SG21- Shotgun	13
R7- Rifle	17	R49- Rifle	16	SG22- Shotgun	13
R8- Rifle	14	R50- Rifle	16	SG23- Shotgun	14
R9- Rifle	15	C1- Carbine	20	SG24- Shotgun	13
R10- Rifle	15	C2- Carbine	18	M-1 Garand Rifle	15
R11- Rifle	15	C3- Carbine	16	M-1 Carbine	16
R12- Rifle	15	C4- Carbine	15	M1A1 Carbine	16
R13- Rifle	14	C5- Carbine	14	M-14 Rifle	17
R14- Rifle	15	C6- Carbine	13	M-16A1 Rifle	18
R15- Rifle	15	C7- Carbine	15	Colt Commando Carbine	18
R16- Rifle	14	C8- Carbine	18	M16A2 Rifle	19
R17- Rifle	14	C9- Carbine	16	M-18 Rifle	20
R19- Rifle	13	C10- Carbine	16	M-22 Rifle	21
R20- Rifle	13	C11- Carbine	15	FAL Assault Rifle	14
R21- Rifle	14	C12- Carbine	15	FAR Assault Carbine	18
R22- Rifle	14	C13- Carbine	15	Mk 4 Rifle	16
R23- Rifle	14	C14- Carbine	15	EM-2 Carbine	20
R24- Rifle	14	C15- Carbine	18	M1911A1 Pistol	14
R25- Rifle	14	C16- Carbine	13	Browning High Power	15
R26- Rifle	14	C17- Carbine	13	Thompson M1928A1 SMG	15
R27- Rifle	14	C18- Carbine	15	Thompson M1A1 Auto Carbine	16
R28- Rifle	14	SG1- Shotgun	13	M3A1 Sub-Machine Gun	16
R29- Rifle	14	SG2- Shotgun	13	Uzi SMG	18
R30- Rifle	14	SG3- Shotgun	14	MP-40	16
R31- Rifle	14	SG4- Shotgun	13	Mk.2 Sten	16
R32- Rifle	14	SG5- Shotgun	16	MAC-10	18
R33- Rifle	14	SG6- Shotgun	16	MAC-11	18
R34- Rifle	15	SG7- Shotgun	16	American 180	19
R35- Rifle	15	SG8- Shotgun	16	American 180 Machine Pistol	19
R36- Rifle	14	SG9- Shotgun	16	Browning Med MG	15
R37- Rifle	14	SG10- Shotgun	16	M60 GPMG	18
R38- Rifle	14	SG11- Shotgun	15	Browning M2 HMG	16
R39- Rifle	14	SG12- Shotgun	15	Browning LMG	17
R40- Rifle	14	SG13- Shotgun	15	SIG 710-3 GPMG	18
R41- Rifle	15	SG14- Shotgun	15	HK 21 LMG	18
R42- Rifle	16	SG15- Shotgun	15	HK 21 GPMG	18
R43- Rifle	14	SG16- Shotgun	15	HK 21 HMG	18
R44- Rifle	15	SG17- Shotgun	15	Mauser MG1	16
R45- Rifle	15	SG18- Shotgun	17		



Appendix 2: Quick Reference Charts

The following pages are provided for ease of play. Feel free to photocopy for personal use.

AGE GROUP	RACE CLASS								
	A	B	C	D	E	F	G	H	
1-5	0	5	8	13	26	46	50	80	160
6-10	1	11	15	22	46	132	90	110	220
11-14	2	17	24	31	66	180	130	150	300
15-17	3	23	31	40	86	300	170	250	500
18-19	4	29	37	49	106	370	200	325	650
20	5	35	43	58	126	450	230	625	750

Race Class A

Orc; Goblin; Scorpion; Kobold; Serpentine; Canine; Insectoid, Wasp; Android

Race Class B

Felidare, Tiger; Saurian; Toridare; Hawk-man; Muridian; Insectoid, Worker-Ant; Ape, Gorilla

Race Class C

Human, Felidare, Lion; Hobgoblin; Rhinoceri; Insectoid, Queen Ant; Ape, Chimpanzee; Ape, Orang-utan

Race Class D

Felidare, Cheetah, Puma/Leopard; Ursoid; Gnoll; Minotaur

Race Class E

Dwarf; Ogre; Kireean

Race Class F

City Dwarf; Insectoid, Mantis

Race Class G

Aquatic Elf; City Elf; Halfling

Race Class H

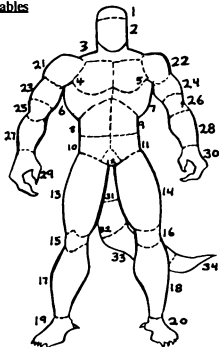
Elf

Hit Location Tables

Bipedal

Tailed

D100	LOC
1-4	1
5-8	2
9-11	3
12-19	4/5
20-27	6/7
28-35	8/9
36-43	10/11
44-48	12
49-53	21/22
54-58	23/24
59-62	25/26
63-66	27/28
67-71	29/30
72-76	13/14
77-81	15/16
82-86	17/18
87-88	19/20
89-91	31
92-94	32
95-97	33
98-00	34



Use this chart for Arachnoid, Canine, Felidare, Muridian, Saurian, Serpentine, and Toridare.

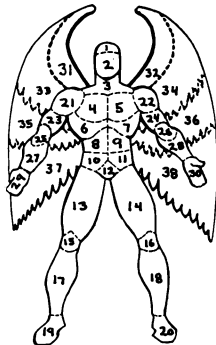
TECHNOLOGICAL LEVEL CHART

TECH LEVEL	TIME PERIOD	REFERENCE
0	Early Stone Ages	
1	Late Stone Ages	
2	Early Bronze Age	Ancient Egypt
3	Late Bronze Age	Classical Greece
4	Iron Age	Roman Empire
5	Early Dark Ages	Fall of the Roman Empire
6	Dark Ages	Norman Invasion of Britain
7	Middle Ages	Crusades
8	Late Middle Ages	Pre Gunpowder
9	Late Middle Ages	Advent of Gunpowder
10	Early Renaissance	
11	Renaissance	
12	Colonization	Revolutionary War
13	Early Industrial Revolution	American Civil War
14	Industrial Revolution	Zulu War
15	World War I	
16	World War II	
17	Korean War	
18	Vietnam War	
19	Computer Era	
20	Fall of the Communist Bloc	
21	Moonbase Established	
22	Solar System Exploration	
23	First Warp Drives	
24	First Galactic Empire	Blasters
25	First Galactic Dark Age	
26	Second Terran Empire	
27	Fall of Terra	
28	SpaceFleet Confederation Established	
29	Age of Peace in Space	
30	?????	

Bipedal

Winged

D100	LOC
1-3	1
4-6	2
7-8	3
9-15	4/5
16-22	6/7
23-29	8/9
30-36	10/11
37-40	12
41-44	21/22
45-48	23/24
49-51	25/26
52-55	27/28
56-59	29/30
60-63	13/14
64-68	15/16
69-72	17/18
73-74	19/20
75-78	31/32
79-85	33/34
86-92	35/36
93-00	37/38

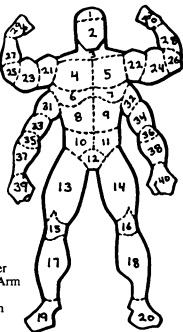


Use this chart for Hawkmen.

Bipedal**4 Arms****D100 LOC**

1-3	1
4-6	2
7-8	3
9-15	4/5
16-22	6/7
23-29	8/9
30-36	10/11
37-41	12
42-46	21/22
47-51	23/24
52-55	25/26
56-58	27/28
59-63	29/30
64-68	13/14
69-74	15/16
75-78	17/18
79-80	19/20
81-85	31/32
86-90	33/34
91-93	35/36
94-97	37/38
98-00	39/40

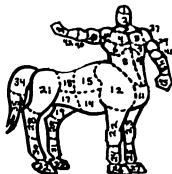
Shoulder
Upper Arm
Elbow
Forearm
Hand



Use this chart for Insectoid, Worker-Ant, Mantis.

Centaur**4 Legs, 2 Arms****D100 LOC**

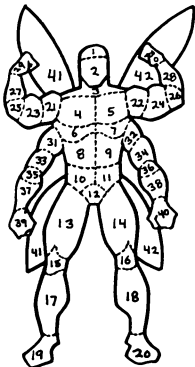
1-3	1
4-6	2
7-8	3
9-14	4/5
15-20	6/7
21-26	8/9
27-32	10/11/12
33-38	22/23
39-44	24/25
45-47	26/27
48-51	36-37
52-55	38-39
56-58	40-41
59-61	42-43
62-65	44-45
66-71	13/14/15
72-77	16/17/18
78-83	19/20/21
84-89	28/29
90-95	30/31
96-98	32/33
99	34
00	35



Use this chart for Insectoid, Queen-Ant, Centaur.

Bipedal**Winged, 4 Arms****D100 LOC**

1-3	1
4-6	2
7-8	3
9-14	4/5
15-20	6/7
21-26	8/9
27-32	10/11
33-36	12
37-40	13/14
41-45	15/16
46-48	17/18
49	19/20
50-53	21/22
54-57	23/24
58-60	25/26
61-63	27/28
64-67	29/30
68-71	31/32
72-75	33/34
76-78	35/36
79-81	37/38
82-85	39/40
86-00	41/42



Use this chart for Insectoid, Wasp.

Computer Programs

Computer Programs	Bananas	Hardware
Translate Single Language	3	ear/eye
Recognize Object per 10%	1	eye
Direction Indicator	3	no
Automatic Map (1 country)	2	no
Each Additional Country	1	no
Star Map	2	no
Mapping Program	2	eye
Text Display	1	eye
Remote Directions	1	no
Net Link	1	no
Inertial Tracking Program	1	inertial tracker
Sound Sampling	1	ear
Voice Analysis	1	ear
Sonar Mapping	1	sonar
Sound Matching	1	ear
Decibel Meter	1	ear
Atmospheric Pressure Interpret	1	atmosphere sampler
Skill Chip	2xcost	no
Database (linked with program)	var	maybe

Cybernetic Part

	Structure
Ear	3
Eye	3
Hand, std	5
Hand, STR 25	7
Hand, STR 35	9
Hand, each additional STR group	+1
Lower Arm, std	10
Lower Arm, STR 35	14
Lower Arm, each additional STR group	+2
Arm, std	20
Arm, each additional STR group	+5
Foot, std	6
Foot, STR 25	8
Foot, STR 35	10
Foot, each additional STR group	+1
Lower Leg, std	12
Lower Leg, STR 35	16
Lower Leg, each additional STR group	+2
Leg, std	25
Leg, each additional STR group	+5
Torso	30
Nose/Sinuses	2
Tail	10
Mouth	3
Throat/ Larynx	2

Hyperspace Mishap Chart

1D100 roll	Mishap
1-50	None. Trip is uneventful.
51-90	Weird occurrences. Meet yourself, etc. Harmless but interesting.
91-95	Temporal Echo - repeat the same time segment 1D10 times.
95-100	Off course! Miss destination by 1D100 light years.
101-110	Alarm! Pi is no longer constant. Things change shape.
111-114	Stuff randomly disappears from the ship
115-120	All people onboard ship become two dimensional for duration of trip.
121-123	All people onboard ship lose all skin pigmentation permanently.
124	Weight of random person(s) onboard ship increased or decreased by 6D10x10 lbs.
125	Height of random person(s) onboard ship increased or decreased by 3D20%
126	Random person onboard ship undergoes permanent sex change.
127-130	Random person onboard ship rendered invisible for 1D10 hours.
131-135	Alarm! Upon return to realspace, everything changes color.
136-140	Alarm! Mutagenic effects. Each passenger or crewmember has a 5% chance of receiving 1D3 mutations.
141-160	Alarm! Caught in Hyperspace stream. Off course by 1D100 x 1000 lightyears or more.
161+	Ship falls through interdimensional rift transported to unknown location.

Forgery Difficulty Chart

Effect Number	Ease of Noticing
-19 or less	Wit AST x 2
-10 to -18	Wit AST x 1.5
-5 to -10	Wit AST +2
-1 to -5	Wit AST
0 to 5	Wit CST
6 to 10	1/2 Wit CST
11 to 15	1/4 Wit CST
16 to 18	1/8 Wit CST
19+	Impossible.

Situational Modifiers for Picking Pockets

<i>Pouch</i>	0
<i>Pocket</i>	-2
<i>Metal Chain attaching item to belt</i>	-2
<i>In target's hand</i>	-8

Program Critical Failure Chart

1-10	Program works normally for 1 net action phase, but then fails
11-20	Program looks like it is working but only gives the illusion of working
21-30	Program works full strength for the intended victim
31-40	Program appears to work normally for intended victim but only gives the illusion of working
41-50	Program works with one major flaw
51-60	Program works with 1d4+1 major flaws
61+	Program simply fails

Program Critical Success Chart

1-10	Program automatically forces immediate derez of opponent
11-20	Program works with one random bonus (GM's choice)
21-30	Program works with 1d4+1 random bonuses
31-40	Program becomes invincible
41+	Program simply works at full capacity

Difference in Effect

Difference in Effect	Result for Net Combat
0-5	Standoff
6-10	Loser must "jack out"
11-15	Loser takes difference in effect numbers in damage
16 +	Loser loses consciousness for 1D10 seconds.

AFTERMATH! Time period Chart

1 Combat Turn = 60 seconds	= 10 Combat Rounds
1 Combat Round = 6 seconds	= 20 Action Phases
1 Action Phase = 0.3 seconds	= 1 Net Turn
1 Net Turn = 0.3 seconds	= 20 Net Phases
1 Net Phase = 0.015 seconds	

The character sheet is provided with inserts for the hit location diagram, also provided. Photocopy the sheet and the diagram appropriate for your race, and paste them together. Then when you photocopy it again, you will have a perfect character sheet.



Player
Character
Race

Age
P. enc
R.F.

Size
Bulk
Looks

Full ENC
Part ENC
Un ENC

BAP
MNA
PCA

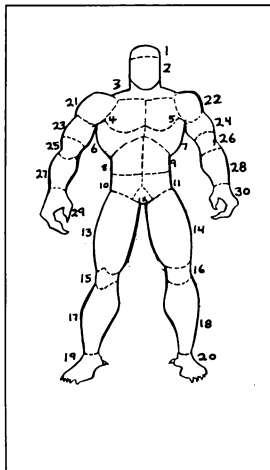
Attribute	Permanent	Current	AST	CST
WIT				
WILL				
STR				
DFT				
SPD				
HLH				
CHA		MCH		
CMB		NAT		
COM		SCI		
EST		MA		
HR		LR		
STR GRP		F.I.S		
CDA		BAP		
SF		MNA		
DRT		PCA		
		Off Hand Dexterity		

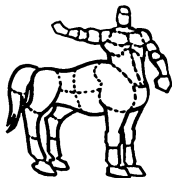
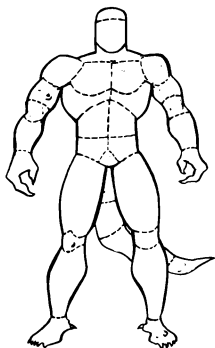
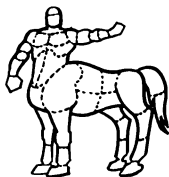
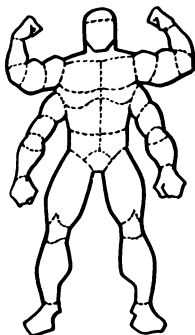
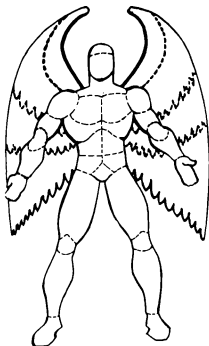
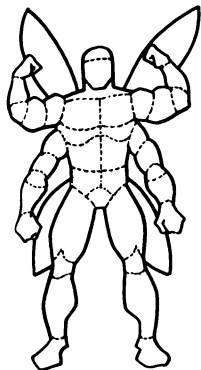
GUNS				Magazine	Caliber	ENC	DUR
Weapon	Format	Action	Capacity	(BDG)			

WEAPONS							
Type	Length	Format	Survival Value	STR	WDM	ENC	

Changed:

Skills | Score | BCS Skills | Score | BCS





AFTERMATH!

TECHNOLOGY!



AFTERMATH! TECHNOLOGY!

AFTERMATH! TECHNOLOGY! is a rules expansion and technology supplement designed for use with the **AFTERMATH!** role playing game system.

Included in this supplement are modifications to the original **AFTERMATH!** combat system, a Universal Character Generator with an expanded list and descriptions of 39 various humanoid races, details on over 100 cybernetic devices and options, rules for space travel (including faster-than-light travel), spaceship design, robots, alien creatures, a detailed listing of 38 new skills, High Tech and exotic equipment, detailed breakdowns on several hundred weapons, and simple rules for net running.

The information is kept as easy to understand as possible, to avoid complicating your game, while adding as much action and detail as possible. Both experienced **AFTERMATH!** players, as well as new ones will find this book an invaluable aid to their **AFTERMATH!** gaming.



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