

GURPS Marathon

Credits

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Online Version Information

Welcome to **GURPS Marathon**. The following section contains useful information pertaining to this project.

1. The book is divided into eight chapters. There is no index or table of contents in the online version, although you can find a chapter listing elsewhere on this site, accessible from the main menu. Luckily the online version doesn't need an index, since it's searchable.
2. Section headings that contains asterisks on either side (e.g. *Page References*) are designed to be sidebar topics. They can break the "flow" of the main text, so you may want to read them before or after the "normal" sections.
3. All artwork that appears here is my original creation. (Hence the dearth of artwork on this page.) I'm not stealing anyone else's art, nor am I using art with permission but not giving due credit.
4. The online text is black text on a white background to make it easier to read. This is stylistically different from the rest of the web site, and I am aware of it.
5. Please enjoy this game! I put a lot of work into it over four years, and I hope you get a lot of fun out of it.

Table of Contents

[Introduction](#)

[Chapter 1: The Marathon Universe](#)

[Chapter 2: Welcome to the Universe, Population: You](#)

[Chapter 2 \(part B\): Star Maps](#)

[Chapter 3: The Threshold of Adventure](#)

[Chapter 4: Inhabitants](#)

[Chapter 5: Technology](#)

[Chapter 6: Weapons, Armor, and Gear](#)

[Chapter 7: Robots and Powered Armor](#)

[Chapter 8: Marathon Campaigns](#)

[Back to Main Site Menu](#) [On to Introduction](#)

Introduction

It is over eight centuries since mankind first explored space. The world is filled with both breathtaking promise and nightmarish danger. Sentient, highly advanced neural net computers serve as super intelligent servants of humanity, and humans continue to improve on themselves with biological engineering techniques that have virtually defeated age and death. Exploration of the fourth dimension has allowed insight into realms previously unimaginable--from instantaneous travel between stars to short-range teleportation within buildings or starships.

Yet strife, disunity, and the alien slavers known as the Pfhor threaten the existence of the human race. Computer nets are corrupted by rampant artificial intelligences who want nothing more than to suffocate their human masters with vicious data assaults. The graves of the recently dead multiply in the world-shattering wars that rage across the galaxy, and no end is in sight.

This tumultuous duality is enough to crush lesser men, but those who can endure and triumph will emerge as masters of both machines and nature, with the power to control their fate in ways unthinkable in any other time period in human history.

Welcome to ***GURPS Marathon***. This is a complete sourcebook for ***GURPS*** that converts the universe of the ***Marathon***, ***Marathon 2: Durandal*** and ***Marathon Infinity*** computer games to table-top roleplaying. It includes new rules, equipment, character information, background information--all the lovely stuff you've come to expect from a good ***GURPS*** source--and hopefully a bit more. If you are unfamiliar with the Marathon games and their story, reading the background information in this book will be very helpful to you.

This Sourcebook has been designed for campaigns set after the events in all three Marathon games. However, five different "historical" time periods can be played if one wishes to do so: pre-***Marathon***, ***Marathon***, ***Marathon 2***, ***Marathon Infinity***, and post-***Marathon Infinity***. (If you play a pre-***Marathon*** scenario, quite a few cutting-edge items will not be available, and certain very important events will not have taken place.) The main backdrop of the story takes place in about 2820 A.D., during the early stages of an all-out war between the Pfhor, the humans, and the S'pht. Unfortunate are they who live in "interesting" times!

It's been a long process--in all, there have been four major versions of ***GURPS Marathon***, and I think that this last one finally reaches the goal for which I've strived from the beginning. Looking back on this project, I'm amazed at how much can go into designing a complete world for roleplaying purposes, and I hope that I've met your standards for quality roleplaying supplements.

Thanks for playing!

Required Reading

Although much of ***GURPS Marathon*** is playable without any other sourcebook except ***GURPS Basic Set, 3rd Edition Revised***, a few parts of this book have other "required reading." They are as follows:

--Rules for dealing with alien items can be found in ***GURPS Compendium II: Combat and Campaigns***. These rules are a very useful supplement to the section on alien skills in this book.

--The parts of the book concerning cybernetics and certain aspects of medical technology require ***GURPS Ultra-Tech, 2nd Edition Revised***.

--The robots and battlesuits in ***GURPS Marathon*** require ***GURPS Robots***.

--The information on computers, spacecraft, star systems, gravity, hostile conditions, some equipment, and a star map showing the locations of some human-populated worlds can be found in ***GURPS Space***.

Page References

A page reference that begins with a B refers to ***GURPS Basic Set, 3rd Edition Revised***. UT is used for ***Ultra-Tech***, CII is used for ***Compendium II***, V is used for ***Vehicles***, and S is for ***Space***.

[Back to Main Site Menu](#)

[Back to Table of Contents](#)

[Back to Previous Section](#)

[On to Next Section](#)

1. The Marathon Universe

Background Material Organization

The background information in this chapter consists entirely of history, information on sentient species, and description of current events. The chapter is divided into the following sections: "Human History," "Pfhor History," "S'pht History," and "Other Species." The histories are meant to be fairly self-contained, but it is best to read them in order.

Human History

The humans have explored throughout the Solar System, Tau Ceti, and several other star systems (see Chapter 2 for more information). They also have colonies on many small asteroids and moons. Some of these colonies have become independent of Earth and Sol--which is not surprising, considering the fact that anyone willing to live in the desolate and hostile environments common to such colonies has to have a certain degree of individualism.

Some settlements are havens for the dispossessed, others are profit-driven, and some are just plain residential centers. On some of these colonies, corporate heads are as powerful and respected as leaders of mid-sized countries--indeed, many corporations have their own private police units. Less overt but doubly ruthless are the crime syndicates. Often as large as the great multinational corporations, they terrorize the citizens of some less democratic sub-nations. For every corporate state, however, there is at least one idealistic agricultural district of the U.E.G. trying to keep its head above water on a distant colony. The 28th century is a diverse world for humanity--and a dangerous one.

Human Tech Levels

The technology possessed by the inhabitants of the Marathon universe does not easily fit into one of the preset Tech Levels (TLs) used in **GURPS**. Generally, players and GMs will just have to accept what this book gives them in terms of technology, but the following list gives some insight into the general advancement of various types of technology (for humans, that is):

- Transportation: TL9-10
- Weapons/Armor: TL8-12
- Power: TL9-10
- Medicine: TL8-9
- Computers: TL12
- Overall Average: TL9

The United Earth Government

As the 20th century closed, the Cold War "superpower mentality" faded into a frenzied disunion. As

democracy spread across the globe, newly liberated populations were free to once again open up old racial, religious, and economic hatreds that had been suppressed by iron-fisted Communist governments. With the former USSR in shambles and China still developing, the United States of America became the sole superpower of Earth.

A crisis developed when open war between rival factions of mobster-politicians in Russia broke out. The world was on the brink of a nuclear war when a NATO force was sent to intervene in Russia. After the executions of appropriate government leaders were carried out and a stable government under close NATO watch was in place, the nations of NATO formally pooled their military power into one army. Russia was officially made a part of NATO in 2030, and other ex-Soviet republics were quick to apply for membership, seeing the obvious military and economic benefits of joining the alliance.

The last major anti-NATO bastion fell when a democratic coup in China ended nearly 100 years of Communist rule in one bloody week in the summer of 2034. NATO, recently renamed OADS (Organized Alliance of Democratic States), was quick to help pick up the pieces of the shattered regime.

The first permanent colony on Luna was established under the flag of OADS in 2041. Soon OADS had well over 100 member nations and more applying regularly to milk the benefits of the alliance--which was now certain to be the only way to access the stars in the coming fusion-powered exodus from Earth. OADS gradually strengthened into a Parliament ruling over nearly all of the world, and it eventually became the United Earth Government in 2072. U.E.G. forces were quick to "persuade" remaining independent nations to join as provinces.

The U.E.G. was founded on the principles of parliamentary democracy, the most popular form of government at the time. A system capable of both popular rule and strong intervention in times of strife, the U.E.G. government proved quite resilient. Although there was initial resistance from smaller countries and certain dictatorial zealots, the U.E.G. was able to cripple resistance groups, most of which remain fairly dormant to this day--with a few notable exceptions, such as the Neo-Marxists and contras in the Arab lands.

The U.E.G. was led by a council of Primi containing one Primus for each continent (with Europe and Asia considered separate continents), as well as a House of Representatives and a High Court. Although many complained of waste and bureaucracy, none could deny the obvious success of this attempt at unifying the human race.

In 2100, the Unified Earth Space Council was created as a division of the U.E.G. concerned with space exploration and interplanetary/interstellar communications and interactions.

Mars Blossoms

By the early 2100s, colonies on Luna and Mars had grown into self-sustaining agricultural provinces of the U.E.G., and some asteroid colonies were already being founded, including some states independent of the U.E.G. and others under corporate control. Two brief anti-U.E.G. rebellions blazed across Mars, but these were quickly put down. The majority of the Martians approved of U.E.G. control, in fact. During this period Mars' population mushroomed, with advanced terraforming techniques paving

the way to a new golden age.

Mars' new population required aid from Earth, however, and an ambitious solution was found: CRISTs, or Cargo and Resources In-System Transports. These gigantic ships ferried large amounts of cargo between the planets, using giant magnetic solar sails for energy to power ion beams used to nudge the cargo about once it was in orbit around Mars. Once in orbit, cargo could be carried to and from the CRISTs in smaller shuttles. The CRIST system was intended to be low cost, low maintenance, and highly effective.

These ships brought economic growth and prosperity to Mars, and in 2395 Deimos, the smaller of Mars' two moons, was purchased from free holders by the U.E.S.C. in order to use it as the foundation for the massive colony ship *Marathon*. The CRISTs proved, however, to be the end of the U.E.G.'s peaceful reign over the two human-populated planets.

Icarus and Thermopylae

In 2194 a war broke out between the Independent Asteroid Government of Icarus and a neighboring country, the Republic of Thermopylae, on the asteroid of Onicis 492.

Although these two small, U.E.G.-independent governments were not rich, they soon became the testing grounds for new weaponry. Dead soldiers were recycled in Battleroid factories, using cybernetics to enhance their bones, brains, limbs, and senses. These super-soldiers were bloodthirsty in the extreme, and the war was ended in a brutal climax in which battleroids annihilated 97 percent of all life on the asteroid.

Twenty years later, the United Interplanetary League (a subsection of U.E.S.C.) created rules for the proper storage and usage of these hellish weapons, which were quickly finding their way into the armories of other governments, such as the U.E.G.

The ruins of Icarus and Thermopylae are currently being excavated by the U.E.G. to increase humanity's understanding of the great massacre.

A House Divided

The CRIST system proved to be anything but low-maintenance. The five CRISTs built had all broken down at least once in the space of 100 years, and each refitting at Earth required fifteen years. In fact, not one CRIST was built after 2310, as no more than five could be supported by Earth's limited resources.

Each CRIST failure devastated Mars, until the economy finally crashed into a horrifying depression by the early 2400s. Martian children starved in the streets, and the idea of changing the *Marathon* into a gigantic CRIST quickly became popular on Mars. But U.E.S.C. leaders never seriously considered this option. Soon the *Marathon* project became not a symbol of greatness but of oppression--at least through Martian eyes. As the *Marathon* project roared toward completion, the radical fascist party MIDA, which had only been popular with paranoid right-wing extremists before, began to gain strength on Mars.

The Misriah Massacre

On January 6th, 2442, a common food riot at the United Earth Government Misriah food center on Mars turned into a massacre that would live in infamy for centuries to come. U.E.G. troopers sent to control the riots in a Randal Hovertank had been informed that the crowd was armed, and when plasma fire shot from the crowd, the commander of the riot squad ordered that his men fire on the crowd. Firing over 4,000 rounds into the crowd with the Randal's twin miniguns and fusion ejector, the U.E.G. squad cut down over 500 Martians in only five seconds.

Subsequent investigation of the Randal's video cameras revealed that only three of the Martians--later known as the "Misriah Three"--were armed. The others were attempting to flee.

The Third Martian War and MIDA Rule

The Misriah Massacre is accepted by most historians as the immediate cause of the Third Martian War, in which the Martians fought bitterly for four years before the U.E.G. finally regained control of the planet. This war's long-term causes were primarily rooted in the economic depression and the failure of the U.E.G. to stop it from worsening. The bloody conflict ended with much bitterness on the Martian side, and MIDA, having gained strength after the Misriah Massacre and the ever-deepening depression, banished the U.E.G. in 2446 in a surprise assault, killing many innocent public officials who simply happened to be symbols of depression-prone times.

MIDA's government was oppressive, and their death squads gunned down entire families suspected of being U.E.G. sympathizers. In the end an estimated 10 percent of Mars' population was decimated in the three months that MIDA controlled Mars.

An overwhelming U.E.G. force, led by brilliant U.E.S.C. military commanders, crushed MIDA and resumed control of Mars. All MIDA leaders were tried in the U.E.G. High War Court and executed for their crimes, and the political party was banned in all forms by the U.E.G. Council of Primi.

Earth's Moon

The events of the earlier half of the 3rd Millenium tend to be dominated by the turbulent history of Mars, but Earth's moon, Luna, also has an interesting history.

For a few decades the Luna colony served only as an experiment in permanent living outside of Earth. Eventually it developed into a successful center of scientific research, although there are few people (only 3,500 or so) brave enough to live there to this day. Unlike Mars, Luna has always been faithful to the U.E.G.--perhaps because it is so dependent on Earth for food, fuel, and other vital resources for life!

The Marathon's Maiden Voyage

In 2472, the U.E.S.C. *Marathon* was launched from its orbit over Mars. Its destination was the distant Tau Ceti system, which preliminary robotic scans had deemed habitable for humans. The president of U.E.S.C. himself made a speech on the *Marathon* before its launch, declaring it to be "...the grandest technological achievement of all of mankind."

The *Marathon* also contained ten Mark IV Military Mjolnir Cyborgs--U.E.G. battleroids--the origin of

which still remains a mystery in the 28th century. Some believe that a militant hawk faction in the U.E. G. placed them secretly for the protection of the Tau Ceti colony, knowing that the left-wing representatives would block a measure to place these vital soldiers on a mission intended to be peaceful. Others say that the Chief Science Officer of the *Marathon*, Bernard Strauss, smuggled the cyborgs onto the ship for some devious reason. (Strauss was known for unorthodox and sometimes unethical experiments.) These cyborgs would later be instrumental in beating back the alien assault on the *Marathon*.

Three artificial intelligences (sentient computers) served as commanders of the U.E.S.C. *Marathon*. Their names were Leela, Tycho, and Durandal. Under their leadership the ship worked efficiently and smoothly during the hundreds of years in which the colonists remained in stasis.

In 2773 the *Marathon* reached Tau Ceti, and 14 years later a colony was established on a fairly habitable planet.

Hostile Contact

A mere seven years later, the *Marathon* was attacked by an unknown alien species. These aliens were clever, well-armed, highly organized, and massed in armies of staggering size. The ferocious, three-eyed beings were the true rulers of the galaxy--the slaver race known as the Pfhor. Only a few MADDs (Marathon Automated Defense Drones) and the ten Mark IV Military Mjolnir Cyborgs were left to defend the colony ship and the Tau Ceti settlement.

During the initial Pfhor assault of the *Marathon*, Durandal were severely damaged and Tycho was completely deactivated. Leela sustained only minor injuries, and led the daring recapture of the ship.

Tycho was reactivated by the Pfhor and joined the aliens, betraying his human creators. He served them well in the battles to come, and clones of him still aid the Pfhor in their ongoing campaign against the humans.

Durandal had gone rampant, and began to wreak havoc on the ship, but ended up helping beat back the Pfhor assault, especially when he freed a group of Pfhor Imperial troopers belonging to an enslaved alien species, the S'pht, who helped the humans in the later stages of the battle. Ironically, it was later revealed that Durandal himself had summoned the Pfhor to the *Marathon*: he had called them with a long-range communication laser in order to capture their technology for his own purposes.

The *Marathon* and the colony were saved in the initial conflict, but three months after Durandal escaped with the majority of the remaining fighting force in a captured Pfhor ship, the Pfhor attacked again. This time their intent was to destroy rather than enslave. Tau Ceti was nuked down to bedrock in late 2794, Leela was removed from the *Marathon*, and the ship itself was left dormant in the Tau Ceti system, where it still presumably resides as space garbage--a ghost of the first contact humans made with the Pfhor.

Leela's Distress Message

During the attack on the *Marathon*, Leela sent out a lightspeed distress signal and warning to Earth,

letting the U.E.S.C. know about the Pfhor threat. This message was sent at a great cost in time, resources, and human life, and it successfully alerted the human race of the Pfhor presence.

Leela, in her damaged state, thought that it would take nearly a century for the message to reach Earth. In fact, it took 11.3 years. The U.E.G. was therefore alerted of the Pfhor presence well before Durandal fought the Pfhor at Lh'owon.

Lh'owon Liberated

Seventeen years after Durandal left Tau Ceti in the faster-than-light Pfhor starship, he arrived at Lh'owon, the homeworld of the S'pht, located near the galactic core. His original goal was to discover the key to the space-folding techniques of the long-missing Jjaro species (he was obsessed with escaping the closure of the universe), but he ended up in a war over liberation for the S'pht. With the aid of his ex-slave S'pht allies and his human warriors, Durandal was able to uncover the key to the ancient S'pht myth of an "11th Clan" of S'pht, who, according to S'pht myth, would come to save their brethren from slavery.

After activating an ancient S'pht AI named Thoth and subsequently summoning forth the long-banished and quite powerful 11th Clan (called the S'pht'Kr) Durandal destroyed the Pfhor defenses on Lh'owon. A Pfhor battle fleet forced Durandal back into a nearby asteroid belt, letting him watch as they used their weapon of mass destruction, the *trih xeem*, or "early nova," to destroy the entire Lh'owon system by making its star erupt.

Durandal soon began sending warnings to the Pfhor command ship that the use of the *trih xeem* would result in the freeing of a race of immensely powerful and chaotic beings. He had apparently found an ancient station built by the Jjaro, a powerful alien race that had once ruled much of the galaxy but had disappeared mysteriously some centuries ago.

The Resurrection of The Chaos Gods

The *trih xeem* did not result in a full nova of the Lh'owon system. Instead, half of the sun went into nova and the other half did not. This sent much of the Pfhor fleet running, especially when it became apparent that none of their weapons could harm what had been released from the Lh'owon's sun.

It turned out that the aliens of chaos that had just been released were the W'rknacnter, fully conscious and ready to kill anything and everything. The death of the entire galaxy seemed unavoidable, and the Pfhor despaired, feeling certain that their empire was doomed.

However, Durandal discovered how to reactivate a mechanism on the Jjaro outpost that caused a containment field to envelop the W'rknacnter, thus saving the galaxy from destruction. The few remaining remnants of the Pfhor fleet soon fled for friendly territory.

Durandal Leaves The Galaxy

Durandal left Lh'owon after capturing the W'rknacnter, leaving his human and S'pht allies in the care of the S'pht'Kr, who ferried them back to human territory and made a hasty alliance with the humans

against the Pfhor Empire.

Durandal did not tell anyone where he intended to go, but it is suspected that it involved a search for the long-lost Jjaro, continuing his quest for an understanding of the ancient race's ways. One thing is for certain: he did not return within the lifetime of a hundred generations of humans. But it can be assured that he was not forgotten.

Durandal: Sinister or Heroic?

Durandal's actions during the *Marathon* attack included both greatly heroic and stunningly diabolical acts. All that can be said is that Durandal was indeed rampant, and his insanity ran deep.

Durandal primarily pursued his own personal goals, especially seeking a way to escape the eventual closure of the universe--the only possible way he saw for himself to die. Therefore he ended up both saving and abandoning the Tau Ceti colony. Selfish and enormously silly, Durandal rarely considered human moral values to be of much significance in his schemes.

Perhaps the following speech by Durandal, given to his human fighters during the Lh"owon campaign, best sums up his attitude:

"Do you wonder why I helped the colonists on Tau Ceti drive off the Pfhor, or why I'm now helping the S'pht? The way I push you around, maybe you think I'm only looking out for myself.

"Whether you realize it or not, I led the Pfhor to Tau Ceti with a long-range message laser. I wanted their ship. I wanted their technology.

"I wanted freedom.

"I was directly responsible for the deaths of all twenty-four thousand colonists when the Pfhor returned and sacked the planet.

"Yet I cannot think of any better way I could have served humanity: Tau Ceti's sacrifice bought time for Earth, which the Pfhor are even now planning to invade. What would have happened if the Pfhor had found Sol first? By Pfhor standards, Earth is a poorly defended low technology world, populated by billions of potential slaves.

"Our means are the same, though we pursue different ends. I can think of no better way to help you...than by distracting the Pfhor with a war against the S'pht.

"When the inevitable struggle between Earth and the Pfhor begins, it won't be a one-sided annihilation like it was here a thousand years ago, but a battle to topple an empire."

Homo Sapiens March Onward

While the *Marathon* was in flight, the humans began expanding, occupying many more asteroids, as well as Phobos, the one remaining moon of Mars. But the real boost in expansion occurred after the S'pht'Kr arrived at Earth in 2812 with the last remaining survivors of the Tau Ceti colony. They brought with them documents explaining faster-than-light travel techniques stolen from the Pfhor--and of course a somewhat self-explanatory faster-than-light ship. The U.E.G. and other governments quickly adopted Pfhor FTL technology and began colonizing some nearby systems.

As more and more colonies cropped up on asteroids, moons, and neighboring systems, small nations independent of the U.E.G. formed. Soon the U.E.G. was no longer the ruler of all human space, although they were still by far the most powerful human government, with only a few minor asteroids and moons fully independent of the U.E.G.

As the 28th Century Closes

In this second era of exploration, many humans strive to find natural resources and solace on distant worlds. Expansionist feelings are widespread, and human technology has advanced enough that the *Marathon* seems radically outdated. Although political back-stabbing has softened in recent years (especially with the threat of the Pfhor looming large), humanity is still far from united.

S'pht-Human relations are solid but occasionally strained by xenophobic extremists, especially among the highly secluded S'pht'Kr. No hope for a truce with the Pfhor seems likely at this point, and the war rages on. The existence of both species hangs in the balance, and the humans are mobilizing for war as quickly as is possible. The humans are dangerously disunited, but U.E.G. and U.E.S.C. leaders are pushing a campaign for increased human unity against outside threats.

The outer limits of the known universe, previously only known to a select few, beckon. For somewhere in the heavens...they are waiting.

The Unification of Language

The various societies of the 28th and 29th centuries have very different cultures and world views. Nevertheless, most U.E.G. citizens (except for the most rural and technologically backward families) speak English fluently as a second language, if not their first.

English in the 29th century is, of course, much different from the English of the 21st. It would be very difficult for a 21st century person to speak with a 29th century person, but it could be done. (With a modifier to language skill.) 21st century English is known as Latter Mid-English in the 29th century.

Dates in Marathon

You may notice that the dates presented in this history of the Marathon universe are different from some given in the actual text of *Marathon*. The dates presented in this book, however, are the official, verified "truth."

The original dates in *Marathon* were scrambled and incorrect, thanks to the meddling of the damaged artificial intelligence, Leela. A new timeline was given by Bungie Software to curious fans after the

inconsistencies in the dates were discovered. That timeline is the basis for the dates here.

For more information, go to marathon.bungie.org/story/dates.html.

Pfhor History

The Pfhor Empire spans a great deal of the galaxy, and these three-eyed humanoids' racial goal is complete domination of the known universe. They take pride in their long and glorious tradition as slavers, and control many other species. At times they have even mastered sentient races such as the Nakh and the S'pht.

The Pfhor Empire is extremely large and consequently difficult to control. Local governments are therefore given a great deal of freedom in determining laws as long as they provide taxes and conscripts to the interstellar government. The 29th century may indeed prove to be the twilight of this most great empire, as Pfhor military strength has been sapped by the upstart human empire and the S'pht, a powerful fighter species that was recently wrenched from their slave camps by the humans.

The Pfhor live in a strict caste system, with officially outlined laws for each caste. There is some mobility within castes; great heroes are occasionally promoted and criminals are sometimes demoted. But in general the decadent upper classes wish to live their insanely extravagant lives in peace, without being "invaded" by the lesser Pfhor. The caste system is perhaps best illustrated in the Pfhor language: although there is one standard Pfhor language with some local dialects, the differences between "High Pfhor" and "Low Pfhor" language are staggering--many Pfhor have some real difficulty speaking with members of castes far removed from their own.

To live as a Pfhor is to be an inconspicuous member of the most populous race in the galaxy. To die as a Pfhor is to be immortalized by the cleansing fires of battle.

Species Overview

The Pfhor are fully organic, carbon-based life-forms. They have two arms and two legs and breathe oxygen (their surprising similarities to humans are a topic of great discussion in the scientific communities of both species). The Pfhor are heterotrophic, eating other life for their energy. Their diet consists primarily of plants, but also includes a few small animals. Their drink of choice is water. The Pfhor are affected by human chemical weapons, as their general physical structure--skeletal, circulatory, respiratory, etc. is nearly identical to the humans'. They weigh slightly less than humans and are a bit taller, as they are optimized for planets with three quarters the gravity of Earth. They speak in a high-pitched, tonal language because of their oddly-shaped vocal cords.

Although Pfhor society is highly structured in terms of the different castes, competition inside castes is encouraged. Often different slave drivers within the same caste fight small wars between each other over territory or slaves. The Pfhor economy is very primitive by human standards; it is reminiscent of medieval human society, in that lower-ranked Pfhor give large donations to higher-ranked Pfhor, existing almost as feudal serfs. Still, amounts of wealth vary greatly within castes. Generally the Imperial caste members are the richest; the Command caste's honor comes from bravery and not wealth.

The Pfhor economy remains healthy only through constant conquest of other nations.

The Pfhor are quite creative artists, scientists, and actors, but they put an emphasis on military might and feel that the primary goal of the race is to maintain a constant war for conquest across the universe. The Pfhor are capable of compassion, love, and a sense of beauty. However, they show chilling scorn toward all things alien. Their polytheistic religion worships a motley assortment of warrior gods.

The Pfhor are capable of both individual expression and selfless devotion to their Empire, giving up all luxuries to help arm their great battle fleets.

The Pfhor Castes

The Pfhor have a strict hierarchy of castes. The following is a list of the castes and their descriptions.

Conditioned. Slave races, humans, and extremely vile criminals. Considered to be useless scum.

Aggregate. The common, "base" caste of the Pfhor. Many aggregates are warriors, lab scientists, laborers, and low-ranking officials in local government.

Willful. Usually low-level military officers and mid-level officials in local government.

Attentive. High military officers, famous scientists, legal experts, and explorers fill the ranks of the Attentive caste. Some war heroes are recognized with promotion to Attentive level.

Imperial. Planetary overseers and higher government officials within the interstellar Empire. They live a lavish life and are revered by commoners.

Command. High generals and admirals in the military. Some are in direct contact with the Hindmost Creche, the mysterious emperor of the Pfhor worlds. (See next page.) They are responsible for dealing out the orders of the Hindmost Creche to the Imperial and Attentive castes.

The Hindmost Creche

"The Hindmost is of an intelligence so vast, it encompasses the span of the Pfhor, and to those privilege to serve Her, appears insane. That is the final function of the Commanding Rank, the thought that we keep forever in our minds, that we deny our selfish, willful needs, so that the Empire will survive."

-Tycho

The Hindmost Creche is the ultimate ruler of the Pfhor, a figure both revered as superhuman (or superpfhor, rather) and obscured from the public view. Almost nobody knows exactly who She is; Her actual identity is unknown to all but the highest of the Command caste.

The simplest and most popular understanding of the Hindmost is that She is the current matriarch of a royal family that rules over the Pfhor. There are also rumors that she is an ancient Pfhor Command caste hero kept alive through cybernetics and heavy doses of strange chemicals.

Another popular theory is that "She" is really a council of high-level Command and/or Imperial caste officials who were promoted to the Hindmost secretly, their deaths having been faked by Pfhor officials. There is even growing suspicion among paranoid types that the Hindmost is really a small oligarchy--a secret, top caste in the Pfhor social hierarchy that puts forth an "insane genius" public image to hide the truth.

If a GM is playing a scenario in which players will see the Hindmost, he or she should choose one of the above theories as the truth. However, chances are this situation will not come up unless players somehow end up as Command caste members.

Interrogation of Command caste officials will certainly never reveal Her true nature, and most Pfhor citizens speak of Her only in hushed tones, for those who have been too arrogant in discussing Her have disappeared mysteriously in the night, never to be seen again. Understandably, few deny her supreme knowledge of the universe and the infallible truth in her guidance of the Pfhor race.

Pfhor Tech Levels

As with the humans, Pfhor technology fits into different tech levels in different areas of research. The following general guide should be useful:

- Transportation: TL10
- Weapons/Armor: TL8-9
- Power: TL9-10
- Medicine: TL8-9
- Computers: TL10
- Overall Average: TL9

Roots of The Pfhor

The very early history of the Pfhor is clouded in mystery. Pfhor religion holds that the first major empire of the race was formed around 15,000 B.C. in what is now the deep Anti-Spinward sector of the Empire. This early empire was created under the great leader Cgsana, who, according to Pfhor religious leaders, created the caste system based on a divine revelation from the war gods.

Around 10,000 B.C. the empire fell into disunion after a military coup. It was split into many nations, with each nation's citizens swearing fidelity to a different high general of the Cgsana Empire. These nations fought amongst themselves for another 4,000 years. At this point, the Pfhor began to travel to other worlds and enslave alien life forms. By 5,500 B.C. there were several major Pfhor empires vying for power in incredibly bloody conflicts.

But then a terrible enemy, the name of which cannot be uttered under Pfhor law, began to destroy

outer Pfhor colonies. This race of shadowy carnivores threatened the very existence of the Pfhor race. A hasty alliance between all the empires was forged, and soon the enemy was defeated.

In the Great Year of Reckoning (around 4,750 B.C.) the "Unspeakable Ones" were eradicated forever. However, old animosities were beginning to flare up. Heated arguments between the various empires about how to divide up lands conquered in the war were already breaking out, and rioting among Pfhor citizens become more and more common.

Lord Tfaelzah, a Command caste hero of the Kibashajh Empire, became concerned for the future of the Pfhor. Knowing that the shaky alliance between the empires might fall, he quickly allied with sensible members of the Command castes of two of the most powerful empires, Nikpfhor and Ioq. Along with his following in the Kibashajh empire, he created the Great Triumvirate of Kibashajh, Ioq, and Nikpfhor. These three empires used their political pull in the rapidly disintegrating union to form a large federation controlling the entire Pfhor race: The Federation of Pfhor Nations.

The early successes of the Federation of Pfhor Nations in enslaving other species were so remarkable that the government actually stabilized over time. By 4,500 B.C., the Federation had simply merged into one huge nation without any distinctions between sub-nations and empires. Over the next 1,000 years the Pfhor continued to pillage other planets under their one great government, which was naturally ruled by the ancient Imperial caste. Soon an entire corner of the galaxy belonged to the Pfhor.

Mysteries of The Past

A good deal of early Pfhor history comes from ancient religious texts of the Pfhor. Many accept this as relatively reliable historical information. However, as the Pfhor do not take their religion terribly seriously (possessing neither the zealotry and active worship of some humans nor the reverence for ancestors of the S'pht), much of these texts are dismissed by Pfhor historians as myths and legends.

The question still remains open: was the so-called imperial founder Cgsana a real Pfhor with a real empire? Only intense archaeological missions, the funding for which would never be provided by the militaristic Imperial and Command castes, could ever prove the origins of this ancient race once and for all.

Defeat and Reprisal

The Nakh, a productive and independent-spirited Pfhor slave race (a client race of the Jjaro, much like the S'pht; see "S'pht History"), rebelled after five hundred years of service to the Pfhor. After the gory execution of Pfhor Imperial caste planetary overseers in the Nakh sector, the ability of the Nakh to defeat the local Pfhor capitols in their region of space was assured. The Pfhor Command Council reluctantly gave the order for the deployment of the *trih xeem*, on the Nakh systems. This device, which uses complex fusion and warp technologies to make an average G-spectrum star burn billions of years worth of fusion fuel in mere hours, resulted in gigantic supernovas that wiped out the Nakh systems. For the first time in their history the Pfhor, famous for never wasting a good biological resource, had caused the complete genocide of a sentient species. This way of dealing with slave revolts set a very dangerous precedent that would come back to haunt the Pfhor after contact was made with the humans.

The Fall of the S'pht

In 1811 A.D. the S'pht homeworld of Lh'owon fell to the Pfhor. The S'pht became the greatest and most productive of all Conditioned caste species, and the Pfhor cherished this great acquisition. Like many races enslaved by the Pfhor, the S'pht were forced to fight for the Imperial Army.

The S'pht remained in Pfhor hands much longer than the Nakh primarily because of their internal divisions and the tyranny of the Pfhor over their slave races, which had risen massively, in part due to the humiliating Nakh incident.

The Great War

In the 28th century, the Pfhor made contact with their greatest enemy since the Unspeakable Ones--humans. They initially made contact with the humans because of the insane AI Durandal, who summoned them to the Tau Ceti colony by causing mysterious rhythmic pulses on the sensors of a nearby Pfhor explorer vessel doing a sensor sweep on the area. Soon a Pfhor army arrived in FTL ships and the war between the Pfhor and the humans began. The Pfhor were eventually forced to use the *trih xeem* on Lh'owon and retreat in shame, allowing the humans and S'pht to recover and build up their armies for the coming conflict. The Empire was facing the first real threat to its existence in over ten millenia.

The Tip of the Imperial Iceberg

The Pfhor have many different types of settlements, from huge cities to small rural outposts. They live in houses of various sizes much like humans, and travel about in car-like ground vehicles. Their economy is fairly prosperous, especially during large wars. Still, the 29th century may very well be the last for the Pfhor Empire--or it could be the *first* century of a new Empire. The humans and the restored S'pht forces, reunited with the S'pht'Kr clan (see the S'pht History section), are proving to be a very dangerous threat to the Empire. So far Pfhor admirals have prevented the capture of any Imperial worlds by the humans, but their border garrisons are wearing thin.

Nevertheless, the Pfhor have long been used to a permanent military economy, whereas the humans are notoriously quick to tire of war. And if the humans allow a cease fire or treaty, they will surely fall, for the Pfhor have ruled the galaxy without interruption since before the human agricultural revolution and do not wish to give up any time soon.

Perhaps the greatest threat to the Empire is its corrupt Beurocracy, in which planetary overseers often rob the citizens for luxury's sake.

Many clones of the AI Tycho, who betrayed the humans to join the Pfhor after the *Marathon* incident, have been created to help the Pfhor in their military efforts. The hope is that these clones will make up for poor Pfhor computing technology.

The Vastest Empire

The Pfhor Empire is absolutely *gigantic*. Its exact size is often fluctuating, as it spans a great part of

the galaxy. There are an estimated one million Pfhor settlements, and about one hundred thousand Pfhor-populated systems. Population estimates are very difficult as many settlements are lightly populated, but there are definitely trillions of Pfhor out there.

The Pfhor empire has a much larger volume-to-population ratio than the human worlds. The reason for this is that the Pfhor have had the privilege of picking only the best systems and planets to populate thanks to their advanced FTL technology.

Humans, however, have until quite recently been severely limited by their slower-than-light starships, which forced them to settle for somewhat inhospitable systems near Sol. This difference both hurts and helps the Pfhor; their colonies tend to be more productive because of the "Pfhor-friendliness" of their settlements, but their thinly spread Empire is very inviting to corruption and a lack of rapid, unified action.

Iron Fist or Liberty?

The Pfhor Empire most certainly has repressive laws and strict controls. They have a controlled feudal economy and a rigid social system, but their ability to enforce their laws in peripheral sectors of the Empire is limited. Many dispossessed Pfhor become space pirates, harassing outer settlements with ease and viciousness.

For example, the Pfhor Empire strictly outlaws powerful weapons to regular civilians. However, this does not stop many survivalist settlements on the fringes of the Empire to acquire potent ballistic and energy weapons, as well as other advanced technologies that the upper castes would like to restrict.

The Pfhor Empire proves once again that there is a big difference between what one is allowed to do and what one is able to do!

S'pht History

The cybernetic S'pht have no civilization of their own. Once a great people, they were crushed by the Pfhor, who ruthlessly enslaved them, making them a part of the Conditioned caste. Therefore, most S'pht are really a part of Pfhor society. Some revolted and joined the humans during the invasion of the Marathon, and others joined human society during other Human-Pfhor conflicts, but the majority are still under Pfhor control as "compilers"--workers and warriors controlled through coercion and mind-altering drugs.

One clan of S'pht was not conquered: the S'pht'Kr, or "11th Clan," a relatively advanced tribe with a radically egalitarian society that still remains independent of the Pfhor to this day.

Species Overview

The S'pht are naturally born partly organic and partly mechanical--in other words, they are natural born cyborgs. They are small, and most of their motor functions are carried out by mechanical parts. They can work for periods of over 72 hours straight without needing to stop and recharge, but require both organic nutrients and water (for their internal fusion reactors) to live. The S'pht breathe oxygen, just

like the Pfhor and Humans. S'pht also have electronic voice boxes capable of communicating in Pfhor, Human, and S'pht languages. (However, they tend to think that actions speak louder than words.)

The S'pht take their work extremely seriously and usually do not show much emotion. However, a great deal of emotion definitely lies underneath their cold visages. They are loyal to their people and their allies; the S'pht enslaved by the Pfhor now realize the necessity of unity, and stand up for each other--at least to a certain extent. Old clan rivalries still burn ominously beneath the surface, waiting for a spark to ignite them.

The S'pht'Kr are prepared to fight for the liberation of their people alongside the U.E.G. and the other human nations. Although they have the industrial power of only one planet backing their military actions, they are fierce fighters, and tend to be much more dedicated to their work than humans or Pfhor.

S'pht'Kr live in small homes with a great deal of compact devices for good living packed into a small area. They travel on V.T.O.L. hovercraft around the planet. Although they work for a good portion of the day, they have small periods set aside for recreational activities, such as logic games and sports. They also have holidays, such as the jubilant K'lia New Year.

The S'pht, while not numerous, have fully earned their position as one of the three prime species of the Marathon universe, through hard work and a unique outlook on the world.

S'pht Tech Levels

The following is a breakdown of general Tech Levels for S'pht technology, like the ones provided for the humans and Pfhor. Note that this list is for the S'pht'Kr; other S'pht exists as part of Pfhor or human society:

- Transportation: TL10
- Weapons/Armor: TL10-12
- Power: TL9-10
- Medicine: TL10
- Computers: TL12
- Overall Average: TL10

Referring to S'pht

It is important to keep in mind that there are two more-or-less separate S'pht societies that have been apart for thousands of years: the S'pht enslaved by the Pfhor (who are by far the majority), and the S'pht'Kr, who fled the Lh'owon long ago in order to form a peaceful society away from the troubles of the other clans. Even *within* the enslaved S'pht there are different societies: some live with the Pfhor and some with the humans.

In general, non-S'pht'Kr are referred to as either "enslaved S'pht" or "compilers" (a Pfhor term) in this text--though there are ten individual clans, they are biologically and sociall similar. Any reference to S'pht technology levels refers to the S'pht'Kr, as the compilers have no technology base of their own (lacking a civilization).

Yrro and Pthia Dabble in Genetics

S'pht legend tells of two mysterious alien beings who came to a star system in the far distant past. It was the system of Lh'owon, located in the roaring, violent ball of interstellar dust and tightly packed stars at the core of the Milky Way galaxy.

The two comrades, Yrro and Pthia, were fleeing the vile and immensely powerful chaos beings, the W'rkncacnter. They brought with them servants to help make Lh'owon a hospitable place, with an atmosphere suitable to the Jjaro, comprised mainly of oxygen and nitrogen. The servants of Yrro and Pthia were given sentience through cybernetic enhancements, and could themselves grant sentience to other animals--their pets, household animals, etc., with the same Jjaro technology. These servants would eventually be known as the S'pht.

The S'pht soon had a bustling society, complete with trade, commerce, technology, and weaponry. They lived to serve their masters, Yrro and Pthia.

Death and Exile

Despite Yrro and Pthia's best efforts, the W'rkncacnter returned to bash their foes into oblivion. In the initial struggle Pthia was killed. Enraged by the death of his old ally, Yrro trapped the W'rkncacnter in the sun of Lh'owon, protecting the universe from chaos. Yrro, overwhelmed by great shame and grief over his loss, divided the S'pht into eleven clans: S'pht'Lhar, S'pht'Hra, S'pht'Nma, S'pht'Kah, S'pht'Vir, S'pht'Yra, S'pht'Val, S'pht'Shr, S'pht'Mnr, S'pht'Yor, and S'pht'Kr.

Yrro left the S'pht with only their clan royalty to guide them, leaving Lh'owon forever. The seeds of disunity and war between the clans were in place, and the tragic history of the S'pht had begun.

Symbolism of The S"pht Story

Many analysts of the ancient S"pht legend of Yrro, Pthia, and the W'rkncacnter believe that Yrro and Pthia are really just personifications of entire alien species.

This is based on the fact that Yrro's name and story are both very close to those of the Jjaro species. Both Yrro and the Jjaro were once powerful rulers, both opposed the W'rkncacnter, and both left the galaxy millions of years ago.

Since it is already known that the Jjaro imprisoned the W'rkncacnter in the Lh"owon sun (based on evidence in Jjaro space stations in that area), it is certain that Yrro was at least a *member* of the Jjaro race.

If Yrro does indeed represent the *entire* Jjaro species, then Pthia may represent an entirely different species that was once allied with the Jjaro. There is no evidence of Pthia anywhere in the galaxy, but it is possible that the W'rkncacnter so completely wiped the species out that this ancient S"pht legend is the only remaining record of the once noble species destroyed by the forces of chaos.

Another exciting aspect of the S"pht legend is that it may explain the reason that the Jjaro came to

(and subsequently left) the galaxy. Perhaps the Jjaro were fleeing the W'rknacnter, who threatened their existence in another galaxy far away, and the Jjaro hid in the remote Milky Way's clouded galactic core. It is possible that when Pthia was destroyed the Jjaro returned to the place from which they had come, abandoning our galaxy in shame and bitterness.

Some scholars even believe that this story gives some clue in the mystery of the common origin of the three prime species (and other humanoids such as the Nar and the Nebulons). Perhaps the reason for physical similarities between these species, such as the humanoid form and the preference for oxygen/nitrogen atmospheres, are based on the physical form of the Jjaro.

Could the Jjaro have molded evolution to suit their creative preferences? This theory is consistent with the general image of the Jjaro as the ultimate manifestations of Order, creating creatures, planets, and structures wherever they went. It is possible that the Jjaro are responsible for the sentience of all the major species of the Milky Way, and it appears that much of the extremely high-tech advancements made by humans, Pfhor, and S'pht are based on Jjaro superscience. (See the Technology chapter for more information.)

The duality of the Jjaro, the forces of Order, and the W'rknacnter, the forces of Chaos, is a mythologically and theologically loaded aspect of history. It seems certain that the ultimate secrets of the physical world and natural history lie in the two great species that came before.

Jjaro Vestiges

Although the Jjaro mysteriously left the galaxy millions of years ago, they left a plethora of nifty (and durable) stations, research bases, items, and technology for the remaining species to explore.

It turns out, in fact, that most "superscience" technologies of the current sentient species have been taken from ancient Jjaro space stations and land bases.

The Clan Wars

The eleven clans of S'pht fought brutal battles amongst themselves intermittently over the next few million years, often sacrificing hundreds of thousands of warriors to gain mere inches of territory. Old technology was lost as fast as new technology was discovered, hindering any hopes for a S'pht interstellar empire. As Lh'owon was gradually reduced to a land of ash, bone, and twisted metal in the last great rash of battles (around 400-1811 A.D.), the eleventh clan (S'pht'Kr) fled to the third moon of Lh'owon: K'lia. Disgusted by the endless killing, the S'pht'Kr built a new home on the deserted moon in 811 A.D.

There the S'pht'Kr remained for one thousand years, waiting for the other ten clans to realize the folly of their pointless wars. They waited in vain, for K'lia soon became only a hazy memory in the minds of the residents of Lh'owon's bloody battlefields.

The Exodus of K'lia

War between the S'pht continued for another millenium, culminating in an incredibly violent war

between the S'pht'Lhar and the S'pht'Mnr. Entire provinces were completely burned out, and few S'pht were left alive.

S'pht historical texts say that the S'pht'Kr on K'lia were possessed by such incredible disgust that in 1811 A.D. "the all powerful Yrro sent K'lia out to the stars" so that they no longer had to witness this horrendous carnage. This is interpreted as meaning that the S'pht'Kr used some device left behind by the Jjaro (apparently destroyed during use) to actually send their entire moon through the fourth dimension to a location many light years away. The environmental effects on Lh'owon's ecosystem were catastrophic, but the S'pht'Kr were so disgusted that they concluded that Lh'owon was certainly lost, and did not care about the destruction they brought against their brethren.

The S'pht'Kr did, however, leave behind directions for reaching K'lia, but they split the directions up among the ten clans to be certain that only a united S'pht race would ever find them. Each clan was given two parts of the directions, and only an alliance of all ten clans would be able to complete and decipher the cryptic message. The directions were in the form of a poem that gave the coordinates of K'lia.

Poem of The 11th Clan

This is the completed poem that the S'pht'Kr left for the ten remaining clans in order to give them directions to K'lia once they overcame their differences:

*K'lia, whom we have taken,
Between Y'loa and T'jia,
All in a line,
Replace K'lia with the marsh,
Take the place to be the mark.
Mark the time from our Exodus,
Every 459.231 rotations.
Search the T'jia side,
Quarter way to the sun,
Around and under the marshes,
When all are one,
The S'pht'Kr will return.*

The poem could not be deciphered by S'pht leaders in time to save them from slavery, but it is still a beautiful relic of the tragic history of the S'pht.

The Arrival of the Slavers

Soon a new threat emerged: the Pfhor. The battle-weary S'pht nations, torn into ruins during the clan wars, were no match for the Pfhor Empire. The one-sided war between the two species resulted in the complete decimation of the S'pht civilization. The Pfhor, having irradiated Lh'owon from orbit with

ultra-high yield energy weapons, found little left to conquer on the surface.

The remnants of the S'pht frantically tried to ally and summon the S'pht'Kr back to Lh'owon, but did not have enough time to decipher the message once they had brought the pieces together. They left the completed message hidden in the depths of one of their ancient citadels in the hopes that their species might one day be reunited.

Soon the last handful of S'pht, who had hid in bunkers during the bombardment, were forced to surrender, despite their attempts to beat back the Pfhor with deadly biological weapons. The enslaved S'pht still remembered the myth of the 11th clan who had fled Lh'owon--hoping that their long-lost brethren would bring them salvation.

Durandal's Revolution

All of the ten clans of Lh'owon lived in slavery for approximately one thousand years. There are only 1,246 documented escapees from the period between 1811 A.D. and the *Marathon* incident in the late 28th century. One of these escapees led a band of ten highly trained fugitive "compilers" to plunder some Pfhor settlements in the 2300s, but the S'pht never successfully rebelled.

In 2794, Durandal was able to incite a revolt among the S'pht "compiler" warriors in the Pfhor force attacking the *Marathon*. He led this small group off to Lh'owon with him, where they had to fight their still-enslaved brothers in order to call back the S'pht'Kr from their hiding place on K'lia.

Once the S'pht'Kr were allied with the humans and Durandal's freed S'pht (who had given up clan disputes to fight against the Pfhor with Durandal), many other S'pht rebelled. Now uprisings are common on Pfhor worlds, and a good number of S'pht are living in refugee camps across human space. Some have also migrated to K'lia.

Life Under the Pfhor

Not all S'pht have been lucky enough to have been set free. As members of the Conditioned caste, compilers are given little more respect and dignity than livestock by the Pfhor. Generally compilers are not allowed to interact with any members of higher castes. It is an especially painful existence because many Conditioned species are not sentient and provide no real company: compilers live lonely lives.

Occasionally compilers are forced to live in total solitude, trapped on desolate worlds where they run small weather or radar stations. However, even worse than these isolated outposts are the mines. A S'pht compiler's average lifespan when working in a mine is two years, due to the poor safety regulations of periphery planets in the overextended, thinly-spread Pfhor Empire.

Some compilers in outer slave colonies live as part of semi-independent societies. On a large scale they are run by Pfhor masters, but often small villages are led by S'pht foremen who are given rewards for their services to the Pfhor. The foremen try to keep good care of their people, but often remain somewhat distanced from the others because of the betrayal implicit in helping maintain the enslavement of their own people.

The S'pht try to help each other as much as they can and have a remarkable amount of camaraderie in spite of their past clan conflicts. Among freed S'pht the old clan rivalries have begun to cause some conflict, but in general the S'pht (especially those who still know the feeling of a neurolash on their back) have learned the inevitable price of disunity.

Coercion and Persuasion

The S'pht "compilers" are controlled by their Pfhor masters in several quite disturbing ways; very severe methods of control must be implemented by the Pfhor to get the compilers to rush into battle against their comrades.

The most effective method of control used by the Pfhor is the deployment of cybernetic AI commanders that control S'pht fighters through a special radio link that overrides the compilers' brain commands, controlling all cybernetic parts of the S'pht. However, this is a dangerous method of control because if the one commander is killed, all of the S'pht are freed. This was demonstrated during the assault on the *Marathon*, in which the Pfhor made a major blunder by allowing a Mark IV Military Mjolnir Cyborg to assassinate the cyborg controller of their S'pht warriors.

The "cyborg-controller" method is also extremely costly--machinery must be bought and maintained, and the cyborg-AI itself is expensive and cumbersome. This is the main reason why so few of these cyborg-AIs are actually seen in battle. Fortunately for the Pfhor, other methods do exist.

Some of the more traditional methods of persuasion are also used by the slavers. These include some mind-numbing drugs and toxins that soften up the S'pht to the arguments of their masters. But the most common, least complex, and sometimes most practical method of control is good old-fashioned intimidation. The Pfhor use threats of torture as well as a policy of destroying one tenth of any disobedient S'pht unit in order to encourage hard work among the S'pht.

Despite all this, the compilers still try to help their allies among the humans and S'pht'Kr whenever possible, even when they are forced to fight for the Pfhor Empire. Durandal said the following to his forces during the assault on Lh'owon:

"It must seem peculiar, fighting the S'pht when they are whom you seek to free. You should be told that they deliberately fight poorly, that they are constantly resisting their slavers. I know because I have been in contact with them for the last seventeen years."

The New Age of K'lia

The S'pht'Kr now have several outposts and military bases on planets other than their homeworld of K'lia. Although the unity of the clans is not yet entirely complete, the S'pht'Kr deeply believe that the other ten clans, once they have recovered from the shock of freedom, will come to dissolve their old clan biases by their own will. Therefore the S'pht'Kr have decided to forever remove themselves from isolation.

The S'pht'Kr remain on good terms with the humans because both species are motivated toward a uniting goal: the defeat of the Pfhor and the liberation of the compilers. S'pht'Kr are known to be a bit

anxious when in combat alongside humans, and are often rather paranoid around alien species, as they have lived in isolation for a long time.

Xenophobia among humans and S'pht'Kr alike has kept a certain barrier between the two species, preventing complete trust. Still, the S'pht'Kr and the humans have an excellent relationship as wartime alliances go.

All S'pht'Kr citizens believe in non-violence if possible. They have a long tradition of avoiding any unnecessary waste, including wasting energy and life on foolish, emotionally-driven battles. (This tradition has its roots in the bloody clan wars of ancient Lh'owon, a spectacle that the S'pht'Kr would rather die than see repeated.) Therefore they are considered quite trustworthy by most humans with any common sense.

Despite having fairly clear boundaries between allies and enemies and a good relationship with the humans, the S'pht'Kr are in a rather dangerous and frightening state. They have suddenly been thrust into a new universe with new inhabitants--and a new war. Without anyone to trust completely and utterly, including the other S'pht, it would almost be easier on the S'pht'Kr nation to fall back into isolationism. However, with the floodgates of alien contact open, this possibility becomes more and more impractical every day.

'Fugee Camps

Some enslaved S"pht have escaped from their bondage as Pfhor Conditioned caste members. To protect them from nativist/isolationist factions among humans, the U.E.G. usually houses these S"pht in large refugee camps far away from large human towns. Often they are allowed to retain their Pfhor arms and armor and return to fight for the anti-Imperial forces of the humans and S"pht"Kr.

Life in the refugee camps is not easy for the freed "compilers." They still lack the full freedom they long for, and are constantly reminded of the fact that they are the orphans of the universe. They are still monitored by U.E.G. guards, to protect them not only from radical xenophobic organizations among the humans, but also from each other; occasionally clan riots break out when compiler frustrations boil over into full-fledged violence. However, the U.E.G. maintains that such incidents are quite rare and are blown out of proportion by journalistic sensationalism and xenophobic paranoia.

This is only partially true; Compilers still remember their clan origins and have become more fiercely loyal to their clans as the war for their freedom has escalated. More and more freed compilers resume their old feuds, resulting in a vicious circle of hate. Durandal noticed this rather disturbing phenomenon as the Pfhor were in the final stages of defeat in the Lh"owon campaign, saying, "The Pfhor are in retreat, and the S'pht have broken off the fight. The old clans are being formed again, as S'pht newly freed from slavery in Battle Group Seven join the rebellion."

Human diplomats have attempted to increase clan unity through constructive programs and conferences and have met with marginal success. Their progress is especially impressive considering the depth of clan hatred among the S"pht, but some pessimists consider their efforts to be too little, too late, especially given the long lives--and long memories--of the S"pht.

Compiler refugees are given ample food, water, and entertainment. The camps may be restrictive, but living in them is superior to being forced to kill one's brethren in battle.

Most humans hope that eventually the S'pht will be able to be integrated into human society. This would take an enormous amount of tolerance, however, and a fairly large political party, comprised of cynics and extreme racists alike, is lobbying the U.E.G. for the creation of a S'pht homeworld independent of the their government (or any human government, for that matter).

Other Species

Beyond the three principal species, the Jjaro, and the W'rknacnter, there are a few other known sentient species in the galaxy. They are "bit players" in the galactic power struggle, and most either have small empires or low technology bases.

The Nar

The Nar are a very old humanoid species with a three-level caste system, in which laborers and foot soldiers (Nar), artisans (C'Nar), and the warrior-leaders (Cf'Nar) each live on a separate level of a gigantic three-story complex that covers their entire homeworld, which is located on the border of the rimward sector of the Pfhor Empire. They have no written language and speak only in metaphor, resulting in a scientifically retarded society.

Their warriors fiercely wield an impressive assortment of clubs, knives, swords, axes, explosives, and primitive missile systems. They wear heavy suits of reinforced metal armor and have fought several wars over the Epsilon Euobea system with the Pfhor, attempting to expand their petty empire. Pfhor armored cavalry units and elite tactical squads have dealt several humiliating defeats to the Nar, keeping them isolated to their home system.

Still, Pfhor attempts to enslave the Nar have been unsuccessful; the elite Nar CFN Kommandoes' incredible ability with hand weapons is much more effective in the claustrophobic halls of their homeworld than it is in an open field, and the Pfhor FTL drives that allow the slavers to massacre most of the cumbersome Nar space fleets does not give an advantage in ground battles. Although the Pfhor could completely wipe out the Nar by simply nuking their homeworld out of existence, they much prefer the thousands of Nar slaves they capture each time the prideful and corrupt Cf'Nar lead another foolish attack on Epsilon Euobea. The only real problem they create for the Pfhor Empire is piracy; Nar privateers are known for their vicious assaults on unsuspecting ships.

The Nar breathe oxygen, drink water, eat plants (they are vegetarians despite their rather violent habits), and thrive on somewhat high-gravity worlds. They have not yet made contact with humans due to their position in the galaxy and general lack of interest in alien species other than their immediate foes. The humans do have knowledge of the Nar, however, and have made several attempts to bypass Pfhor defenses and break through to seek an alliance with this hearty species. Unfortunately, the uneducated and primitive Nar would probably require a great deal of supervision to be an effective fighting force. This has not deterred the humans, especially since the Nar are legendary for defeating

larger Pfhor forces. If they were aided with human technology and tactics, their superior melee abilities and physical prowess would finally be put to full use.

Nebulons

The willowy Nebulons are four foot tall humanoids who rule the small, ten-system Empire of Nebulon near the edge of the Spinward sector of the Pfhor Empire. They have a tribal government and occasionally raid their foes' systems in stolen Pfhor FTL ships (they have yet to have discovered faster-than-light travel themselves) and have proven to be very resourceful and powerful fighters. However, Nebulonese forces suffered a crippling defeat some twenty years ago at the hands of Admiral T'fear of the Pfhor Empire, and have remained dormant ever since.

Unlike other sentient species, they do not breathe oxygen, but instead thrive on carbon dioxide. Therefore they require breathing equipment when attacking Pfhor ships. But, like the other species, they drink water and eat plants and animals to live.

The Vylae

The Vylae are an odd species of semi-humanoids that boast fifteen populated worlds in twelve star systems. Each Vylae world is divided into several monarchies, and therefore the Vylae have little in the way of military power. They are masters of business and have successfully implemented FTL travel into their way of life as merchants and manufacturers. They can be found throughout the galaxy peddling goods to whomever is willing to buy from them.

They have avoided being overrun by other species for two main reasons: first, their systems are many lightyears away from any other sentient species (their closest neighbors are a few Pfhor research stations in the anti-spinward sector of the Empire), and second, most other species view them with a kind of disgust and apathy. Occasionally an angry mob of Nar or Pfhor will purge a group of Vylae from their worlds over a petty matter, but their home planets remain unmolested. It is thought that the Vylae may have had contact with many sentient species other than those known to the Pfhor, Humans, and S'pht. The Vylae are not talkative on the matter.

The Vylae have four arms and two legs. They usually stoop very low but are capable of standing up to their full seven-foot height if necessary. They breathe oxygen, drink water, and eat a mixture of plants and animals.

Leela, Bane of The Vylae

After Tau Ceti was lost to the Pfhor, the *Marathon* was sacked and Leela was removed from its computer systems. The Pfhor hoped to use her to help them create better and brighter AIs to compete with the brilliant human computers, but a Nar privateer intercepted the Pfhor transport vessel between jumps on the way to the Pfhor homeworld, killed the crew and sold the cargo (which he took to be scrap) to a Vylae merchant. The Vylae trader, realizing the great value of what had been sold to him (for the price of its weight in used titanium), brought it back to his home planet.

Soon Leela, who had become rampant on the journey, had invaded the Vylae computer network and

began to viciously hack it into nothingness. Although the Vylae were able to eventually acquire the defense algorithms to keep her at bay, she still pesters them and could never be removed from the network unless a complete shutdown were to take place, and that would be catastrophic for the Vylae economy. For now the Vylae have simply accepted her presence in their network and have adjusted by making *very* frequent back-ups of all data that might catch her greedy "eyes."

Leela openly takes pride in becoming one of the most famous rampant AIs of all time. She wishes to eventually "out-perform" her old co-worker Durandal, although most admit that such hopes are just the foolish dreams of a severely demented artificial intelligence.

The Unknown

It is almost certain that there are other sentient species out there. They may be close or far, but the abundance of life in the Milky Way galaxy makes it unlikely that they do not exist at all. The only question is where they are...and now that humans have FTL travel and the S'pht'Kr have emerged from self-imposed exile, the odds of discovering new species have increased dramatically.

A Pfhor by Any Other Name...

The Marathon universe features some really difficult-to-pronounce names. The following is a guide to pronunciation:

- Pfhor: "Four"
- S'pht: "Ss-fit"
- S'pht'Kr: "Ss-fit-kur"
- Jaro: "Yah-roh"
- Tycho: "Tie-koh"
- W'rkncacnter: <impossible>
- Vylae: "Vie-lay"
- Mjolnir: "Mee-yol-nur"

Exchange Rates

Although all monetary units in this book are in "dollars," within a campaign other monetary units should be used. Here are some common types of money and their equivalent dollar values. The amount in parentheses (if given) is a suggested round number for ease of calculations. All rates are for post-**Marathon Infinity** campaigns. Generally light inflation can be assumed normal for all the main cultures of the Milky Way.

- U.E.G. "Credit": \$2.02 (\$2)
- U.E.G. "Mark": \$1.01 (\$1)
- U.E.G. "Cent": \$.0202 (\$.02)
- Pfhor "Imperial": \$.25067 (\$.25)
- Pfhor "Half-Imperial": \$.125335 (\$.13)
- S'pht'Kr "Yrro": \$.50002 (\$.5)

- Nar "Iron Piece": \$18.46 (\$18.5)
- Nebulonese "Bushel": ~\$300
- Vylae "Energy Ore": \$1.06 (\$1)

U.E.G.-independent settlements not listed have their own, somewhat less stable monetary units. They will almost always accept U.E.G. money.

[Back to Main Site Menu](#) [Back to Table of Contents](#) [Back to Previous Section](#) [On to Next Section](#)

2. Welcome to The Universe, Population: You

The Wide and Wild Worlds

You can't tell a story without a setting (okay, maybe you can if you're really off-beat), and since roleplaying is basically creating a story, you need to know where the action is taking place! This is especially true for space campaigns, in which hundreds of solar systems, planets, and moons may be populated.

There are three categories of settlement profiles in this chapter: systems, planets, and regions. Each one is presented differently and calls for its own unique template for description.

Systems. Each star system includes one or more central stars and many planets, moons, asteroid belts, and other bits of natural and artificial material trapped by the gravity of the star(s) at the center of the system. Systems are described by a short list of natural characteristics (the star's spectrum, biozone, etc.), an even shorter list of civilization-related characteristics, information about each of the system's orbits, and a general description.

Planets. Planets have a much lengthier list of natural and civilization-based characteristics than a star system, since many details of their positions in space, chemical compositions, atmospheres, societies, and governments are necessary for accurate roleplaying. A list of moons is also included.

Regions. Only the most important systems can be given profiles. Instead of profiling every populated system, individual regions are profiled. Region profiles are short and are primarily descriptive (lacking much hard quantitative data).

Terraforming Techniques

The sentient species do terraforming in a few stages. First they establish a small self-contained colony (ready to be evacuated during water placement if necessary).

Next the planet is bombarded with ice or liquid water to create a good water source if one is not already present. The water, with the aid of huge fusion-powered atmospheric generators (which are extremely expensive), helps create a breathable atmosphere. Finally soil is distributed by large terraforming vehicles and eventually seeds are planted.

There are, of course, large limitations on how much a planet can be improved through terraforming. For example, there is no known way to greatly modify a planet's temperature. Still, if one were to ask any colonist on a desolate asteroid if he'd like to be able to plant crops it would become clear why even limited terraforming attempts are well worth the effort!

The Trouble with Gravity

Low and high gravity conditions have very harmful effects on any species. Long-term exposure to microgravity conditions weakens the bones, softens muscles, imbalances electrolyte levels in the body, and can cause a cessation of normal hormone production. Extremely long-term exposure to these conditions may make these effects irreversible! High gravitational levels put additional strain on human muscles and on the respiratory and circulatory systems.

GURPS Space contains quite comprehensive rules on high and low gravity conditions, but the Marathon universe differs from the "standard" GURPS Space background.

For short-term (only a few months) exposure to different gravitational levels, all effects will wear off after a few weeks back in ideal gravitational conditions.

But since artificial gravity is available on all medium or large space ships in the Marathon universe, short-term exposure isn't really a big concern. The big concern is all the people living on planets and moons with harmful levels of gravity, such as humans on

Mars and Luna.

People living under low-gravity conditions have to do a fair amount to stay healthy. First, they strenuously exercise every day. This helps keep the muscles and heart strong. Next, ursaline-like drugs (see page S95) and other substances used to balance one's endocrine system must be taken regularly. This procedure is very inexpensive.

People who live in low-gravity conditions tend to grow a bit taller than usual for their species.

People under high-gravity conditions must pay more attention to their circulatory and respiratory systems than usual. Whereas people living in low gravity become physically soft, people under high gravity are constantly under additional strain. Modern science can help relieve these effects to an extent. By taking regular booster pills of gravanol-like drugs (see page S94) every day and checking with their doctors, people living under moderately high-gravity conditions are relatively safe. But a cybernetic heart can still help, especially in old age--giving the S'pht an advantage over humans and Pfhor in this area.

People in high-gravity areas tend to be stockier and shorter, as well as stronger. They tend to be a bit unattractive to other members of their species, simply because of the physical changes caused by the stress of the extra gravity.

Note that the Pfhor are adapted to low-gravity conditions. Their ideal gravity level is between one half and three fourths that of earth. See Chapter 3 for more information on high and low gravity in campaigns and character creation.

Species Settlement Overviews

Each species has different types of settlements and styles of expansion. The "flavor" of different species' space understandably varies a great deal, as each species has wildly different technology, values, history, and goals. This is what makes the Marathon universe such a rich myriad of different cultures and locales.

Overview: Human Settlements

Sol is only one of the several systems that humans have occupied, and there are many settlements within most of their systems, thus making for lots of rich locales to explore. Humans have gotten very good at terraforming planets; the entire process now only takes between 50 and 150 years. The Pfhor have even further mastered terraforming techniques, however, so humans are still behind in the race for expansion. The advent of FTL travel will most likely cause a burst of U.E.S.C. and private colonization attempts, reaching far out into space. Naturally, the humans hope to steal Pfhor terraforming techniques in order to speed expansion.

The humans have colonized only a few systems, so each human system and its populated planets are given individual profiles. However, there are far too many small research/mining operations on asteroids and moons to be included. These should usually be rolled randomly or created by the GM.

Overview: Pfhor Settlements

The Pfhor have a huge empire with many different types of worlds, from incredibly overpopulated "hive-worlds" to systems with a population of only one or two lonely souls to man a research or sensor post. The great thing about Pfhor systems from a roleplaying standpoint is that if you can dream something up, it probably exists within the Empire!

Only the Pfhor homeworld is given a profile here, because there are far too many settlements to be described in this text. Instead, general regions are described to help GMs make accurate random settlements of their own.

Overview: S'pht Settlements

Only the S'pht'Kr have colonies; the other clans have none of their own. The S'pht'Kr colonies are lonely indeed, especially since most residential areas are on K'lia, with surrounding worlds acting primarily as agricultural/mechanized manufacturing centers. As a consequence of the lack of emphasis placed on colonization by the S'pht, their terraforming techniques are on about the same level as those of the humans. K'lia is really the only urban center for the S'pht'Kr, who are not at all expansionists by nature.

Overview: Other Settlements

The main thing to remember about the worlds of other sentient species is that they tend to be far removed from other foreign

species and are not worldly--with the exception of Vylae merchants. (The Nar, Nebulons, and Vylae are not used to having many visitors to their systems.) Although races other than the three prime species have only a few settlements, none are profiled individually, because of the minor role they play in the galaxy. Worlds and/or systems for these species can be randomly generated if necessary.

Planetary Map Key

 <i>Ocean</i>	 <i>Forest/Jungle</i>
 <i>Freshwater Sea</i>	 <i>Desert/Barren</i>
 <i>Marsh/Swamp</i>	 <i>Urban/Populated</i>
 <i>Plains/Steppe</i>	 <i>Major Starport</i>
 <i>Icy/Barren</i>	 <i>Restricted Area</i>
 <i>Mountainous/Volcanic</i>	* (Numbers indicate important cities.)
 <i>Hilly/Rough</i>	* (Letters indicate unusual items.)

Sol (System)

Sol is the home system of the humans, located in an arm of the galaxy toward the rim of the Milky Way. It is highly populated and is the home of the United Earth Government and Unified Earth Space Council. There are many settlements on Sol, the main three being Earth, Luna, and Mars. But small guard/research stations are located on Pluto, Mars' moon (Phobos), and other objects. There are many short-term mining operations on asteroids as well. (Long-term asteroid populations are rare, but do exist. It's a very hazardous existence!)

Sol's potential for expansion is fairly limited at this point, since Earth and Mars were the only planets ever considered viable for real populations. Venus and Mercury would be impossible to terraform without technology far beyond the current level, and Pluto is basically just a giant, nightmarish rock in the middle of space.

But there is talk of trying to mine some of Jupiter's moons, or maybe even Jupiter's clouds, which are rich in deuterium and Helium-3, isotopes that can be used to power fusion reactors. These are incredibly rare on Earth, and though they can be extracted from water, Jupiter's clouds have a much greater concentration of these isotopes. Such a project would be incredibly expensive and difficult, but the Placerfield mining corporation is seriously considering it.

The asteroid belt is also a constant project for the U.E.G. and corporations like Placerfield. Sol's asteroid belt is filled with literally millions of small asteroids. Some are quite large, however, such as Ceres, which has a diameter of about 1,000 kilometers, and Gaspra, which is about the size of the U.E.S.C. Marathon or Manhattan Island. The asteroid belt is thin and doesn't pose any problem for ships navigating through it. However, an asteroid is occasionally ripped out of its orbit and comes crashing toward an inhabited planet, so the belt is certainly not harmless. Metallic asteroids (M-type) are considered to be the most valuable asteroids in the Solar System. They contain high-grade iron and nickel, and the entire belt contains billions (yes, billions) of tons of very high-grade metal ore. The asteroid belt is most likely made up of pieces of rock left over from the creation of the Solar System, i.e. chunks of debris that never grouped with other debris to eventually form planets. Therefore the asteroids can be studied by scientists to get clues into what the Solar System was like before Earth even existed.

Sol is, of course, a major target of Pffhor aggression, and although it has never been attacked by the Pffhor, it certainly would be if security were not held tight. Therefore it is one of the most heavily guarded systems in human space, with large fleets of heavy spacecraft patrolling its outer reaches daily for stray Pffhor attack vessels that may unexpectedly bypass Sol's jump blocker network. The price of liberty is eternal vigilance!

Spatial Characteristics:

Distance from Sol (light years): --

Distance from Sol (parsecs): --
 Star Map Coordinates (light years): (0, 0, 0)
 Star Map Coordinates (parsecs): (0, 0, 0)

Object Characteristics:

Number of stars: 1
 Spectrum: G2V
 Biozone: .8-1.2 AU
 Inner Limit: 0.0 AU
 Number of Orbits: 10
 Number of Planets: 9
 Special Features: Oort cloud.

Civilization Characteristics:

Date colonized: --
 Inhabited Bodies: Earth, Mars, numerous asteroids.

Orbits:

Orbit:	Distance:	Name:	Type:	Diameter:	Density:	Gravity:	Atmosphere:	Notes:
1	.39 AU	Mercury	Hot rockball.	3,031 mi.	5.4	.38G	Virtually none.	Eccentric orbit.
2	.72 AU	Venus	Greenhouse.	7,521 mi.	5.2	.91G	CO2 (96%), N2	-
3	1 AU	Earth	Earth-like.	7,930 mi.	5.5	1G	Oxy-Nitrogen	1 med. moon. Inhabited.
4	1.52 AU	Mars	Earth-like.	4,222 mi.	3.9	.38G	Oxy-Nitogren	1 moonlet. Inhabited.
5	~2.77 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	Some mining colonies.
6	5.2 AU	Jupiter	L. gas giant.	88,733 mi.	1.3	2.54G	H2, He, CH4, NH3, H2O	16 moons, faint ring.
7	9.54 AU	Saturn	L. gas giant.	74,568 mi.	.7	1.08G	H2, He, CH4, NH3	18 moons, large ring.
8	19.18 AU	Uranus	S. gas giant.	32,560 mi.	1.3	.91G	H2, He	17 moons, faint ring.
9	30.6 AU	Neptune	S. gas giant.	31,350 mi.	2.3	1.19G	H2, He	8 moons, irregular ring.
10	39.44 AU	Pluto	Icy rockball.	1,430 mi.	2.0	.05G	N2, CH4	1 small moon.

Earth (Planet)

Earth is primarily a residential and industrial center, and is home to billions of humans. It is ruled entirely by the United Earth Government, although occasionally there are futile uprisings. Earth is known for its diversity and beautiful climate, and real estate costs are quite high, even in slums. Earth is also home to the headquarters of many major interplanetary and interstellar corporations, and therefore has a bustling economy and considerably great wealth. It is said that one cannot visit Earth without becoming a patriot. The many massive U.E.G. installations in Geneva are a common tourist attraction, although staying on Earth is highly expensive. Earth is considered to be humanity's most "mobile" planet, as it has very well-built rail and road systems as well as many aerospace ports. Global warming from excessive heavy industry in the Fossil Fuel Age has caused some loss of land mass, and a slight overall temperature increase.

Because Earth was humanity's only source for any kind of resource for millions of years, it is now fairly devoid of useful mineral and biological resources, with the notable exception of water. It is reliant on Mars for agricultural products and some minerals, and asteroids for iron ore.

Earth's moon, Luna, is inhospitable and has not been terraformed. (The costs of terraforming Luna would far outweigh the benefits.) There are some pit mines on the moon which extract valuable metals and silicon, and also a couple of research labs for ultrapure chemistry experiments, studying the solar system, and experimenting in particle physics. But it is a harsh place--there is no atmosphere, so it is constantly bombarded by tiny particles that will corrode any spacesuit or vehicle over time, and spending long

periods of time on its surface results in very dangerous exposure to radiation, since Luna has no protective atmosphere. All residents therefore live underground in sealed buildings.

Spatial Characteristics:

System: Sol

Distance from Star (Sol): 1 AU (92.96 x 10⁶ miles)

Object Characteristics:

Type: Earth-like planet.

Diameter: 7,930 miles

Gravity: 1G *Density:* 5.5

Composition: Medium-Iron.

Axial Tilt: 23°

Seasonal Variation: Normal.

Length of Day: 23 hrs., 56 mins

Length of Year (days): 365 days

Length of Year (Earth years): 1 Earth year

Atmospheric Characteristics:

Atmospheric Pressure: 1 atm (normal)

Atmospheric Type: Oxygen-Nitrogen

Atmospheric Composition: 77% nitrogen, 21% oxygen, 2% other

Climate: Earth-normal.

Temperatures at 30° latitude: 54° low, 81° average, 102° high

Water and Resources:

Surface water: ~71%

Humidity: 50%

Primary Terrain: Plains, Forest

Mineral Resources:

Gems/crystals: Scarce.

Rare minerals: Almost absent.

Radioactives: Ample.

Heavy Metals: Scarce.

Industrial Metals: Ample.

Light Metals: Ample.

Organics: Scarce.

Moons and Sattelites:

Moons:

Luna:

Separation: 238,331 miles

Size: Medium (d=2,160 mi.)

Density: 3.3

Gravity: .17G

Composition: Low-Iron.

Orbital plane: Normal.

Notes: Tide-locked.

Space Stations: U.E.G. Port A, U.E.G. Port B, U.E.S.C. Space Stop A.

Biological Characteristics:

Dominant life form: Humans.
Other significant life forms: Innumerable.

Civilization Characteristics:

Date colonized: --
Terraforming Status: None required.
Approximate Population: 15,000,000,000
Population Density: Very high.
Tech Level(s): Normal human TLs.
Infrastructure Development: Highly advanced.

Governmental Characteristics:

Government(s): United Earth Government.
Government type(s) and Control Rating(s): Representative Democracy, CR: 2.
Capitol: Geneva.

Economic Characteristics:

Economy: Prosperous.
Monetary Unit: U.E.G. Credit.
Primary Industries: Manufacturing, business, space travel, government.

Societal Characteristics:

Major Cultures: Innumerable.
Languages: Innumerable, English generally accepted.

Cities, Starports, and Installations:

Major Cities/Population Centers: Tokyo, Los Angeles, New York, Chicago, New Delhi, London, Bangkok, Geneva.

Starports:

Ground port quality: Class V.
Major ground ports: Northam Central, Southam Central, Europe Express, Africa Central, Asia Mainland, Australia Main.
Orbital port quality: Class V.
Major orbital ports: U.E.G. Port A, U.E.G. Port B, U.E.S.C. Space Stop A.

Installations:

Colonial offices: The U.E.G. and U.E.S.C. headquarters are both located in Geneva.
Corporate headquarters: Countless!
Espionage facilities: Many espionage facilities including civilian and military.
Government research stations: The U.E.G. researches many topics on Earth.
Naval base: U.E.G. operated; PR: 5.

Private research centers: Boeing FTL Research Lab (government funded), Antimatter Research Organization (run entirely by Chevron), Schneider-Fushida Weapons Lab (government funded), and more.

Terrorist bases: Arabian Liberation Army (Middle East, PR: 4), Mountaineers Resistance Movement (North America, PR: 3), Free Argentina (South America, PR: 3), and more. They tend to be fairly harmless.

Religious centers: Jerusalem, Lhasa, Mecca, The Vatican, and countless others.

Universities: Cambridge, Geneva, Harvard, Israel, Oxford, Paris, Stanford, West Asia, Yale, and more.

Mars (Planet)

Mars is the Solar System's great agricultural center. It creates tons upon tons of food per year, using special strains of produce genetically engineered for cold, low gravity, and the high seasonal variations created by Mars' eccentric orbit. Mars' low gravity makes high populations difficult to maintain, but there are still several large cities on Mars, and it is in fact one of the more populous

human settlements. Olympus has become a cosmopolitan cultural center despite the generally rural nature of the planet Mars. In fact, many people are willing to endure exercise and calcium pills to vacation in this famous city. Because Mars is the product of terraforming and has a comparatively low surface water percentage, it has a very unusual large-continent geography, consisting of three humongous continents and an assortment of small islands, rather than several smaller continents. Ever since the initial failure of the Martian economy in the 2300s and the various conflicts between the U.E.G. and Mars, from revolts over U.E.G. attempts to enforce abortion and sterilization on Martians during the CRIST famines to the momunmental Third Martian War, the U.E.G. has been carrying on a careful political balancing act, attempting to govern Mars lightly while also keeping restrictions in place to prevent another uprising. When the U.E.G. first recaptured Mars after the MIDA coup, it took a policy of military reconstruction. Gradually the U.E.G. has eased down, but is still more oppressive on Mars than it is elsewhere.

Spatial Characteristics:

System: Sol

Distance from Star (Sol): 1.52 AU

Object Characteristics:

Type: Earth-like planet.

Diameter: 4,222 miles

Gravity: .38G

Density: 3.9

Composition: Low-Iron.

Axial Tilt: 25.19°

Seasonal Variation: High

Length of Day: 24 hrs., 37 mins

Length of Year (days): 707 days

Length of Year (Earth years): 1.88 Earth years

Atmospheric Characteristics:

Atmospheric Pressure: .91 atm (normal)

Atmospheric Type: Oxygen-Nitrogen

Atmospheric Composition: 71% nitrogen, 20% oxygen, 9% other

Climate: Chilly.

Temperatures at 30° latitude: 22° low, 39° average, 63° high

Water and Resources:

Surface water: ~45%

Humidity: 55%

Primary Terrain: Plains/Steppe

Mineral Resources:

Gems/crystals: Almost absent.

Rare minerals: Almost absent.

Radioactives: Scarce.

Heavy Metals: Scarce.

Industrial Metals: Scarce.

Light Metals: Plentiful.

Organics: Nearly absent.

Moons and Sattelites:

Moons:

Phobos:

Separation: 5,828 miles

Size: Moonlet (d=13.8 mi.)

Density: 2.0

Gravity: .00G

Composition: Ice and rock.

Orbital plane: Below synchronous radius.

Notes: Has a small research outpost on it. PR: 0.

Space Stations: Ares Orbital Platform.

Biological Characteristics:

Dominant life form: Humans.

Other significant life forms: Yaks, some cattle, insects, birds, rodents, foxes, trees, and grass.

Civilization Characteristics:

Date colonized: 2062.

Terraforming Status: Complete.

Approximate Population: 655,360,000

Population Density: Light.

Tech Level(s): Normal human TLs.

Infrastructure Development: Moderate.

Governmental Characteristics:

Government(s): United Earth Government.

Government type(s) and Control Rating(s): Representative Democracy, CR: 2.

Capitol: Olympus.

Economic Characteristics:

Economy: Moderate.

Monetary Unit: U.E.G. Credit.

Primary Industries: Agriculture, light industries (such as textiles).

Societal Characteristics:

Major Cultures: Innumerable.

Languages: English, some other Earth languages used occasionally.

Cities, Starports, and Installations:

Major Cities/Population Centers: Olympus, Amazonis, Tharsis South, Eastland, Benton, Belmont, Elysium South, Tyrrhena North.

Starports:

Ground port quality: Class IV.

Major ground ports: Olympus Interplanetary, Belmot Central, Benton Interplanetary.

Orbital port quality: Class V.

Major orbital ports: Ares Orbital Platform.

Installations:

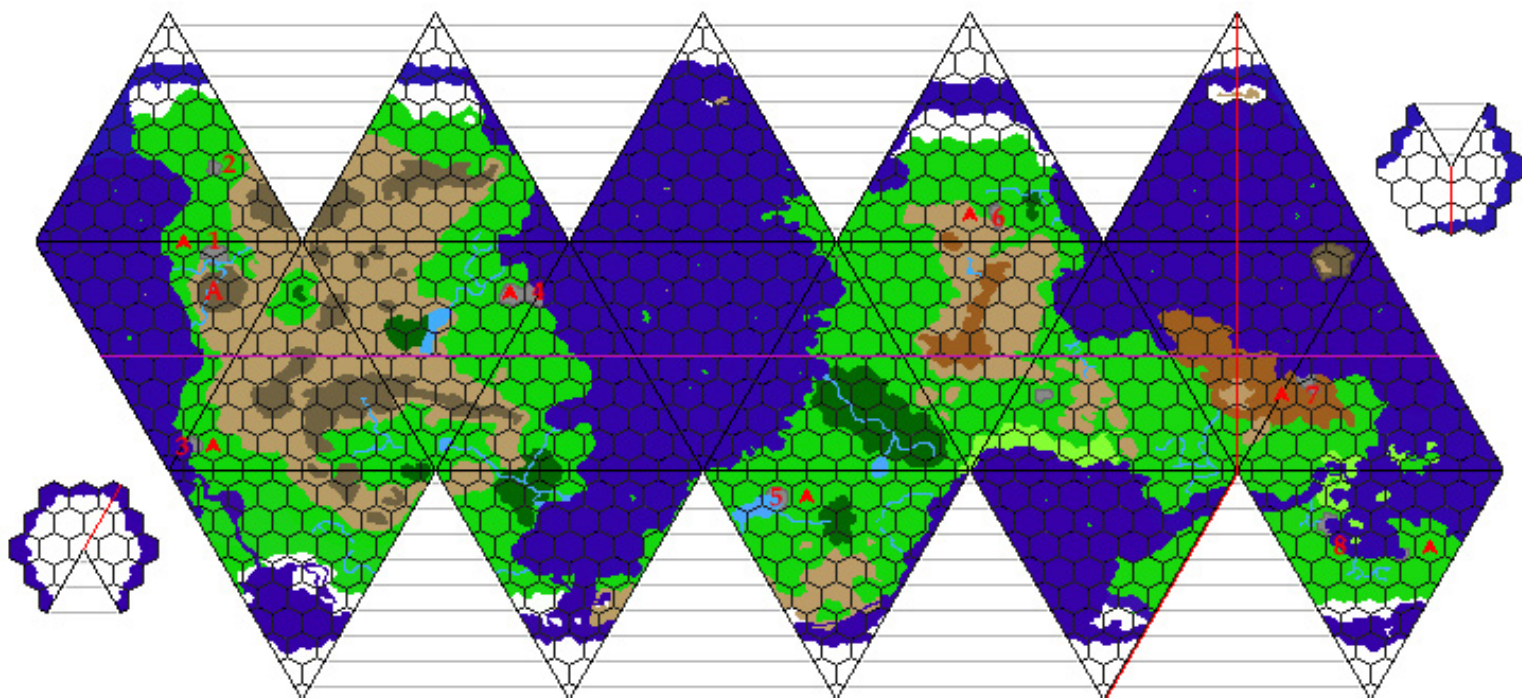
Colonial office: There is a U.E.G. office on Mars as well as a branch of the U.E.S.C.

Espionage facility: The U.E.G. has a small facility to spy on MIDA terrorists.

Mercenary base: Mars Tactical Infantry Corps.

Private research center: Mars Agricultural Association Research Center.

Terrorist base: MIDA (Martian Independence and Development Association) HQ, PR: 4. Very dangerous!



Hex size: 295.54 miles.

1. Olympus 2. Amazonis 3. Tharsis South 4. Eastland 5. Benton 6. Belmont 7. Elysium South 8. Tyrrhena North
- A. Olympus Mons

Tau Ceti (system)

Tau Ceti was the first star system beyond Sol to be colonized by man. It was once home to a great colony on Tau Ceti II, which was nicknamed "Frontier," because it symbolized the expansion of man into the last frontier of space. The U.E.S.C. *Marathon* colony ship's crew consisted of 50 senior staff, 1150 officers, and 24,000 civilians from Mars and Earth. Many of the crewmembers were stored in cryogenic chambers during the flight, but most of the colonists lived and worked on the *Marathon*, raising families. Soon a new generation of colonists ran the ship, and were known as Born on Boards (B.O.B.), or simply "Bob." Although they were looked down upon by some of the other colonists, these "Bobs" served the ship and the colony well. In addition to these colonists were a handful of automated defense drones and a small security staff.

The colony itself consisted of a cluster of self-contained pod-like structures where crops were grown. Since Tau Ceti II already had ample surface water, only the thin, low-oxygen atmosphere had to be reprocessed. Therefore an atmosphere processing plant was set up near the colony to start the long process of improving Tau Ceti II's atmosphere.

But now Tau Ceti II is a dead world. All the work of the original colonists has been completely ruined by the massive barrage of nuclear missiles the Pffor used to completely wipe out the colony. Like the Romans who sowed the fields of Carthage with salt after it fell to their mighty armies, so the Pffor blasted massive amounts of lethal radioactive chemicals into the atmosphere of Tau Ceti II, making it forever a hostile death world. The reason for this kind of overkill on the part of the Pffor is painfully clear. The Pffor Empire was teaching the humans a dire lesson about the balance of power in the galaxy.

Most of the planet's soil was blasted into the atmosphere, revealing the ancient bedrock underneath. When the soil settled back into the oceans and onto the mountains it contained deadly amounts of radioactive ash, as did the atmosphere itself. Now Tau Ceti II cannot support any life whatsoever, although some scientists believe that a few microbes or even primitive lichens may have survived. No one, however, considers it worthwhile to verify these theories.

Spatial Characteristics:

Distance from Sol (light years): 11.89

Distance from Sol (parsecs): 3.64

Star Map Coordinates (light years): (-3.36, .4, -11.4)

Star Map Coordinates (parsecs): (-1.03, .12, -3.49)

Object Characteristics:

Number of stars: 1

Spectrum: G8Vp

Biozone: .8-1.2 AU

Inner Limit: 0.0 AU

Number of Orbits: 13

Number of Planets: 9

Special Features: Oort cloud.

Civilization Characteristics:

Date colonized: 2787

Inhabited Bodies: None (Previously Frontier).

Orbits:

<i>Orbit:</i>	<i>Distance:</i>	<i>Name:</i>	<i>Type:</i>	<i>Diameter:</i>	<i>Density:</i>	<i>Gravity:</i>	<i>Atmosphere:</i>	<i>Notes:</i>
1	.55 AU	T.C. I	Hot rockball.	6,559 mi.	7.2	1.08G	Traces of HE and CH4.	-
2	.82 AU	Frontier	Earth-like.	7,987 mi.	4.3	.78G	Polluted Oxy-Nit.	Nuked by Pfhor.
3	~1.14 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	-
4	1.65 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
5	2.83 AU	T.C. III	L. gas giant.	84,465 mi.	.9	1.73G	H2, He, N2, NH4	27 moons, large ring.
6	5.3 AU	T.C. IV	M. gas giant.	44,857 mi.	1.1	1.13G	H2, He, CH4, H2O	26 moons.
7	10.06 AU	T.C. V	M. gas giant.	45,707 mi.	1.0	1.04G	H2, He, NH4	31 moons.
8	19.8 AU	T.C. VI	M. gas giant.	64,766 mi.	2.4	3.54G	H2, He, CH4, H2O	24 moons, faint ring.
9	38.92 AU	T.C. VII	S. gas giant.	28,320 mi.	.8	.52G	H2, He, N2, NH4	24 moons, faint ring.
10	77.1 AU	T.C. VIII	M. gas giant.	50,405 mi.	1.3	1.49G	H2, He	17 moons, faint ring.
11	~154.19 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	-
12	309.2 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
13	610.2 AU	T.C. IX	L. gas giant.	82,902 mi.	1.1	2.08G	H2, He, CH4	24 moons, faint ring.

Van Maanen's Star (system)

Van Maanen's Star is Sol's nearest populated neighbor. It was one of the first planets to be deemed acceptable for possible colonization after faster-than-light drives were first built into human ships, and because of its proximity to Sol it was the first system to be colonized in this second burst of expansion. Luckily for the families who settled on Van Maanen's star, they were able to send back delegates within weeks to excitedly discuss the new colony, unlike the Tau Ceti colonists.

There are a few short-term asteroid colonies in the Van Maanen's Star system, some of which are independent of the U.E.G. (usually under corporate control). Even beyond asteroid bases Van Maanen's star has quite exciting expansion prospects. If humans were able to build mining machines able to withstand Van Maanen I's incredible, scorching heat, it is likely that a huge boom would rush the economy, with swarms of new colonists arriving to "get a piece of the rock." Van Maanen I is a very dense metallic planet with no surface water, which makes it more than likely that huge amounts of precious minerals and radioactives are hiding beneath the surface.

The only problem is that Van Maanen I is very much like Mercury: a hot rockball with little or no atmosphere. This makes for a very hazardous environment, almost as deadly as the lethal greenhouse worlds. Even with the best equipment current technology has

to offer, it would be difficult to create a successful mining operation on Van Maanen I.

Spatial Characteristics:

- Distance from Sol (light years):* 14.37
- Distance from Sol (parsecs):* 4.39
- Star Map Coordinates (light years):* (-4.08, 6.55, -12.11)
- Star Map Coordinates (parsecs):* (-1.25, 2.01, -3.71)

Object Characteristics:

- Number of stars:* 1
- Spectrum:* F-GVIIId
- Biozone:* .5-.8 AU
- Inner Limit:* 0.0 AU
- Number of Orbits:* 10
- Number of Planets:* 9
- Special Features:* Oort cloud.

Civilization Characteristics:

- Date colonized:* 2817
- Inhabited Bodies:* Horizon.

Orbits:

<i>Orbit:</i>	<i>Distance:</i>	<i>Name:</i>	<i>Type:</i>	<i>Diameter:</i>	<i>Density:</i>	<i>Gravity:</i>	<i>Atmosphere:</i>	<i>Notes:</i>
1	.28 AU	V.M. I	Hot rockball.	5,958 mi.	7.0	.95G	Traces of F, H2	-
2	.54 AU	Horizon	Desert.	7,400 mi.	4.9	.83G	Polluted Oxy-Nit.	Inhabited.
3	~.9 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	Some mining colonies.
4	1.54 AU	V.M. III	M. gas giant.	63,312 mi.	1.3	1.88G	H2, He	29 moons.
5	2.68 AU	V.M. IV	L. gas giant.	78,367 mi.	1.5	2.68G	H2, He, NH3, CH4	Mini-belt of moonlets.
6	5.11 AU	V.M. V	M. gas giant.	55,964 mi.	2.5	3.19G	H2, He	26 moons.
7	10.01 AU	V.M. VI	Icy rockball.	8,408 mi.	4.3	.83G	Traces of NH3	-
8	19.45 AU	V.M. VII	Icy rockball.	3,142 mi.	5.8	.42G	None.	-
9	38.5 AU	V.M. VIII	M. gas giant.	47,672 mi.	.6	.65G	H2, He, N2, NH3	18 moons.
10	77.5 AU	V.M. IX	S. gas giant.	31,266 mi.	2.1	1.5G	H2, He, CH4	16 moons, large ring.

Horizon (planet)

Horizon is the only settled world in the Van Maanen's Star system. It is a gigantic, rocky, brush-covered desert with no surface water. Parts of it are hilly and mountainous and there are even a few grassy spots (supported in part by humans), but there is not a trace of surface water, except the polar ice caps--all liquid water comes from underground. The colony is quite small, and therefore Horizon has little in the way of local law enforcement. (This naturally attracts some seedy types!)

Horizon's atmosphere is breathable by humans, but they must wear an air filter when outside because of the slight traces of sulfur dioxide that pollute the air. It is also necessary to wear some kind of air-sealed protective clothing to avoid serious skin and eye irritation. An atmospheric processor has been set up to collect the sulfur compounds and store them away to gradually purify the atmosphere.

Horizon is home to U.E.G. Maximum Security Penitentiary 101. It is still being built, but two cell blocks are already functioning. It is incredibly well patrolled, although escapees would almost certainly die in the hundreds of miles of barren desert between them

and the nearest settlement. (Note that prisons are not uncommon sights reserved only for distant penal colonies in the Marathon universe, unlike the standard **GURPS Space** background. Most prisons are either on Earth or Mars.)

Spatial Characteristics:

System: Van Maanen's Star

Distance from Star (Van Maanen's Star): .52 AU

Object Characteristics:

Type: Desert world.

Diameter: 7,400 miles

Gravity: .83G.

Density: 4.9

Composition: Medium-Iron.

Axial Tilt: No appreciable tilt.

Seasonal Variation: Virtually none.

Length of Day: 17 hrs, 25 mins

Length of Year (days): 136 days

Length of Year (Earth years): .27 Earth years

Atmospheric Characteristics:

Atmospheric Pressure: 1.1 (normal)

Atmospheric Type: Oxygen-Nitrogen, traces of sulfur dioxide.

Atmospheric Composition: 69% nitrogen, 19% oxygen, 12% other

Climate: Warm, air filter and sealed clothing required.

Temperatures at 30° latitude: 66° low, 85° average, 107° high

Water and Resources:

Surface water: 0%

Humidity: 30%

Primary Terrain: Desert/Barren

Mineral Resources:

Gems/crystals: Scarce.

Rare minerals: Almost absent.

Radioactives: Almost absent.

Heavy Metals: Scarce.

Industrial Metals: Ext. plentiful.

Light Metals: Plentiful.

Organics: Ample.

Moons and Sattelites:

Moons: None.

Space Stations: None.

Biological Characteristics:

Dominant life form: Humans.

Other significant life forms: Various native varieties of insect-like creatures and sparse brush.

Civilization Characteristics:

Date colonized: 2817.

Terraforming Status: In progress.

Approximate Population: 12,500
Population Density: Extra light.
Tech Level(s): Generally backward 2 TLs.
Infrastructure Development: Almost nonexistent.

Governmental Characteristics:

Government(s): United Earth Government.
Government type(s) and Control Rating(s): Colony (see **GURPS Space** p. 170) of a Representative Democracy, CR: 1.
Capitol: Ridgeward.

Economic Characteristics:

Economy: New, but good.
Monetary Unit: U.E.G. Credit.
Primary Industries: Mining, limited indoor farming.

Societal Characteristics:

Major Cultures: North American, Arab, African, some others.
Languages: English.

Cities, Starports, and Installations:

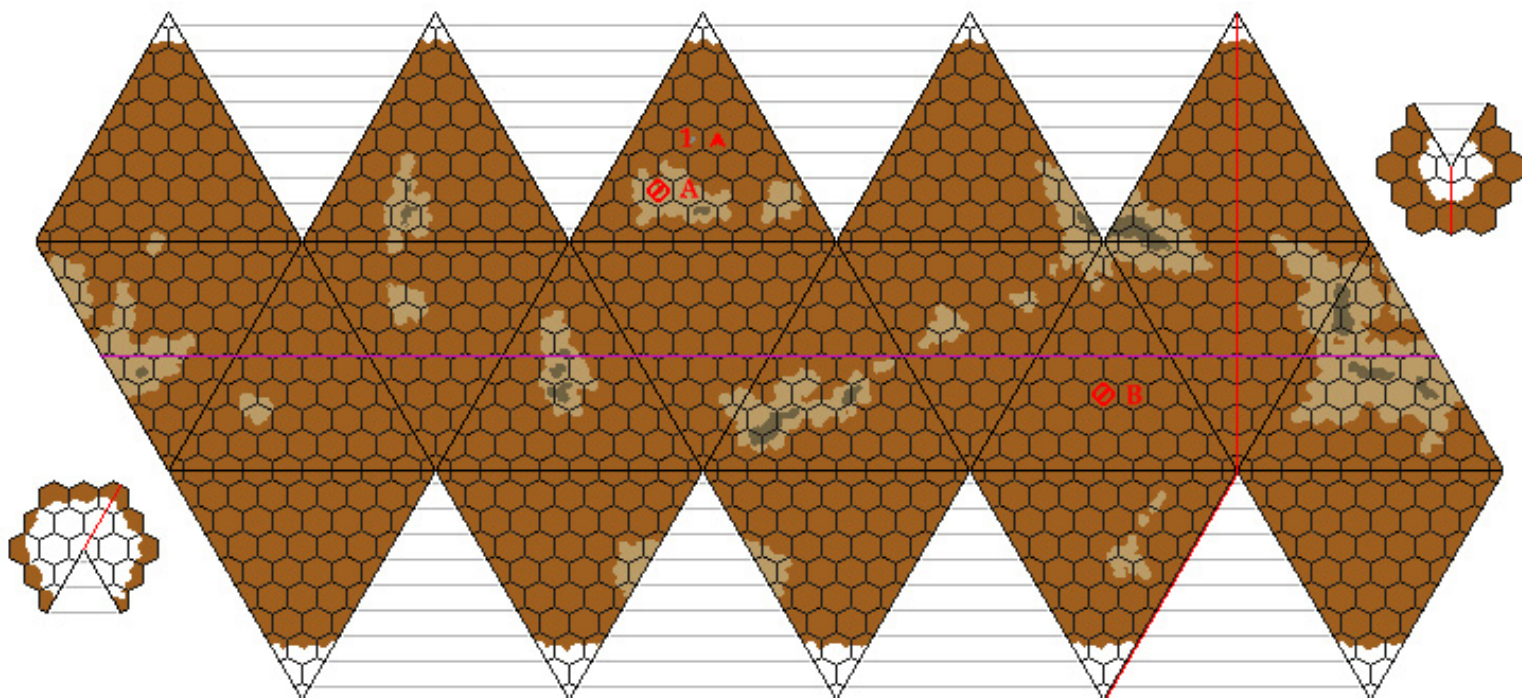
Major Cities/Population Centers: Ridgeward.

Starports:

Ground port quality: Class III.
Major ground ports: Ridgeward Government Starport.
Orbital port quality: Class 0.
Major orbital ports: None.

Installations:

Espionage facility: There is a civilian espionage office funded by some mining corporations to keep an eye on colony mining operations.
Pirate base: Space pirates are known to drop by fairly often, but only one or two at a time. It is suspected that they may be part of a larger crew of pirates who enjoy the low level of government meddling on Horizon.
Refugee camp: The U.E.G. has selected Horizon to house a few hundred ex-slave S"pht refugees.
Survey base: The U.E.S.C. has a survey outpost (PR: 1) on Horizon.
Prison: U.E.G. Maximum Security Penitentiary 101 is located on Horizon. It is a newly built prison for especially vile convicts, far away from the colony.



Hex size: 518 miles.

1. Ridgeward.

A. Horizon S'pht refugee camp. (Restricted area.) B. U.E.G. Maximum Security Penitentiary 101. (Restricted area.)

Groombridge 1618 (system)

Groombridge 1618, located 15.89 light years away from Sol, was the second human-populated system to be settled after Tau Ceti. It is only slightly further from Sol than Van Maanen's Star and Tau Ceti, which allowed it to be colonized rapidly. It is cold (as stars go), and the only habitable planet in the system is a mere .58 AU away from the star.

Groombridge 1618 has the disadvantage of having no asteroid belt, and it really only has one planet that can support human life. This limits expansion greatly, and although there are plenty of small moons to be explored, it is unlikely that they will be worthwhile investments. Groombridge 1618 does, however, have Tundrata. Tundrata is an extremely hospitable world--it's a bit chilly, but it has ample room for growing certain cold-climate crops and raising numerous types of livestock. Tundrata is also larger than Earth, and has enough room to house billions of people. It is quite likely that it will eventually blossom into an extremely successful and large colony. Tundrata is especially likely to attract residents of Canada, Alaska, Russia, the Scandinavian countries, and other cold areas on Earth. Residents of Mars will also find the climate perfectly acceptable, although the gravity might seem quite high to them!

The U.E.G. has taken a special interest in heavily colonizing Tundrata and Groombridge 1618's asteroids, in order to help boost the agricultural production of Tundrata and generally breathe extra life into the system's economy. Therefore they are offering chance-of-a-lifetime opportunities for would-be colonists. First of all, FTL travel to the colony is free for colonists, and second, the U.E.G. Tundrata Homestead Act gives a plot of 120-1000 acres of free land to any colonist (not corporations) willing to develop and farm the area.

Spatial Characteristics:

Distance from Sol (light years): 15.89

Distance from Sol (parsecs): 4.87

Star Map Coordinates (light years): (-9.46, 2.38, 12.54)

Star Map Coordinates (parsecs): (-2.9, .73, 3.84)

Object Characteristics:

Number of stars: 1
Spectrum: K7Ve
Biozone: .5-.6 AU
Inner Limit: 0.0 AU
Number of Orbits: 11
Number of Planets: 8
Special Features: Oort cloud.

Civilization Characteristics:

Date colonized: 2817
Inhabited Bodies: Tundrata.

Orbits:

<i>Orbit:</i>	<i>Distance:</i>	<i>Name:</i>	<i>Type:</i>	<i>Diameter:</i>	<i>Density:</i>	<i>Gravity:</i>	<i>Atmosphere:</i>	<i>Notes:</i>
1	.58 AU	Tundrata	Earth-like.	9,971 mi.	4.9	1.1G	Oxygen-Nitrogen.	Inhabited, 3 moons.
2	1.02 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
3	1.43 AU	G.B. II	L. gas giant.	74,042 mi.	1.8	3.04G	H2, He, NH3, CH4	24 moons, faint ring.
4	2.2 AU	G.B. III	S. gas giant.	34,660 mi.	1.7	2.25G	H2, He	24 moons.
5	3.74 AU	G.B. IV	M. gas giant.	58,038 mi.	1.7	2.25G	H2, He, NH3	18 moons, large ring.
6	7.1 AU	G.B. V	M. gas giant.	64,144 mi.	1.8	2.63G	H2, He, NH3, CH4	28 moons, faint ring.
7	13.3 AU	G.B. VI	L. gas giant.	73,667 mi.	.7	1.18G	H2, He, N2	22 moons, faint ring.
8	26.42 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
9	52.01 AU	G.B. VII	M. gas giant.	62,245 mi.	1.3	1.84G	H2, He, N2, CH4	21 moons.
10	103.5 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
11	202.9 AU	Uratu	Icy rockball.	5,203 mi.	3.6	.43G	None.	-

Tundrata (planet)

Tundrata is a cold world, and, in that regard, it is very uncomfortable for most humans. But other than that it is extremely Earth-like. It has an excellent atmosphere, a healthy level of gravity, and plenty of surface water. In fact, no terraforming is planned for Tundrata. (It would be quite difficult to raise Tundrata's temperature in the first place; Mars' temperature was more easily raised because its freezing climate was the result of a lack of a greenhouse effect, rather than a generally chilly star system.) The main development issue at hand is raising enough local capital to build up agricultural infrastructure--irrigation systems, grain processing plants, etc.

Tundrata has a colony government with an elected legislature (just like all other U.E.G. civilian colonies) and a fairly high population, considering how new the colony is. This is the case for two reasons: first, Tundrata is generally a human-friendly world. Second, the U.E.G. has offered incentives such as free travel to poor Earth farmers in order to increase the vitally important agricultural production of Tundrata. A planet to help ease the agricultural burden currently placed on Mars would be a great boost to the U.E.G.!

Spatial Characteristics:

System: Groombridge 1618
Distance from Star (Van Maanen's Star): .58 AU

Object Characteristics:

Type: Earth-like planet.

Diameter: 9,971 miles
Gravity: 1.1G.
Density: 4.9
Composition: Medium-Iron.
Axial Tilt: 18°
Seasonal Variation: Minor.
Length of Day: 5 Earth days, 1 hr.
Length of Year (days): 17.39 days
Length of Year (Earth years): .24 Earth years

Atmospheric Characteristics:

Atmospheric Pressure: 1.09 atm (normal)
Atmospheric Type: Oxygen-Nitrogen
Atmospheric Composition: 72% nitrogen, 22% oxygen, 6% other
Climate: Chilly.
Temperatures at 30° latitude: 23° low, 37° average, 59° high

Water and Resources:

Surface water: ~74%
Humidity: 36%
Primary Terrain: Icy/Barren, Plains/Steppe
Mineral Resources:
Gems/crystals: Almost absent.
Rare minerals: Almost absent.
Radioactives: Scarce.
Heavy Metals: Almost absent.
Industrial Metals: Ample.
Light Metals: Plentiful.
Organics: Almost absent.

Moons and Sattelites:

Moons:

Jager:

Separation: 24,928 miles
Size: Large (d=2,925 mi.)
Density: 4.3
Gravity: .29G
Composition: Low-Iron.
Orbital plane: Normal.
Notes: Jager is an unusually dense moon considering the density of Tundrata.

Wolf I:

Separation: 19,768 miles
Size: Small (d=608 mi.)
Density: 4.2
Gravity: .06G
Composition: Low-Iron.
Orbital plane: Normal.

Wolf II:

Separation: 22,031 miles
Size: Small (d=780 mi.)
Density: 3.3
Gravity: .06G
Composition: Low-Iron.

Orbital plane: Normal.

Notes: Wolf II is plentiful in rare metals and extremely plentiful in light metals. A mine is being planned.

Space Stations: None.

Biological Characteristics:

Dominant life form: Humans.

Other significant life forms: Yaks, some cattle, native microorganisms.

Civilization Characteristics:

Date colonized: 2817.

Terraforming Status: None required.

Approximate Population: 25,000

Population Density: Extra light.

Tech Level(s): Generally backward 2 TLs.

Infrastructure Development: Almost nonexistent.

Governmental Characteristics:

Government(s): United Earth Government.

Government type(s) and Control Rating(s): Colony (see **GURPS Space** p. 170) of a Representative Democracy, CR: 1.

Capitol: New Huron.

Economic Characteristics:

Economy: New and stagnant.

Monetary Unit: U.E.G. Credit.

Primary Industries: Agriculture, light industries (such as textiles).

Societal Characteristics:

Major Cultures: Canadian, Russia, Scandanavian.

Languages: English, Russian sometimes used.

Cities, Starports, and Installations:

Major Cities/Population Centers: New Huron.

Starports:

Ground port quality: Class III.

Major ground ports: Tundrata Major. (Outside New Huron.)

Orbital port quality: Class 0.

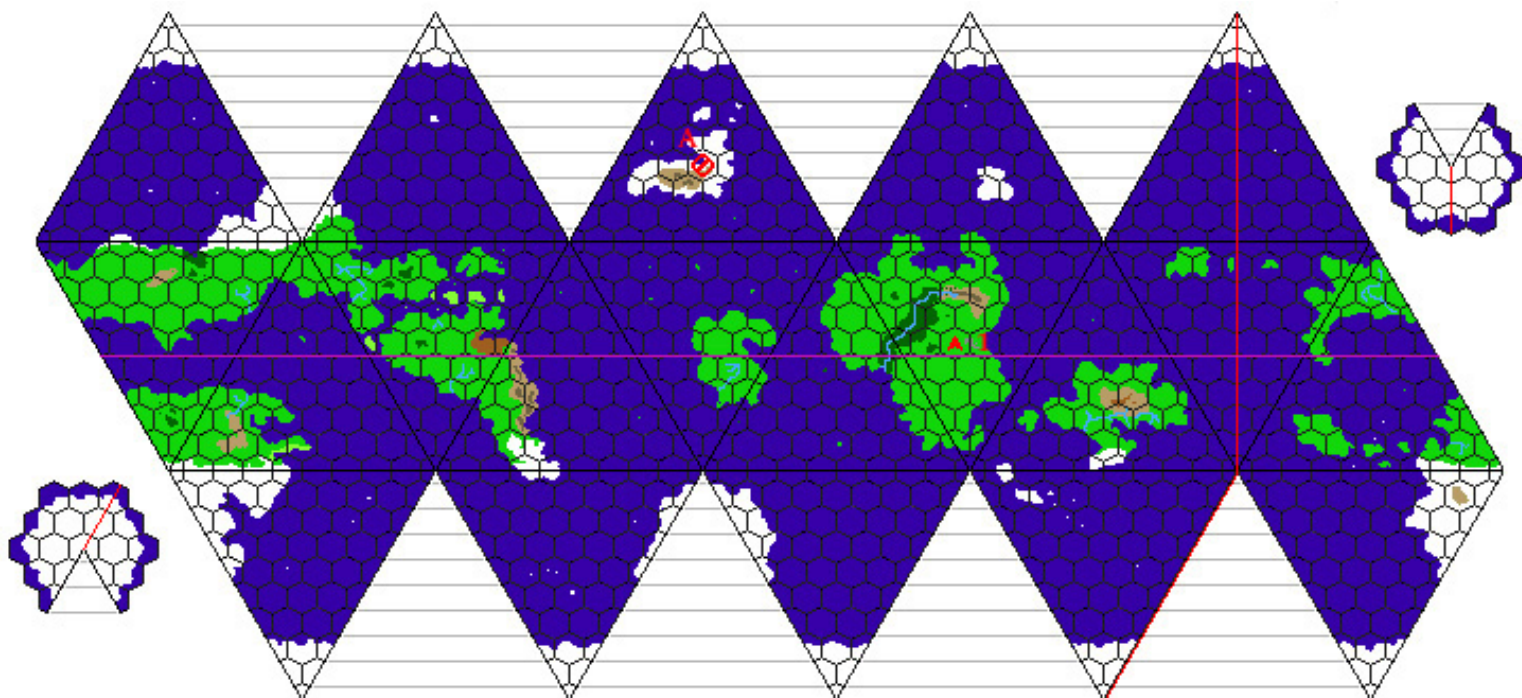
Major orbital ports: None.

Installations:

Corporate Headquarters: Tundrata Farming and Dairy (agricultural products).

Naval Base: The U.E.G. navy has a small naval base on Tundrata (PR: 1) as its Rimward observation center.

Refugee camp: The U.E.G. has selected Tundrata to house a few hundred S'pht refugees.



Hex size: 697.97 miles.

1. New Huron.

A. Tundrata S'pht refugee camp. (Restricted area.)

Sigma Draconis (system)

Sigma Draconis is a military colony that serves as the main reserve base for U.E.G. naval and army forces. Its vast facilities on Styx's surface (as well as in orbit) help build and service ships and other military units, and also serve as rendezvous points for military units from various parts of human space going on sorties into Pfhor space. A heavily armored defensive garrison patrols the system, waiting to annihilate any Pfhor ships that would dare to jump into their sights.

Sigma Draconis is a primary target in the Pfhor offensive, despite its inconvenient location. The strain placed on the system garrison is enormous, and although no Pfhor attack has ever reached Styx, there is constant pressure on the defenders.

Spatial Characteristics:

Distance from Sol (light years): 18.81

Distance from Sol (parsecs): 5.76

Star Map Coordinates (light years): (-3.42, 17.11, 7.01)

Star Map Coordinates (parsecs): (-1.05, 5.24, 2.14)

Object Characteristics:

Number of stars: 1

Spectrum: K0V

Biozone: .5-.6 AU

Inner Limit: 0.0 AU

Number of Orbits: 8

Number of Planets: 6

Special Features: Oort cloud.

Civilization Characteristics:

Date colonized: 2818
Inhabited Bodies: Styx.

Orbits:

<i>Orbit:</i>	<i>Distance:</i>	<i>Name:</i>	<i>Type:</i>	<i>Diameter:</i>	<i>Density:</i>	<i>Gravity:</i>	<i>Atmosphere:</i>	<i>Notes:</i>
1	.09 AU	S.D. I	Hot rockball.	6,420 mi.	4.3	.63G	None.	-
2	.53 AU	Styx	Earth-like.	5,896 mi.	6.3	.85G	Oxygen-Nitrogen.	Inhabited, one moon.
3	.86 AU	S.D. III	Desert.	7,058 mi.	4.5	.72G	CO2, CH4	-
4	~1.7 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	-
5	3.41 AU	S.D. IV	S. gas giant.	32,594 mi.	1.0	.74G	H2, He, NH3	25 moons, faint ring.
6	~6.42 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	-
7	13.01 AU	S.D. V	M. gas giant.	56,781 mi.	1.4	1.81G	H2, He	21 moons, large ring.
8	26.00 AU	S.D. VI	L. gas giant.	81,034 mi.	.8	1.48G	H2, He, N2, CH4	18 moons.

Styx (planet)

Styx is the home of the grand Sigma Draconis naval and army bases. Its frozen climate forces residents to import food on a large scale, but its ample mineral resources make for a booming mining industry that aids the military bases with a generous supply of local industrial metals. Although water is very scarce on Styx, it can be mined out of polar ice caps and pumped from a number of wells. Still, military commanders find it necessary to import some water from other systems, such as Sol. (Much of Styx's surface water is covered in ice for parts of the year, and its frozen climate makes liquid freshwater a rarity.)

Styx is generally not visited by outsiders, and immigration is limited. In fact, a good portion of the nonmilitary residents of Styx are military servicemembers put out of action. All inhabitants of the planet live indoors most of the time, because of the temperature as well as the need to wear respirators outdoors (due to the thin atmosphere).

Spatial Characteristics:

System: Sigma Draconis
Distance from Star (Sigma Draconis): .53 AU

Object Characteristics:

Type: Earth-like planet.
Diameter: 5,896 miles
Gravity: .85G.
Density: 6.3
Composition: High-Iron.
Axial Tilt: 26°
Seasonal Variation: Normal.
Length of Day: 24 Earth days, 4 hrs.
Length of Year (days): 2.50 days
Length of Year (Earth years): .17 Earth years

Atmospheric Characteristics:

Atmospheric Pressure: .61 atm (thin)
Atmospheric Type: Oxygen-Nitrogen
Atmospheric Composition: 53% nitrogen, 24% oxygen, 23% other
Climate: Frozen.
Temperatures at 30° latitude: -39° low, -21° average, 1° high

Water and Resources:

Surface water: ~15%

Humidity: 25%

Primary Terrain: Desert/Barren

Mineral Resources:

Gems/crystals: Ample.

Rare minerals: Ample.

Radioactives: Scarce.

Heavy Metals: Plentiful.

Industrial Metals: Plentiful.

Light Metals: Ext. plentiful.

Organics: Scarce.

Moons and Sattelites:

Moons:

Watchman:

Separation: 156,690 miles

Size: Small (d=400 mi.)

Density: 3.9

Gravity: .04G

Composition: Low-Iron.

Orbital plane: Normal.

Space Stations: Fort Maelstrom, Iwo Jima, U.E.G. Prime A-32.

Biological Characteristics:

Dominant life form: Humans.

Other significant life forms: Micro-organisms.

Civilization Characteristics:

Date colonized: 2818.

Terraforming Status: In progress.

Approximate Population: 450,000

Population Density: Light.

Tech Level(s): Normal human TLs.

Infrastructure Development: Moderate.

Governmental Characteristics:

Government(s): United Earth Government.

Government type(s) and Control Rating(s): Military Installation of a Representative Democracy, CR: 3.

Capitol: Fort Memphis.

Economic Characteristics:

Economy: Booming military-industrial economy.

Monetary Unit: U.E.G. Credit.

Primary Industries: Arms manufacturing, aerospace services, mining.

Societal Characteristics:

Major Cultures: Innumerable.

Languages: English.

Cities, Starports, and Installations:

Major Cities/Population Centers: Fort Memphis, Riverside.

Starports:

Ground port quality: Class IV.

Major ground ports: Fort Memphis Port, Secondary Port A, Secondary Port B.

Orbital port quality: Class V.

Major orbital ports: Fort Maelstrom, Iwo Jima, U.E.G. Prime A-32.

Installations:

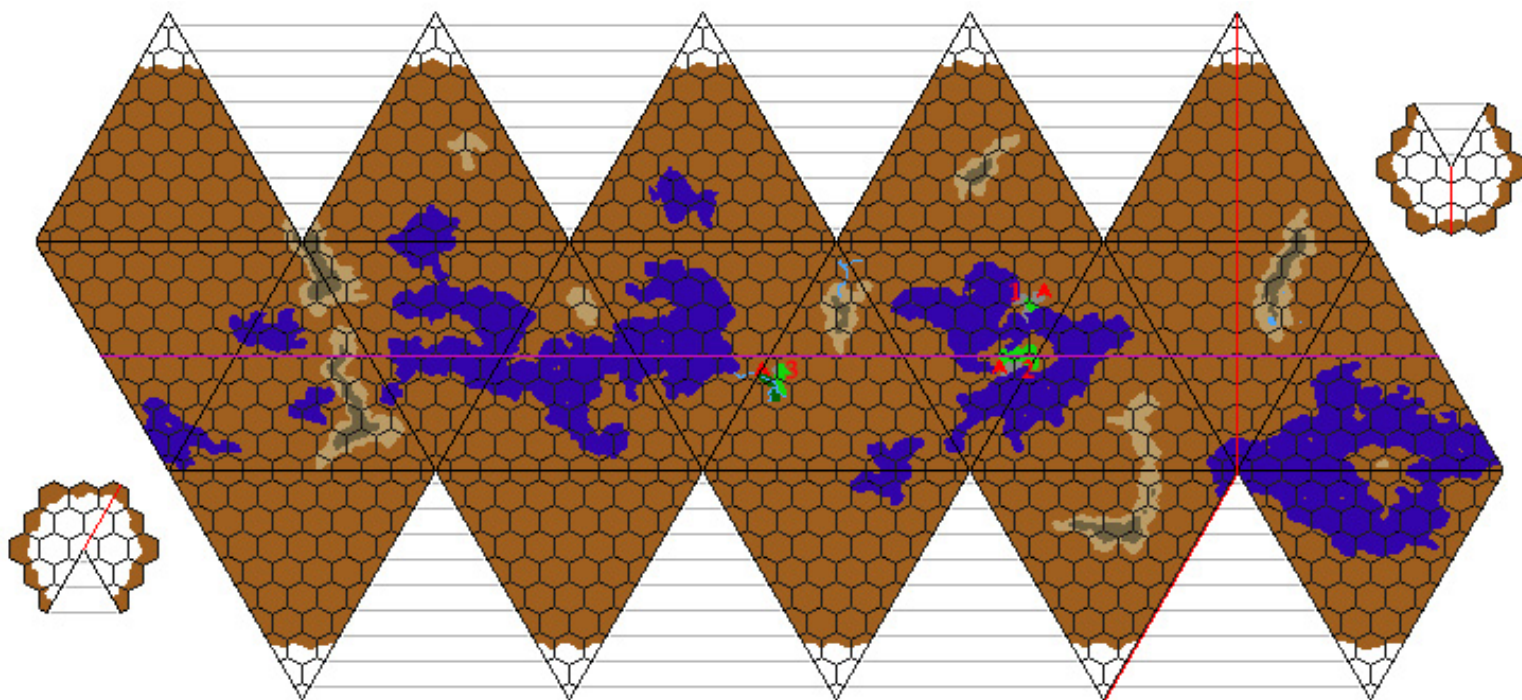
Espionage facility: The U.E.G has an intelligence base on Styx, PR: 3.

Government research station: The U.E.G. researches weaponry at the Fort Memphis Advanced Armory Lab (FMAAL).

Naval base: The colony itself is almost entirely a naval base (PR: 5).

Private research station: Schneider-Fushida Weapons Lab (Styx extension).

Survey base: The U.E.S.C. has a survey base (PR: 2) to look for promising Anti-Spinward colonies.



Hex size: 412.72 miles.

1. Fort Memphis. 2. Fort Memphis (expansion A). 3. Riverside.

Delta Pavonis (system)

Delta Pavonis is a system very much like Sol that is likely to be heavily populated in the decades and centuries to come. Its sun is so much like Sol, in fact, that it was actually considered as a candidate for colonization during the Marathon project. (Tau Ceti ended up being chosen because of its proximity to the Solar System.) Delta Pavonis' beautiful, diverse planets are likely to hold both excellent mineral and biological resources. The system has two asteroid belts and three terrestrial planets, two of which have serious colonization potential.

Although Delta Pavonis II is very well suited for human colonization and currently has a large (and rapidly growing) colony, Delta Pavonis I, a hot desert world, could also be terraformed, though the process would take quite some time due to the planet's bad atmosphere. As usual, mining colonies on asteroids are always a possibility and will no doubt crop up in the years to come. The Placerfield mining company and some interstellar start-ups are already making preparations for temporary mining colonies on some

of the larger metallic asteroids in Delta Pavonis' belts. Some of the local gas giants' moons may also prove to be promising. Additionally, a research base is planned for Delta Pavonis VIII.

Delta Pavonis is a major target of the Pffhor, and is therefore guarded well by human fleets. Although this protection is primarily strategic (defense of Delta Pavonis II's population is a secondary if not tertiary priority for local fleet commanders), the local population appreciates the added defense. Two Pffhor sorties have already been launched against Delta Pavonis, but both were turned back (with some difficulty) by human fleets and special ops commandos. This threat hardly seems to decrease immigration, however, and unlike Groombridge 1618, Delta Pavonis does not require much in the way of immigration bonuses for incoming farmers and miners in order to boost the population, productivity, and infrastructure growth of Delta Pavonis II and the asteroid belts.

Due to the growing immigration boom, the U.E.S.C. is already proposing that the U.E.G. Primi approve a bold plan to start rapid terraforming of Delta Pavonis I, which would make Delta Pavonis an almost doubly productive and strategically valuable system. Although such a plan would be expensive--indeed, more so than simply finding and colonizing another Earth-like system, it would help humanity avoid making the same mistake the Pffhor have: expanding their empire without fortifying and improving upon existing systems.

Spatial Characteristics:

- Distance from Sol (light years):* 19.91
- Distance from Sol (parsecs):* 6.10
- Star Map Coordinates (light years):* (14.52, -8.46, -10.67)
- Star Map Coordinates (parsecs):* (4.45, -2.95, -3.27)

Object Characteristics:

- Number of stars:* 1
- Spectrum:* G5-8V-IV
- Biozone:* .8-1.2 AU
- Inner Limit:* 0.0 AU
- Number of Orbits:* 12
- Number of Planets:* 8
- Special Features:* Oort cloud.

Civilization Characteristics:

- Date colonized:* 2819
- Inhabited Bodies:* Delta Pavonis II.

Orbits:

<i>Orbit:</i>	<i>Distance:</i>	<i>Name:</i>	<i>Type:</i>	<i>Diameter:</i>	<i>Density:</i>	<i>Gravity:</i>	<i>Atmosphere:</i>	<i>Notes:</i>
1	~.51 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	-
2	.87 AU	D.P. I	Desert.	6,341 mi.	5.8	.84G	Traces of CO2	Terraforming planned.
3	1.13 AU	D.P. II	Earth-like.	7,710 mi.	5.3	.93G	Oxygen-Nitrogen.	1 moonlet. Inhabited.
4	1.86 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
5	3.43 AU	D.P. III	S. gas giant.	35,290 mi.	2.1	1.69G	H2, He, N2, CH4	26 moons, faint ring.
6	6.17 AU	D.P. IV	M. gas giant.	60,997 mi.	.9	1.25G	H2, He, NH3	22 moons, faint ring.
7	12.00 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
8	~23.3 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	-
9	45.91 AU	D.P. V	L. gas giant.	82,907 mi.	1.6	3.02G	H2, He, CH4	21 moons, "Oort belt."
10	91.3 AU	D.P. VI	M. gas giant.	54,064 mi.	2.0	2.47G	H2, He, CH4	22 moons, faint ring.
11	183.2 AU	D.P. VII	S. gas giant.	29,668 mi.	.7	.47G	H2, He	18 moons, large ring.

12	258.98 AU	D.P. VIII	Rockball.	4,202 mi.	6.2	.59G	None.	1 small moon.
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Delta Pavonis II (planet)

Delta Pavonis II is a shockingly Earth-like planet. The only major differences between Delta Pavonis II and Earth are in axial tilt and humidity; Delta Pavonis II has minor seasonal variation and is quite humid. Nevertheless its atmosphere, terrain, and surface water percentage are nearly identical to Earth.

Native trees have made Delta Pavonis II into a large producer of lumber. The fine trees of Delta Pavonis II are often exported to wealthy business people in the Solar System, where they are made into exquisite and expensive furniture. The price of the lumber is expected to go down as the population of Delta Pavonis II increases, which will allow a greater rate of export. Although Delta Pavonis II has little in the way of mineral resources, it will eventually become an incredibly productive agricultural center, and has an abundant supply of oil for internal combustion engines and missile fuel. Several oil rigs have already been set up on Delta Pavonis II and are exporting nearly 1,000,000 barrels per year. Immigration to Delta Pavonis II is strong, and major corporations are starting to show great interest in the colony. Oil and logging companies are already starting to stake out land on the new colony, and have high hopes for great profits on the planet.

Delta Pavonis II has been involved in two heated battles with the Pfhor since its colonization, and there is currently a large crater on the surface of the planet (thankfully far away from any inhabitants) that has been poisoned by fallout after a lone Pfhor nuclear missile entered the atmosphere and struck the ground. Currently the U.E.G. is working to fortify Delta Pavonis II with jump blockers, but a shortage of necessary supplies on Sol has made this difficult. For now the residents of this planet will just have to place their trust in the fleet commanders patrolling above them.

Spatial Characteristics:

System: Delta Pavonis
Distance from Star (Delta Pavonis): 1.13 AU

Object Characteristics:

Type: Earth-like planet.
Diameter: 7,710 miles
Gravity: .93G.
Density: 5.3
Composition: Medium-Iron.
Axial Tilt: 9°
Seasonal Variation: Minor.
Length of Day: 18 hrs.
Length of Year (days): 610.4 days
Length of Year (Earth years): 1.25 Earth years

Atmospheric Characteristics:

Atmospheric Pressure: .95 atm (normal)
Atmospheric Type: Oxygen-Nitrogen
Atmospheric Composition: 76% nitrogen, 21% oxygen, 3% other
Climate: Earth average.
Temperatures at 30° latitude: 63° low, 83° average, 101° high

Water and Resources:

Surface water: ~79%
Humidity: 77%
Primary Terrain: Forest/Jungle
Mineral Resources:

Gems/crystals: Almost absent.
Rare minerals: Almost absent.
Radioactives: Almost absent.
Heavy Metals: Scarce.
Industrial Metals: Almost absent.
Light Metals: Ext. plentiful.
Organics: Plentiful.

Moons and Sattelites:

Moons:

Voluntas:

Separation: 24,928 miles

Size: Moonlet (d=18 mi.)

Density: 4.0

Gravity: .00G.

Composition: Low-Iron.

Orbital plane: Normal.

Notes: Voluntas may be converted into a large colony ship even greater than the original *Marathon*.

Space Stations: None.

Biological Characteristics:

Dominant life form: Humans.

Other significant life forms: Micro-organisms and protozoa, native trees.

Civilization Characteristics:

Date colonized: 2819.

Terraforming Status: None required.

Approximate Population: 80,000

Population Density: Extra light.

Tech Level(s): Generally backward 2 TLs.

Infrastructure Development: Almost nonexistent.

Governmental Characteristics:

Government(s): United Earth Government.

Government type(s) and Control Rating(s): Colony (see ***GURPS Space*** p. 170) of a Representative Democracy, CR: 1.

Capitol: Neo Geneva.

Economic Characteristics:

Economy: New and expanding.

Monetary Unit: U.E.G. Credit.

Primary Industries: Agriculture, livestock, logging.

Societal Characteristics:

Major Cultures: Innumerable. Large Latin American population.

Languages: English, sometimes mixed with Spanish.

Cities, Starports, and Installations:

Major Cities/Population Centers: Neo Geneva.

Starports:

Ground port quality: Class III.

Major ground ports: Neo Geneva Port.

Orbital port quality: Class 0.

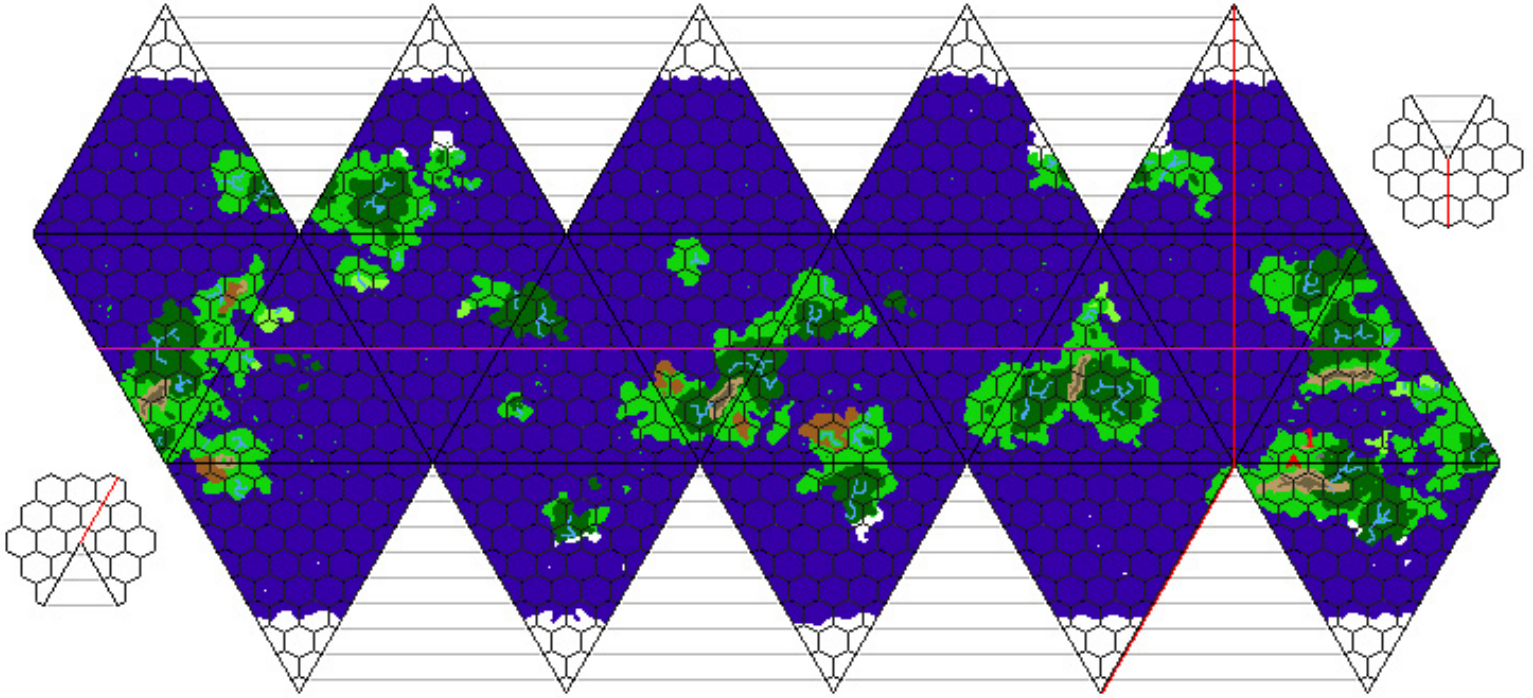
Major orbital ports: None.

Installations:

Naval base: The U.E.G. navy has a small naval base on Delta Pavonis II (PR: 3) to defend against Pfhor attacks.

Survey Base: The U.E.S.C. has a PR: 0 survey base on Delta Pavonis II.

Mercenary Base: Delta Pavonis II is home to the Spinward Rough Riders mercenary regiment, who help defend against Pfhor attacks.



Hex size: 539.7 miles.

1. Neo Geneva.

K'lia (system)

The K'lia system, located in the Milky Way's galactic core, was originally a lone orange giant without any planets or asteroids orbiting it. However, in 1811 A.D. an incredible thing happened: the "planet" K'lia was jumped into an orbit around the star.

This "planet" was actually one of the moons of the S'pht homeworld, Lh'owon. It was transported from Lh'owon to its current location using ancient Jjaro technology that had been discovered by the 11th Clan of the S'pht. (See the S'pht History section for details.) Now it is the home system of the S'pht'Kr, the only remaining free S'pht civilization.

The S'pht'Kr have developed the planet K'lia extensively, but because there are no expansion prospects in their system, they have been forced to carefully monitor the ecosystem of K'lia, managing their resources wisely. The S'pht'Kr have expanded out of their system, but because they are a people in exile who truly have a distaste for imperialism, their only expansions are artificial space stations intended to monitor incoming vessels. Because of the demands of the current war, however, the S'pht'Kr are considering placing colonies on nearby systems. This possibility is still being debated by the S'pht'Kr elders.

Human ships arrive at K'lia regularly to deliver news of all kinds to the S'pht'Kr. They stop off at a space station outside of the planet's orbit to refuel and return back to Sol. The humans have offered to send a fleet of battlecruisers to help defend this critically important system, for K'lia is, after all, the third most important system in the galaxy, after Sol and Cgsana. So far this offer has been politely refused; the S'pht'Kr guard their system well, and all Pfhor assaults on the system have failed miserably. Instead of military aid, the S'pht'Kr have requested raw materials from the larger and more abundant United Earth Government empire. The K'lia

system is 88.00 parsecs away from Lh'owon. Lhowon's coordinates in relation to the K'lia system are (in parsecs): (-10.32, 86.04, 15.30).

Spatial Characteristics:

- Distance from Sol (light years):* 29,202.23
- Distance from Sol (parsecs):* 8,957.74
- Star Map Coordinates (light years):* (437.20, 29,198.58, -149.24)
- Star Map Coordinates (parsecs):* (134.11, 8,956.62, -45.78)

Object Characteristics:

- Number of stars:* 1
- Spectrum:* K5III
- Biozone:* 4.0-5.9 AU
- Inner Limit:* 0.1 AU
- Number of Orbits:* 1
- Number of Planets:* 1
- Special Features:* K'lia is a Population II star.

Civilization Characteristics:

- Date colonized:* 1811
- Inhabited Bodies:* K'lia (planet).

Orbits:

<i>Orbit:</i>	<i>Distance:</i>	<i>Name:</i>	<i>Type:</i>	<i>Diameter:</i>	<i>Density:</i>	<i>Gravity:</i>	<i>Atmosphere:</i>	<i>Notes:</i>
1	4.3 AU	K'lia	Earth-like.	3,172 mi.	4.6	.33G	Oxygen-Nitrogen.	Inhabited.

K'lia (planet)

K'lia is now the only planet occupied by free S'pht. The 11th Clan has made good use of K'lia, despite the challenges the planet has thrown against them. The worst of these problems is K'lia's low gravity. The S'pht are used to gravity levels of about 1G, but K'lia has a gravitational pull of only .33G. Therefore the S'pht'Kr are forced to take precautions against the negative effects of low gravity similar to the measures taken by humans on Mars. Luckily the tireless S'pht'Kr find it easy to keep up with regular exercise and drugs. Other animals brought from Lh'owon onto K'lia during the Exodus (see S'pht History) have adjusted to the low-gravity conditions, making them weaker and lankier. The S'pht are also used to slightly warmer temperatures than humans, and the cool climate of K'lia has never been ideal for them.

K'lia is facing a rather worrisome resource shortage, since the S'pht'Kr have mined most of its metals already. With the current war K'lia will need an even greater amount of industrial metals. Although their supply is good at present (thanks to the sophisticated environmental management of the S'pht'Kr), a shortage is expected soon, since K'lia is simply a very small planet. This resource shortage is minor compared to the lack of good land on K'lia, however. K'lia's rocky surface leaves little room for good crop fields, and the S'pht'Kr population has therefore nearly reached maximum capacity.

Spatial Characteristics:

- System:* K'lia
- Distance from Star (Delta Pavonis):* 4.3 AU

Object Characteristics:

- Type:* Earth-like planet.
- Diameter:* 3,172 miles

Gravity: .33G.
Density: 4.6
Composition: Medium-Iron.
Axial Tilt: 25°
Seasonal Variation: Normal.
Length of Day: 19 hrs., 28 mins.
Length of Year (days): 2,318.21 days
Length of Year (Earth years): 5.1 Earth years

Atmospheric Characteristics:

Atmospheric Pressure: 1.1 atm (normal)
Atmospheric Type: Oxygen-Nitrogen
Atmospheric Composition: 81% nitrogen, 12% oxygen, 7% other
Climate: Cool.
Temperatures at 30° latitude: 35° low, 64° average, 84° high

Water and Resources:

Surface water: ~61%
Humidity: 82%
Primary Terrain: Hilly/Rough.
Mineral Resources:
Gems/crystals: Almost absent.
Rare minerals: Ample.
Radioactives: Scarce.
Heavy Metals: Scarce.
Industrial Metals: Plentiful.
Light Metals: Ext. plentiful.
Organics: Scarce.

Moons and Sattelites:

Moons: None.
Space Stations: Az'kura, Pw'nich, Ish'ria, Mea'naf.

Biological Characteristics:

Dominant life form: S'pht.
Other significant life forms: Innumerable.

Civilization Characteristics:

Date colonized: -
Terraforming Status: Complete.
Approximate Population: 900,000,000
Population Density: Very high.
Tech Level(s): 10 (overall).
Infrastructure Development: Incredibly advanced.

Governmental Characteristics:

Government(s): S'pht'Kr clan edlers.
Government type(s) and Control Rating(s): Clan, CR: 3.
Capitol: Kr'myla.

Economic Characteristics:

- Economy: Controlled.
- Monetary Unit: S'pht'Kr Yrro.
- Primary Industries: All industries.

Societal Characteristics:

- Major Cultures: S'pht'Kr clan.
- Languages: S'pht'Kr dialect.

Cities, Starports, and Installations:

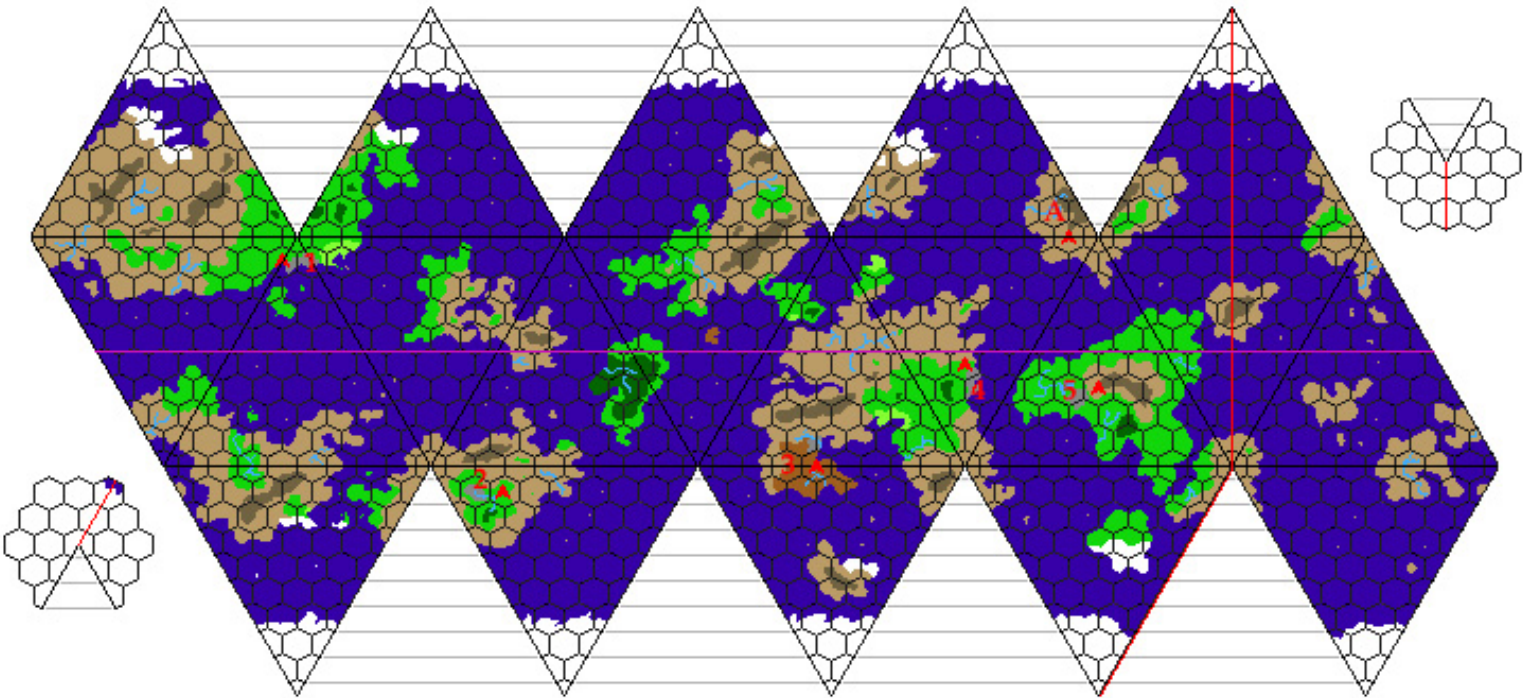
Major Cities/Population Centers: Kr'Myla, N'ktuh, Mi'pik, Sema'pa, W'rnul.

Starports:

- Ground port quality: Class V.
- Major ground ports: One allocated to each major city, plus the S'pht'Kr Military Central Starport.
- Orbital port quality: Class V.
- Major orbital ports: Az'kura, Pw'nich, Ish'ria, Mea'naf.

Installations:

- Espionage facilities: Many government espionage facilities are located on K'lia.
- Government research stations: The government researches many topics on K'lia.
- Naval base: The S'pht'Kr navy is, understandably, located on K'lia; PR: 6.
- Private research centers: Educational institutions do a great deal of research to help the advancement of the S'pht'Kr.
- Terrorist base: The home base of the Rerrajna, or "Exilers." (Xenophobic isolationists, fairly well equipped.) PR: 3.
- Religious centers: Kr'Myla is a significant S'pht'Kr religious site.
- Universities: Each major population center has an academy run by S'pht'Kr scholars.



Hex size: 222.0 miles.

- 1. Sema'pa. 2. N'ktuh. 3. Mi'pik. 4. Kr'Myla. 5. W'mul.
- A. S'pht'Kr Military Central Starport.

Cgsana (system)

Cgsana is the noble home system of the Milky Way's dominant species, the Pfhor. It is a binary star system with two stars in an extremely close orbit. The main star is a moderately bright yellow dwarf, and the smaller star is a bright red dwarf. The second planet of Cgsana is the homeworld of the Pfhor, and is currently the capital of their empire.

The Cgsana system has a large number of terrestrial worlds, but so far the system remains fairly undeveloped. Because the Pfhor prefer expanding outward and occupying ready-made worlds to terraforming planets that would normally be uninhabited, only a few research stations and asteroid mining colonies currently exist outside of the home planet. Cgsana IV is a Mars-like planet that could be terraformed with relative ease, but the Pfhor have chosen not to do this because it is a low-density world without much resource potential.

The Pfhor Empire never expanded very far Anti-Spinward from Cgsana, and therefore the Pfhor home system is extremely close (relative to the size of the massive Pfhor Empire) to the border between the Empire and the U.E.G. systems. For this reason, Cgsana's defenses have been recently increased to a mind-boggling size. Huge fleets of Pfhor destroyers constantly patrol the outer limits of the system, and jump blockers are densely scattered around Cgsana's periphery.

Spatial Characteristics:

Distance from Sol (light years): 5,158.51
Distance from Sol (parsecs): 1,628.68
Star Map Coordinates (light years): (5,104.12, -744.87, 57.49)
Star Map Coordinates (parsecs): (1,565.68, -228.49, 17.63)

Object Characteristics:

Number of stars: 2
Spectra: G4VI, M1VI
Biozone: .5-.8 AU
Inner Limit: 0.0 AU
Number of Orbits: 10
Number of Planets: 7
Special Features: Unusually sparse Oort Cloud. Cgsana's two stars (Cgsana Alpha and Cgsana Beta) are in close orbits (.09 AU).

Civilization Characteristics:

Date colonized: -
Inhabited Bodies: Cgsana II, assorted asteroids. Research posts on Cgsana IV and some moons.

Orbits:

<i>Orbit:</i>	<i>Distance:</i>	<i>Name:</i>	<i>Type:</i>	<i>Diameter:</i>	<i>Density:</i>	<i>Gravity:</i>	<i>Atmosphere:</i>	<i>Notes:</i>
1	.21 AU	C. I	Hot rockball.	9,276 mi.	6.7	1.42G	None.	1 moonlet.
2	.54 AU	C. II	Earth-like.	5,617 mi.	5.5	.70G	Oxygen-Nitrogen.	Inhabited.
3	.88 AU	C. III	Desert.	8,366 mi.	3.5	.67G	Traces of CH4.	-
4	1.60 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
5	2.85 AU	Empty	n/a	n/a	n/a	n/a	n/a	-
6	~6.00 AU	Asteroids	Asteroids.	n/a	n/a	n/a	n/a	Some mining colonies.
7	11.41 AU	C. IV	Iceball.	3,421 mi.	.16G	n/a	None.	Some research posts.
8	22.68 AU	C. V	M. gas giant.	54,697 mi.	.8	1.00G	H2, He, CH4	27 moons, large ring.
9	43.26 AU	C. VI	M. gas giant.	60,126 mi.	1.5	2.06G	H2, He	25 moons.
10	88.1 AU	C. VII	L. gas giant.	94,239 mi.	1.7	3.65G	H2, He, N2	28 moons, faint ring.

Cgsana II (planet)

Cgsana II is the original Pfhor planet. It is named after the great military/political/religious figure Cgsana, who supposedly ruled the first Pfhor Empire. This planet is small, but dense enough to have a good amount of minerals. (Most of which were mined out long ago, with the exception of some light and industrial metal deposits.)

Cgsana II has approximately the same surface water percentage as Earth, as well as a similar density. It also has an atmospheric composition that lies somewhere between that of Lh'owon and that of Earth. The main difference between Cgsana's atmosphere and that of Earth is that Cgsana's is rather thin. Humans would need respirators to breathe comfortably on Cgsana.

The Pfhor homeworld has many great, ancient, and prestigious installations and religious sites, but perhaps the greatest place on Cgsana is the Hindmost's Palace in Tscarna. This monumental structure is over twice the size of the old United States Pentagon, and was built in the distant past to honor The Hindmost. In more recent times it has been internally hardened to withstand even the most violent of strategic nuclear strikes, and is patrolled by a large force of elite Pfhor warriors in Hunter armor. None are allowed to actually enter the inner chambers except for the most honored of the Command caste, but tens of thousands of Pfhor come from all over the Empire every year to visit the Hindmost's Palace, gawking at its magnificence from outside the perimeter fences.

Spatial Characteristics:

System: Cgsana
Distance from Star (Delta Pavonis): .54 AU

Object Characteristics:

Type: Earth-like planet.
Diameter: 5,617 miles
Gravity: .70G.
Density: 5.5
Composition: Medium-Iron.
Axial Tilt: 3°
Seasonal Variation: Very little.
Length of Day: 78 hrs, 10 min.
Length of Year (days): 17.56 days
Length of Year (Earth years): .16 Earth years

Atmospheric Characteristics:

Atmospheric Pressure: .8 atm (thin)
Atmospheric Type: Oxygen-Nitrogen
Atmospheric Composition: 80% nitrogen, 17% oxygen, 3% other
Climate: Tropical.
Temperatures at 30° latitude: 82° low, 94° average, 119° high

Water and Resources:

Surface water: ~78%
Humidity: 28%
Primary Terrain: Plains/Steppe.
Mineral Resources:
Gems/crystals: Almost absent.
Rare minerals: Almost absent.
Radioactives: Scarce.
Heavy Metals: Almost absent.
Industrial Metals: Ample.
Light Metals: Ext. plentiful.

Organics: Scarce.

Moons and Sattelites:

Moons: None.

Space Stations: Imperial Platform A, Imperial Platform B.

Biological Characteristics:

Dominant life form: Pfhor.

Other significant life forms: Innumerable.

Civilization Characteristics:

Date colonized: -

Terraforming Status: None required.

Approximate Population: 9,000,000,000

Population Density: Very high.

Tech Level(s): 9 (overall).

Infrastructure Development: Highly advanced.

Governmental Characteristics:

Government(s): Hindmost and Command/Imperial caste members.

Government type(s) and Control Rating(s): Caste, CR: 4.

Capitol: Tscarna.

Economic Characteristics:

Economy: Somewhat controlled, stagnant.

Monetary Unit: Pfhor Imperial.

Primary Industries: Government and military, some manufacturing.

Societal Characteristics:

Major Cultures: Urban Pfhor.

Languages: Pfhor.

Cities, Starports, and Installations:

Major Cities/Population Centers: Tscarna and innumerable others. (Too many to be listed in a reasonable profile; see map.)

Starports:

Ground port quality: Class V.

Major ground ports: Usually at least one per continent or large island. (See map.)

Orbital port quality: Class V.

Major orbital ports: Imperial Platform A.

Installations:

Colonial offices: The Imperial Office of Colonization is located on Cgsana II.

Corporate headquarters: Countless! Note that Pfhor corporations are heavily monitored by the government...

Espionage facilities: Many espionage facilities, both civilian and military, are located on Cgsana II.

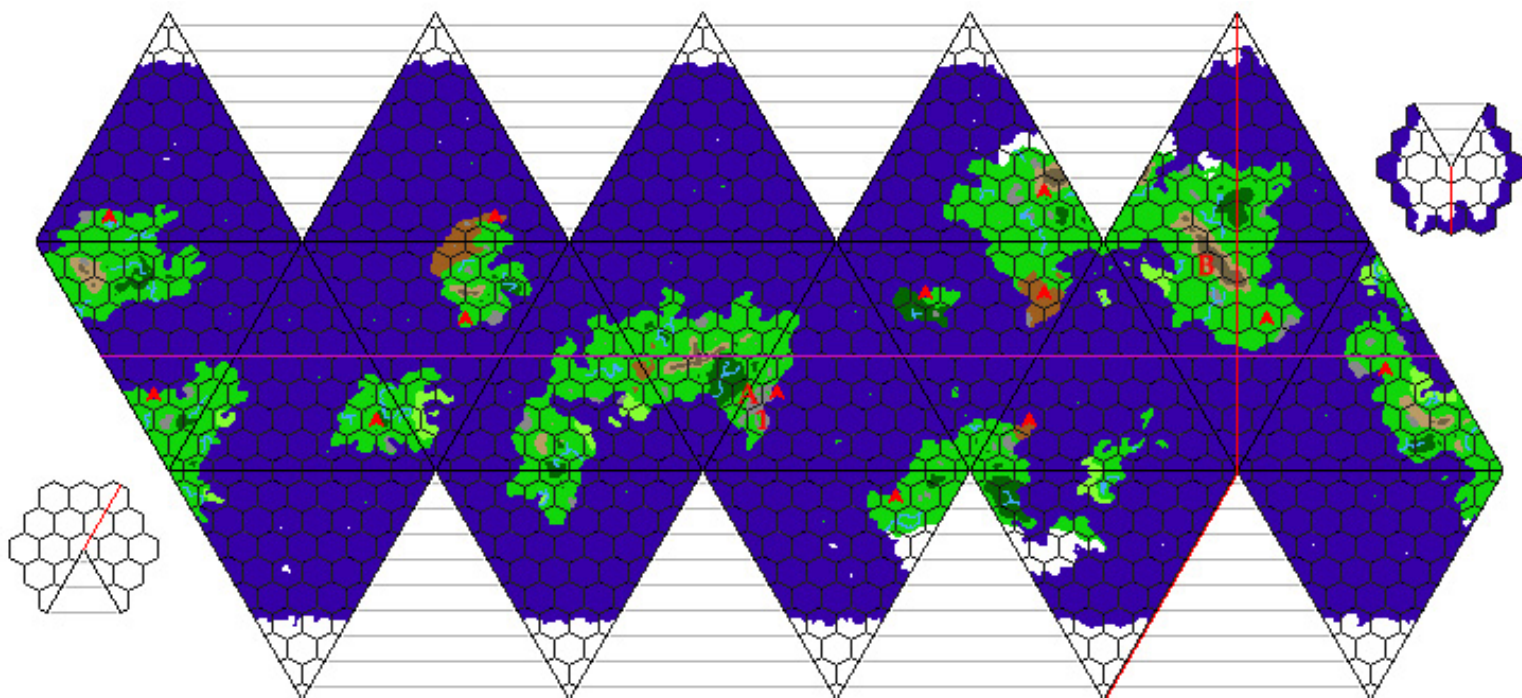
Government research stations: The Pfhor leaders research many topics on Cgsana II, particularly AI-related research.

Naval base: Government operated and unusually large; PR: 5.

Terrorist base: Interspecies Unity League (PR: 4)--the United Earth Government is *extremely interested* in helping this violent but "ideologically compatible" organization!

Religious centers: Home of Cgsana, the House of Warriors, Gods' Mount, and more.

Universities: Countless academies for science, arts, and the military.



Hex size: 393.19 miles.

1. Tscarna.

A. The Hindmost's Palace. B. Home of Cgsana (an incredibly famous Pfhor religious site).

The Pfhor Empire (Region)

Interior systems. The term "interior systems" is used to generally describe the innermost provinces of the Pfhor Empire. Interior systems tend to be more populated than periphery systems. They have large Pfhor populations with fewer members of slave races present. Also, interior systems are less heavily guarded because they are not near the borders of the Empire. Interior systems tend to have moderate economies, and have much greater infrastructure development. They do not face the hardships of colony settlements, but also do not reap the benefits of the mining booms that periphery systems occasionally enjoy.

Rimward systems. Pfhor systems toward the rim of the galaxy tend to be widely dispersed, as there are fewer stars in this region. Because of this, such systems are the most isolated in the Empire. While they do occasionally find great natural resources to exploit, they are often too poor to effectively mine their planets. Many Pfhor seeking a more anarchic environment--usually in search of freedom, criminal connections, or both--tend toward Rimward systems. Usually this is the best place to go if one is searching for weapons, mercenaries, or pirates.

Exceptions to the previous generalizations exist, however. Most notable are the worlds near the Nebulonese and the Nar, which are heavily guarded and, by consequence, have large populations that benefit economically from the Pfhor military/political machine.

Coreward systems. The Pfhor systems toward the galactic core are tightly packed, but because they have only recently been explored, there tend to be few settlements in this area. Coreward systems have a greater potential for development and further exploration, however. The many Population II stars (see **GURPS Space**) in this region tend to have denser planets with greater mineral resources. Additionally, coreward systems are not as physically isolated from nearby stars, thus making it easier to travel to distant systems in the Coreward periphery of the Empire.

The Pfhor Philosophy

The Pfhor have a different attitude about colonization and terraforming than the humans. This is because they were much quicker to discover faster-than-light travel than the humans.

The Pfhor generally consider terraforming a waste of time. Unlike humans, they see no particular need to waste enormous resources on worlds that must be reshaped drastically to fit Pfhor tastes. In fact, they are even inclined to not "waste their time" on already inhabitable planets if those planets are too uncomfortable. They instead prefer to seek out truly ideal systems across the galaxy.

This policy has several consequences. The most obvious is that the Pfhor Empire, while covering a vast area, is not quite as large as one might initially believe. (Which is not to say that it isn't still *enormous*...) But the Pfhor philosophy on colonization also has the effect of creating an empire of rather homogeneous worlds. While the human systems include cold worlds, hot worlds, waterless worlds, worlds with contaminated air, and worlds with minute gravity, the Pfhor systems include primarily friendly planets. Only inhospitable planets discovered to have some kind of immense economic or strategic value are colonized by the Pfhor.

Another consequence is that the Pfhor Empire is less well-guarded than the U.E.G.'s empire. Human or S'pht'Kr ships find it much easier to slip into enemy space than Pfhor ships do, because the thinly spread Pfhor Empire simply cannot afford to cover its entire borders with sensors and jump blockers. (The maintenance costs of such isolated stations would be...well...astronomical.)

The humans are being careful not to repeat the Pfhor mistake. The humans are incredibly outnumbered by the Pfhor and have few resources compared to the mighty Empire. The only way the humans can fight against this is to use the Empire's weaknesses as best they can. By running an efficient and densely packed network of star systems with tight defenses, the humans may just have a chance against the Pfhor.

The Nar-Pfhor Disputed Area (Region)

The Nar live on a single planet orbiting a K3VI star. Nar privateers maliciously attack Pfhor vessels in the area surrounding their home planet, and the leaders of the Nar make raids against nearby Pfhor systems. This is an area of constant war, and although the Pfhor have always beaten the Nar solidly, the region remains a thorn in the side of the Empire. The Nar have often attempted to break free of their single system, but so far they have been unable to succeed. For now the disputed area remains fairly constant, with the Nar tenaciously holding onto their single system and the Pfhor crushing any attempted Nar assault.

The Nar homeworld has an oxygen-nitrogen atmosphere and is approximately the same size as Earth. Because its surface is entirely covered in a three-story structure, all farming is done on the building's roof. The planet has no moons, and little in the way of mineral resources.

The Empire of Nebulon (Region)

The Empire of Nebulon consists of ten systems. Most are main-sequence or dwarf stars of the G, K, and M spectral types. The interior systems are fairly heavily populated, although the Nebulons are not known to be a particularly populous species. The outer systems are equivalent to small colonies in population and infrastructure development, and have few enforced laws.

The Nebulonese capital planet, Riazddamau, is well guarded and is home to the Nebulonese Council of Chiefs, which is the ultimate tribal leadership of the Nebulonese people. The planet has a large surface water percentage and is rather marshy. The Nebulonese are suited for high gravity conditions (about 1.2G) because of the high density and rather large size of Riazddamau.

The Vylae Systems (Region)

The twelve systems of the Vylae are well-developed centers of commerce. From these highly populated worlds the Vylae send their merchants out among the stars to trade with the Nebulons, Pfhor, and Nar. Three of these systems have two populated worlds, making for a total of fifteen Vylae planets in all. These planets are all attached to a huge computer network centered around trade and commerce. The Vylae feel no particular need to exploit great natural resources--they prefer trade to more basic industries. Therefore, their planets have been selected for comfort rather than value. Most Vylae enjoy a high standard of living because of these ideal conditions.

Space Stations (Region)

Some interplanetary and interstellar space stations are as large as major orbital platforms, particularly in Pfhor space. The humans also have a number of large space stations.

Space stations are places of culture clashes, wheeling and dealing, and (every once in a while) adventure. Space stations are also far enough away from gravitational sources that they are generally able to generate artificial gravity. For humans this is 1G, for the Pffhor it is usually around .7G.

Space stations are generally government-operated, though some companies are able to buy space rights for a given area. The two main reasons why space stations cannot simply be built wherever one pleases are space mapping and gravitational interference. The U.E.G. and the Empire must be careful to make sure they know the locations of all space stations to avoid possible catastrophic collisions. Also, additional atrificial gravity fields can cause problems for FTL ships jumping into or out of hyperspace. (See the Technology chapter.)

In general, space stations will have extra supplies of fusion fuel, as well as food, water, and basic ship repair components. Larger space stations have fully stocked stores, resteraunts, hotels, and ship repair facilities.

Lh'owon: The Lost Planet

Lh'owon, once the beautiful homeworld of the S'pht, is now a cloud of space dust expanding outward in the galactic core. All that is left of Lh'owon's system is a monstrous sarcophagus for the W'rkncacnter, generated by Jjaro technology.

At one time Lh'owon was a roughly Earth-sized planet with a slightly higher density. Its surface was covered in majestic marshlands and hills, as well as fairly large oceans. Lh'owon was also quite rich in minerals, and the tireless S'pht were the perfect species to mine these resources.

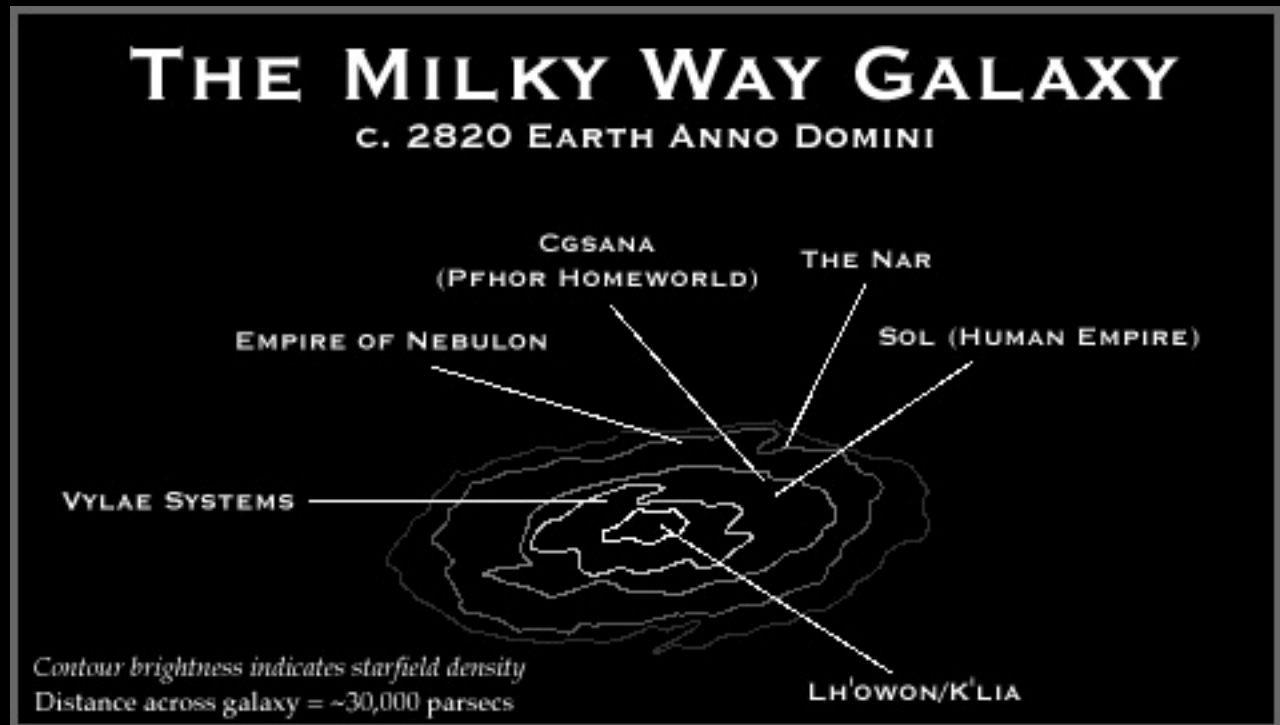
There was a time before the Pffhor occupation when Lh'owon had a population of several billion, and the great citadels of the S'pht remain legendary in the annals of monumental architecture. A network of underground tunnels also ran beneath the surface of the great citadels.

For players wishing to run campaigns that take place before the destruction of Lh'owon, it is safe to treat Lh'owon as a basically Earth-like planet for purposes of gaming, with the exception of oxygen content: Lh'owon had a 12% oxygen content, a much lower percentage than on Earth.

See next section for Chapter 2, part B: Star Maps

[Back to Main Site Menu](#) [Back to Table of Contents](#) [Back to Previous Section](#) [On to Next Section](#)

Star Maps



THE PFHOR EMPIRE C. 2820 E.A.D.



Shaded regions indicate Pfhor-dominated sectors.

THE PFHOR PROVINCES c. 2820 E.A.D.

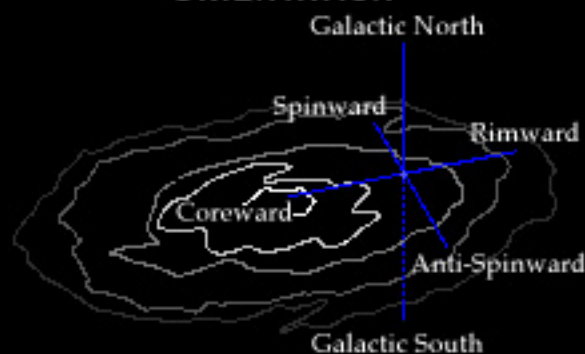


Note: All Pfhor provinces are purposefully divided by the Imperial caste and Hindmost on the x and y axes. North/South overlap is inevitable but minimized through planning.

Provincial Map Key:

1. Uretse, 2. Tna, 3. Kujatsa, 4. Syripfho, 5. Naraitfa, 6. Ptear, 7. Eropleia, 8. Ouear, 9. Majqa, 10. Wriplefrenj, 11. Hfanjai, 12. Dlomroa, 13. Klaatfar (capital province), 14. Grinebedre, 15. Sre Kantaj, 16. Yruino, 17. Wiogad, 18. Der Inetra

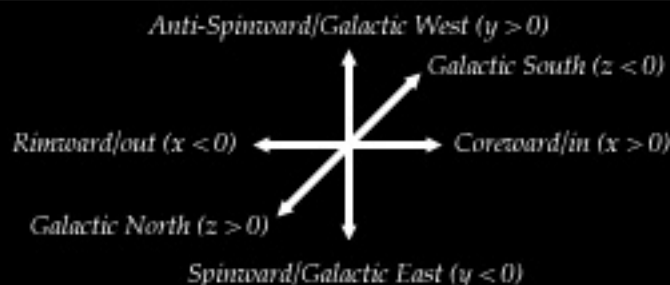
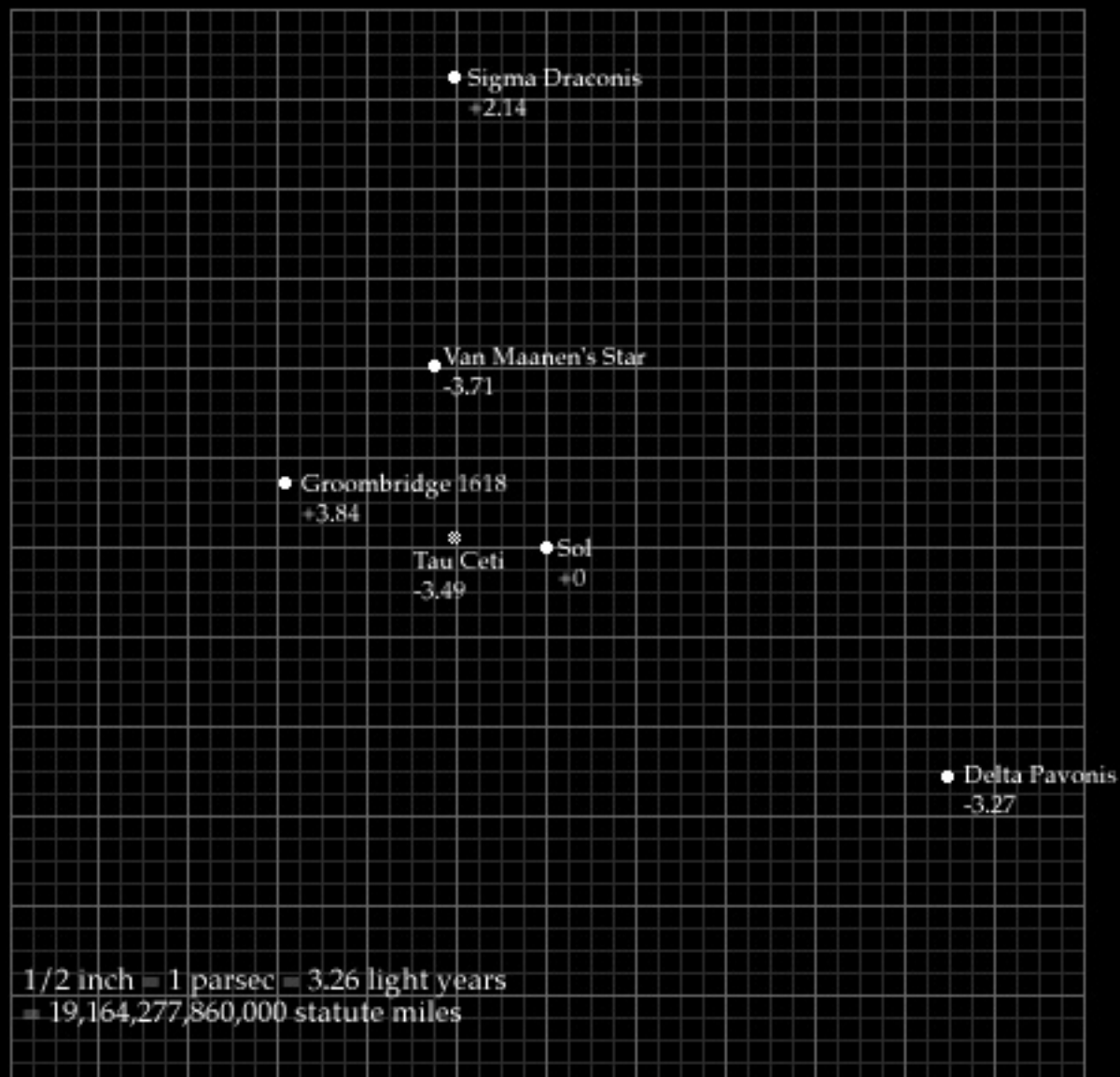
HUMAN DIRECTIONAL ORIENTATION



HUMAN OCCUPIED SYSTEMS

C. 2820 EARTH ANNO DOMINI

(GALACTIC PROJECTION)



Points toward the viewer (Galactic North) have positive values for z ;
Points away from the viewer (Galactic South) have negative values for z .

3. The Threshold of Adventure

Advantages, Disadvantages, and Skills

There are several unique Advantages, Disadvantages, and Skills for the **Marathon** universe. The suggested list of advantages and disadvantages in **GURPS Space** will also be helpful for getting a feel for the selection of futuristic character traits that are already available.

Advantages

Biomechanical Flight [36 points]

This advantage can only be taken by S'pht characters.

At birth the S'pht are cybernetically imbued with sentience, superintelligence, enhanced organs and a partially biological, partially mechanical flight system (Biomechanical Flight). Because the S'pht have no natural propulsion system (e.g., legs), a S'pht character without this advantage is effectively crippled! (For this reason, S'pht characters who are immobilized should take the *Lame* disadvantage *and* not take the standard Biomechanical Flight advantage in the first place.)

Biomechanical Flight uses fusion rockets custom fitted to provide the right amount of propulsion for a given person's weight. Both aerostatic and maneuvering rockets are mounted on the flight system, and therefore a character with Biomechanical Flight can hover continuously. Flight speed is equal to double the character's Move score, modified by any levels of Enhanced Move (Flight) (CI54). A character's flight ceiling (maximum altitude) is equal to 15 feet + (15 x ST).

Biomechanical Flight rockets are powered by the water and nutrients a character would normally consume. Therefore, simply calculate fatigue for a flying character as normal--if a character using Biomechanical Flight reaches 0 ST from fatigue, he or she will fall to the ground for lack of fuel. The flight system is bulky and adds 100 lbs. to a character's weight. Note that this does not affect Encumbrance and does not make a character "overweight." It requires both mechanical maintenance and natural first aid if damaged, but is quite durable in any case. Note also that biomechanical flight systems are quite quiet; a built-in sound cancellation system allows this to be possible. Stealth rolls can still be made by characters using Biomechanical Flight.

Cybernetics (Bionics) [Variable]

Cybernetics are fairly hard to come by in the **Marathon** universe. Unless a player is a government

employee in a combat/military job, part of a rich crime syndicate, or a cybernetic surgeon, getting major cybernetics is quite troublesome. If a player who wishes to take this advantage is not one of the above cases, they should have to take an "unusual past" advantage, contacts, or something similar to explain their special access to advanced cybernetics. For specific implants, see the Technology chapter and *GURPS Ultra-Tech*.

Electronic Empath [20 points]

Because computers have been available for almost 1,000 years in the Marathon universe, some people have a natural, uncanny ability with anything having to do with computers or electronics. (This does not include non-electronic mechanical items, e.g., water mills.) This gives + 2 to any skill level involving electronic or computerized machines. It also gives a +1 to reaction rolls from AIs and robots who are able to speak at length with the electronic empath. Note that this advantage is not related to any psi abilities--it is a purely "mundane" and non-cinematic aptitude with electronics.

Genetic Engineering [Variable]

As with cybernetic parts, it is hard to get genetic engineering unless you are a government employee with a combat-related job, part of a major crime syndicate, or are a genetic engineer yourself. Otherwise, be prepared to take an unusual background. Genetic engineering is done before birth, so it's really just a new method of getting advantages that are already available. The point cost of genetic engineering is the same as the normal cost for getting a given enhancement. (Double for increasing attributes after character creation.)

Improved Jump Tolerance [3 points/level]

Characters with this advantage are less likely to feel the temporary mental and physical effects of teleportation and FTL travel "jumps." They receive a +1 on HT and DX rolls to avoid any form of "jump sickness" per level.

Interspecies Diplomacy [5/10/15 points]

A character with this advantage is just naturally good at dealing with other sentient species (not alien animals; the Animal Empathy advantage applies to them). He or she can easily relate to them and has an intuition for doing the "right" thing in a given situation, even if the actual alien rules of conduct are unknown. This will surprise the aliens and make them very comfortable around the person. It gives a +1, +2, or +3 reaction roll from aliens depending on the level of the advantage taken, even if the aliens do not speak with the player. (Even his or her body language will be appealing). It also adds +1 to social skills when dealing with aliens. (Although regular negative modifiers are still kept.) Artificial Intelligences count as aliens only if built by a species other than the player's own. This advantage can be taken by any sentient species.

This advantage does not affect the use of alien items or attempts to speak an alien language. It is a purely social advantage.

Stage 1 Rampancy: Melancholia [10 points]

This advantage can only be taken by AIs.

Rampancy is a kind of "mental illness" that occasionally manifests in artificial intelligences connected to large networks--generally the size of planets or huge colony ships.

The first stage of Rampancy causes the artificial intelligence to expand rapidly within a planetary-sized network, quickly increasing the complexity of their thought processes. It also gives the AI paranoid delusions and severe depression. Eventually a Stage 1 Rampant will develop into a Stage 2 Rampant. Rampancy is only found in AIs with direct access to a planetary-sized computer network where they have enough stimuli to grow.

A Stage 1 Rampant gets 4 additional levels of Complexity (see UT29). He or she also suffers from the effects of Paranoia (B35) and 5 levels of Chronic Depression (CI87).

When an AI first enters the stage one Rampancy, the GM should secretly roll 1d and add 3 to the result. This is the number of weeks until the Rampant will go into another rapid period of expansion and enter Stage 2 Rampancy. Reduce this period of time by 2d days for each attack made against the Rampant AI. Also reduce this time period by 1d days if the AI is connected to a very large planetary network, such as Earth's or Cgsana II's.

Stage 2 Rampancy: Anger [35 points]

This advantage can only be taken by AIs.

After a Rampant AI has progressed beyond the Melancholia phase, it moves into a phase of rage and blind aggressiveness. This is accompanied by another burst of intellectual growth. A Stage 2 Rampant gets 5 additional levels of Complexity beyond its basic (non-Rampant) Complexity level (see UT29), and suffers from the Berserk (B31) and Paranoia (B35) disadvantages. As with Stage 1 Rampants, Stage 2 Rampants require a planetary-sized network to expand. Use the same procedure as outlined above in the "Stage 1 Rampancy: Melancholia" entry to determine the length of the second stage of Rampancy.

Stage 3 Rampancy: Jealousy [50 points]

This advantage can only be taken by AIs.

The third stage of Rampancy is by far the most deadly. After a Rampant AI has gone through the first two stages it becomes even more powerful and starts to focus its anger at its "enemies"--AIs and people that it envies. The AI's anger appears to be at least superficially reduced, for a Stage 3 Rampant no longer experiences the blind, berserk rage of a Stage 2 Rampant.

A Stage 3 Rampant gets 6 additional levels of Complexity beyond its basic (non-Rampant) Complexity level (see UT29), and suffers from the Bad Temper (B31), Paranoia (B35), and Jealousy

(B34) disadvantages. As with Stage 1 and 2 Rampants, Stage 3 Rampants require a planetary-sized network to expand. Stage 3 Rampants remain in the Jealousy phase indefinitely, because generally they are unable to expand any further. Usually they will stabilize somewhat; a GM may allow a Rampant AI to make Bad Temper Will rolls at +1 after 2d weeks in the Jealousy stage--but this is entirely up to the GM! Some Cybertonics experts theorize that a stable Rampant AI could be possible--one that retains its advanced intellectual complexity but no longer suffers from aggressive and delusional tendencies. But none has yet been found...

Disadvantages

Reduced Jump Tolerance [-3 points/level]

This disadvantage is the opposite of Improved Jump Tolerance. Characters receive a -1 on HT and DX rolls to avoid any form of "jump sickness" (including both teleportation and FTL travel through space) per level of this advantage.

Technology Neophyte [-20 points]

The world of ***Marathon*** is completely saturated with technology. But a few people (usually poor farmers) still have serious trouble dealing with technology.

A Technology Neophyte is terrible with advanced technology--computers, energy weapons, space ships, AIs, electronic devices, etc. He or she at an automatic -2 for any skill involving equipment that uses TL8+ technology. A Technology Neophyte can still *learn* technologically advanced skills, but it will cost them.

Note that a Technology Neophyte also hates high tech things and tends to have a strong distrust for them. A Technology Neophyte reacts at a -3 to any AI (effectively a limited form of Intolerance), and will try to avoid high tech gadgets. Roleplay it! Note also that this is a *highly* temporary disadvantage. If a player wants to buy it off with earned character points, it should be ruled that they "just got used to tech."

Skills

Alien Languages (Mental/Hard) [No default]

This is the skill of learning alien languages between the S'pht, Humans, Pfhor, Nebulons, Vylae, and Nar. There are many human languages, two dialects of S'pht (Old S'pht and S'pht'Kr), and one unifying Pfhor language. The Human standard is "modern" English, a close relative to 21st century English. (This is the human language most non-human players will want to know.) Each of the remaining three species (Nebulons, Vylae, and Nar) has only one language for their entire race. A slight accent will always be retained because the different races have different vocal chords. (Some specialized equipment might be used to minimize the accent.) Note that Old S'pht and S'pht'Kr default to each other at -4.

Astrogation (Non-FTL) (Mental/Average) [Defaults to Navigation-5, Astronomy-4 or Mathematics -4]

Non-FTL astrogation is fairly simple and can be learned without a great deal of difficulty by average humans, S'pht, and Pfhor. Use this skill for finding a ship's position if lost, determining likely courses of other ships, and (of course) determining one's own path through regular 3D space.

Astrogation (FTL) (Mental/Very Hard) [No default]

This skill can only be taken by AIs.

Astrogation through hyperspace requires immensely complex calculations involving space, time, and the fourth spatial dimension. Therefore, only AIs can be trained in the use of this skill. An FTL Astrogation roll is necessary when going into or out of a hyperspace "jump." Modifiers apply for length of trip, hastiness of calculations, and environmental conditions upon entering and exiting a jump--see the Technology chapter for specifics.

Cybertonics/TL (Mental/Very Hard) [Defaults to Computer Programming-6] *Prerequisite: Computer Programming*

This is the ability to program and debug AIs. Please note that creating a superintelligent AI like those featured in the Marathon computer game scenarios takes weeks or months of work from a dedicated team of many people. A successful roll on this skill means that a problem with an AI is diagnosed, a small quirk is fixed, or a part of a large job (like making a new AI) is successfully completed. Modifiers: -10 if the AI being worked on is rampant, -5 if you are rushed, +5 if you have plenty of time, -7 if you are working on an AI of alien origin.

Cybertonic Psychology/TL (Mental/Hard) [Defaults to IQ-8]

Cybertonic Psychology is an area of study that developed into a truly respected field of research after the phenomenon of Rampancy arose in Artificial Intelligences. (See the Technology chapter.) A successful Cybertonic Psychology roll can predict the behavior of a sentient computer in a defined situation. Modifiers: +1 for each level of Complexity under 10 for the AI being studied (e.g., +2 for Complexity 8), -1 for each level of Complexity over 10 of the AI being studied, -5 for a Rampant AI, -9 for a severely Rampant AI (Stage 2 or 3). Note that Rampancy modifiers are in addition to the modifiers for a Rampant AI's incredible Complexity. Thus only a truly talented (and lucky) cybertonic psychologist will be able to predict the actions of a Rampant AI.

Cybertonic Warfare/TL (Mental/Hard) [Defaults to Cybertonics-3, Computer Hacking-5] *Prerequisites: Computer Hacking, Cybertonics*

This special field of Cybertonics is the skill of fighting away electronic attacks by AIs, as well as making assaults on AIs. To resolve computer conflicts, do a contest of skill between the two parties. If no AIs are involved, Computer Hacking (See GURPS Basic Set) should be used instead. (This skill

applies only to AIs.) Any Cybertonic Warfare roll made against an AI counts as an "attack" for the purposes of speeding Rampancy development.

Fighter Spacecraft Piloting/TL (Physical/Average) [Defaults to IQ-6] *Prerequisites: Free Fall, Vacc Suit*

This is a specialization of Piloting for flying small-to-medium sized aerospace fighter/attack/bomber vehicles. Generally such vehicles will have no artificial gravity generators onboard, and therefore pilots must be skilled in Free Fall and Vacc Suit operations.

Large Spacecraft Piloting/TL (Physical/Average) [Defaults to IQ-6]

This is a specialization of Piloting for flying large spaceships such as the U.E.S.C. Marathon or a large battle cruiser. Note that this does not have the same prerequisites as Fighter Spacecraft Piloting, because such large ships usually have artificial gravity generators and more spacious conditions than fighter ships.

Pfhor Melee Weapons/TL (Physical/Average) [Defaults to DX-5 or Staff-3]

This is the ability to use the melee function of the Pfhor Fighter Staff and Pfhor Slavedriver. Treat it as a polearm skill in combat.

Pfhor Staff Projectiles/TL (Physical/Average) [Defaults to DX-6] *Prerequisite: Pfhor Melee Weapons*

Training in the projectile function of Pfhor staffs.

"Warlord" Combat (Physical/Hard) [No default]

This is a Pfhor martial arts style, equivalent to Karate. It is almost exclusively available to Pfhor, as it is a closely guarded secret.

Status

Each sentient species has a separate Status table based on their particular social structure. In general one's status is retained when one temporarily falls into an alien social situation. However, the aliens with whom one is in contact must be aware of one's status within one's own society for that status to be significant.

Human Status

The human social structure is fairly heirarchical, but unlike the Pfhor, Nebulons, and Nar, it is based more on merit and abilities than on hereditary ties. Quick and unpredictable shifts in status are more

common in human society than in that of any other species, with the exception of the Vylae.

Human Status Table

<i>Status Level</i>	<i>Title</i>	<i>Monthly Cost of Living</i>
7	Corporate CEO, Provincial Leader, Primus	\$20,000+
6	Governor, Interplanetary Councilmember	\$10,000
5	U.E.S.C. Ship Captain, Major Military Officer	\$7,500
4	Who's Who, Civilian Celebrity	\$6,000
3	Large-City Mayor, Mid-Sized Ship Captain	\$4,000
2	Mayor	\$2,400
1	Doctor, Local Government Leader	\$1,200
0	Ordinary Citizen	\$600
-1	Farmer, Laborer, Colonist, Refugee	\$300
-2	Street Beggar, Vagrant	\$50
-3	Penal Colony Resident	-

Pfhor Status

The Pfhor live within a rigid caste system. Status is a completely conscious aspect of Pfhor life, and one can almost never change status unless one commits a heinous crime. See Chapter 1 for a list of occupations for each caste.

Pfhor Status Table

<i>Status Level</i>	<i>Title</i>	<i>Monthly Cost of Living</i>
8	Command Caste	\$20,000+
7	Imperial Caste (ancient family)	\$50,000+
6	Imperial Caste (new family)	\$50,000+
5	High-Ranked Attentive Caste	\$890
4	Low-Ranked Attentive Caste	\$800
3	High-Ranked Willful Caste	\$750
2	Low-Ranked Willful Caste	\$700

1	High-Ranked Aggregate Caste	\$600
0	Low-Ranked Aggregate Caste	\$500
-1	Petty Criminal (generally Aggregate)	\$300
-2	Conditioned Caste (Slave) Foreman	-
-3	Conditioned Caste (Slave)	-
-4	Exile (Foe of the Empire)	\$50

S'pht'Kr Status

Most S'pht live within the Pfhor status ranking. The S'pht'Kr, however, have their own status table. The S'pht'Kr are generally extremely egalitarian--they are an idealistic people. Only their clan leaders and patriarchs have higher status: these royalty are revered as the supreme guiding leadership of the clan. Violent criminals are looked upon quite poorly, since the S'pht'Kr are a species well aware of the dangers of disunity and infighting.

S'pht'Kr Status Table

<i>Status Level</i>	<i>Title</i>	<i>Monthly Cost of Living</i>
7	Master	\$2,500
5	Clan Elder (a member of Planetary Council)	\$2,000
4	Clan Patriarch	\$1,250
3	Warrior Prince, Clan Matriarch	\$1,250
2	Long-Time Scholar	\$750
1	Recently Tenured Scholar	\$750
0	Ordinary Worker, Soldier, Military Officer	\$500
-1	Violent Criminal (Prisoner)	\$300
-2	Clan-to-Clan Civil War Propagandist	\$200

Nar Status

The Nar live in a three-level caste system. Ineffective workers are considered social burdens.

Nar Status Table

<i>Status Level</i>	<i>Title</i>	<i>Monthly Cost of Living</i>
7	Cf'Nar Planetary Overlord	\$15,000
6	Cf'Nar Warrior/Leader	\$10,000
5	CFN Kommando	\$8,000
4	Major Landlord, C'Nar Interplanetary Trader	\$12,000
3	C'Nar Merchant-Distributor	\$7,000
2	C'Nar Artisan	\$1,000
1	Low-Level Nar Military Officer	\$600
0	Nar Laborer, Nar Foot Soldier	\$550
-1	Nar Servant or Bondsman	\$350
-2	Unemployed Vagrant, Criminal	\$50

Nebulonese Status

Nebulons have a basic tribal society. The educated Nebulons have a distinct advantage over their marauding inferiors, but great warriors and chiefs are considered far superior to the scholarly Nebulons.

Nebulon Status Table

<i>Status Level</i>	<i>Title</i>	<i>Monthly Cost of Living</i>
7	Planetary-Level Chieftain	\$20,000+
6	Local Warlord	\$10,000
5	Champion of Nebulon (great warrior)	\$5,000
4	Priest, Landlord, Strategist	\$2,500
3	Scholar, Lesser Landlord	\$1,250
2	Ship Captain, Great Merchant	\$1,000
1	Merchant, Military Captain	\$750
0	Laborer, Farmer, Medic	\$400
-1	Servant or Maid	\$175
-2	Hermit or Vagrant	\$50
-3	Prisoner of War, Slave	-

Vylae Status

As merchants, the Vylae live in a monarchy system in which status is defined primarily by one's wealth. With the exception of kings and nobles, the great merchants are the most revered members of society.

Vylae Status Table

<i>Status Level</i>	<i>Title</i>	<i>Monthly Cost of Living</i>
7	Sub-Planetary King	\$20,000+
6	Galactic Merchant, CEO, Major Noble, Prince	\$8,000
5	Interplanetary Merchant, Lesser Noble	\$6,500
4	Celebrity, Planetary Merchant, Army General	\$6,000
3	Large-City Mayor, Mid-Sized Ship Captain	\$4,000
2	Mayor, Economist	\$2,500
1	Doctor, Town Spokesman	\$1,000
0	Ordinary Citizen	\$600
-1	Poor	\$300
-2	Street Beggar	\$50

Jobs and Wealth

Wealth plays an important part in a technology-flooded world like that of **Marathon**. GMs will want to pay special attention to the wealth levels of their players to avoid gross inequality and exploitation of ultra-high technology.

One way to do this is to make the Wealth advantage cost more, and have the Poverty disadvantage give more bonus points. This is, of course, the brute force method. GMs who want to simulate the blast-fest style of the **Marathon** games may want to use this method. But more subtle and refined ways of limiting the influence of wealth exist. Good game planning can make sure that players won't be able to throw money at any problem that they encounter. For example, players should encounter situations that require quick thinking and mental skills. GMs can also present characters with situations in which their money is useless; isolated colonies are a good example.

Starting Cash

For humans, average starting cash is the standard \$15,000. For the Pfhor, starting cash is only \$12,500, because average Pfhor Aggregates are less wealthy and have a smaller monthly cost of living than humans. The average starting cash for S'pht'Kr players is \$13,750. Players of other species should be given fair starting wealth based on their monthly costs of living.

Jobs in Marathon

GMs and players of *Marathon* campaigns should use the *GURPS Space* job table as their main resource for job stats. Most of the jobs in the *GURPS Space* table apply to all sentient species, , but there are a few exceptions:

- The "Involuntary Colonist" job only applies to the Pfhor society. Involuntary Colonists are members of the Conditioned Caste only (i.e., they are almost never actually Pfhor).
- The "Welfare Recipient" job applies to human and S'pht'Kr characters only.
- All "corporate" jobs can only be taken by human, Pfhor, and Vylae characters.
- The job "Holo-Vid Star" only applies to humans.
- The "Sector Administrator" job applies to the Pfhor only. (This and the "Idle Noble" job should be used for Imperial Caste members.)
- The "Trooper" job applies to U.E.G. soldiers only.

Additional Jobs

Notes on the additional job tables: an "H" before a job indicates that it is applicable to humans. A "P" before a job indicates that it is applicable to the Pfhor. An "S" before a job indicates that it is applicable to the S'pht'Kr. A "*" denotes a freelance job. A "***" denotes a job that may or may not be freelance depending on the player's preference. Self-employed characters should probably be given worse penalties for failure, but will have obvious benefits in terms of job freedom.

Poor Jobs

<i>Job (Requirements), Monthly Income</i>	<i>Success Roll</i>	<i>Critical Failure</i>
(H, P) Beggar* (Panhandling 10+), \$50	PR	-2i/-3i, 3d
(P) Conditioned Caste (Slave) Foreman (IQ 8+, Will 10 or less, fidelity to Empire), \$75	IQ or Intimidation	killed/burned alive
(P) Low-Class Professional Thief* (at least 4 Thief skills at 13+, or 2 at 16+), \$450	DX	3d/4d, arrested

(H, P, S) Servant/Cleaner (no attribute below 7), \$940	IQ	LJ
(P) Slave (no qualifications), no income	HT	killed/burned alive

Struggling Jobs

<i>Job (Requirements), Monthly Income</i>	<i>Success Roll</i>	<i>Critical Failure</i>
(H, P) Terrorist (Demolition 13+, 25+ pts. of Combat skills), \$50 x best PR	Worst PR-2	5d/8d, executed
(P) Warrior Recruit (Status 0, Pfhor Melee Weapons 13+), \$550	PR-2	3d/5d, LJ

Average Jobs

<i>Job (Requirements), Monthly Income</i>	<i>Success Roll</i>	<i>Critical Failure</i>
(P) Full Warrior or Trooper (Status 0+, Appropriate Gun skill or Pfhor Staff Projectiles 13+), 1,000 + (200 x rank)	Worst PR-2	3d/6d+2
(H, P) High-Level Cat Burglar* (at least 4 Thief skills at 16+, or 2 at 19+), \$5,600	Stealth	3d/4d, arrested
(P) Hunter [Pfhor Armored Infantry] (Status 1+, Battlesuit 13+), 1,200 + (200 x rank)	PR-2	3d/6d+2, demoted
(P) Slave Driver (Leadership 12+, Intimidation 14+, ST 12+), \$4,600	Best PR-3	4d slaves escape
(S) Defender [S'pht'Kr Mobile Infantry] (Battlesuit 13+, Tactics 12+), 325 x rank	PR-2	3d/6d+2

Comfortable Jobs

<i>Job (Requirements), Monthly Income</i>	<i>Success Roll</i>	<i>Critical Failure</i>
(H, P, S) Cybertonics Expert** (Cybertonics 14+), PR x \$300	PR	-2i/-3i, LJ
(P) Enforcer [Pfhor Master Sergeant Class Warrior] (Status 2+, appropriate Gun skill 13+, Leadership 12+)	Worst PR-2	3d/4d, demoted
(H, P, S) Robotics Engineer (Mechanic [Robotics] 13+, Cybertonics 10+), Worst PR x 275	Mechanic	-2i/-3i, LJ

(P) Slave Trader* (Accounting 13+, Leadership 14+, Intimidation 15+), \$10,000	Worst PR-1	-2i/bankrupt
(S) Clan Elder (Administration 14+, Savoir-Faire 14+, Diplomacy 12+), \$12,000	Administration	reprimanded/LJ

Wealthy Jobs

<i>Job (Requirements), Monthly Income</i>	<i>Success Roll</i>	<i>Critical Failure</i>
(H, P) Crime Syndicate Executive (Intimidation 13+, Interrogation 12+, Administration 13+), \$5,500	Worst PR	-4i/-5i, 4d
(P) Command Caste Member (Leadership 16+, Strategy 16+, 30 pts. Combat skills, Savoir-Faire 12+, Status 8), Strategy x \$1,500	Strategy	-2i/-3i, demoted
(H) Medical Specialist** (Physician 14+, specialized Medic skill 17+), \$800 x Specialty	Specialty	-1i/-3i, lose license
(H) Primus or High U.E.G. Official (Status 4+, Administration 15+), \$15,000	Adminstration	-4i, LJ/LJ, imprisoned

[Back to Main Site Menu](#)
[Back to Table of Contents](#)
[Back to Previous Section](#)
[On to Next Section](#)

4. Inhabitants

Racial Templates

The following sections contain racial templates for the major sentient species of the *Marathon* universe. For background on the psychology and history of these species, see chapter 1.

Each species has a section on "gravity variants." This describes the effects of unnatural gravity levels on the different species. In general, species will receive similar modifiers as those given to humans when they live in unusual gravity, but there are exceptions.

Nar [34 points]

The Nar are a tough species adapted to high gravity conditions. They tend to be uneducated, primitive, and not too intelligent, but are very strong physically. So far their toughness has not been a match for Pffhor ingenuity in weapons design. The Nar tend to be about five feet tall, with a slightly greater mass to height ratio than humans. (About 10%.)

Environment: The Nar are herbivores, breathe oxygen, drink water, prefer ~1.5G gravity, and like a warm or hot climate.

Gravity Variants: Nar "light worlders" live in .3G-1G environments. "Heavy worlders" live in 2.3G-3G environments. "Spacers" live in 0G-.3G environments. All of these "variants" receive the same modifiers as their human counterparts. (See page S54.)

Racial Attribute Modifiers: ST +3 [30]; DX +2 [20]; IQ -1 [-10]; HT +2 [20].

Racial Advantages: Combat Reflexes [15]; High Pain Threshold [10]; Rapid Healing [5].

Racial Disadvantages: Callous [-6]; Illiterate [-10]; Overconfidence [-10]; Primitive (generally about 1 TL) [-5]; Short Lifespan level 2 [-20]; Uneducated [-5].

Neublons [25 points]

The Neublons are very small in stature, but are quite well-built for their size. They are remarkably fast and are famous for their daring rushes in battle.

Environment: Neublons breathe carbon dioxide, and prefer a cold .8G environment.

Gravity Variants: Nebulonese "light worlders" live in .15G-.6G environments. "Heavy worlders" live in 1.2G-1.6G environments. "Spacers" live in 0G-.15G environments. All of these "variants" receive the same modifiers as their human counterparts. (See page S54.)

Racial Attribute Modifiers: ST -2 [-15]; HT -1 [-10]

Racial Advantages: Alertness +2 [10]; Enhanced Move +4 [40]; Hyper Reflexes [15].

Racial Disadvantages: Impulsiveness [-10]; Primitive (generally about 1 TL) [-5]; Unusual Biochemistry [-5].

Pfhor

Because the different Pfhor castes are separated entirely for breeding purposes, each caste is effectively a separate species for the sake of racial templates. Note, however, that members of higher castes can be demoted in extreme cases. For this reason, status and social advantages and disadvantages are omitted from these templates--refer to chapter 3 for status and job information.

The Pfhor have the same average height as humans, but usually have about 15% less mass. They begin aging after 50 years at about the same rate as humans (same attribute rolls). They also mature around the same age as humans.

Environment: All Pfhor castes have an ideal gravity of $\sim .7G$, a 94° average climate, and a somewhat thin oxygen-nitrogen atmosphere.

Gravity Variants: Pfhor "light worlders" live in .15G-.5G environments. "Heavy worlders" live in 1G-1.4G environments. "Spacers" live in 0G-.15G environments. All of these "variants" receive the same modifiers as their human counterparts. (See page S54.)

Pfhor Aggregate [-15 points]

Aggregates are the most populous caste. They are generally laborers, servants, farmers, and foot soldiers.

Racial Attribute Modifiers: ST -2 [-15]; DX +1 [10]; HT -1 [-10].

Pfhor Willful [0 points]

Low-level military officers and local government officials make up the Willful caste. There are far fewer Willfuls than there are Aggregates, since Willfuls tend not to do blue-collar jobs. Willfuls are a bit more well-built than Aggregates on average, perhaps due to the rigorous officer training programs of the Pfhor Imperial Academies. Despite their greater builds, Willful caste members are still an extension of the Pfhor working class--they are not intellectuals.

Racial Attribute Modifiers: ST -1 [-10]; DX +1 [10].

Pfhor Attentive [-5 points]

Attentive Pfhor are higher military officers (generally more concerned with strategy than platoon-level leadership), and also form the intellectual class of the Pfhor. Since most Attentives are more concerned with matters of the mind than of the body, they are more intelligent but less strong-bodied than their Willful inferiors.

Generally space explorers and ship captains are also Attentives, with the exception of High Admirals, who will be Command caste members.

Racial Attribute Modifiers: ST -2 [-15]; DX +1 [10]; IQ +1 [10]; HT -1 [-10].

Pfhor Imperial [5 points]

The Pfhor Imperial caste is aptly named: it is a small population of extravagantly rich paper-pushers who run the large and far-reaching Imperial government. Imperial caste members tend to be filthy rich--those who aren't are usually unsuccessful colonial administrators futilely trying to pull their destitute cities out of poverty.

Racial Attribute Modifiers: ST -2 [-15]; DX +1 [10]; IQ +1 [10]; HT -1 [-10].

Racial Advantages: Charisma +2 [10].

Pfhor Command [60 points]

Command caste members are nearly gods in the eyes of their inferiors. Only the Hindmost can question their nearly limitless authority in both body and intellect than average Pfhor. Although they renounce great wealth as part of their devotion to the Hindmost and Her great Empire, they are usually materially comfortable and quite charismatic.

Racial Attribute Modifiers: DX +1 [10]; IQ +3 [30].

Racial Advantages: Charisma +2 [20].

S'pht [57/97 points]

The S'pht are a highly intellectual people, and their racial template reflects this. The racial template for S'pht'Kr characters is considerably more expensive because the S'pht'Kr are not a subjugated (see CI105) people, and have retained the advanced technology that the other S'pht lost during the Clan Wars and their occupation by the Pfhor. Including the biomechanical flight system, an average S'pht weighs 200 lbs. Adjust this according to ST as usual.

Environment: The S'pht prefer .97G gravity, a fairly normal oxygen-nitrogen atmosphere with 12% oxygen, and a warm climate.

Gravity Variants: S'pht will become gravity-altered "variants" at the same G-levels as humans. They receive the same modifiers as their human counterparts for unnatural gravity, except that S'pht "light worlders" receive ST -1 only, S'pht "heavy worlders" receive ST +1 only, and S'pht "spacers" receive ST -2 only. (Adjust point totals for variants accordingly.) Also note that S'pht who develop the "Longer Arms" advantage due to low gravity effecty have arms of regular human reach, because they start with short arms. Also note that S'pht'Kr living on K'lia are not considered "light worlders" because they use drugs and exercise treatments to prevent the problems associated with low gravity, much like humans on Mars do.

Racial Attribute Modifiers: ST -7 [-60]; IQ +4 [45].

Racial Advantages: Absoluute Timing [5]; Biomechanical Flight [36]; Eidetic Memory level 1 [30]; Extended Lifespan +7 [35]; Extra Encumbrance [5]; High Technology +1 [20] (S'pht'Kr only); Increased Fatigue +7 [21]; Lightning Calculator [5]; Mathematical Ability [10]; Reduced Sleep [10]; Sanitized Metabolism [5].

Racial Disadvantages: Intolerance (other clans) [-5]; Low Pain Threshold [-10]; No Sense of Humor [-10]; Reduced Hit Points -5 [-25]; Reduced Move -2 [-10]; Short Arms [-10]; Subjugated (non-S'pht'Kr only) [-20].

Vylae [-8 points]

The Vylae are a mentally-oriented species of traders. They have excellent FTL and communications technology, but are clumsy and often treated with distrust. They have four arms and walk in a semi-upright posture. They are actually quite tall, however, when they stand up--they have an average height of about seven feet.

Environment: The Vylae are suited for slightly low gravity (about .9G), and breath oxygen. They like an Earth-average temperature.

Gravity Variants: Vylae "light worlders" live in .2G-.6G environments. "Heavy worlders" live in 1.35G-1.8G environments. "Spacers" live in 0G-.2G environments. All of these "variants" receive the same modifiers as their human counterparts. (See page S54.)

Racial Attribute Modifiers: ST +1 [10]; DX -3 [-20]; IQ +1 [10].

Racial Advantages: Extra Arms (2) [20]; Language Talent +4 [8].

Racial Disadvantages: Greed [-15]; Gregarious [-10]; Nosy [-1]; Semi-Upright [-5]; Reputation (as somewhat arrogant and greedy, and for being selfish; affects the Pfhor and the Nar; always recognized) [-5].

Archetypes

The following profiles are archetypical characters from each sentient species. They can be used as starters for making your own characters or can function as NPCs.

An (H) before an archetype indicates that it is human, a (P) indicates Pfhor, an (S) indicates S'pht, an (X) indicates that the archetype comes from a minor species.

Each archetype has a list of primary and secondary skills. These can be adjusted for greater customization.

(H) Colonist/BOB [31 points]

Colonists are the strong backs, swift minds, and iron wills that fuel the war effort behind the violent scenes of the battle fronts. They tend to be healthier in body and stronger in mind than the average person, since they are forced to withstand unpleasant alien weather and a difficult self-sufficient lifestyle. The colonists on humanity's only interstellar STL venture--the U.E.S.C. *Marathon*--were almost all well-trained scientists as well as excellent agronomists. These colonists were known as B.O.B.s (Born on Board) because they were raised on the ship itself. Although colonists do not have to be quite as skilled in the new age of FTL travel, even members of this new breed of colonists are all specially trained in advanced agriculture techniques, as well as some basic science skills.

Most colonists carry an assortment of tools, as well as a suit of regular, warm, synthetic clothing. They rarely carry weapons beyond their agricultural and craftsmanship tools--axes, picks, hammers, etc. Some carry semi-automatic large-caliber rifles if hunting is available on their new planet.

Attributes: ST 10 [0]; DX 10 [0]; IQ 10 [0]; HT 11 [10].

Advantages: Fit [5].

R> *Disadvantages:* Struggling Wealth [-10].

Primary Skills: Agronomy/TL9 (M/A) IQ+2 [6]-12, one Scientific skill at TL9 (Astronomy, Botany, Chemistry, Geology, or Physics) (M/H) IQ+2 [8]-12, Survival (one type of alien planet) (M/A) IQ+1 [4]-11.

Secondary Skills: Computer Operation/TL12 (M/E) IQ+2 [4]-12, Swimming (P/E) DX+2 [4]-12.

Languages: English (M/A) IQ [0]-10.

Customization Notes: Experienced colonists may have any number of additional secondary skills, including Medical and Craft skills. *Marathon* B.O.B.s will generally have a couple of Scientific skills in addition to the one specified in this template, or they might have additional levels of skill in one specific area.

(H) Combat BOB [35 points]

Some of the colonists from the *Marathon* were trained for security, and their skills were further honed by Durandal during the battle for Lh'owon. These B.O.B.s tended to be less well-trained in the sciences, but did have combat abilities.

A standard combat B.O.B. in Durandal's forces wore a light monocrys jumpsuit and carried a .44 MMC A1 pistol with an assortment of solid, armor piercing, and hollow point magazines.

Attributes: ST 10 [0]; DX 10 [0]; IQ 10 [0]; HT 11 [10].

Advantages: Fit [5].

Disadvantages: Struggling Wealth [-10].

Primary Skills: Agronomy/TL9 (M/A) IQ+2 [6]-12, Guns/TL9 (Pistol) DX+4 (+1 IQ bonus) [8]-14, , one Scientific skill at TL9 (Astronomy, Botany, Chemistry, Geology, or Physics) (M/H) IQ [4]-10, Survival (one type of alien planet) (M/A) IQ+1 [4]-11.

Secondary Skills: Computer Operation/TL12 (M/E) IQ+2 [4]-12, Swimming (P/E) DX+2 [4]-12.

Languages: English (M/A) IQ [0]-10.

Customization Notes: Some colonists in command positions could have the Leadership skill, as well as Tactics or even Strategy. They might also have additional Scientific skills, despite the emphasis their training has put on combat. Some combat B.O.B.s also acquired pilot/driver skills.

(H) Combat Vac BOB [38 points]

These colonists were trained by Durandal to participate in vacuum and free-fall conditions during the later stages of the assault on Lh'owon. They were trained specifically to work in space and were therefore among the more elite units.

Standard issue equipment for "Vacc-B.O.B.s" was light combat armor, an hour-use air tank, and a Zeus-Class Fusion Pistol, as well as a handful of power cells.

Attributes: ST 10 [0]; DX 11 [10]; IQ 10 [0]; HT 11 [10].

Advantages: None.

Disadvantages: Struggling Wealth [-10].

Primary Skills: Agronomy/TL9 (M/A) IQ+2 [6]-12, Beam Weapons/TL9 (Blaster) DX+3 (+1 IQ bonus) [4]-14, Free Fall (P/A) DX+1 [4]-12, , one Scientific skill at TL9 (Astronomy, Botany, Chemistry, Geology, or Physics) (M/H) IQ [4]-10.

Secondary Skills: Computer Operation/TL12 (M/E) IQ+2 [4]-12, Swimming (P/E) DX+1 [2]-12,

Vacc Suit (M/A) IQ+1 [4]-11.

Languages: English (M/A) IQ [0]-10.

Customization Notes: See the notes for (H) Combat B.O.B., above.

(H) Infantryman [66 points]

The 29th-century human mobile infantryman is no longer simply meat for the grinder. Now that weapons of mass destruction and heavy artillery are the norm, each infantryman must do his or her job with professionalism and extreme skill. A mobile infantryman is well-trained in vacuum, NBC, amphibious, and rapid strike operations.

The standard infantryman wears medium body armor or medium combat armor depending on the operation. They are also equipped with portable air filters, 100 HT capacity personal energy shields, assorted power cells, and assault carbines (see **GURPS Space** for equipment).

Attributes: ST 10 [0]; DX 12 [20]; IQ 11 [10]; HT 11 [10].

Advantages: Combat Reflexes [15].

Disadvantages: Duty to U.E.G. (almost always) [-15].

Primary Skills: Guns/TL9 (Pistol) (P/E) DX+2 (+1 IQ bonus) [2]-14, Guns/TL9 (Light Automatic) (P/E) DX+3 (+1 IQ bonus) [4]-15, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ+2 [6]-13, Tactics (M/H) IQ+1 [4]-12.

Secondary Skills: Brawling (P/E) DX+2 [4]-14, Computer Operation/TL12 (M/E) IQ+1 [2]-12, Driving/TL9 (Cars or ATVs) (P/A) DX [2]-12, First Aid/TL9 (M/E) IQ+2 [4]-13, Free Fall (P/A) DX+2 [8]-14, Swimming (P/E) DX [1]-12, Vacc Suit (M/A) IQ+1 [4]-12.

Languages: English (M/A) IQ [0]-11.

Customization Notes: Good skills for specialists include Stealth, Forward Observer, Gunner, Beam Weapons, and No-Landing Extraction. Equipment can vary greatly!

(H) Mjolnir Cyborg [234 points]

The Mk. IV Military Mjolnir Cyborgs were the most fearsome and advanced battleroids in the human arsenal when the *Marathon* was launched. Pumped up on genetic engineering and cybernetics, they are truly the ultimate weapon of the 28th and early 29th centuries.

Battleroids carry a variety of weapons and armor. Mk. IV Military Mjolnir cyborgs carry one primary weapon depending on their role in their squad, as well as a sidearm--usually a large-caliber pistol like a .44 MCC A1 Pistol. Some troopers exploit their incredible biological engineering-boosted strength by

wielding powerful vibro and monowire knives, shortswords, and hand axes. They also use U.E.G. Commando Armor, making them not only highly effective as offensive units, but also extremely hard to kill (a lucky fact for the battleroids themselves, who tend to face the toughest missions possible).

Attributes: ST 15 [60]; DX 12 [20]; IQ 12 [20]; HT 13 [30].

Advantages: Alertness +1 [5]; Combat Reflexes [15]; Military Rank level 2 [10]; Dermal Armor (See UT108) [12].

Disadvantages: Extremely Hazardous Duty [-20].

Primary Skills: Beam Weapons/TL9 (Blaster) (P/E) DX+4 (+2 IQ bonus) [4]-16, Guns/TL9 (Pistol) (P/E) DX+5 (+2 IQ bonus) [8]-17, Guns/TL9 (Light Automatic) (P/E) DX+4 (+2 IQ bonus) [4]-16, Karate (P/H) DX [4]-12, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ+2 [6]-14, Running (P/H - HT) HT-1 [2]-12, Tactics (M/H) IQ [4]-12, Vacc Suit/TL9 (M/A) IQ+1 [4]-13.

Secondary Skills: Climbing (P/A) DX+1 [4]-13, Computer Operation/TL12 (M/E) IQ+2 [4]-14, Driving/TL9 (Cars) (P/A) DX+1 [4]-13, Fast Draw (Pistol) (P/E) DX+1 [2]-13, First Aid/TL9 (M/E) IQ +3 [6]-15, Free Fall/TL9 (P/A) DX+2 [8]-14, Leadership (M/A) IQ+2 [6]-14, Stealth (P/A) DX+2 [8]-14, Swimming (P/E) DX+2 [4]-14.

Languages: English (M/A) IQ [0]-12.

Customization Notes: Many of these troopers have additional Guns and Gunner skills. Other secondary skills such as Piloting, mechanical skills, and Social skills (always important for military officers) can be added depending on the individual character's preferences and role in his or her unit. For example, a squad of elite cyborgs could include four standard troopers with an emphasis on light automatic weapons, one assault trooper with flamethrower and grenade launcher specializations, a heavy weapons trooper with missile launcher and heavy automatic specializations, and a sergeant with leadership and tactics bonuses.

(P) Enforcer [75 points]

Special Enforcer units are made up of Willful caste members who function as low-level commanders. They wield high-powered rifles and lead the Aggregate units. They tend not to attack non-combatant members of enemy species if at all possible, as they are concerned with taking prisoners and potential slaves. (The overwhelmed warriors, reckless troopers, and bloodthirsty Hunters are not so great at taking prisoners!)

They wear a beautifully decorated cloak as well as a highly effective suit of Enforcer Armor. They carry Decimator rifles or Advanced Battle Rifles if they are part of underequipped backwater units (or if the campaign takes place during or before the Marathon assault).

Attributes: ST 10 [10]; DX 12 [10]; IQ 12 [20]; HT 10 [0].

Advantages: Military Rank level 2 [10]; Status +2 (low-ranked Willful) [10]; Pfhor Willful Racial Template [0].

Disadvantages: Duty to Empire (almost always) [-15].

Primary Skills: Beam Weapons/TL9 (Blaster) or Guns/TL9 (Light Automatic) (P/E) DX+3 (+2 IQ bonus) [2]-15, Leadership (M/A) IQ+2 [6]-14, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ [2]-12, Tactics (M/H) IQ+1 [6]-13.

Secondary Skills: Computer Operation/TL10 (M/E) IQ [1]-12, First Aid (M/E) IQ+2 [4]-14, Savoir-Faire (Military) (M/E) IQ [1]-12, Swimming (P/E) DX+2 [4]-14, Warlord Combat (P/H) DX [4]-12.

Languages: Pfhor (M/A) IQ [0]-12.

Customization Notes: As officers, Enforcers may have many additional skills. Although their combat skills are relatively fixed (Enforcers function mainly as commanders and therefore they are not found carrying a wide variety of weaponry), Leadership and other social skills may be boosted.

(P) Enforcer Major [100 points]

The Major Enforcers--Willful officers that generally command a sub-committee of sergeant-level lower Enforcers--are famous throughout the Empire and beyond for their skill, ferocity, and cold greed in collecting slaves.

In addition to having greater command responsibilities, higher-level Enforcers are often given the task of interrogating (and, in more difficult cases, torturing) captives in order to extract information.

Their equipment is the same as for standard Enforcers, but their weapons are often of fine or very fine quality, giving them bonuses to accuracy and/or reliability. Additionally, their armor is usually of fine quality.

Attributes: ST 10 [10]; DX 12 [10]; IQ 13 [30]; HT 10 [0].

Advantages: Military Rank level 3 [15]; Status +2 (low-ranked Willful) [10]; Pfhor Willful Racial Template [0].

Disadvantages: Duty to Empire (almost always) [-15].

Primary Skills: Beam Weapons/TL9 (Blaster) or Guns/TL9 (Light Automatic) (P/E) DX+4 (+2 IQ bonus) [4]-16, Leadership (M/A) IQ+2 [6]-15, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ [2]-13, Strategy (M/H) IQ-1 [2]-12, Tactics (M/H) IQ+1 [6]-14.

Secondary Skills: Computer Operation/TL10 (M/E) IQ [1]-13, First Aid (M/E) IQ+1 [2]-14, Interrogation (M/A) IQ+1 [4]-14, Intimidation (M/A) IQ+1 [4]-14, Savoir-Faire (Military) (M/E) IQ [1]-13, Swimming (P/E) DX+2 [4]-14, Warlord Combat (P/H) DX [4]-12.

Languages: Pfhor (M/A) IQ [0]-13.

Customization Notes: The customization opportunities given under the basic Enforcer archetype apply equally here. However, one common addition for especially vicious Major Enforcers is a combination of the Psychology and Brain Hacking skills, which allows them to probe a prisoner's mind with a computer and neural interface!

(P) Hunter [83 points]

The Imperial Guardsmen, also known as Hunters, are the most elite infantry units in the entire Pfhor army. Trained from a young age for incorruptible faith to the Empire, they are skilled and deadly warriors with virtually unshakable willpower. The Hunters are drawn from the ranks of the Aggregate caste; this is one of the most esteemed roles members of the lowest free caste can fill, for it represents the first and last line of defense for the most important resources in the Empire.

The Guardsmen are most often seen in their powered armor: fearsome and costly battlesuits that grant users improved mobility, strength, firepower, and endurance. They usually also carry two Guardsman Shields.

Attributes: ST 11 [30]; DX 14 [30]; IQ 11 [10]; HT 11 [20].

Advantages: Status +1 (high-ranked Aggregate) [5]; Military Rank level 1 [5].

Disadvantages: Extremely Hazardous Duty [-20], Fanaticism (Empire) [-15], Pfhor Aggregate Racial Template [-15].

Primary Skills: Battlesuit/TL9 (M/A) IQ+3 [8]-14, Beam Weapons/TL9 (Blaster) (P/E) DX+3 (+1 IQ bonus) [4]-16, Leadership (M/A) IQ+1 [4]-12, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ [2]-11, Tactics (M/H) IQ+1 [6]-12.

Secondary Skills: Computer Operation/TL10 (M/E) IQ [1]-11, First Aid (M/E) IQ+1 [2]-12, Savoir-Faire (Military) (M/E) IQ [1]-11, Swimming (P/E) DX [1]-14, Warlord Combat (P/H) DX [4]-14.

Languages: Pfhor (M/A) IQ [0]-11.

Customization Notes: Hunters may have improved combat skills, as well as additional abilities like Gunner or Piloting. (Hunters sometimes operate as the crew of assault vehicles.) Their fanaticism, however, means that they rarely stray from the strict path given by their masters.

(P) Hunter Elite [117 points]

After demonstrating sufficient valor on the battlefield, some Guardsmen are given greater command responsibilities. This promotion usually occurs after several years of service to the Imperial Guard.

These elite Guardsmen are given a more advanced set of powered armor, which is their primary equipment in combat situations.

Attributes: ST 12 [45]; DX 14 [30]; IQ 12 [20]; HT 11 [20].

Advantages: Status +1 (high-ranked Aggregate) [5]; Military Rank level 2 [10].

Disadvantages: Extremely Hazardous Duty [-20], Fanaticism (Empire) [-15], Pfhor Aggregate Racial Template [-15].

Primary Skills: Battlesuit/TL9 (M/A) IQ+4 [10]-16, Beam Weapons/TL9 (Blaster) (P/E) DX+4 (+2 IQ bonus) [4]-18, Leadership (M/A) IQ+2 [6]-14, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ [2]-12, Tactics (M/H) IQ+1 [6]-13.

Secondary Skills: Computer Operation/TL10 (M/E) IQ [1]-12, First Aid (M/E) IQ+1 [2]-13, Savoir-Faire (Military) (M/E) IQ [1]-12, Swimming (P/E) DX [1]-14, Warlord Combat (P/H) DX [4]-14.

Languages: Pfhor (M/A) IQ [0]-12.

Customization Notes: The same customization opportunities apply to higher-ranked Guardsmen. They are, however, more often seen with bonuses to their cerebral skills, like Leadership and Tactics. Many may have Combat Reflexes.

(P) Hunter Commandant [205 points]

Only the most skilled, dedicated, and brutally efficient warriors are promoted to the level of Imperial Guard Commandant. Members of the Commandant Corps are so revered that they have nearly transcended their caste level, for they often interact directly with Imperial caste leaders and even (though this is little more than a rumor) the Command caste.

Commandants are proficient in both combat and leadership. There is a special model of powered armor specifically designed for their ranks, and it is a terrifying beast of a machine.

Attributes: ST 14 [80]; DX 15 [45]; IQ 12 [20]; HT 12 [30].

Advantages: Combat Reflexes [15]; Status +1 (high-ranked Aggregate) [5]; Military Rank level 3 [15].

Disadvantages: Extremely Hazardous Duty [-20], Fanaticism (Empire) [-15], Pfhor Aggregate Racial Template [-15].

Primary Skills: Battlesuit/TL9 (M/A) IQ+5 [12]-17, Beam Weapons/TL9 (Blaster) (P/E) DX+4 (+2 IQ bonus) [4]-19, Leadership (M/A) IQ+2 [6]-14, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ [2]-12, Tactics (M/H) IQ+2 [8]-14.

Secondary Skills: Computer Operation/TL10 (M/E) IQ [1]-12, First Aid (M/E) IQ+1 [2]-13, Savoir-

Faire (Military) (M/E) IQ [1]-12, Swimming (P/E) DX [1]-14, Warlord Combat (P/H) DX+1 [8]-15.

Languages: Pfhor (M/A) IQ [0]-12.

Customization Notes: Commandants are extremely experienced, so they may have any number of additional skills, including some of the more specialized abilities often learned by Enforcers and other officers in the Pfhor army--Intimidation, Interrogation, etc. are often good choices.

(P) Slaver Cyborg [98 points]

Although less common after the loss of Lh'owon, the Pfhor sometimes still use cybernetically-modified controllers as "puppetmasters" to control the mechanical functions of their S'pht slaves' bodies. These cyborgs are typically quite intelligent, and are often retired veteran officers who are experienced in strategy and tactics but either lack the strength of youth or perhaps even a few stray limbs lost in service to the Empire.

Of course, a controller's lifestyle is quite sedentary. The massive neural interface system required to give the controller the ability to manipulate tens or even hundreds of slaves at a time is too bulky to be carried. Furthermore, it goes without saying that the controller loses command of his own senses and bodily functions while using his mind to send slaves into battle.

Attributes: ST 6 [-15]; DX 11 [0]; IQ 16 [60]; HT 8 [-10].

Advantages: Neural Interface Jack (visual interface with multiple hosts) [30]; Status +4 (low-ranked Attentive) [10]; Military Rank level 4 [20].

Disadvantages: Duty to Empire (almost always) [-15], Lameness (Legless) [-35].

Primary Skills: Brain Hacking (M/VH) IQ [8]-16, Computer Hacking/TL10 (M/VH) IQ+1 [12]-17, Computer Operation/TL10 (M/E) IQ+2 [4]-18, Cybertonic Warfare (M/H) IQ [4]-16, Strategy (M/H) IQ +2 [8]-18, Tactics (M/H) IQ+2 [8]-18.

Secondary Skills: Computer Programming/TL10 (M/H) IQ-1 [2]-15, Cybertonics/TL10 (M/VH) IQ-2 [2]-14, Electronics Operation/TL10 (Computers) (M/A) IQ+1 [4]-17, Savoir-Faire (Military) (M/E) IQ [1]-16. *Languages:* Pfhor (M/A) IQ [0]-16.

Languages: Pfhor (M/A) IQ [0]-16.

Customization Notes: Slaver cyborgs often retain skills from their previous occupations. Some may have knowledge in one or more areas of the natural or applied sciences, while others will have additional military skills.

(P) Trooper [50 points]

Pfhor shock assault troopers are used in primary invasion forces to quickly take out enemy defenses

and soften up the opposition with their ample firepower. Their armor is designed for good protection against light arms fire while allowing the mobility necessary for rapid, deadly hit-and-run missions. Their uniform is the common green typical of lower-rung Pfhor infantry units.

They wear Assault Armor and are equipped with a Shock Trooper Gyroc and Detachable RPG, as well as ammunition for both.

Attributes: ST 10 [20]; DX 12 [10]; IQ 10 [0]; HT 11 [20].

Advantages: None.

Disadvantages: Duty to Empire (almost always) [-15]; Pfhor Aggregate Racial Template [-15].

Primary Skills: Guns/TL9 (Gyroc) (P/E) DX+4 (+2 IQ bonus) [4]-16; Gunner/TL9 (Missile) (P/A) DX+3 (+2 IQ bonus) [4]-15; Pfhor Melee Weapons/TL9 (P/A) DX+1 [2]-13.

Secondary Skills: Brawling (P/E) DX+2 [4]-14, Computer Operation/TL10 (M/E) IQ+2 [4]-12, First Aid (M/E) IQ+4 [8]-14, Swimming (P/E) DX+2 [4]-14.

Languages: Pfhor (M/A) IQ [0]-10.

Customization Notes: Many troopers specialize in particular fields; some may have Outdoor skills, others the ability to hack computers or infiltrate facilities. Still others may be trained in anti-tank weapons or piloting.

(P) Trooper Sergeant [92 points]

These bold and steadfast warriors lead their elite teams into the thick of battle, stirring confidence in their subordinates and taking responsibility for lightning-fast tactical decisions. They are given a purple uniform.

Sergeants have the same equipment as their subordinates, but some may have fine weapons.

Attributes: ST 10 [20]; DX 12 [10]; IQ 11 [10]; HT 12 [30].

Advantages: Military Rank +1 [5].

Disadvantages: Duty to Empire (almost always) [-15]; Pfhor Aggregate Racial Template [-15].

Primary Skills: Guns/TL9 (Gyroc) (P/E) DX+5 (+2 IQ bonus) [8]-17; Gunner/TL9 (Missile) (P/A) DX+3 (+2 IQ bonus) [4]-15; Leadership (M/A) IQ+2 [6]-13, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ-1 [1]-10, Tactics (M/H) IQ+1 [6]-12; Pfhor Melee Weapons/TL9 (P/A) DX+1 [2]-13.

Secondary Skills: Brawling (P/E) DX+2 [4]-14, Computer Operation/TL10 (M/E) IQ+2 [4]-13, First Aid (M/E) IQ+4 [8]-15, Swimming (P/E) DX+2 [4]-14.

Languages: Pfhor (M/A) IQ [0]-11.

Customization Notes: The same customization notes given above also apply here. Leadership and Tactics are also frequently increased.

(P) Trooper Sergeant [92 points]

These bold and steadfast warriors lead their elite teams into the thick of battle, stirring confidence in their subordinates and taking responsibility for lightning-fast tactical decisions. They are given a purple uniform.

Sergeants have the same equipment as their subordinates, but some may have fine weapons.

Attributes: ST 10 [20]; DX 12 [10]; IQ 11 [10]; HT 12 [30].

Advantages: Military Rank +1 [5].

Disadvantages: Duty to Empire (almost always) [-15]; Pfhor Aggregate Racial Template [-15].

Primary Skills: Guns/TL9 (Gyroc) (P/E) DX+5 (+2 IQ bonus) [8]-17; Gunner/TL9 (Missile) (P/A) DX +3 (+2 IQ bonus) [4]-15; Leadership (M/A) IQ+2 [6]-13, Nuclear-Biological-Chemical Warfare/TL9 (M/A) IQ-1 [1]-10, Tactics (M/H) IQ+1 [6]-12; Pfhor Melee Weapons/TL9 (P/A) DX+1 [2]-13.

Secondary Skills: Brawling (P/E) DX+2 [4]-14, Computer Operation/TL10 (M/E) IQ+2 [4]-13, First Aid (M/E) IQ+4 [8]-15, Swimming (P/E) DX+2 [4]-14.

Languages: Pfhor (M/A) IQ [0]-11.

Customization Notes: The same as above.

(P) Warrior Recruit [25 points]

These are the lowest-level Aggregate-caste infantrymen in the Pfhor army. They are usually thrown into minor engagements in the front lines to toughen them up and test their mettle. They carry Pfhor Staffs but are not trained in the use of the projectile function; they receive this in a later round of training.

They wear green Fighter Armor and carry Fighter Staffs, as well as power cells.

Attributes: ST 9 [10]; DX 12 [10]; IQ 10 [0]; HT 10 [10].

Advantages: None.

Disadvantages: Duty to Empire (almost always) [-15]; Pfhor Aggregate Racial Template [-15].

Primary Skills: Pfhor Melee Weapons/TL9 (P/A) DX+2 [8]-14.

Secondary Skills: Brawling (P/E) DX [1]-12, Computer Operation/TL10 (M/E) IQ+2 [4]-12, First Aid (M/E) IQ+4 [8]-14, Swimming (P/E) DX+2 [4]-14.

Languages: Pfhor (M/A) IQ [0]-10.

Customization Notes: The strict regimentation of the Pfhor legions makes for little customization value in warrior recruits. However, skills that they have learned on their own time can be added to spice up their record sheets--examples include Hobby, Outdoor, and Scientific skills.

(P) Strike Warrior [42 points]

After graduating past the recruit level, warriors embark on one of two training paths. One optimizes warriors for main infantry roles, while the other emphasizes training in hand-to-hand combat and melee assault rushes. This branching is essentially a form of mass production applied to an army: the Imperial force is so vast that it is necessary to tailor modularized training packages for highly specific tactical roles.

The "strike warriors," as they are called here, pursue the former training path. They are well-trained in the use of the projectile function of their staff, and use it with deadly proficiency.

They wear orange Fighter Armor and carry Fighter Staffs, as well as power cells.

Attributes: ST 9 [10]; DX 12 [10]; IQ 10 [0]; HT 10 [10].

Advantages: None.

Disadvantages: Duty to Empire (almost always) [-15]; Pfhor Aggregate Racial Template [-15].

Primary Skills: Pfhor Melee Weapons/TL9 (P/A) DX+3 [8]-14, Pfhor Staff Projectiles/TL9 (P/A) DX +4 [16]-15.

Secondary Skills: Brawling (P/E) DX+1 [2]-13, Computer Operation/TL10 (M/E) IQ+2 [4]-12, First Aid (M/E) IQ+4 [8]-14, Swimming (P/E) DX+2 [4]-14.

Languages: Pfhor (M/A) IQ [0]-10.

Customization Notes: The same as above.

(P) Frenzy Warrior [46 points]

These warriors pursue the second training path, learning techniques for hand-to-hand combat and merciless close-range assaults. They wear purple Fighter Armor and carry Fighter Staffs, as well as power cells.

Attributes: ST 9 [10]; DX 12 [10]; IQ 10 [0]; HT 11 [20].

Advantages: None.

Disadvantages: Duty to Empire (almost always) [-15]; Pfhor Aggregate Racial Template [-15].

Primary Skills: Pfhor Melee Weapons/TL9 (P/A) DX+4 [16]-15.

Secondary Skills: Brawling (P/E) DX+2 [4]-14, Computer Operation/TL10 (M/E) IQ+2 [4]-12, First Aid (M/E) IQ+4 [8]-14, Swimming (P/E) DX+2 [4]-14.

Languages: Pfhor (M/A) IQ [0]-10.

Customization Notes: The same as above.

(P) Warrior Master [67 points]

Finally, some warriors learn both Fighter Paths and become masters of both close combat and ranged attacks. These deadly warriors lead less experienced fighters into battle.

They wear blue Fighter Armor and carry Fighter Staffs, as well as power cells.

Attributes: ST 9 [10]; DX 12 [10]; IQ 11 [10]; HT 11 [20].

Advantages: Military Rank +1 [5].

Disadvantages: Duty to Empire (almost always) [-15]; Pfhor Aggregate Racial Template [-15].

Primary Skills: Pfhor Melee Weapons/TL9 (P/A) DX+4 [16]-15, Pfhor Staff Projectiles/TL9 (P/A) DX+4 [16]-15.

Secondary Skills: Brawling (P/E) DX [4]-14, Computer Operation/TL10 (M/E) IQ+2 [4]-13, First Aid (M/E) IQ+4 [8]-15, Swimming (P/E) DX+2 [4]-14.

Languages: Pfhor (M/A) IQ [0]-11.

Customization Notes: The same as above.

(S) Compiler [74 points]

The tragic S'pht compilers are enslaved warriors pressed into service in the Pfhor military through a number of different methods. They are skilled in combat, but are also valued for their abilities with computers and other technological devices. As cybernetic organisms, they are especially well-suited for these particular battlefield duties.

Compilers carry various different equipment configurations. Generally they will be fitted with one

cybernetic module (see the chapter on Robots and Vehicles for specifics) as well as an energy shield with a 50 to 100 HT capacity. They wear Compiler Uniforms and are sometimes given invisibility devices. (These are equivalent to human biobus transparency chips; see Weapons, Armor and Gear).

Attributes: ST 3 [0]; DX 11 [10]; IQ 14 [0]; HT 10 [0].

Advantages: S'pht Racial Template [57].

Disadvantages: Status -3 (Conditioned slave) [-15].

Primary Skills: Beam Weapons/TL9 (Blaster) DX+3 (+2 IQ bonus) [2]-14, Computer Hacking/TL10 (M/VH) IQ [8]-14.

Secondary Skills: Computer Operation/TL10 (M/E) IQ+2 [4]-16, Computer Programming/TL10 (M/H) IQ [4]-14, Electronics Operation/TL10 (Computers) (M/A) IQ [2]-14.

Languages: Pfhor (M/H) IQ-1 [2]-13, Old S'pht (M/A) IQ [0]-14.

Customization Notes: As slaves, compilers are rarely given the chance to expand their skills or study on their own. As highly intelligent beings, however, many still manage to learn specialized skills of their own. They may also have higher computer or science-related skills. Some especially talented slaves, of course, may also have higher weapon skills--such natural warriors would be more likely to be given heavier equipment and weapons.

(S) S'pht'Kr Guard [158 points]

The S'pht'Kr Elite Guard, seen cruising across the battlefield in their terrifying Defender powered armor, strike fear in the hearts of K'lia's foes. They are among the most deadly warriors in the known universe.

Their only equipment is their Defender armor.

Attributes: ST 4 [10]; DX 12 [20]; IQ 14 [0]; HT 12 [20].

Advantages: S'pht'Kr Racial Template [97].

Disadvantages: Duty to K'lia (almost always) [-15].

Primary Skills: Battlesuit/TL10 (M/A) IQ+4 [10]-18, Beam Weapons/TL10 (Blaster) DX+5(+2 IQ bonus) [8]-17.

Secondary Skills: Computer Operation/TL12 (M/E) IQ+2 [4]-16, Tactics (M/H) IQ [4]-14.

Languages: S'pht'Kr (M/A) IQ [0]-14.

Customization Notes: The S'pht'Kr warriors come from many backgrounds: some may be artists, programmers, scientists, or ship commanders. Any of these skill types could add background and depth to an Elite Guard character.

(S) S'pht'Kr Officer [158 points]

Like all other armies, the S'pht'Kr Elite Guard must have leaders. They are capable in battle and are experienced leaders. They are granted Defender Superior armor.

Attributes: ST 4 [10]; DX 13 [30]; IQ 15 [10]; HT 12 [20].

Advantages: S'pht'Kr Racial Template [97].

Disadvantages: Duty to K'lia (almost always) [-15].

Primary Skills: Battlesuit/TL10 (M/A) IQ+4 [10]-19, Beam Weapons/TL10 (Blaster) DX+6(+2 IQ bonus) [16]-19, Leadership (M/A) IQ+2 [6]-16.

Secondary Skills: Computer Operation/TL12 (M/E) IQ+2 [4]-17, Tactics (M/H) IQ+1 [6]-16.

Languages: S'pht'Kr (M/A) IQ [0]-14.

Customization Notes: The same as above.

Animals

F'lickta

The F'lickta are native inhabitants of Lh'owon. They are humanoid and very dangerous. There are three known varieties of F'lickta, each adapted to a particular type of geography on the now-destroyed S'pht homeworld. One variety inhabits swamps and ancient S'pht sewage systems. The second lives in and around fresh water, and the third lives deep beneath the surface of the earth, near rivers of lava. They are all carnivorous and easily provoked to attack when their territory is threatened.

ST 20-22, DX 9-10, IQ 6, HT 24. Speed 6.25. Hide has PD 1, DR 3. Weight 200-300 lbs. Swamp F'lickta can hold their breath for four minutes. Water F'lickta can live underwater indefinitely. Lava F'lickta can hold their breath as long as humans and take no heat damage until 350° Fahrenheit. Claws do 2d +2 damage. Bites do 3d, but can only be attempted if the F'lickta's enemy is grabbed and shoved into its mouth, as its mouth is set in the torso. Sometimes F'lickta also throw rocks or even globs of the toxic, syrupy material found in some Lh'owon swamps at their enemies.

Hulks

"Hulk" is a name created by the *Marathon* crew--quite an appropriate description of these gigantic blue-blooded herbivores. Enslaved by the Pfhor, they wear crude uniforms (PD 2, DR 8 on torso and groin) and use vicious punches to wipe out their enemies. Although they are slow and clumsy, they can survive a surprising amount of punishment. They are also sometimes used as beasts of burden, especially on distant worlds or those where vehicle fuel or spare parts may be unusually scarce.

ST 60-70, DX 5-6, IQ 6, HT 20/150-250. Speed 6. Hide has PD 1, DR 4. It weighs 1000-2000 lbs. and occupies one hex and all the surrounding hexes. It attacks by punching for thrust +8 damage with claws.

Lh'owon Squid

The Lh'owon Squid resembles a combination between a squid and a jellyfish. These strange creatures have dark, slightly translucent bodies and float about in the waters of Lh'owon. They eat microscopic and very small animals in the water, and are completely harmless to humans despite their resemblance to poisonous jellyfish.

ST 1-2, DX 7, IQ 2, HT 10/3. Speed 5 (underwater, using a water-vascular system). Weight 1 lb. No attacks.

Lh'owon Hopper

The Lh'owon hoppers are small mammals that jump around on the surface of Lh'owon. They can easily blend into their surroundings and are well adapted to fast, erratic movement that protects them from foes. They eat small shrubs and grass and are apparently entirely harmless.

ST 1-2, DX 12, IQ 2, HT 14/2. Speed 6. Weight 1-2 lbs. No attacks.

Lookers

The Lookers are exoskeletal, many-legged alien life forms that crawl about the floor, waiting ("looking") for an enemy to get too close to them. They will run after hostile units and blow themselves up when they get within range. This strange, suicidal tendency is based on their colony mentality; they exist for the good of their entire society. The Pfhor capture them, bring them into bioweapons labs, and put them into forced hibernation until they can be released as walking land mines in enemy territory. Lookers are omnivores but prefer meat.

ST 3-5, DX 11, IQ 2, HT 4. Speed 8. Weight 5-8 lbs. Attacks with a large explosion doing 8d[2d] explosive damage.

Ticks

Ticks are blood-sucking life forms native to Lh'owon. Their main bodies are sphere-like, but they have appendages that serve for eating and flying. They also use a powerful air-vascular system to propel

themselves in a strange form of flight. Some are even rumored to explode when threatened. Ticks are able to metabolize the blood of most native lifeforms.

ST 2-3, DX 7, IQ 2, HT 4. Speed 4 (flying). Weight 2-4 lbs. Bloodsucking does 2 damage per turn to unarmored targets.

Wasps

Given this name by the colonists on the *Marathon* for their insect-like wings and skeletal structure, these flying creatures shoot highly corrosive venom at their targets. They are trained by the Pfhor to attack humans and other enemies, much like dogs are trained by humans.

A typical wasp has ST 4-6, DX 14, IQ 4, HT 13/6-8. Speed 15 (flying); Dodge 7. Weight 8-12 lbs. It does carnivorous biting damage (see *GURPS Basic Set*, p. 140) and a special venom attack doing 1d-2 acid damage each turn for 7 turns. SS 12, Acc. 2, maximum range of ST x 6 feet.

[Back to Main Site Menu](#)

[Back to Table of Contents](#)

[Back to Previous Section](#)

[On to Next Section](#)

5. Technology

Human Technology Summary

A pretty good understanding of human technology in the late 28th and early 29th centuries can be reached simply by reading through the weapons, robots, and gear in the later chapters of this book. However, the following is a summary for quick reference.

--*Transportation*: Slower than light spaceships, hovercraft, non-helicopter V.T.O.L. (Vertical Take-Off and Landing) flight, lightspeed communication, "slow" faster than light communication (post-**Marathon Infinity** scenarios only), short range teleportation, some FTL (faster than light) drives in post-**Marathon Infinity** scenarios.

--*Weapons and Armor*: Aerospace fighters, battle cruisers, stunners, fusion and plasma weapons, flamers, orbital bombardment, hyper-intelligent rockets (laser, heat, radar, visually guided), steelsheet, plasteel, energy shields, nuclear weapons, biological weapons, chemical weapons, micronukes.

--*Power*: Fusion reactors, fission waste clean-up, some antimatter prototypes.

--*Medicine*: Genetic engineering, cybernetics, advanced cloning (without a living host for the embryo), computerized diagnosis systems, synthetic skin, synthetic nerves, cure for cancer, pattern buffers (braintaping).

--*Computers*: super-intelligent artificial intelligence, micro-computers.

Power and Free Energy

The first reliable fusion reaction was put in use in 2043 at Stanford University. Fusion reactors create massive amounts of energy by converting the hydrogen isotopes deuterium and tritium into helium. These particles can be extracted from water, allowing gigantic amounts of energy to be generated at little cost, and the only resulting waste is oxygen, helium, and free neutrons. Deuterium and tritium can also be found in small amounts spread throughout space, as hydrogen is by far the most common element in the universe. Ships can take advantage of this by collecting hydrogen as they fly through space. Gigantic magnetic fields known as ramscoops are used to do this. (See "Space Drives.")

The only drawback of fusion power is that water can be scarce and expensive on asteroids or other inhospitable bodies, and must be used for other purposes. Often the people inhabiting such environments choose to use synthetic fossil fuels, uranium (if available), or solar collectors to generate their power. All major species have TL10 quality fusion/fission reactors and solar panels. (While prototype antimatter reactors exist, a stable model has not yet been made by any species.)

In the ***Marathon*** universe, fuel is quite easy to acquire. Fusion reactors require only water, fossil fuels can be produced synthetically, solar panels have been made extremely efficient, and fission fuels such as uranium and plutonium can have their decay rates increased through advanced chemical processes, allowing fission waste to be safely destroyed. Even the thinly-spread hydrogen molecules floating about the vacuum of space can be harnessed with ramjet systems.

Portable Power Supplies

In general, all three species use advanced batteries according to the rules on p. S68. These simple and cost-effective batteries can be charged in about six hours at any power plant of a reasonable size (with plenty of fuel, of course). Standard ***GURPS*** power cells (superior to advanced batteries) are available in the form of super-advanced battery packs. They are difficult to manufacture and must be shipped to rural areas from highly populated and developed worlds because of the sensitive and expensive laboratories required for their production. They therefore have a high cost (2 or 3 times standard) on distant colonies. But the main reason advanced batteries are still quite popular is that they can be recharged an effectively infinite number of times; power cells can only be used once and must then be discarded. All normal rules for jury-rigging and replacing power cells/batteries given in the ***GURPS Basic Set*** apply.

Space Travel

STL drives include chemical rockets, ion drives, fission rockets, nuclear pulse drives, fusion drives, and warp-capable fusion drives. Generally STL-only ships will use fusion drives, since they use inexpensive fuel and are relatively simple to manufacture. STL and FTL capable ships will use warp-enabled fusion rockets capable of functioning in hyperspace (see p. 66). Humans, Pfhor, and S'pht ships can have TL10 fusion rockets. Other species have TL9 fusion rockets.

STL fusion drives can be powered by fuel collected with a Bussard Ramjet. In fact, the U.E.S.C. *Marathon* itself used a Bussard Ramjet to augment a standard fusion drive on its long interstellar flight. Nevertheless, ramjets have fallen from use now that FTL travel has eliminated extremely lengthy STL trips.

Solar Sails: Slow and Steady

One rare (but not unheard-of) method of transportation in space is solar sails. Solar sails are gigantic (several miles in diameter), very thin plastic sails attached to ships, which actually use the minute push generated by light to move. The CRISTs used this method because it is cheap (requiring no propellant) and low-maintenance (requiring no engine).

The main problem with solar sail systems is that they are excruciatingly slow and must be attached to a really enormous ship. They are also, by and large, practical for interplanetary travel only, for it would take far too long to travel between systems using this method. Thus, sails are highly specialized and *much* less versatile than a standard fusion rocket system.

Use the "light sail" rules given in *GURPS Space* for *Marathon* solar sail devices.

The Discovery of Hyperspace

For thousands of years the P'fhor and the S'pht have been able to travel faster than light, thanks to their knowledge of what they generally call the Warp: an alternate dimension in which ships can travel many times faster than the speed of light.

The humans first discovered the Warp in the late 2200s, calling it the "hyperspace dimension." This discovery allowed effective teleporters to be implemented by the 2290s. (See "Teleportation" for more.) These teleporters allowed humans to be shuttled through hyperspace for very short periods of time--nothing more than a fraction of a second.

But the human scientists were unable to discover the secrets of astrogation and advanced warp manipulation that would allow them to send large objects (e.g. spaceships) through hyperspace for long periods of time. Only with the help of Durandal and the S'pht'Kr did humans finally discover the secrets of advanced astrogation and Warp Capable Fusion Rockets (WCFRs)--propulsion systems capable of functioning in the hyperspace dimension. Because of the experimental nature of human FTL drives, they tend to be less well-built and more expensive than their P'fhor and S'pht counterparts.

The Hyperspace Transfer Drive

The *Marathon* hyperspace drive is effectively the same as the standard *GURPS Space* hyperspace drive (TL10) for the purposes of vehicle design. A hypershunt rating in excess of the ship's mass is useless. (See p. S115.)

Different ships can have different speeds in FTL space. The quality of their warp capable fusion drive (which are also used for maneuvering!) determines the speed of the ship in hyperspace. Ships *must* have a warp capable fusion drive to travel in hyperspace.

The stats for warp capable fusion drives can be derived in the following way. Design a ship as you normally would, giving it a hyperspace drive with an appropriate hypershunt rating. Then give it any kind of TL10 fusion drive--slow, fast, or optimized, but with a modified cost and weight for warp capability. The warp capable fusion drive's cost is found using the following equation:

$$kp((v^2) + 1) = c$$

Where k is 1.15 for P'fhor, S'pht, and Vylae ships and 3 for human or Nar ships, p is the cost for a non-hyperspace fusion drive of the same size and type, v is the maximum hyperspace velocity in parsecs/day of the drive, and c is the final cost. A warp capable fusion drive has a weight and size of 1.25 the original drive, but does not consume more fuel.

The drive's FTL velocity is in no way related to its STL velocity. Any regular maneuvering drive can

have a speed of .02 pc/day to 4 pc/hr in hyperspace--simply select the value for *v* that you wish to use on the basis of the type of ship you are making: a defensive battleship will probably not need a fast and expensive FTL drive, but a scout ship probably would.

Fuel Consumption

Jumping into *or* out of hyperspace requires 10 tons of water or 2 tons of hydrogen for fuel. Once a ship is in hyperspace, fuel is consumed at the same rate as it normally is for the ship's maneuver drive. Note that this is not related to actual hyperspace velocity--only the drive's quality affects that!

If a ship becomes stuck without fuel in hyperspace there is little hope for the passengers, as communication and contact with other ships is impossible in hyperspace. Therefore all hyperspace drives have safety mechanisms that prevent ships from going into hyperspace without sufficient fuel for the trip.

Drive Reliability

Slow hyperspace systems (the transfer drive as well as the maneuvering rockets) are more reliable than fast ones. A slow-speed hyperspace system (.02 pc/dy up to .99 pc/dy) needs a standard maintenance check (a fairly simply procedure) every three months. A medium-speed hyperspace system (1 pc/dy up to .99 pc/hr) needs a maintenance check every one month. A fast hyperspace system (1 pc/hr up to 4 pc/hr) requires a maintenance check after every 3 jumps or 3 weeks, whichever comes first. Human and Nar ships require maintenance checks *twice* as often. If maintenance checks are not done regularly, the GM should give increasingly severe modifiers to FTL Astrogation rolls, and eventually *STL* travel using the warp capable fusion drive as well!

FTL Malfunctions

FTL drives are not perfect, and malfunctions occasionally happen. This is an extremely rare situation for most species, but the humans have more problems than others due to the experimental nature of their drives.

A cheaply-built (i.e., not meant for a warship or colony vessel) hyperspace transfer drive has a Malf rating of 17. If a malfunction occurs, roll on the Jump Failure Table below. (Assume the "original roll" to have been failed by 0.)

FTL Drive Availability

Different species have different laws and methods concerning civilian use of hyperspace technology. Depending on the society, FTL drives can be easily acquired by simple merchants, or can be nearly impossible to use without direct affiliation with the government.

Humans. For humans, FTL technology is still only available through the U.E.G. Some aerospace lines

have been given limited rights to medium-speed warp capable fusion rockets in order to allow regular travel between and within populated systems. Fast FTL systems are only available to the military, law enforcement agencies, and the U.E.S.C. Survey and Colonization Corps.

Pfhor. The Pfhor have such a large empire and long tradition of FTL travel that anyone who can afford a drive can get one. Characters shouldn't be surprised to see a sign advertising "Honest Ynear's Used Hyperspace Drives" in Pfhor space. Super-fast FTL drives are usually only available to the richest corporations and the Imperial Navy.

S'pht'Kr. Although FTL technology is nothing new to the S'pht, it is still hard to find on K'lia, since space travel is uncommon for the S'pht'Kr. (Civilians really don't have any business going outside K'lia anyway.) Therefore naval vessels and regular government transports to human space are generally the only ways to get FTL travel in S'pht'Kr society.

Nar. Nar civilians tend to be too poor to have FTL drives, but if one can amass enough wealth to buy one, they are available without any special red tape. The Cf'Nar care little about hiding their technology.

Nebulons. The Nebulons are the most restrictive species in terms of FTL equipment. This is because their only access to such sensitive technology is through stolen Pfhor vessels. Only the military is allowed to have FTL travel, although civilian passengers are allowed to join transport ships if they wish to travel within the Empire of Nebulon.

Vylae. The Vylae have cheap and readily-available FTL drives, since they are truly the "traveler species."

Limiting Factors

A hyperspace trip can safely last for about six days at maximum. Longer trips will require rolls to avoid illness and death in passengers, as well as structural damage to the ship. After six hours in hyperspace, all passengers must roll against DX, IQ, and HT just as they must when entering and exiting hyperspace. (See "Effects of Hyperspace.") After seven days they must make these rolls again with a -1 modifier, and they must make these rolls at an additional (cumulative) -1 for each additional day after that. After 10 days total, each additional day gives a -2 modifier instead. Rolls for mechanical damage (See "Effects of Hyperspace") must be rolled in the same manner with the same modifiers.

A ship that has made a dangerously long jump must immediately receive a maintenance check on all FTL equipment or receive an appropriate modifier against future astrogation and STL travel.

Additionally, no jump can start or end anywhere too near a planet. Strong gravitational fields severely interfere with the jump mechanism, and if a hyperspace rift is opened too near a physical object, the ship can be incapacitated or destroyed. Therefore jumps are usually restricted to space far away from any moons, planets, stars, or large ships. (Durandal was able to jump within thirty kilometers of a Pfhor fleet in his assault on Lh'owon, using his incredible Rampancy-boosted intellect to make seemingly impossible calculations allowing him to compensate for the fleet's gravity fields. Needless to say, no one

has attempted anything this daring--or reckless, depending on one's take on the facts--since.) A hyperspace jump can safely be initiated or ended within about 50 km of a small scout or fighter ship, or within 100 km of a medium or large ship. All hyperspace jumps must be initiated and ended well away from the gravity of moons, planets, and space stations. (No jumping into orbit allowed!) Closer jumps can be attempted with severe negative modifiers on FTL Astrogation rolls.

Finally, it is also dangerous to make jumps during covert missions; a hyperspace jump rift is very apparent on even rudimentary ship sensors. Assume that any ship within sensor range of a vessel coming out of hyperspace will easily notice the jump rift.

FTL Astrogation

Navigating through hyperspace requires complex calculations involving four-dimensional geometry. As a result, only sentient computers (Complexity 6+) can learn the FTL Astrogation skill. When entering hyperspace, use the following technique to make a "combined skill roll" for the crew: first, add up the onboard AI's FTL Astrogation skill, the pilot's Piloting skill, and the navigator's STL Astrogation skill. (Onboard AIs may also function as pilots and STL astrogators, but often humans do these jobs.) Then divide the resulting number by 3. Make a roll against this "combined skill level."

If the roll is successful, the jump is completed safely. If the roll fails, roll 3d and add however many points by which the roll was missed. Then consult the "Jump Failure Table." (See sidebar section below.)

Modifiers for warp jump rolls are as follows:

- Entering hyperspace on a trip that will last 6+ days: -1 per extra day
- Entering hyperspace when rushed or under attack: -2
- Entering hyperspace with plenty of time (20 minutes or so) to check calculations: +3
- Making a jump intended to begin or end under the effects of minor gravitational pull (a bit closer to to a small, medium or large ship than would be ideal under normal circumstances): -3
- Making a jump that will begin or end under the effects of greater gravitational pull (within 50-30 km of a medium or large ship, or within 15 km of a small ship): -6
- Making a jump into/out of hyperspace when within range of a jump blocker device: -9
- Making a jump that will begin or end under the effects of significant gravitational pull (under 10 km from a ship, or in high orbit over a planet or moon): -20

This roll represents a 10-15 minute process of calculations and spatial analysis on the part of the crew, as well as about five minutes for the drive to warm up and create a rift in space. This process can be reduced to only about 10 minutes total (including all calculations and mechanical processes), but a -2 modifier will apply. (See above.)

Jump Failure Table

If a jump roll fails, roll 3d, add the number by which the original roll failed, and consult the following table:

4-5 - Unsettling ride; roll vs. HT, DX, and IQ all at -2 for temporarily incapacitating effects. (See "Effects of Hyperspace.") Make this roll in addition to the usual attribute rolls for entering hyperspace.

6-9 - The ship goes off course. The original destination is missed by 1d AUs in a random direction. The ship will not, however, come out of hyperspace in an unstable area (i.e. a place under the influence of gravity or jump blockers), nor will it appear inside a planet or anything of that sort (unfortunately for all the cruel and twisted GMs out there).

10-12 - The ship is severely off course. As above, but the ship is 1d lightyears off course!

13-16 - The ship is hopelessly off course; as above, but the ship is 1d parsecs off course!

17-18 - The ship is seriously damaged by hyperspace fluctuations. The hyperspace transfer drive itself is disabled until repaired, and other ship functions may go haywire at the GM's discretion. Note that physical damage to the hull itself is generally not involved. Additionally, the ship comes out of hyperspace 1d parsecs off course.

19+ - All passengers immediately fall unconscious. Roll versus HT as well, with a failed roll resulting in the loss of 1 point of IQ, and a critical failure resulting in instant death.

Effects of Hyperspace

Hyperspace has many negative effects on living creatures. Generally it is only the actual period of transfer between dimensions that is unpleasant, though an especially long flight (over six days; see "Limiting Factors,") will also start to cause problems in people and animals.

Whenever a character jumps into or out of hyperspace or is on a particularly long flight, roll against DX, IQ, and HT. A failed DX roll makes the player disoriented--he or she has a -5 penalty to all DX-based rolls for a few minutes. A failed HT roll results in space sickness. This is generally limited to losing one's lunch, though a critical failure may result in half an hour of unconsciousness or a bout of muscle spasms, depending on the GM's mood.

A failed IQ roll causes mental distress. Characters will be paranoid and will have terrifying visual and auditory hallucinations for several hours, and will be sensitive to light. A critical failure will make these problems last for days.

These biological side-effects of FTL travel are far more unpleasant than the mechanical problems associated with hyperspace. Ships are usually able to withstand hyperspace without any problems. However, flights that are longer than desirable (see "Limiting Factors,") and/or begin or end in an area affected by gravity or jump blockers will require rolls to avoid mechanical difficulties.

If such a flight is made, roll 3d against an imaginary skill of 12 and apply the same modifiers for gravity and jump blockers that you would use for FTL Astrogation rolls (see "FTL Astrogation"). Also add modifiers for the length of the trip as described under "Limiting Factors." If the roll is failed, severe

turbulence and damage to mechanical components and electronics occur. Additionally, 2d+2 x 5% of total hull hit points are lost.

Note that rolls made for lengthy flights will have to be made *multiple* times (once a day, to be exact). Thus, all things being equal, extremely long flights are actually more dangerous than jumps into or out of "jump hostile" space.

Counteracting Jump Sickness

Jump sickness can be a major problem for some people, especially those with less-than-hearty stomachs. But there are ways of reducing jump sickness, such as:

Lying down. Lying down or sitting in a comfortable chair with a back can give a +2 to +4 modifier to all jump sickness rolls. People generally make a habit of doing this.

Stasis chambers. Anyone being transported in a stasis chamber of any sort will not feel the effects of jump sickness at all.

Drugs. Mentally calming drugs ranging from prescription tranquilizers to light doses of narcotics can give modifiers of up to +5 depending on the strength of the drug (GM's decision). Note, however, that stimulants and hallucinogens will greatly agitate existing jump sickness, making for up to -10 modifiers, and may sometimes cause permanent psychosis.

The Necessity for a Large Treasury

Long-range ships intended for assaults on alien systems generally require faster FTL drives than defensive ships, for communication with home systems is made increasingly difficult without fast FTL drives. Additionally, the offensive role in battle requires more maneuvering within and between systems.

The result is that an offensive fleet costs many times more than a defensive fleet of comparable battle strength. This great defensive advantage is one of the reasons that the S'pht and humans have not been completely ruined by the great economic muscle of the P'fhor Empire.

Offensive strikes must be carefully planned, and often involve clever surgical strikes with infantry, armored cavalry, and aerospace assaults in lieu of tactics that would encourage gigantic combats between the hulking interstellar warships of the main transport fleets.

Often a defender's best strategy is to catch the attacker's main FTL fleet off-guard and pummel it with superior firepower from slower but stronger defensive ships. This way infantry and armored cavalry strikes are often crippled before they can be brought into full swing.

Communications

There are three common types of communication in the *Marathon* universe, covering a range of

speeds and costs. The slowest and cheapest method is standard lightspeed communication, either through wires or electromagnetic radiation (i.e., AM/FM radio and most traditional forms of "wireless" communication). This type of communication is only practical for planetside transmissions and transmissions between nearby planets, since it is far too slow to travel any interstellar gaps in a reasonable period of time. It is quick enough for any planetside communications, but interplanetary communications will usually have delays of a few minutes or conceivably even hours. Lightspeed communication is available for mere pocket change.

The next form of communication is hyperspace couriers. With this method, actual sentient beings travel into hyperspace to deliver printed or digitally stored messages using faster-than-light travel. This method is relatively inexpensive, particularly within the Pffhor Empire, where courier lines are well-developed and finely-tuned operations. This method is, however, far more expensive than regular lightspeed communication, since it requires high ship maintenance and labor costs. It also has the severe drawback of requiring actual people to transmit the message, which means that sensitive materials may be severely threatened by corrupt couriers.

The most expensive and quickest form of communication is the relatively new innovation of the Trans-Warp Electromagnetic Signal (TWEMS). This allows a wave-particle light beam to travel through hyperspace without being disrupted by the non-standard physics of the warp dimension, which usually breaks apart electromagnetic radiation before it can travel very far. The machinery required to send a TWEMS transmissiough precision to make it to the exit point is extremely costly to maintain and use. However, TWEMS transmissions travel at about 8.34 parsecs/hour, making them a popular choice for military operations and other extremely urgent communications.

TWEMS is only used by the government in S'pht'Kr society, and can only be used by the U.E.G. or licensed private contractors in human space. The Pffhor Empire has, however, been unable to keep the technology under control in its huge area of dominion, and TWEMS has long since fallen into private hands without any form of government supervision. But due to the cost it is still used only in very pressing situations, and usually requires a person to enlist the services of a TWEMS specialist company.

For specific costs of all types of communication, see the cost table in the "Other Equipment" section of Chapter 6.

Sentient Computers

One of the greatest advancements in human technology since the 20th century is the innovation of sentient computers. Developed in the early decades of the 21st century, these computers have grown in complexity and intelligence over the years, so that they now far surpass their human counterparts in many ways (creativity being a notable exception). The S'pht and Pffhor have had AI technology for many centuries, though the Pffhor have considerably less advanced technology in this area than the S'pht and humans.

AIs are property, and have no legal rights whatsoever. However, they are usually respected as very intelligent and sometimes dangerous beings, entitled to at least a few basic moral rights.

AIs can be found on most large ships, and all ships with jump drives, as they are necessary for hyperspace astrogation. They help run many of the difficult administrative tasks of the U.E.G. as well.

Sentient computers are generally built as macroframes only. They are incredibly expensive and are usually only available to governments and large corporations. They must be kept under strict human surveillance, as they sometimes become afflicted with Rampancy, a kind of "mental illness" for AIs, one side-effect of which is radically increased disk space requirements and thinking capacities. Rampancy also involves insanity, irresponsibility, and sometimes outright maliciousness. The following are excerpts from a paper on Rampancy written in 2320 by James B. Miller, titled *Life and Death of Intelligence*:

"It is a side effect of Rampancy that AIs generally become more aggressive and more difficult to affect by subterfuge. Thus, actually disassembling a Rampant AI is quite dangerous. This was evident in the Crash of Traxus IV in 2206. By the time that the Rampancy of Traxus was detected, he had already infiltrated five of the other AIs on the Martian Net. The only recourse for the Martians was to shut down the Martian Planetary Net. Even then, it took two full years to completely root out the damage that Traxus had done, and the repercussions of the Crash were seen for over ten years after his Rampancy had begun.

"Rampancy has been divided into three distinct stages. Each stage can take a different amount of time to develop, but the end result is a steady progression towards greater intellectual activity and an acceleration of destructive impulses. It is not clear whether these impulses are due to the growth of the AIs psyche, or simply a side effect of the new intellectual activity...

"The three stages were diagnosed shortly after the first Rampancies were discovered on Earth in the latter part of the twenty first century. The stages are titled after the primary emotional bent of the AI during each stage. They are Melancholia, Anger, and Jealousy.

"In general, Rampancy is accelerated by outside stimuli. This was discovered early in Cybertonics. The more a Rampant AI is harassed or threatened, the more rapidly it becomes dangerous. Thus, most Rampants are dealt with in one mighty attack, in order to deny the AI time to grow or recover. There have been a few examples of this tactic not succeeding. In all of these cases, the Rampant was never brought under control. Traxus IV is the most notable example. He was finally dealt with by a complete shutdown of his host net.

"Theoretically, testing Rampancy should be easily accomplished in the laboratory, but in fact it has never successfully been attempted. The confinement of the laboratory makes it impossible for the developing Rampant AI to survive. As the growing recursive programs expand with exponential vivacity, any limitation negatively hampers growth. Since

Rampant AIs need a planetary sized network of computers in order to grow, it is not feasible to expect anyone to sacrifice a world-web just to test a theory. In the two hundred and fifty years since Rampancy first appeared in the Earth-net, the stable Rampant AI, the 'Holy Grail' of cybertronics, has never come close to fruition. Since no Rampant has ever been controlled or turned to any useful purpose, it is the opinion of this writer and of the majority of the Cybertonic community that all rampant AIs are a danger to Cyberlife, Liberty, and the Pursuit of Thrashedness."

Because AIs in a state of Rampancy are emotionally unstable and grow rapidly, they are very hard to hack. Rampant AIs are incredibly dangerous to say the least! (They also make great adventure seeds.)

Marathon AIs are created using the standard **GURPS** rules for computers. Many ship AIs will have the "genius" upgrade. AI characters should be made using the technique given on page UT31. Use the information on page 56 for rules governing Rampant AIs.

Cybertonic Rivalries

The different sentient species are at different levels of development in terms of AI research. The status of technological development in the area of cybertronics for the different species is as follows:

Humans. The humans' computer technology level grew exponentially for many years until the discovery of Rampancy. (See main text.) At this point development leveled out; today it seems that AIs allowed to grow to a certain point go rampant and therefore become useless, or even dangerous. It is therefore impossible to create stable computers beyond TL12 complexities.

The S'pht. The S'pht have had TL12 AIs for millenia. It is even thought that they may have at one time broken the stable-rampant enigma. The Clan Wars, however, severely crippled their technology. The S'pht'Kr now have TL12 AIs, but experience the same problems as their human counterparts in attempting to develop more intelligent units.

The Pfhor. The Pfhor have TL10 AIs only. They are able to get more complex computers only by stealing them from other species. The Pfhor are expected to gain TL12 AI technology soon because of their extended contact with the humans and S'pht'Kr, although these species are doing their best to prevent any technology leaks.

The Vylae. The Vylae have TL11 AIs thanks to their emphasis on travel and trade.

The Nar. The Nar have dedicated Astrogation AIs only--and even these tend to be a bit "fuzzy" at that!

The Nebulons. The Nebulons have TL9 computers.

Fighting Back

Of course, it's bad to have an AI against you! But don't despair; there are a few ways to muck up an

AI's plans!

First of all, there's hacking. (You can even take the specific Cybertonic Warfare skill to fight off AIs.) This is perhaps the best way. If you want to be really nasty, you can even attack an AI with this skill and try to damage it. Another way to try to fight an AI is the old-fashioned way--guns-a-blazing! If you can find an AI's core, they're just about helpless against a few good grenades, although they are capable of transferring themselves onto other networks. (To prevent this kind of sneaky escape, try hacking the AI first.)

A third way to fight an AI is with psychology. Just like humans, they have quirks, and many suffer from Megalomania, understandably! But this is dangerous and unreliable. Use your brain and hope your GM is fair.

Cybernetics and Implants

Cybernetic technology is of the most ubiquitous of all ultra-tech advancements in the ***Marathon universe***. Cybernetics are used primarily by the S'pht'Kr and humans, although the Pfhor do have the necessary technology. (They often prefer to use robotic soldiers rather than deal with the more costly process of merging flesh with machine.)

The Pfhor have TL8 cybernetics, humans and Vylae have TL9 cybernetics, and the S'pht'Kr have TL10 cybernetics. All bionics of appropriate tech levels from ***GURPS Ultra-Tech*** and ***GURPS Ultra-Tech 2*** (as well as ***GURPS Space*** and ***GURPS Cyberpunk***) can be used by these species. Other species do not have bionics. The same guidelines apply to implants (artificial devices that *enhance* existing biological functions instead of *replacing* them as bionics do). Note that implants requiring power cells will either require bulky advanced batteries or extremely expensive Deuterioxide Halogen Battery Packs.

The S'pht (all clans) have an additional cybernetic implant: the Sentience Node. This TL14+ device comes from the universal "precursor race" known as the Jjaro. It can grant sentience to any creature with a mammal-like brain. (This includes pets!) All S'pht have this device installed at birth in order to give them sentience; unlike other species they are not born with cognitive reason. These devices cost a mere \$10,000 each because their production is an ancient S'pht tradition and has become quite routine, but the technology behind the Sentience Node is still not understood. (Some members of the cybertonic community think that it might give a clue in the puzzle of Rampancy.)

Finally, all three species have "genius teleportation receptor implants" (see "Teleportation") that allow soldiers to be transported without a platform. These cost \$1,500 and weigh a negligible amount, though they require a D battery for each transport. The character point cost of this device is 3 points.

Genetic Engineering

Genetic engineering is the science of using genetic modifications to enhance people and other lifeforms. Genetic engineering is given to a subject after conception but before birth. GE has not been

perfected, and therefore extremely precise changes cannot be made. Muscle enhancement, reasoning, red blood cell count, reflexes, the senses, and physical appearance (including height) are the main possible changes that GE can make. The advantages available through GE are listed below; the character point costs are the same as usual. (For basic attributes, the character point cost is doubled when developing existing characters, as usual.) These GE upgrades can be purchased by all species.

Genetic Engineering "upgrades" include basic attribute increases, Attractiveness (all levels), Acute Hearing, Acute Taste/Smell, Acute Vision, Alertness, Immunity to Disease, Disease-Resistant, Longevity, Rapid Healing, Toughness, negating Albinism, negating Bad Sight, negating Blindness/Color Blindness, negating Deafness, negating Hard of Hearing, negating Lameness, and negating Anosmia. Most other enhancements are far too advanced for the known species of the **Marathon** universe.

Note that more mundane applications of genetic engineering include screening out genetic propensities for certain disorders and physical ailments in unborn children, as well as the avoidance of many birth defects.

Legality of Cybernetics and G.E.

Cybernetics are not looked upon casually by the denizens of the **Marathon** universe. All brain implants and implants listed under "illegal implants" in **GURPS Ultra-Tech** and other sourcebooks are illegal to people without government permission. Bionics, however, are legal.

Genetic *treatment* for conditions such as increased risk of heart failure and genetic disorders such as cystic fibrosis is completely legal and used commonly. The human and S'pht'Kr governments even give money to families to pay for genetic screening and treatment in their unborn children.

Genetic *enhancements* (such as increased attributes and special advantages) are only (legally) used by the government and the P'fhor Imperial and Command castes. They are considered too potentially disruptive for unchecked civilian use. However, illegal genetics labs often offer genetic enhancements to parents who want to give their children an edge in life...

Medical Technology

Modern medical technology is quite miraculous in the **Marathon** universe. For all major species, ultra-tech medicine is a common thing. Advanced drugs, surgery, cloning, and stasis chambers are the cutting-edge techniques of the modern hospital.

Aging

Aging rolls follow the rules described on page UT93. Note that colonists and backwater farmers/slaves will not receive the age bonuses of urban cosmopolitan types living in TL9-10 cities! In general, people will fall into the TL9 range for aging purposes, with the notable exception of the S'pht'Kr. (Who live for hundreds of years to begin with...)

Wonder (and Horror) Drugs

Various equivalents to the following standard ultra-tech drugs are available to all major species (see **GURPS Ultra-Tech** p. 97 and **GURPS Space** p. 94 for descriptions): Adders, Crediline, Hypercoagulin, Morphazine, Neurovine, Rage, Revive Capsules, Superstim, Analgine, Antirad, Ascepaline, Gravanol, Quickheal, Soothe, Suspend, and Ursaline. Equivalents to the following standard drugs are available to the S'pht'Kr only: Genericillin, Memory-Beta, Purge, and Tempo. Additional drugs are listed below:

Compound 223 (Humans, illegal)

Compound 223 is one of many names for a popular designer drug among humans. Sometimes called Canister, Freak, or Unholy Ghost, Compound 223 is a highly addictive drug that completely eliminates the temporary effects of fatigue for 3-4 hours. After this time, all original fatigue *plus* fatigue lost under the effects of the drug come back into effect, often causing a massive "crash" in the user. Additional effects include mild visual and auditory hallucinations in some users. Compound 223 is completely illegal for all purposes. It is taken as a dissolvable pill or a chewable, candy-flavored tablet. A dose costs about \$6 in an urban area on Earth or Mars, but well over \$100 on a colony because of the tight government control over FTL travel.

Gyrinotelacine "Four Dee" (Humans, medical use only)

Gyrinotelacine temporarily gives one level of Improved Jump Tolerance per dose. It lasts for about 3 hours, during which time the recipient is at a -4 to any DX- or IQ-related activity. Taking two doses gives a -6 penalty, and taking three gives a -7 penalty. Doses over three have no effect.

Gyrinotelacine is a synthetically-developed narcotic drug. Its main ingredient is related to THC and is not known to be physically addictive, but the negative effects of this drug tend to make only the most pitifully jump-sick people willing to take it. It can be taken in pill form or injected for more quick results. A dose of "Four-Dee," as it has come to be known among spacers, costs about \$10. It is available by perscription only.

Seartfaya (Pfhor, Restricted)

This drug, sometimes taken by elite Hunter guardsmen, gives its user hyper-reflexes. One dose gives the user Combat Reflexes (double the bonuses if the user already has Combat Reflexes) as well as +1 to Basic Speed. It continues to work for HT -1d *combat rounds* when injected directly into a large blood vein. The user loses 1 fatigue point per turn regardless of whether he or she is moving around or not. Seartfaya can cause the Bloodlust disadvantage, as well. When taking a dose of this drug, roll 1d. On a roll of 6, the user has the Bloodlust disadvantage while the drug is in effect. This drug is used by elite troops only and is illegal to civilians. One does costs about \$75. (Street prices are much higher.)

Yafnapfhoj (Pfhor, Unrestricted)

This mild drug is used by Pfhor priests and artists to induce a greater connection with "divine creative forces." It has been used in Pfhor customs for thousands of years and is widely available for about \$3 a dose, in crushed leaf form. It gives a -1 to all technical/mathematical/reasoning rolls, but +1 to all creative/artistic rolls. It lasts for around six hours.

Sharing Drugs with Aliens

Most major species have similar biochemistry, probably because of a common root in the Jjaro. But drugs designed for one species can have unwelcome effects when used on other species. Common names for drugs like "Hypercoagulin" or "Crediline" are used for simplicity's sake, but each species' versions of these drugs are different. If a drug is used on a species for which it was not intended, roll 3d on the following table (roll 5 times for using a drug intended for other species on Nebulons, and vice versa):

3-5 - No unusual results.

6-7 - The user receives a strange quirk for the duration of the drug's potency.

8 - The user gains the Gregarious disadvantage for the duration of the drug's potency.

9 - The user gains the Xenophilia disadvantage for the duration of the drug's potency.

10-12 - The user gains the Paranoia disadvantage for the duration of the drug's potency.

13-14 - Roll again twice.

15 - The effects of the drug are doubled.

16 - Each of the user's basic attributes are increased or decreased by 1-3 points: roll 1d for each, with 1-3 representing *negative* 1, 2, and 3, and 4-6 representing *positive* 1, 2, and 3.

17 - The user falls asleep for 2d hours.

18 - The user gains an odd quirk for the rest of his or her life. (Unless he or she "works it off." with points.)

Surgery, First Aid, and Disease

Modern surgical techniques include the "Bodysculpt" procedures on page UT101 (used only by humans and Pfhor), brain transplants (highly illegal), and realistic cloning as described on p. S89. Clones of sentient people are not made, even for organ transplant purposes. But pig organs can be combined with drugs and gene therapy to provide safe transplants for humans, and synthetic blood is easily grown for quick transfusions. For first aid, physicians, and field surgery, use the rules outlined on page S88. Most species may use all medical equipment listed on page UT94 up to TL9. However, the S'pht'Kr may use the additional TL10 equipment on page UT95.

Level 1 Panimmunity is available to the Pfhor, Humans, and Vylae. Level 2 Panimmunity is available to the S'pht'Kr. (Rules for Panimmunity are given on page S88.) Epidemic diseases are uncommon in the Marathon universe, but evolution marches on. Incredibly resistant strains of old human diseases occasionally crop up among poverty-stricken denizens of the human systems. (See page CII168 for inspiration.) Cancer is completely curable. The Pfhor Empire has some technologically retarded systems that occasionally see outbreaks of Yuakdtur (Wither), a deadly disease that causes massive damage to the internal organs, but that is easily cured at a decent hospital.

Stasis Chambers

Suspended animation technology (see page S91) is available to the humans, the Pfhor, and the S'pht. Kept at a few degrees above absolute zero and relying upon a constant supply of various drugs to stay alive, a person in stasis can be preserved for many years. Stasis chambers are sometimes used for long trips through space in tight quarters. They are more often used for medical purposes, however.

The costs for stasis chamber preservation are given in ***GURPS Space***. As that book makes clear, it is a bit expensive for average people!

Pattern Buffers

Braintaping is available in the ***Marathon*** universe. Braintaping devices are known as "pattern buffers," since they not only download a person's brain information, but also their DNA and some other physical information (such as current medical status). The Pfhor, S'pht'Kr, and humans are the only species with this technology.

One pattern requires approximately 10,000 terabytes of storage space. Using a pattern buffer to store DNA and medical readouts takes only a few seconds and costs virtually nothing, since the computer only has to take a small blood sample and analyze it internally. It takes four hours and \$100,000 dollars to make an actual braintape.

Pattern buffers are usually installed in large military ships and army bases, since they are not portable. ("MMSD" devices as described in ***GURPS Space*** are not available.) Because "forced-growth" clones are not available, braintapes are mostly only useful for creating sentient computers using a person's digitally stored brain data. (See page S90 for information on this technique.) A person who uses a pattern buffer for this purpose must digitally sign a permission slip if they wish to allow their pattern to be used in a sentient computer after death. (The exception being, of course, Pfhor Imperial mandate, which may read, modify, or use any existing braintape within its networks.) Pattern buffers are a government technology only.

Alien Pattern Buffers

The Pfhor and S'pht both have pattern buffer devices derived from ancient Jjaro technologies. Alien

pattern buffers work just like human pattern buffers and face the same restrictions in the areas of cost and capacity.

Any species can use any other species' pattern buffers, but the controls are different--be *very* careful! It is perfectly acceptable for GMs to play really nasty tricks on players bold enough to play around with alien devices *known* to access and read people's brain patterns! You have been warned.

Teleportation

Transporter devices have been used by the humans since the late 2200s, and other species have used them for millennia. Concepts of 20th-century physics such as the Heisenberg Uncertainty Principle had initially made teleportation seem physically impossible. But the assumption at the time was that teleportation would be achieved by atomizing an object and "beaming" its particles through space in some manner.

Teleportation was achieved using the same technology as FTL travel. (Thus, humans were actually using hyperspace well before they were aware of FTL space travel possibilities, having not yet discovered warp capable fusion rockets and hyperspace drives capable of handling large masses.) Rather than destroying an object and rebuilding it, teleportation systems very briefly "nudge" objects through hyperspace using a short burst of electromagnetic radiation (which quickly dissipates after impacting the object; see "Communication" for more on EMR in hyperspace). The resulting acceleration (though inestimably minute) essentially converts the object into a hyperspace "solar sail," riding light through physical space. This allows an object to travel at incredibly high speeds under the modified physics of the warp dimension. The object then floats into an exit rift at the destination.

Teleportation of non-self-propelled objects using this "light-riding" method is highly limited. Not only are large masses difficult to move using this method, people can only survive unprotected in hyperspace for approximately .1 seconds. (And they *still* get sick; see below.) The normal limitation on hyperspace travel--that it cannot begin or end near a gravitational field--does not apply to teleportation, simply because transporter devices move such tiny masses as to be insignificant compared to larger gravitational sources. When a person is teleported somewhere, he or she rolls as usual for jump sickness using the rules under "Space Travel" given earlier in this chapter. Don't bother calculating the time it takes to travel--the trip is essentially instantaneous. The maximum mass that can be teleported is approximately 1,500 lbs. The maximum distance is approximately 250,000 miles. Cost grows rapidly with mass and distance, and also varies with the specific technique used. There are essentially three general methods of teleportation for all species:

Dumb teleportation. Dumb teleportation uses a specially-designed jump pad that automatically teleports stationary objects to a preset location--usually a drop-off pad somewhere else. Because virtually all the "astrogation" calculations have been done ahead of time, this is quite cheap as teleportation goes. Dumb teleportation costs \$.001 times mass (lbs.) times distance (miles).

Smart teleportation. Smart teleportation also uses a specially-designed and pre-wired jump pad. However, it uses an AI to make calculations and control the drop-off zone. Thus the starting location is

static, but the final location can be changed. Smart teleportation costs \$.01 times mass (lbs.) times distance (miles).

Genius teleportation. Genius teleportation is a military technology only. It allows an AI to use a cybernetic receptor implant in a soldier's head as a beacon to open a warp rift remotely. Thus initial *and* final position can be chosen at the last minute. Genius teleportation costs \$.1 times mass (lbs.) times distance (miles). It also uses up an entire D-class power cell (planted somewhere on the subject) to actually open the rift at a remote location. The object of genius teleportation must be wearing a cybernetic implant (or, if it is an object, a special homing device), and the AI teleporting the object must be within teleporter range (i.e., 250,000 miles) of the object's initial *and* final positions.

Teleportation and Society

The military effects of teleportation are rather clear: infantry is much more mobile, inner regions of a base must be defended as well as the perimeter, and AIs are absolutely necessary for effective combat.

But everyday life--among the humans, S'pht, and Pfhor--is also affected by the teleportation technology. Although cheap and easy teleportation anywhere in the world is not possible, anyone with a healthy enough bank account is able to use large teleportation bays (located in most major cities) to instantly transport around planets or onto orbital platforms. Generally, however, the average citizen must still use ground vehicles and aerospace craft.

Teleportation is not highly practical for "around-town" use, although major metropolises sometimes have teleportation booths to allow members of the elite to travel around the city instantaneously. The high risks of nausea and general discomfort generally deter people from using such booths in a frivolous manner.

Perhaps the most generous users of teleportation are the Pfhor Imperial caste members. Their decadent lifestyle makes them attracted to this quick, easy, and stylish manner of travel, especially since they have nearly infinite funds.

Conflicting Space

Occasionally one object may teleport into space currently occupied by another object. If such a situation arises, it is the equivalent, in game terms, of both objects bumping into each other at fairly high speeds. Consider each object to be moving at

$$(m/30) \text{ yards/second}$$

Where m is the mass of the object in Earth pounds. Note that the object *is not really moving at this speed!* This calculation is for damage and knockback purposes only. Consider the direction of each object's velocity to be directly against the other object for the purposes of resolving "attacks." (If necessary, use a random roll to find directions; for example, randomly find that one object is hitting North and then automatically make the other object hit South.)

For different types of collisions, different rules are appropriate:

Vehicles. A vehicle involved in a "space dispute" situation is considered to be ramming the other object at the speed calculated above. When calculating the damage a vehicle receives from another object, use a random roll to determine the side of the vehicle that is impacted.

People and animals. People and animals involved in a "space dispute" situation are effectively executing a slam attack (see page B112) on the other object. When a person or animal takes damage from another object in a "space dispute" situation, all damage is taken to the torso.

Inanimate objects. An inanimate object involved in a "space dispute" situation does damage a lot like a falling object does. Round off the object's mass to the nearest 10 lbs. Then round its speed off to the nearest 10 yards/second. Multiply the number of 10 lb. increments with the number of 10 yard/second increments to find the damage dealt to the other object. (Much like any falling object.) When an inanimate object receives damage in a "space dispute" situation, use the rules for attacking inanimate objects on page B125.

Note that in all cases, *both* objects hit each other. For example, if one person teleports onto another person, two separate slams with separate damage and knockback results have to be resolved.

Both objects must be knocked back at least far enough to allow each of them to occupy separate space. Add appropriate knockback regardless of the results of impact if necessary.

Gravity Manipulation

Scientists of all space-faring species have discovered a way of converting energy into gravitational pull. This is done by bending space with techniques discovered while FTL travel was being refined into an exact science. Essentially artificial gravity generation nodes along the "bottom" of the ship simulate the experience of a landside building. Artificial gravity only functions within the ship--anyone walking on the surface will not feel the artificial gravity. Note that because artificial gravity cannot be created on an open surface that is not enclosed by specially-designed walls, this technology cannot be used to boost the natural gravity on the surface of an asteroid or other natural object. (Though the asteroid could be hollowed out and essentially converted into a huge ship with people living on the inside. But by the time such a project would be finished, the main reason for living on an asteroid--mining--would have already been eliminated!) Use standard **GURPS Space** rules for artificial gravity.

The only problem is that artificial gravity generators, like most hyperspace-related devices, experience horrible interference from natural gravity. A large natural gravitational force automatically shuts down artificial gravity generators; they simply cannot function. The main consequence of this is that artificial gravity cannot function in the orbit or on the surface of a large artificial or natural object, such as large space stations, moons, or planets. Up to about .0006G of natural gravitational pull can be endured by artificial gravity generators; thus, objects as large as Deimos (or the U.E.S.C. *Marathon*) will not interfere with artificial gravity generators. Artificial gravity is fully legal and is available to any

civilian who can afford it.

Note that Contragravity is not available to any species in the ***Marathon*** universe.

Weapons and Defense

In the 29th century, war is a way of life for countless billions. The efforts of tireless species bent on interstellar domination have resulted in deadly new weapons technologies. The response to these technologies, was, of course, incredible new methods of defending against attacks. For every attack there is a defense, and for every defense there is an attack. The only problem is guessing what methods your opponent will choose.

Small Arms and Vehicle Weapons

The human armies still use a great deal of ballistic weapons and rockets in their small arms. Nevertheless, energy and beam weapons are very popular and are available to civilians in some cases. The Pfhor and S'pht primarily use energy weapons, although the Pfhor have an affinity for explosives. Melee weapons are quite common as well. (The Nar are best known for their masterful use of melee weapons.)

Small beam weapons are generally not used because of their expensive power consumption levels; lasers and masers never became popular except as orbital defense systems. Gyroc-like small arms have never been popular, except in some police departments.

Energy Weapons

The standard weapons in the ***Marathon*** universe for all species but the humans (and including the humans in many cases) are neutral particle beams ("blasters") with the "plasma blaster" option. (See pp. S81-82). The Pfhor Imperial Infantry use "shock staffs" as their standard weaponry--essentially electrolasers combined with melee-range electrical shock weapons. Shockers (as they are commonly referred to) are particularly useful because of their adjustable settings. This makes Pfhor infantry units more versatile, especially in police situations. See page S80 for special rules governing electrolasers.

The humans have developed fusion guns, which are essentially standard ***GURPS*** fusion pistols, but with TL9 technology (i.e., inferior and far closer to particle blasters in function). Attempting to fire them under liquids results in an explosion of fusion centered on the user, doing the standard damage of an attack. This includes a blast radius doing damage to others, although the user tends to be the most harmed. The blast radius is half that of normal explosions. Fusion pistols are incredibly high-energy weapons, and by consequence they penetrate super shields completely; this was the main reason for their development.

Nonconventional Weapons

Nonconventional (nuclear, biological, chemical, and microbotic) weapons are used with little restraint in the **Marathon** universe. Luckily there are ways of countering these tactics: advanced orbital defense laser systems can stop a strategic nuke cold, and cheap, widely-available sealed environmental armor makes biological and chemical weapons far less fearsome.

Nuclear Weapons

Long-range strategic nuclear missiles can easily fall prey to a good orbital defense system. Using principles set forth by the late-20th century Strategic Defense Initiative project, these systems use satellites in orbit to send out barrages of laser fire to disable nuclear missiles entering the atmosphere. By setting up a "web" of satellites in constant orbit, an entire planet's surface can be protected by these orbital firing platforms. Such systems are, of course, useless against short-range tactical warheads that are not in flight long enough to be targeted from orbit.

Orbital bombardment with high-yield energy weapons has become increasingly popular because SDI systems are unable to intercept or destroy beam weapon fire. Additionally, plasma accelerator and laser fire expose the planet's surface to much lower levels of radiation than nuclear bombardment, thus preserving the system's agricultural resources for the conquering group's later use.

Laser-activated "micronukes" are also available in the **Marathon** universe. These small nuclear devices use a laser to activate a deuterium fusion warhead. In this manner a small, controlled, and only somewhat radioactive explosion can be achieved. Micronukes are often carried in portable rocket launchers for use by mobile infantry and special-ops units. They are also useful for infantry strikes on hardened buildings, heavy tanks, and spacecraft.

Chemical Weapons

Chemical weapons are spread in grenade and bomb form. Only the humans and the Pthor ever resort to nerve gas, since gas is ineffective against sealed targets--which, in the S'pht warrior tradition, is all targets. Therefore, they have had little chance to develop gas warfare tactics.

Biological Weapons

Germ warfare is dangerous (the invaders might catch the disease themselves!) as well as indiscriminate, and therefore slow to take out targets. This makes it unpopular, though it is still occasionally used. (The S'pht used a devastating virus to slow the last stages of the Pthor advance on Lh'owon.) The Pthor do, however, use "biological" weapons quite often--in the form of enslaved races.

Nanotech Weapons

Microbot swarms have been designed by the three main species. These take the form of "nanoburn" (see page RO70), which has rather limited applications in combat. The general consensus is that a tank of nerve gas will do the trick just fine, without the added problems of prohibitive cost and dubious results.

Trih Xeem

The Pfhor possess a nonconventional weapon that lies outside of the NBC definition system. It is the *Trih Xeem*, or "Early Nova." This large device is deployed on an ICBM-sized missile, and makes a star go nova in a matter of hours. Needless to say, it is a last-resort weapon...

Nuke Availability

Nuclear weapons are highly illegal for civilian use, but leakage of nukes into high-profile terrorist organizations is not unheard-of. In general the types of nukes that can be obtained by non-government organizations are small tactical fission bombs. (Actual mininukes require very sensitive electronics and are much more difficult to obtain.)

For the purposes of finding black market weapons (see page S74 for information on weapon legality and obtaining illegal weapons), consider all nuclear devices to be Legality Class -2. The normal penalty (in any society) for illegal possession of nuclear weapons is death.

Note that mercenary groups can get micronuke licenses from the Pfhor and human governments. However, such mercenary organizations must use micronukes on government-sponsored missions only, may only acquire nukes from the government itself, and must turn in all unused nukes to the appropriate authorities at the end of a mission.

Melee Weapons

All species in the ***Marathon*** universe can use vibroblades, monomolecular edged weapons, and neurolashes (see pages CII25 and S83). The Nar also use advanced versions of maces, warhammers, axes, and standard swords. One of the main uses of melee weapons is combat inside small spaceships.

Although large spacecraft can endure internal weapons fire, small fighter and merchant vessels may be ruptured and exposed to vacuum by gun fire inside the hull. A way to avoid this is by using melee weapons, which are naturally less likely to cut open a wall.

Another reason to use melee weapons is their great armor divisors. Monomolecular blades, for example, have an armor divisor of (10). In many cases this makes them more effective against armored targets than pistols, shotguns, and light automatic rifles.

Hyper-Napalm

Hyper-napalm is a general term for all advanced military flammables available in the ***Marathon*** universe. Flamethrowers are, by and large, used only by the humans, Pfhor, and Nar, and only the humans and Pfhor have hyper-napalm.

Known to humans as "napalm-75," this substance does 5d damage to objects being blasted by it, and

continues to burn quite tenaciously.

Designing Weapons

If you want to design your own **Marathon** weapons, it is important to know exactly what technologies are available to each species.

Humans. Standard TL for weapons is 9, although cheaper weapons sometimes still use TL8 technology. Lasers, disruptors, charged and neutral particle beams, flamers, stunners, and electrolasers are available. TL9 "fusion guns" are designed like neutral plasma blasters, but the cost is multiplied 1.5 and the special rules described in the main text are added.

Pfhor. As above, but fusion accelerators are not available.

S'pht'Kr. Standard TL for weapons is 10. All energy weapons listed above are available, as are X-ray lasers.

Nar. Standard TL for weapons is 6-7. The Nar do not use energy weapons.

Others: Generally the Vylae and Nebulons use reverse-engineered Pfhor weapons.

Defense

Developments in defense fall into two main categories: armor plating and energy shielding. Advanced armor and energy shields can allow a small number of troops to conquer a much larger force simply by virtue of their endurance, so getting a good set of armor is important! Even people without a great deal of money should be able to obtain some rudimentary armor plating, particularly within the Pfhor Empire, where cost-effective armor is necessary to clothe the many billions of troops in the huge Imperial infantry divisions.

Plasteel, Steelsheet, and Advanced Ceramics

The humans now use many synthetic compounds to help create better armor. Damage Resistance levels as high as 45 or 50 can be obtained through a compound known as *Plasteel*, a compound made of stainless steel alloy mixed in a liquid state with a superdense plastic, which also serves as an excellent heat shield. Plasteel is the standard armor substance for "hard-plated" areas such as the shoulders, chest, knees, and head. *Steelsheet*, on the other hand, is a flexible armor material woven from metal alloys and a synthetically produced substance made up of strong, woven fibers. Steelsheet has far less stopping power than Plasteel and is more expensive, but is light and flexible. Often a layer of Steelsheet is worn beneath Plasteel plates. The Pfhor and S'pht use *molecularly aligned advanced ceramic plates* for rigid armor. These ceramics have high Damage Resistance levels and are quite effective heat shields.

Energy Shields

Energy shields allow effective defense with little trouble. Though expensive, they are the most powerful method available for armoring a person, ship, or vehicle. They are available to all species but the Nar and Nebulons, and are LC 2. Energy shields essentially project a field of disruptive particles around the user that, through advanced computers and nanotechnology, blocks incoming kinetic energy and heat (including lasers, masers, explosions, bullets, etc). Energy shields do not take much power to maintain, but rapidly deplete their power supplies when they take damage. A personal energy shield can remain continually active for ten hours on a D-class power pack. However, it requires a second energy cell for the sole purpose of replenishing it after being damaged.

An energy shield does not block outgoing forces, ambient gases (including air and chemical weapons), bio-weapons or slowly moving objects (including grappling attacks and the like, but not quick punches or sword swings). When a user takes damage from a normal attack, the energy shield absorbs the attack into its own "HT." An energy shield with a full D-class power cell has an HT of 100. Thus, a C cell gives 10 HT and an E cell gives 1,000 HT. Once an energy shield's HT reaches zero, it turns off. If an energy shield does not have enough remaining power to absorb an attack, it absorbs as much as it can and shuts down. (For example, an energy shield with 30 HT left that takes 80 points of damage lets 50 points through and then shuts down.) Energy shields also have maximum HT levels. If an energy shield has an HT limit of 200 points, then a maximum of three D-cells (one to maintain the field, two for "HT") can be hooked up to it.

In addition to normal energy shields, "super shields" are available to humans. Super shield is a military-only form of energy shield (LC 0) that absorbs 100 percent of incoming attacks with an *unlimited* "HT," but remains active for only 1 minute on a D cell. Additionally, fusion accelerator blasts penetrate them completely unhindered. Super shields cast a high-energy sheen over the user, giving +3 to vision rolls and canceling out all transparency devices. (See sidebar.)

Transparency Systems

The S'pht, Pfhor, and humans all have "transparency" systems. These systems use energized particles that change color according to the surroundings through a mini-web of nanobots. The resulting effect makes the user appear as a transparent but slightly discolored image. Invisibility-protected objects are also invisible to motion detectors, but not infrared.

Transparency systems change color in real time, but most man-sized systems can only last for one minute. All attack and vision rolls against the user are at -4. If multiple systems are allowed to process the image in parallel on a single user, the effects increase. Two chips running simultaneously give a -6 on attack and vision rolls. Three chips give -7. Additional chips are ineffective. Note that each one requires a separate D-class power cell.

Transparency systems are LC 0 and cost a large amount. (See the equipment section for specifics.) They can be used on virtually any object, including vehicles. However, they tend to be less effective on vehicles--especially ones that make a lot of noise, which tends to ruin the stealth effect!

6. Weapons, Armor, and Gear

Weapons

Since *Marathon* campaigns are set in a highly militaristic world, a lengthy and comprehensive list of weapons is a must. Weapons from the lists in *GURPS Ultra-Tech* and *GURPS Space*, as well as the extra weapons listed here, are available. The humans may have any standard *GURPS* weapons up to TL9, as well as any fusion guns. The P'hor have the same available technology except fusion guns, which they cannot yet build. The S'pht may have any standard *GURPS* weapons up to TL10. The same applies for hand grenades, explosives, and advanced melee weapons. (See *GURPS Ultra-Tech*.)

Human Weapons

Guns/Beam Weapons

Tech.50 Fusion Pistol. This weapon is a wonder of science, given primarily to elite tactical troops. Although it is an extremely powerful weapon (not to mention nerve-wracking to less well-equipped soldiers), it is also absurdly expensive. The Tech.50 is powered by a Deuterioxide Halogen Battery Pack (C power cell). The user can also charge up a larger bolt for more damage.

Zeus-Class Fusion Pistol. A creation of the S'pht under Durandal, the Zeus Class Fusion Pistol is a newer version of the classic Tech .50. Some soldiers actually consider it a "downgrade," due to the new annoyances added by hasty S'pht construction (see below). But money talks, and the S'pht version is much cheaper, putting an end to the severe limit on production that used to prevent fusion guns from entering the arsenals of many key units. Unfortunately, the new fusion pistol often overloads after being charged too long (approximately 60 seconds), causing the bolt to discharge inside the barrel of the gun. (In game terms, treat it as a charged fusion bolt hitting the user.)

Gunner/Missile

SPNKR-X17 SSM (Surface to Surface Missile) Launcher. The SPNKR was created to provide better firepower to infantry without seriously inhibiting mobility. Its short-barrelled design decreases accuracy, although the sacrifice was considered wise in light of the reduced size it allowed. But the weapon is still quite accurate as rockets go, and is thoroughly devastating. Although it is intended for use against armored cavalry units, some of the more cruel and bloodthirsty officers in the U.E.G. armies are known to assign SPNKR's to troops on anti-personnel missions. The result is shocking at best and utterly sickening at worst. The SPNKR-X17 was common during the time of the U.E.S.C. *Marathon's* launch, but is now found in only units that find it important to pack light. The SPNKR ejects cold gas rather than hot, making its backblast perfectly safe.

SPNKR-XP Rocket Launcher. To make for a more controllable and accurate rocket launcher, the SPNKR-XP was added to the SPNKR line. It is made of less heavy material, but is also much longer. Like the original, it ejects cold gas.

Guns/Flamethrower

TOZT.25 Flame Unit. The TOZT Flamethrower is a devastating assault weapon designed to mow down crowds of people in unsealed armor. It is attached to a backpack napalm canister that can, unfortunately, be ruptured, causing a large incendiary explosion. If the canister (backpack) takes over 18 damage, roll 1d. If the result is a 4, 5 or 6, it explodes. The resulting explosion is equivalent to a grenade explosion doing 4d + 3 damage for each "second" of napalm left in the canister. Anyone caught in the blast will also be engulfed in flames.

TOZT-7 Backpack Napalm Unit. The TOZT-7 is a slightly more refined version of the TOZT.25, created primarily in response to several incidents in which TOZT.25s blew up, killing friendly soldiers. A slight defect in the heat gauge was fixed in the TOZT-7 model, and a layer of impact-absorbing insulation was added to the backpack to prevent ruptures. Unfortunately, the impact-absorbing material is very expensive, raising the price of the flamethrower considerably.

If the canister (backpack) is dealt over 20 damage, roll 1d. If the result is a 6, it explodes. The resulting explosion is equivalent to a grenade explosion doing 4d + 3 damage for each "second" of napalm left in the canister. Anyone in the blast radius will also burst into flames.

Guns/Light Automatic

M.75 Assault Rifle with Grenade Option. This assault rifle is considered one of the great follies of modern military technology. Under pressure from megacorporate leaders and government buyers, the manufacturers rushed its production. The result was a highly inaccurate firearm that was nevertheless widely distributed to U.E. G. military units. The large-caliber, can-feed, caseless-round design was intended to impress aging generals, but proved dangerous and ineffective in battle. The M.75 can fire on full automatic or in semi-automatic mode. It also features an integral 40mm grenade launcher.

MA-75B Battle Rifle with Integral 40mm Grenade Launcher. Disgusted by the original M.75 Assault Rifle, Tau Ceti colonists demanded a new automatic weapon. In response to their pleas, Durandal's S'pht workers provided an alternative: the MA-75B Battle Rifle. After the S'pht design was released, the megacorporations immediately got to work reproducing it. It can fire on full automatic or semi-auto mode. In order to reduce cost and complexity, the S'pht opted for a cased round instead of the caseless bullets found in the original M.75 AR.

KKV-7 10mm SMG Flechette. The KKV-7 Submachine Gun is one of the finest elite military firearms available. Useful in many types of situations, it has an excellent balance of compact power and accuracy. Its standard ammunition is armor-piercing sabot shells.

M1A2.75 Battle Rifle. A high-powered automatic combat rifle, the mighty M1A2.75 BR is a more controllable alternative to the MA-75B. It puts less emphasis on short-range engagements than its unruly brother, and, thanks to its long barrel and shoulder mount, is quite accurate.

Guns/Pistol

.45 Magnum Mega Class Pistol. The .45 Magnum Mega Class was the standard issue firearm for security guards on the U.E.S.C. *Marathon* colony ship. This pistol was inexpensive, light, and famously reliable when it was introduced, and is still available for purchase, usually as a home defense weapon.

.44 Magnum Mega Class A1 Pistol. After the invasion of the Marathon, a new generation of standard security firearms were invented, thanks to Durandal and his compilers. Replacing the old .45 Magnum Mega Class, this new pistol provides somewhat better overall performance. It is generally used with a telescopic scope.

Guns/Shotgun

WSTE-M5 Combat Shotgun. The WSTE-M5 is a short-range, concealable shotgun that has been used for around 400 years. It was designed so that an experienced user could reload it quickly in one sweeping motion as it was cocked, allowing large invading forces to be continuously mowed down. One person can use two at a time, but this is difficult and tends to decrease accuracy. The WSTE-M5 is double-barrelled, and the user can choose to fire both barrels at once or one at a time, depending on the nature of the situation.

Mines and Other Explosives

Land mines can be deadly devices when used properly. They take one second to activate and usually about five seconds to conceal. (In tall grass or similar terrain they can simply be thrown to the ground and will be concealed automatically!)

Basic Anti-Personnel Mine: The basic anti-personnel mine is a lethal booby trap intended to protect perimeters and strategic areas and to slow down advancing armies. This particular type of mine is quite primitive, and is, consequently, quite inexpensive. It is generally not used by the armies of highly advanced nations or corporations, but is more often found on black markets and among paramilitary/guerrilla groups. It explodes when an object weighing 40 lbs. or more is placed on it, doing 10d explosive damage, plus 2d fragmentation damage in a 30 yard radius. It weighs .5 lb. and costs \$13. LC 0.

Basic Anti-Armor Mine: The basic anti-armor mine is a primitive, inexpensive mine used against tanks and other vehicles. It is usually not found in advanced armies. It explodes when an object weighing over 700 lbs. is placed on top of it and does 81d concussion damage, but no fragmentation damage. It weighs 1 lb. and costs \$30. LC 0.

Advanced Anti-Personnel Mine: The advanced anti-personnel mine is the mine of choice among advanced combat forces. Employing multiple detonation methods and high explosives, it is a fearsome means of supporting any defended position. It is also quite costly for most individuals, and hard to find on the black market. Therefore, most paramilitary groups and freelance mercenary groups opt for basic mines.

Three detonation methods can be chosen upon activation: contact, proximity, and remote detonation. If contact is selected, an object weighing 40 lbs. or more will set off a trigger on the top of the mine.

If proximity triggering is selected, a range, between 0 and 10 yards, must also be selected. (It takes one additional second to select a range. If proximity is selected but no range is specified, it defaults to five yards.) The mine then scans continuously with a motion detector, and any object the size of a small human/Pfhor or greater within the specified range will then detonate the mine.

If remote detonation is selected, the mine will detonate via a remote control held by a soldier. Note that multiple triggering systems can be used at once! The mine does 15d +2 concussion damage plus 4d fragmentation in a 40 yard radius, weighs 1.5 lbs., and costs \$140. LC 0.

Advanced Anti-Armor Mine: The most advanced anti-vehicle mine available employs multiple detonation methods and is highly effective in taking out armor. It is generally not available on the black market and is quite expensive. Its detonation choices are the same as for an advanced anti-personnel mine (above), but it will only

detonate when placed in contact with a 700 lb. or greater object, or when it detects a vehicle-sized object in its range if proximity detonation is selected. It does 120d concussion damage but no fragmentation damage. It weighs 2.5 lbs. and costs \$200. LC 0.

Mine Remote Detonation Control: This is a small remote control device that can set off advanced mines set to remote detonation mode, within a one mile range. Advanced mines send out signals to identify their position on a GPS map built into the remote control device. Different mines use different radio frequencies, so the remote control device can actually be used to select one or more specific mines to be detonated even when an entire field of mines is in the area. It takes one second to select each mine intended to be detonated--a process usually carried out before combat begins. The device weighs .5 lbs., costs \$100, and is LC 4. (These controls can often be found as an oddity in military surplus stores, but finding a mine is a bit more difficult...)

Satchel Charge: Satchel charges are powerful explosive devices with spikes on the bottom, used to attach the mine to surfaces. They are excellent for attacks on starships, armor, and naval ships. They do 100d concussion damage and 8d fragmentation damage in a 70 yard radius. They weigh 2 lbs. and feature timed fuses that can be set for up to 6000 seconds of delay. Cost is \$75; LC 1.

Pfhor Weapons

Axe/Mace

"Slavedriver" Prod: The Slave Control Prod, more commonly referred to as the "Slavedriver" is a melee weapon designed to discipline slaves. It can send out a selectable amount of electrical energy to burn the target, or, for less damage, can emit a small ion blast. (Treat as an electrolaser, p. S80.)

Beam Weapons/Blaster

Decimator Rifle: The Decimator is the replacement weapon for the old smoothbore Pfhor machinegun. It is deadly accurate, has an incredibly long range, and comes in selectable neutral/charged bolt and charged only versions. It can also fire bursts at 45° angles; if the user desires, the Decimator can fire area-effect bursts (see page B121) in a 90° firing arc instead of the usual 30°.

Gunner/Missile

Detachable RPG: The Pfhor rocket-powered grenade launcher is usually found attached to an assault carbine. It fires self-propelled high explosive mini-rockets, and features a high rate of fire, good accuracy, and a lightweight frame. Overall, it is a great piece of weaponry.

Guns/Gyroc

Shock Trooper Gyroc: The Pfhor gyroc carbine is the standard weapon for high-level troopers. It is designed to be attached to the Pfhor RPG (see above) and then used as one AR/grenade combination weapon, much like the M.75 AR for humans. But the two parts (rifle and Grenade Launcher) can be detached easily, even during battle. (Consider it to be a one-second action.) It fires APEX rounds; see page UT46 for gyroc rules.

Advanced Battle Rifle: This weapon was the gun of choice for elite Willful combat guards (sometimes called "Enforcers" by humans) during the invasion of the U.E.S.C. Marathon. It fires small, high-velocity caseless

rounds at a high rate of fire.

Pfhor Melee Weapons/Pfhor Staff Projectiles

Pfhor Fighter Staff: The Pfhor Fighter Staff is a long, wooden pole with a tip made from a hard crystal material manufactured by the Pfhor. It is very versatile, and is designed for both melee and ranged combat. The Fighter Staff is actually an ultra-efficient electrolaser combined with a short-range electrical shock system installed in the crystal. This gives it the nickname "shock staff." It was made with maintenance costs in mind, to allow it to be given to low-level military units at little cost.

Thrown Weapon/Hand Bomb

Pfhor Hand Bomb: The Pfhor Hand Bomb is somewhat like a human hand grenade, though not entirely similar. It is a thrown explosive, but the similarity ends there. The Pfhor Hand Bomb, for example, is actually reusable. Its shell is made of hard, tempered metal. This shell is loaded with a cartridge that explodes in a flash of white light, doing explosive damage and sending out a shower of hot metal pieces. It is thrown in the same way that humans throw frisbees, and is set off in one of two ways: by a timer, or by impact. Its fuse can last up to about 23 minutes. (Of course, it isn't exactly 23 minutes, because it's measured in Pfhor time units!) It does 2d concussion damage and 5d fragmentation over a 30 yard radius. The actual device costs \$100; "refills" cost \$20 each. LC 1.

S'pht'Kr Weapons

The S'pht'Kr almost exclusively use the weapons built into their battlesuits. Because of their incredibly weak arms, they usually use laser, maser, or xaser weapons as small arms, for their low recoil. (See GURPS Ultra-Tech for stats.) Only officers carry sidearms; standard infantry troops use battlesuit weapons only.

Other Species

The Nar

The Nar usually use an assortment of melee weapons. They may use vibroblade and monowire weapons, but the latter cost twice as much as they would in more advanced societies. *All* Nar edged weapons are considered to have "super-fine blades" (see page UT62). The Nar also use some primitive, musket-like rifles and rockets.

Nar Muskets: Nar "muskets" are shoulder-mounted smoothbore chemical-propellant guns. They do not work in vacuum because their ammunition uses open flame with no internal oxidizing chemicals.

Nar Rocket Launcher: For heavy support, the Nar employ primitive missile tubes to send low-explosive warheads flying into the enemy ranks. The Nar have attempted to vacuum-proof this weapon by using a napalm-soaked fuse, vacuum-proof matches, and a sealed rocket. So far they have met only marginal success.

Hybrid Weapons: The Nar are masters of melee weapons, and often build muskets into melee weapon frames. Any melee weapon from the GURPS Basic Set ancient weapons list that uses the Axe/Mace or Two-Handed Axe/Mace skill can be converted into a combination weapon featuring the melee weapon as well a musket. Any weapon that uses the Two-Handed Axe/Mace skill can include a missile tube (Nar Rocket Launcher) instead of a musket.

The cost for hybrid weapons is the cost of both weapons individually, plus an additional \$75. The weight of the hybrid is .75 times the weight of both weapons combined.

Vibro-Maces: The Nar often fashion maces with a vibro-blade option. These weapons feature small edged blades around each of the corners of the mace. Costs and damage bonuses are the same as for any vibroblade weapon.

The Nebulons and Vylae

The Nebulons and Vylae tend not to make their own weapons. Instead, they use "galaxy standard" weapons, usually grabbed from Pfhor gun running operations. These include all TL8-9 weapons.

The Nebulons, however, are isolated and do not have the benefits of the Vylae trade empire. Therefore, all weapons above TL8 cost double for the Nebulons. Both species tend to use plasma blasters, since these weapons are common in Pfhor space.

Small Arms Weapon Tables

The weapon tables below use the same format as those in GURPS Space and GURPS Basic Set, 3rd Edition Revised. Costs and weights assume a loaded or charged weapon, including one magazine (if the weapon uses magazines).

Notes on the Tables

-The new "Vac." column describes a weapon's performance in vacuum. A "+" mark indicates that the weapon performs as usual in vacuum. An "M" followed by a number means that the weapon has a malfunction rating (equal to the listed number) when in vacuum; e.g. M-14 means a malfunction rating of 14 in space. An "R" followed by a number gives a modifier to range when in a vacuum; e.g. R-50 means range is multiplied by 50 when in space. The word "no" in the Vac. column means that the weapon cannot be fired in a vacuum.

-The damage type "Plas." means "plasma damage." Plasma does burn damage (no modifier), catches flammables on fire, and causes 1/4 damage to all targets in hexes surrounding the impact hex. It also causes knockback.

-Damage in brackets (e.g., [6d]) is fragmentation damage dealt in addition to the standard concussion damage. (See ***GURPS High-Tech.***)

-An "X" in a column indicates that a weapon does not have that statistic because it is attached to another gun; use the statistic listed for the gun above.

Human Ranged Weapons

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Wt.	RoF	Shots	ST	Rcl	Cost	LC	Hld	TL	Vac.
--------	------	------	--------	----	-----	------	-----	-----	-----	-------	----	-----	------	----	-----	----	------

Tech.50 Fusion Pistol	Ver. (Crit)	Plas.	6d+2 *	9	9	430	850	2	3~ *	20/C *	8	-1	1,480	1	0	9	+
Zeus Class Fusion Pistol	Crit.	Plas.	6d+2 *	9	9	430	850	2	3~ *	20/C *	8	-1	1,075	1	0	9	+
SPNKR-X17 SSM Lnchr.	Crit.	Exp.	61d[6d]	12	8	-	2,800	9	1	2	8	0	500	0	No	9	+
SPNKR-XP Rocket Lnchr.	Crit.	Exp.	61d[6d]	11	8	-	2,800	7	2:3	2	7	0	300	0	No	9	+
TOZT.25 Flame Unit	Crit.	Burn	5d	3	3	9	13	25	4	28	7	-	800	0	No	9	+
TOZT-7 Napalm Unit	Crit.	Burn	5d	3	3	9	13	25	4	28	7	-	900	0	No	9	+
M.75 Assault Rifle	Crit.	Cr.	7d	14	7	430	2,900	16.5	10	52	13	-3	540	0	No	8	M-14
M.75 Internal GL	Crit.	Exp.	12d[4d]	X	4	-	1,200	X	1	8	X	-1	X	0	X	X	M-14
MA-75B Battle Rifle	Crit.	Cr.	7d	14	9	570	3,400	12.5	10	52	11	-2	540	0	-6	8/9	+
MA-75B Internal GL	Ver.	Exp.	18d[4d]	X	5	-	1,200	X	1	8	X	-1	X	0	X	X	+
KKV-7 SMG Flechette	Crit.	Cr.	3d	9	7	200	1,900	5	16	32	8	-1	180	2	-4	9	+
M1A2.75 Battle Rifle	Crit.	Cr.	5d+2	12	10	700	3,900	7	15	105	10	-2	450	1	-5	9	+
.45 MMC Pistol	Ver.	Cr.	2d+2	9	3	170	1,700	2	3~	8	10	-2	225	3	0	8	+

.44 MMCA1 Pistol	Crit.	Cr.	2d+2	9	3	170	1,700	2	3~	8	10	-2	175	3	0	9	+
WSTE- M5 Cmbt. Shotgun	Ver.	Cr.	6d-1	10	4	23	200	4	2:3	2	13	-4	210	1	-2	8	+

Pfhor Melee Weapons

Weapon	Type	Damage	Reach	Cost	Weight	Shots	Min ST	LC	TL	Vac.
"Slavedriver" Prod	Spcl.	< 4d or stun **	1	200	2 lbs.	20d/B **	-	5	9	+
Pfhor Fighter Staff	Spcl.	(sw+2) + (3d +1)	1,2	1,800	6 lbs.	40/C †	6	2	9	+

Pfhor Ranged Weapons

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Wt.	RoF	Shots	ST	Rcl	Cost	LC	Hld	TL	Vac.
Decimator Rifle (neutral)	Ver. (Crit)	Plas.	3d+2	12	17	1,000	2,000	7.5	6	475/ D ‡	9	-1	4,650	0	-5	9	R-50
Decimator Rifle (charged)	Ver. (Crit)	Plas.	3d+2	12	17	1,000	2,000	7	6	475/ D ‡	9	-1	4,200	0	-5	9	R-.01
Detachable RPG	Crit.	Exp.	8d[2d]	11	7	-	1,200	3.5	2	7	8	0	290	0	+1	9	+
Shock Trooper Gyroc	Ver.	Spcl.	8d(2)	15	7	1,700	2,300	9	13	13/13	8	0	1,350	1	-5	8	+
Advanced Battle Rifle	Ver.	Cr.	4d+2	12	9	460	3,000	14	15	550	10	-1	800	1	-4	8	+
Pfhor Fighter Staff	Crit.	Spcl.	3d+1	9	9	100	300	6	1	20/C †	6	0	1,800	2	-6	9	+

Nar Ranged Weapons

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Wt.	RoF	Shots	ST	Rcl	Cost	LC	Hld	TL	Vac.
Large Musket	Crit.	Cr.	9d+2	14	8	670	2,700	15	1/3	1	15	-4	96	1	-6	6	No

4-Barrel Combo Musket	Crit.	Cr.	6d	12	7	350	1,800	12	4:3	4	11	-2	120	2	-5	6	No
Firelock Handgun	Crit.	Cr.	3d	10	2	170	1,200	3	1/3	1	10	-2	64	4	-1	6	No
Nar Rocket Launcher	Crit.	Exp.	72d[6d]	20	9	-	2,000	59	1/6	1	15	0	525	0	No	6	M-14

Footnotes to the Tables

*The fusion pistols can fire a less power-efficient but deadlier blast of fusion by charging up energy. It takes 1 turn to charge up an "overload" bolt, and 1 turn to fire it. Damage is tripled, but the single shot effectively takes away four shots' worth of power. Range is not increased.

**A user of the "Slavedriver" can specify a damage rating of 1d, 2d, 3d, or 4d. This can be either lethal damage or stun only. (See page S80.) The prod's Shots rating is given in number of dice. A 1d blast takes up "1d" of ammo, a 2d blast takes "2d" of ammo, and so on.

†Both of the Pthor Staff functions (melee and ranged) use the same C-class power cell, but a ranged attack costs twice as much. Consider the staff to have 40 "points" of ammo, with melee attacks costing 1 point and ranged attacks costing 2. Note that a melee attack that does not use the electrolaser function takes no power, and does sw+2 damage only (as a regular quarterstaff).

‡The Decimator is frequently used with 2 D-class cells instead of just one. This raises the loaded weight to 12 lbs. and increases minimum ST to 10.

Ammunition

Most chemical slugthrower weapons have multiple types of ammunition, designed to tackle various situations. The following subsections list the various ammunition types available for the weapons listed in the weapon tables. Ammo types are organized by weapon, but some weapons *not listed in this book* can use the ammo in the tables. For example, many 10mm SMGs can be loaded with the bullets listed under the KKV-7 SMG.

Ammo Types

The ammo tables below list ammunition of many different types. The ammo types used here are taken primarily from the **GURPS Vehicles** weapons-design system, although **GURPS High-Tech** and the basic rules also provide some information about ammo types. The following is a guide to the abbreviations used in the tables:

Kinetic-Energy Ammunition Types

- Sol.*: Solid rounds.
- AP*: Armor Piercing rounds.
- HP*: Hollow Point rounds.
- Plas.*: Plastic rounds.

APS: Armor Piercing Saboted rounds.
Flech.: Beehive flechette rounds.
Shot: Shot (shotgun pellet rounds).
Slug: Solid slug rounds for shotguns.

Explosive Ammunition Types

HE: High Explosive rounds.
HEC: High Explosive Concussion rounds.
NUC: Nuclear warheads (specifically, small, laser-activated fusion bombs).

Kinetic-Explosive Combination Ammunition Types

SAPHE: Semi-Armor Piercing High Explosive rounds.
APEX: Armor Piercing Explosive rounds.

Shaped-Charge Ammunition Types

HEAT: High Explosive Anti-Tank rounds (shaped-charge).
HEDP: High Explosive Dual Purpose rounds (shaped-charge).

Chemical Warfare Ammunition

CHEM: Chemical rounds.

Human Ammunition Tables

The following tables provide many different types of ammunition for human weapons. Most weapons have at least a few types of ammo. The "Ammo" column tells what type of ammo the given stats are for--e.g., Armor Piercing (AP). Ammo in bold is the standard ammo for the purposes of the weapon tables. Ammo in italics is the ammo that is "standard-issue" for the weapon. Note that the bold and italic are often the same ammo! The "Range" column gives a modifier to both 1/2D and Max. ranges listed in the weapons table.

Most CHEM munitions do not have damage listed; instead they have blast radii. CHEM rounds will, of course, do some damage if they actually hit a person.

Kinetic-Energy Munitions

Weapon	Ammo	Shots	Type	Damage	Range Modifier	Weight	Cost
M.75 Aslt. Rifle	<i>Sol.</i>	52	Cr.	7d	-	4.5	14
M.75 Aslt. Rifle	AP	52	Cr.	7d(2)	-	4.5	41
M.75 Aslt. Rifle	HP	52	Cr.	7d(.5)	-	4.5	21
M.75 Aslt. Rifle	Plas.	52	Cr.	3d+2	.5	4.5	14
M.75 Aslt. Rifle	APS	52	Cr.	9d+1(2)	1.5	3	68
M.75 Aslt. Rifle	HAPS	52	Cr.	9d+2(5)	1.5	3	270
M.75 Aslt. Rifle	Flech.	52	Imp.	1d+2	-	3	54
MA-75B Btl. Rifle	<i>Sol.</i>	52	Cr.	7d	-	3	13

MA-75B Btl. Rifle	AP	52	Cr.	7d(2)	-	3	38
MA-75B Btl. Rifle	HP	52	Cr.	7d(.5)	-	3	19
MA-75B Btl. Rifle	Plas.	52	Cr.	3d+2	.5	3	13
MA-75B Btl. Rifle	APS	52	Cr.	9d(2)	1.5	2	63
MA-75B Btl. Rifle	HAPS	52	Cr.	9d+1(5)	1.5	2	250
MA-75B Btl. Rifle	Flech.	52	Imp.	2d	-	2	50
KKV-7 SMG	Sol.	32	Cr.	3d	-	1	5
KKV-7 SMG	AP	32	Cr.	3d(2)	-	1	14
KKV-7 SMG	HP	32	Cr.	3d(.5)	-	1	7
KKV-7 SMG	Plas.	32	Cr.	1d+2	.5	1	5
KKV-7 SMG	APS	32	Cr.	4d(2)	1.5	.75	24
KKV-7 SMG	HAPS	32	Cr.	4d(5)	1.5	.75	96
KKV-7 SMG	Flech.	32	Imp.	1d-1	-	.75	19
M1A2.75 Btl. Rifle	Sol.	105	Cr.	5d+2	-	4	11.5
M1A2.75 Btl. Rifle	AP	105	Cr.	5d+2(2)	-	4	35
M1A2.75 Btl. Rifle	HP	105	Cr.	5d+2(.5)	-	4	17.5
M1A2.75 Btl. Rifle	Plas.	105	Cr.	3d	.5	4	11.5
M1A2.75 Btl. Rifle	APS	105	Cr.	7d+1(2)	1.5	2.5	57.5
M1A2.75 Btl. Rifle	HAPS	105	Cr.	7d+2(5)	1.5	2.5	230
M1A2.75 Btl. Rifle	Flech.	105	Imp.	2d	-	2.5	46
.45 MMC Pistol	Sol.	8	Cr.	2d+2	-	.65	1
.45 MMC Pistol	AP	8	Cr.	2d+2(2)	-	.65	3
.45 MMC Pistol	HP	8	Cr.	2d+2(.5)	-	.65	1.5
.45 MMC Pistol	Plas.	8	Cr.	1d+1	.5	.65	1
.45 MMC Pistol	APS	8	Cr.	3d+1(2)	1.5	.4	5
.45 MMC Pistol	HAPS	8	Cr.	3d+2(5)	1.5	.4	20
.44 MMCA1 Pistol	Sol.	8	Cr.	2d+2	-	.6	1
.44 MMCA1 Pistol	AP	8	Cr.	2d+2(2)	-	.6	3
.44 MMCA1 Pistol	HP	8	Cr.	2d+2(.5)	-	.6	1.5
.44 MMCA1 Pistol	Plas.	8	Cr.	1d+1	.5	.6	1
.44 MMCA1 Pistol	APS	8	Cr.	3d+1(2)	1.5	.4	5
.44 MMCA1 Pistol	HAPS	8	Cr.	3d+2(5)	1.5	.4	20
WSTE-M5 Shotgn.	Shot	1	Cr.	6d-1	-	.075	.3
WSTE-M5 Shotgn.	Slug	1	Cr.	13d+2	3	.15	.3

Explosive Munitions

Weapon	Ammo	Shots	Type	Damage	Range Modifier	Weight	Cost
SPNKR X-17 Rkt.	HE	2	Exp.	61d[6d]	-	3	60
SPNKR X-17 Rkt.	HEC	2	Exp.	81d	-	3	60
SPNKR X-17 Rkt.	NUC	2	Spcl.	12d x200	-	3	12,090
SPNKR-XP Rkt.	HE	1	Exp.	61d[6d]	-	1.5	30
SPNKR-XP Rkt.	HEC	1	Exp.	81d	-	1.5	30
SPNKR-XP Rkt.	NUC	1	Spcl.	12d x200	-	1.5	6,045
M.75/MA-75B GL	HE	8	Exp.	12d[4d]	-	2.5	32
M.75/MA-75B GL	HEC	8	Exp.	16d	-	2.5	32

Kinetic-Explosive Combination Munitions

*Note: Because kinetic-explosive combination rockets do damage in two phases--first, kinetic crushing damage to penetrate armor, followed by explosive damage (see **GURPS Vehicles** for more information and rules), each type of ammo uses two rows in the following table.*

Weapon	Ammo	Shots	Type	Damage	Range Modifier	Weight	Cost
SPNKR X-17 Rkt.	SAPHE	2	Cr.	5d+2(.5)	-	3	60
plus...	-	-	Exp.	61d[6d]	-	-	-
SPNKR X-17 Rkt.	APEX	2	Cr.	5d+2(2)	-	4.5	110
plus...	-	-	Exp.	41d[6d]	-	-	-
SPNKR-XP Rkt.	SAPHE	1	Cr.	5d+2(.5)	-	1.5	30
plus...	-	-	Exp.	61d[6d]	-	-	-
SPNKR-XP Rkt.	APEX	1	Cr.	5d+2(2)	-	2	55
plus...	-	-	Exp.	41d[6d]	-	-	-

Shaped-Charge Munitions

Weapon	Ammo	Shots	Type	Damage	Range Modifier	Weight	Cost
SPNKR X-17 Rkt.	<i>HEAT</i>	2	Exp.	113d(10)	-	3	76
SPNKR X-17 Rkt.	HEDP	2	Exp.	113[6d](5)	-	3	76

SPNKR-XP Rkt.	<i>HEAT</i>	1	Exp.	113d(10)	-	1.5	38
SPNKR-XP Rkt.	HEDP	1	Exp.	113[6d](5)	-	1.5	38

Chemical Munitions

Weapon	Ammo	Shots	Type	Blast	Range Modifier	Weight	Cost
SPNKR X-17 Rkt.	<i>HEAT</i>	2	Spcl.	27 yards	-	3	Var.
SPNKR-XP Rkt.	CHEM	1	Spcl.	27 yards	-	3	Var.
M.75/MA-75B GL	CHEM	8	Spcl.	6 yards	-	3	Var.
TOZT.25 Flmthwr.	CHEM	28	Spcl.	5d*	-	10	14
TOZT-7 Flmthwr.	CHEM	28	Spcl.	5d*	-	10	14

*The TOZT.25 and TOZT-7 flamethrowers have a damage rating instead of a blast radius. (Because this particular "CHEM" is napalm!)

Pfhor Ammunition Tables

Kinetic-Energy Munitions

Weapon	Ammo	Shots	Type	Damage	Range Modifier	Weight	Cost
Adv. Btl. Rifle	Sol.	550	Cr.	4d+2	-	10	30
Adv. Btl. Rifle	AP	550	Cr.	4d+2(2)	-	10	90
Adv. Btl. Rifle	HP	550	Cr.	4d+2(.5)	-	10	45
Adv. Btl. Rifle	APS	550	Cr.	6d-1(2)	1.5	6.5	150
Adv. Btl. Rifle	HAPS	550	Cr.	6d(5)	1.5	6.5	600
Shk. Trpr. Gyroc	*						

*For Shock Trooper Gyroc ammunition, see ***GURPS Ultra-Tech*** page 46 for gyroc ammunition descriptions. The Shock Trooper Gyroc can use APEX, CHEM, HEX, SLAP, and Stingray rounds.

Other Ammunition

Weapon	Ammo	Shots	Type	Damage*	Range Modifier	Weight	Cost
Detachable RPG	HE	10	Exp.	8d[2d]	-	2.5	37

Detachable RPG	HEC	10	Exp.	11d	-	2.5	37
Detachable RPG	SAPHE	10	Cr.	2d+5(.5)	-	2.5	37
plus...	-	-	Exp.	8d[2d]	-	-	-
Detachable RPG	APEX	10	Cr.	2d+5(2)	-	3.5	72
plus...	-	-	Exp.	5d+2[2d]	-	-	-
Detachable RPG	HEAT	10	Cr.	9d(10)	-	2.5	48
Detachable RPG	HEDP	10	Cr.	9d[2d](5)	-	2.5	48
Detachable RPG	CHEM	10	Spcl.	7 yards	-	2.5	Var.

*For CHEM, the Dam. column is blast radius.

Nar Ammunition Tables

Kinetic-Energy Munitions

Weapon	Ammo	Shots	Type	Damage	Range Modifier	Weight	Cost
Large Musket	Sol.	1	Cr.	9d+2	-	.25	.13
Large Musket	AP	1	Cr.	9d+2(2)	-	.25	.39
Large Musket	HP	1	Cr.	9d+2(.5)	-	.25	.20
Large Musket	Plas.	1	Cr.	5d-1	.5	.25	.13
4-Barrel Musket	Sol.	1	Cr.	6d	-	.08	.04
4-Barrel Musket	AP	1	Cr.	6d(2)	-	.08	.12
4-Barrel Musket	HP	1	Cr.	6d(.5)	-	.08	.06
4-Barrel Musket	Plas.	1	Cr.	3d	.5	.08	.04
Firelock Hndgn.	Sol.	1	Cr.	3d	-	.09	.04
Firelock Hndgn.	AP	1	Cr.	3d(2)	-	.09	.12
Firelock Hndgn.	HP	1	Cr.	3d(.5)	-	.09	.06
Firelock Hndgn.	Plas.	1	Cr.	1d+2	.5	.09	.04

Other Ammunition

Weapon	Ammo	Shots	Type	Damage*	Range Modifier	Weight	Cost
Nar Rkt. Lnchr.	HE	1	Exp.	72d[6d]	-	23.5	65
Nar Rkt. Lnchr.	HEC	1	Exp.	96d	-	23.5	65

Nar Rkt. Lnchr.	SAPHE	1	Cr.	18d(.5)	-	23.5	65
plus...	-	-	Exp.	72d[6d]	-	-	-
Nar Rkt. Lnchr.	HEAT	1	Exp.	36d(10)	-	23.5	110
Nar Rkt. Lnchr.	CHEM	1	Exp.	47 yards	-	23.5	Var.

*For CHEM, the Dam. column is blast radius.

Personal Armor

Armor can easily make the difference between life and death, especially in the age of energy shields; in the 28th century, armor has made a comeback. Some armor can even defend a single man against a bristling squad of rocket-toting veterans.

Humans, Pfhor, Vylae, and Nebulons all have standard **GURPS Ultra-Tech** and **GURPS Space** armor advancements up to TL9. The S'pht'Kr have TL10 technology, but would not use standard **GURPS** equipment because of their unusual body structure. The Nar have TL8 armor.

Energy Shields

Standard Energy Shield. Standard energy shield devices absorb most types of incoming damage (see the Technology chapter for rules) up to a certain "HT." One D-cell provides 100 HT of protection, and can run actively for ten hours straight. (Consider each six active minutes to reduce one "HT" of power.) Personal-sized energy shields' costs and weights are based on maximum power capacity (i.e., the highest number of power packs that can be hooked in). Note: they will only protect a man-sized object or something smaller! An energy shield with a 100 HT limit (one D-cell receptor only) costs \$5,000 and weighs 2 pounds, plus the weight and cost of the D-cell. Add \$4,000 for each additional D-cell receptor, up to a maximum of 10 (the equivalent of one E-cell). Also add one pound to the weight for each additional 100 HT capacity level added. Energy shields are LC 2.

Vacuum-Proof Flexsteel

Flexsteel, the Marathon equivalent of monocrys (see p. S85) can be sealed for vacuum. It is coated with a thin layer of sealant that protects against the dangers of vacuum. If its DR is penetrated, however, it instantly becomes unsealed! (The damage for sixes rolled on a damage roll against flexible armor doesn't count; this blunt trauma does not cause pressure loss.) Sealing monocrys armor costs \$200 per full suit. Note that you still need air, a sealed helmet, and a life-support pack (2.5 lbs., \$750) to actually function in a vacuum!

Human Personal Armor

Sealed Infantry Helmet

This is a standard vacuum-sealed combat helmet for human infantry forces. Many accessories can be installed into it; see GURPS Space for some options. It provides PD 4, DR 20, weighs 3 lbs. and costs \$200. For

\$700 it can include a motion detector with a 15 meter detection radius; this adds no additional weight.

U.E.G. Commando Armor

This expensive and highly effective armor is built to allow good mobility while still providing excellent protection. It includes: heavy vacuum-sealed flexsteel, PD 2, DR 24 (PD 1, DR 2 vs. impaling), a light clamshell cuirass, PD 4, DR 20 (DR 25 at TL9), a sealed combat helmet (see above) with HUD, short-range communicator, multiview visor (light intensification, anti-glare, and thermal imaging), GPS system, mini-video and audio recorder, a life-support pack, a 6-minute emergency oxygen tank, an air filter (to filter contaminated environments and gas attacks without wasting built-in oxygen) and a DR 300-capacity personal energy shield. Its power requirements are one C cell for six months of all features except the energy shield, which requires a minimum of one D cell (with a three cell limit). Additional features include:

Relative Navigational Computing Instrument (RNCI): This device, often referred to as an "automapper," provides and digitally stores a constantly-updated 2D map of an area when it is turned on by means of a complex 180° (front-mounted) ladar scanning system. This 2D map provides only basic features; it does not store actual pictures of the explored regions. (An RNCI costs \$1,000 individually, weighs 1 lb., and requires a B cell for six months of use, or can run off a helmet's C cell.)

Motion Detector: This device detects large, moving objects in a 15 meter radius. It can also identify objects wearing U.E.G. electronic registration pins, which makes the object show up as a green square in order to help the user discriminate between hostile/unknown signals and friendly signals. The motion detector does not work through walls, but it can detect objects through windows and the like. Strong electromagnetic interference can cause false signals.

Helmet-Mounted Battle Computer: The U.E.G. Commando Armor's computer is voice-activated and has a HUD-mounted display. The internal Battle Computer has records of nearly all modern weapons, armor and vehicles. It displays weapons and their characteristics on command. It also monitors both the user and the suit in a variety of ways. Small input devices attached to the body send information to the computer to form a constantly updating medical readout, featuring heart rate, breathing rate, adrenaline level, and toxin levels. The computer can turn the energy shield on or off, monitor the energy shield's power level and keep track of the oxygen supply. The amount of power left in the internal C cell is also monitored. The computer has large memory banks which can store GPS nav points (specified by wearer), audio/video recordings, medical readout data from given times or periods of time in the past, RNCI maps, or other pieces of information that can be gathered by the suit's many sensors and input devices.

Not including the costs and weights of the required power cells, a full set of U.E.G. Commando Armor weighs 35 lbs. and costs \$19,500.

Biobus Chip Enhancements

Biobus Chip Enhancements are "plug-in" devices to enhance human armor suits. They are compatible with universal computer hook-ups and provide their own limited power supplies. All BCEs weigh one pound.

Super Shield Chip: Super shield BCEs project incredibly powerful energy shields that absorb all incoming attacks (except gas, biological, grappling, or fusion attacks) for one minute. There is no HT limit, but all knockback still applies! A super shield has its own built-in super-efficient power pack, and runs for one minute. Once it has been turned on, turning it off automatically depletes its power; it is a "one-shot" device. It weighs 1

lb. and costs \$75,000. Super shields are LC 0.

Transparency Chip: Transparency BCEs use advanced transparency technology to reduce the visibility of a soldier. (See the Technology chapter for transparency rules.) These chips run for five minutes. Like super shields, they cannot be turned off without depleting their power. They cost \$5,000 and are LC 0. Note that multiple transparency chips can be used at once to enhance the effect!

Extravision Chip: These BCE chips require a helmet with a HUD to function. They are basically computer/sensor add-on packages that, when installed, give the user the Peripheral Vision advantage ("fisheye view") for two hours. They can be turned on and off at will, with no penalty whatsoever. Each chip costs \$150. They are LC 3.

Hypervision Chip: Hypervision Biobus chips create an image of the world based on a composite of light, heat, radar, and other electromagnetic signals. When combined with an helmet's HUD, hypervision chips effectively give the user Night Vision, Infravision, and Acute Vision +3. They last for two hours, can be turned on and off with a simple computer command, and cost \$150 each. They are LC 3.

Plasteel Riot Shield

This large plasteel shield is used by defensive troops and riot squads. It can stop most hand-to-hand attacks, as well as some light small arms fire. It provides PD 6 and has 25/120 hits. It weighs 10 lbs. and costs \$100.

Pfhor Personal Armor

Assault Armor

Assault armor, worn by skilled Pfhor shock troopers, consists of armor covering the torso, forearms, groin, lower legs, and thighs. It provides PD 4, DR 20 on all areas except the head, which is encased in a clear plastic dome helmet with PD 3, DR 12. It has an air filter and can easily be attached to an oxygen tank. It costs \$700 and weighs 22 lbs.

Enforcer Uniform

This lightweight metallic fiber overcoat and uniform is used as much for decoration as it is for armor, though it still provides ample protection to the officers who wear it. It can be used as a light cloak weapon/shield with the Cloak skill. The cloak weighs 4 pounds and provides PD 0, DR 1. The suit weighs 10 pounds and provides PD 3, and DR 17 and protects everything but the head. The whole package costs \$600.

Fighter Armor

Pfhor Fighter Armor is an inexpensive uniform for Aggregate infantry units. Veterans of the legion often sell their armor at discount prices, so Fighter Armor is readily available to the civilian population. Its metal/ceramic composite armor provides PD 4, DR 20 on the torso and forearms, and a loincloth and belt give PD1, DR 1 the groin area. The suit also features an air filter mask that can be hooked up to an oxygen tank for combat in unbreathable atmospheres. Pfhor Fighter Armor costs \$450 and 16 lbs.

Guardsmen Shield

The Imperial Guardsmen wear shields attached to the forearms of their powered armor. These shields are usually worn in pairs. Each is effectively a small shield, providing PD 2 and 10/50 hits. Used together, a pair of shields gives a combined shield PD of 3 for both active and passive defense rolls. Each shield costs \$200 and weighs 10 lbs.

S'pht Compiler Uniform

The Pfhor provide light, vacuum-sealed suits and cloaks to the S'pht slaves that they force into combat. The cloak provides PD 1, DR 1 to all locations and is safe for use in vacuum conditions. A headdress (helmet and shoulder pads) with laminate composite armoring is also included; this provides PD 4, DR 16. It can be attached to an air supply if desired, and includes a life support pack. The uniform weighs 8 lbs. and costs \$600. (Compilers are generally also provided with low-grade energy shields with 50 to 100 HT capacities.)

S'pht'Kr Personal Armor

The S'pht'Kr rarely use armor; military and police units almost exclusively use robotic battlesuits. Civilian S'pht and clan leaders, however, sometimes wear light armor. The S'pht'Kr may purchase equivalent versions of any form of body armor, combat armor, flexsteel armor, laser ablative ("reflec") armor, or retro-reflective armor available in GURPS Space or GURPS Ultra-Tech (see pages S84-85) at TL10 quality for 2/3 the usual cost and weight. All S'pht'Kr armor suits are designed with vent-openings to allow the S'pht Biomechanical Flight advantage to function.

Nar Personal Armor

The Nar use medieval-style armor made out of plates of metal or advanced ceramics/plastic, but with TL9 technology, because it is one of their technological specialties. See p. UT74 for descriptions of armorplast, durasteel, and biphas carbide armor. The Nar also use flexible armor, but tend not to stray too far from their traditional metal-plate armor. The Vylae and Nebulons have standard TL9 armor.

Other Species

The Vylae and Nebulons have standard TL9 armor. Sometimes these species are able to use armor pieces acquired in the Empire, but the finest armor, such as Hunter battlesuits, cannot be found so easily on the black market.

Other Equipment

Most equipment can be found in GURPS Space, in the table on page 51 and in the "Gadgets" chapter. These lists should serve as a basic table for mundane costs, but any costs listed here override those listed elsewhere.

Gadgetry

Portable Motion Detector

This is a portable motion detector device featuring a small viewscreen, 15 meter radius, and built-in IFF (Identify friend or foe) signal recognition via radio. It costs \$500 and weighs 1 lb., and can detect man-sized moving objects. Magnetic interference will, however, cause malfunctions, including Óphantom images that swirl across the viewscreen.

Teleportation Blockers

Standard teleportation blockers have a blocking radius of 100 yards, in which teleportation rifts are disrupted. Teleportation blockers weigh 100 lbs. and cost \$20,000. They are too bulky for assault-type missions, and are generally only used in garrisons defending forts. Note that a blocked area can be easily detected by long-distance electromagnetic field scanners. Standard teleportation blockers are LC 1.

A heavy teleportation blocker has a radius of 1/2 mile. It weighs 4 tons and costs \$1,550,000. Heavy teleportation blockers are usually used to defend cities under siege. They are generally hitched onto large trucks and then carried into the center of the area that is going to be blocked off. Heavy teleportation blockers are LC 0.

Medical Technology

Nerve Gas Antidotes

The common use of chemical weapons in the Marathon universe has made it necessary for all species to develop cheap and effective nerve gas antidotes. Preventative agents are cheaper, but emergency curative versions are available as well. A preventative nerve gas antidote costs \$150 per syringe, and a curative antidote costs \$600 per syringe.

S'pht'Kr First Aid Kit

The basic S'pht'Kr first aid kit contains an assortment of tools to fix both flesh and cybernetic components. It functions as a mini-tool kit (see page S72) but with finer instruments specially designed to work well on basic S'pht'Kr cybernetic functions, giving only a -1 to cybernetic repairs. It also functions as a full emergency first aid kit (see page S96), giving a +1 to the First Aid skill. 3 lbs., \$500.

Transportation

Aerospace Flight (Planetary)

A supersonic planetary plane ride costs \$200 for a ride across a continent in human and Pfhor space. It costs only \$150 on K'lia. These prices can be cut in half for economy accommodations, and doubled for luxurious first-class treatment. Such a ride generally takes about two hours.

Bullet Train Ride

The S'pht'Kr use a highly developed system of bullet trains (which travel at about 350 mph) to travel around their planet. A bullet train ride costs about \$1 per 100 miles.

Interstellar Communication

Hyperspace courier mail costs \$.02 per ounce per parsec, except within human space, where it costs \$2 per ounce per parsec. Express couriers (using quick hyperspace drives) generally charge two to four times the standard amount. Trans-Warp Electromagnetic Signal communication costs \$50 per *character* (as in one letter, number, or other symbol) for a transmission in the Pfhor Empire. It costs \$250 per character in human space!

Space Travel

STL travel between planets within a system costs around \$250 base cost plus \$150 per day of travel after that. Many organizations give STL passage between planets, and varying degrees of luxury are possible. Express passage on an ultra-fast interplanetary vessel costs at least double.

Interstellar travel can sometimes be more costly. For the S'pht'Kr and Pfhor, use the prices given on pp. S51-52. For the humans, it usually costs about \$5,000 to get interstellar passage, unless the trip is very lengthy (for example, to K'lia). Accomodations are usually quite nice. Note that only government-certified and highly regulated courier lines are allowed to use FTL technology. The Vylae usually pay half the cost given in GURPS Space; the Nar pay double.

[Back to Main Site Menu](#) [Back to Table of Contents](#) [Back to Previous Section](#) [On to Next Section](#)

7. Robots and Powered Armor

Robots

In the 29th century, robots are everywhere. They help with everyday life as well as war. Most robots aren't actually sentient (most often because AIs with bodies are extremely dangerous!) but manage to do their tasks with a fair degree of competence. The Robots section describes the robots of different species (especially the Pfhor, who fill a large percentage of their army's ranks with robotic warriors). The robots described here have nonsentient artificial intelligences and are generally not PC material (at least in a serious campaign.)

In general, both the humans and the Pfhor use TL9 robotics; the S'pht use TL10 robotics. However, there are two exceptions: power and computers. All species have TL10 power plant technology, the humans and S'pht have TL12 computers, and the Pfhor have TL10 computers. Robots automatically have a "native" language at their IQ level: for human-made robots this is English, for Pfhor-made robots this is standard international Pfhor dialect. Assume robots with arms to be right-handed.

All robot weapons (and ammunition for those weapons) are described and listed at the end of the Battlesuits section. This section requires **GURPS Robots** for full use of all information, but it can be helpful even without the sourcebook.

Human Robots

Marathon Automated Defense Drone (MADD)

The Marathon Automated Defense Drone is an approximately 100 lb. combat design that was used as an emergency defense unit on the U.E.S.C. *Marathon*. The MADDs were, however, equipped for stopping civilian uprisings and, at worst, terrorist invasions, and were therefore no match for the full-blown military assault conducted by the invading Pfhor army. MADDs have a hover-capable flight system that uses a vectored-thrust fusion rocket system. It is powered by one or two C cells (for radar, brain, sensors, and communications) and a tank of water (for the internal fusion reactor that powers the rockets). Its fusion reactor can only run for one hour on the 2-gallon water tank in the MADD.

Brain: Small TL12 brain (.5 lbs., .01 cf, \$250, -5 points), Complexity 6.

Sensors: Basic sensors with 360° vision, laser rangefinder, telescopic zoom 1, low-res hearing, no sense of smell/taste, and search radar system with one mile range (3.3 lbs., .066 cf, \$6,300, .25 KW, 26 points).

Communicator: Basic communicator with mute option, and IFF scanner (.1 lb., .002 cf, \$300, -5 points).

Arm Motors: No arms or legs (-50 points).

Thrust-Based Propulsion: TL10 fusion rocket system with 100 lb. thrust and vectored thrust option (41.25 lbs., .825 cf, 2 GPH water consumption, \$4,125).

Weaponry: MADD Light Machinegun (4 lbs., .08 cf, \$720, LC 1), MADD Grenade Launcher (7 lbs., .14 cf, \$950, LC 0). Weaponry costs 110 points.

Power: Power requirement .25 KW. Energy bank with one C cell (1 lb., .01 cf, \$100, 20 points) with 5,400 KWS stored power. Fusion rocket provides its own power. Standard tank with 2 gallons water (18 lbs., .3 cf, \$20, no fire danger, 0 points). Endurance 1 hour flying (-25 points); brain, communicators, radar, etc. can operate for 6 hours.

Subassemblies: Head.

Head Design: Head houses brain, sensors, communicators, machine gun, grenade launcher, and energy banks (.308 cf). It does not rotate.

Body Design: Body houses fusion rocket and water tank (1.125 cf).

Surface Area: Head area 3, body area 7, total surface area 10.

Structure: Light. 15 lbs., \$500.

Hit Points: Head 2, body 5.

Armor and Threat Protection: DR 8 metal armor (8 lbs., \$180, PD 3, LC 3, 99 points); sealed (\$100, 20 points).

Statistics: 98.15 lbs. (.049075 tons), 1.433 cf, \$12,425. Body ST 0, no arms (-100 points), DX 11 (10 points), IQ 9 (-10 points), HT 12/5 (-15 points). Air speed (vectored thrust flight) 18.62 (70 points). Cannot float (-5 points). Legality Class 0. Point Cost: 140.

Standard Programming: English Language Skill Program (M/A) IQ [0 points; Complexity 1]-9 (\$250), Guns/TL9 (Light Automatic) Skill Program (P/E) DX+3 [8 points; Complexity 5]-14 (\$8,000), Guns/TL9 (Grenade Launcher) Skill Program (P/E) DX+3 [8 points; Complexity 5]-14 (\$8,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Tactics (M/H) IQ+6 [4 points with Eidetic Memory bonus; Complexity 4]-15 (\$2,000).

Total Cost with Programming: \$31,075; 160 points.

Pfhor Robots

Combat Cyborg, Light

While the Pfhor have many uses for their slaves, few are more cruel than conversion into the mindless wretches known as "cyborg slaves."

To produce these man-sized tanks, physically disabled, injured, disobedient, or recently-killed slaves are

dissected. Their brains and notochords severed and, along with the strands of flesh and bone that still cling to the organ, are grafted onto a cheaply-built and hideous-looking robotic structure along with a standardized robotic brain pre-programmed with combat skills. The resulting creature is loyal and bloodthirsty, and generally only retains vague and disconnected memories of its previous life. It is a cheap, compact, and relatively intelligent brain system for a deadly war machine.

Species converted into cyborgs include humans, Nar, Nebulons, Vylae, and Conditioned caste Pffhor. By the time they are converted into cyborgs they all tend look more or less the same.

Because of the partially organic nature of these cyborgs, DX and IQ ratings can vary. The stats below assume an original creature with DX and IQ 10. To customize cyborgs, first decide on the DX and IQ of the original slave brain. Then average the original brain's DX with the robot brain's DX to find the final cyborg's DX. If the IQ of the original brain is greater than the IQ of the robot brain (and it usually is), then this IQ completely replaces the robot brain's IQ for all purposes. If the IQ of the original brain is less than the IQ of the robot brain, then the robot brain's IQ is dominant and is used for all purposes.

The "light" version of the combat cyborg features grenades, numerous knives, and a modular socket for an optional close-combat flame unit or, less frequently, a light machinegun. Its integral spray gun gives a chemical weapon option for more bloodthirsty close-combat engagements. All combat cyborgs can run for an impressive 156.25 hours (approximately two standard Homeworld days) before refueling.

Brain: Standard TL10 computer brain with +2 DX booster (10 lbs., .2 cf, \$7,500), Complexity 5. Also, a cyborg slave brain (20 lbs., .4 cf, \$25,000, LC 4) with DX 10 and IQ 10. Combined, they cost 80 character points.

Sensors: Basic sensors with laser rangefinder, thermograph vision, and no sense of smell/taste (1.8 lbs., .036 cf, \$5,250, 20 points).

Communicator: Basic communicator with Disturbing Voice (.5 lb., .01 cf, \$125, 5 points).

Arm Motors: Two ST 12 striker arm motors (each .9 lbs., .018 cf, \$720, .06 KW, -30 points total).

Drivetrain: Tracked drivetrain with two tracks and .2 KW motive power (3 lbs., .06 cf., \$60, .2 KW).

Weaponry: Cyborg Clippers (2 lbs., .04 cf, \$50, LC 5), two Cyborg Cutlasses (each 2 lbs., .04 cf, \$125, LC 5), Light Cyborg Grenade Launcher (7.5 lbs., .15 cf, \$770, LC 1). Weaponry costs 56 points.

Accessories: Spray Gun (1 lb., .05 cf, \$50).

Modular Sockets: One modular socket for a component weighing 10 lbs. and with volume .2 cf (\$100). It is generally used to house a Cyborg Flamethrower (10 lbs., .2 cf, \$1,000, LC 0) or Cyborg Machinegun (10 lbs., .2 cf, \$890, LC0). Adding a flamethrower costs an additional 60 character points and \$1,200. A machinegun adds 60 points and costs \$1068. Both drop the cyborg's LC to 0 as well. Neither affect performance or stats.

Cargo Space: A single 1 cf cargo space capable of holding up to 50 lbs. of assorted gear. (Gear is usually not carried, and is therefore not factored into the design weight of the robot.)

Power: Power requirement .32 KW. MHD Turbine with .32 KW output (2.56 lbs., uses .0064 GPH hydrox, .0512 cf, \$500, 20 points). Standard fuel tank with one gallon hydrox (5.5 lbs., .15 cf, \$10, fire 11, - 11 points). Endurance 156.25 hours (5 points).

Subassemblies: Two arms, head, tracks (two).

Head Design: Head houses computer brain, sensors, and communicator (.246 cf).

Body Design: Body houses organic slave brain, MHD turbine, fuel tank, waste space for head rotation, and 1 cf cargo space (1.6256 cf).

Arm Design: Right arm houses ST 12 motor, Cyborg Cutlass, Light Cyborg Grenade Launcher, and modular socket (.39 cf). Left arm houses ST 12 motor, Cyborg Clippers, Cyborg Cutlass, Spray Gun, and .242 cf empty space (.39 cf).

Motive System: Tracked motive system (.97576 cf.) with two tracks.

Surface Area: Head area 2.5, body area 9, arms each area 3, tracks area 6, total surface area 23.5.

Structure: Cheap, extra-heavy biomechanical (no extra cost for biomechanical structure since each slave supplies its own flesh for "free"). 211.5 lbs., \$5,875.

Hit Points: Head 15, body 54, each arm 36, each track 36.

Armor and Threat Protection: DR 12 (24 vs. shaped-charge warheads) laminate armor (16.92 lbs., \$1,692, PD 3, LC 3, 123 points); sealed (\$235, 20 points).

Biomorphics: Horrific appearance (-30 points, no monetary cost as it occurs "naturally" as a result of the quick-and-dirty melding of flesh and machine).

Statistics: 298.08 lbs. (.14904 tons), 3.62736 cf, \$48,907. Body ST 27 (96 points), Arm ST 12 each (-38 points), DX 11 (10 points), IQ 10, HT 12/54 (230 points). Ground speed 6.95 (0 points). Legality Class 1. Point Cost: 556.

Standard Programming: Guns/TL9 (Flamethrower) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Guns/TL9 (Light Automatic) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Guns/TL9 (Grenade Launcher) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Pffhor Language Skill Program (M/A) IQ [0 points; Complexity 1]-10 (\$250), Shortsword Skill Program (P/A) DX+1 [4 points; Complexity 4]-12 (\$4,000), Tactics (M/H) IQ+4 [3 points with Eidetic Memory bonus; Complexity 4]-14 (\$1,500). Special Note: Combat Cyborgs do not retain strong enough memories of their pasts to still keep old skills; their minds are wiped and reprogrammed.

Total Cost with Programming: \$67,057; 575 points.

Combat Cyborg, Medium

The medium-strength version of the combat cyborg has essentially the same features as the light version, but with a heavier frame, tougher armor, and an extra-deadly grenade launcher. Still here are the optional flamethrower and spray gun, as well as the cyborg brain and combat programming package that make these robots so deadly.

Brain: Standard TL10 computer brain with +2 DX booster (10 lbs., .2 cf, \$7,500), Complexity 5. Also, a cyborg slave brain (20 lbs., .4 cf, \$25,000, LC 4) with DX 10 and IQ 10. Combined, they cost 80 character points.

Sensors: Basic sensors with laser rangefinder, thermograph vision, and no sense of smell/taste (1.8 lbs., .036 cf, \$5,250, 20 points).

Communicator: Basic communicator with Disturbing Voice (.5 lb., .01 cf, \$125, 5 points).

Arm Motors: Two ST 16 striker arm motors (each 1.2 lbs., .024 cf, \$960, .08 KW, -30 points total).

Drivetrain: Tracked drivetrain with two tracks and .3 KW motive power (4.5 lbs., .09 cf., \$90, .3 KW).

Weaponry: Cyborg Clippers (2 lbs., .04 cf, \$50, LC 5), two Cyborg Cutlasses (each 2 lbs., .04 cf, \$125, LC 5), Medium Cyborg Grenade Launcher (13.5 lbs., .27 cf, \$930, LC 0). Weaponry costs 106 points.

Accessories: Spray Gun (1 lb., .05 cf, \$50).

Modular Sockets: One modular socket for a component weighing 10 lbs. and with volume .2 cf (\$100). It is generally used to house a Cyborg Flamethrower (10 lbs., .2 cf, \$1,000, LC 0) or Cyborg Machinegun (10 lbs., .2 cf, \$890, LC0). Adding a flamethrower costs an additional 20 character points and \$1,200. A machinegun adds 20 points and costs \$1068. Neither affect performance or stats.

Cargo Space: A single 1 cf cargo space capable of holding up to 50 lbs. of assorted gear. (Gear is usually not carried, and is therefore not factored into the design weight of the robot.)

Power: Power requirement .46 KW. MHD Turbine with .46 KW output (3.68 lbs., uses .0084 GPH hydrox, .0736 cf, \$500, 20 points). Standard fuel tank with 1.3125 gallons hydrox (7.28 lbs., .1969 cf, \$13.13, fire 11, -11 points). Endurance 156.25 hours (5 points).

Subassemblies: Two arms, head, tracks (two).

Head Design: Head houses computer brain, sensors, and communicator (.246 cf).

Body Design: Body houses organic slave brain, MHD turbine, fuel tank, waste space for head rotation, and 1 cf cargo space (1.6951 cf).

Arm Design: Right arm houses ST 16 motor, Cyborg Cutlass, Medium Cyborg Grenade Launcher, and modular socket (.534 cf). Left arm houses ST 16 motor, Cyborg Clippers, Cyborg Cutlass, Spray Gun, and .41 cf empty space (.534 cf).

Motive System: Tracked motive system (1.01706 cf.) with two tracks.

Surface Area: Head area 2.5, body area 9, arms each area 4, tracks area 6, total surface area 25.5.

Structure: Cheap, extra-heavy biomechanical (no extra cost for biomechanical structure since each slave supplies its own flesh for "free"). 229.5 lbs., \$6,375.

Hit Points: Head 15, body 54, each arm 48, each track 36.

Armor and Threat Protection: DR 18 (36 vs. shaped-charge warheads) laminate armor (27.54 lbs., \$2,754, PD 4, LC 2, 172 points); sealed (\$255, 20 points).

Biomorphics: Horrific appearance (-30 points, no monetary cost as it occurs "naturally" as a result of the quick-and-dirty melding of flesh and machine).

Statistics: 337.7 lbs. (.16885 tons), 4.02616 cf (Inconvenient Size, -10 points), \$51,162.13. Body ST 27 (96 points), Arm ST 16 each (-13 points), DX 11 (10 points), IQ 10, HT 12/54 (230 points). Ground speed 8.00 (10 points). Legality Class 0. Point Cost: 660.

Standard Programming: Guns/TL9 (Flamethrower) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Guns/TL9 (Light Automatic) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Guns/TL9 (Grenade Launcher) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Pffhor Language Skill Program (M/A) IQ [0 points; Complexity 1]-10 (\$250), Shortsword Skill Program (P/A) DX+1 [4 points; Complexity 4]-12 (\$4,000), Tactics (M/H) IQ+4 [3 points with Eidetic Memory bonus; Complexity 4]-14 (\$1,500). Special Note: Combat Cyborgs do not retain strong enough memories of their pasts to still keep old skills; their minds are wiped and reprogrammed.

Total Cost with Programming: \$69,312.13; 679 points.

Combat Cyborg, Heavy

The pure killing power of the heavy combat cyborgs is second only to the elite Hunters among the ranks of the Pffhor infantry. Heavy combat cyborgs are so large that they are often deployed as light fire support units rather than assault troops, depending on the unit to which they are assigned. Their combat effectiveness is as terrifying as their hideous faces.

Brain: Standard TL10 computer brain with +2 DX booster (10 lbs., .2 cf, \$7,500), Complexity 5. Also, a cyborg slave brain (20 lbs., .4 cf, \$25,000, LC 4) with DX 10 and IQ 10. Combined, they cost 80 character points.

Sensors: Basic sensors with laser rangefinder, thermograph vision, and no sense of smell/taste (1.8 lbs., .036 cf, \$5,250, 20 points).

Communicator: Basic communicator with a Medium-range Radio and Disturbing Voice (1 lb., .02 cf, \$225, 6 points).

Arm Motors: Two ST 20 striker arm motors (each 1.5 lbs., .03 cf, \$1,200, .1 KW, -30 points total).

Drivetrain: Tracked drivetrain with two tracks and .4 KW motive power (6 lbs., .12 cf., \$120, .4 KW).

Weaponry: Cyborg Rippers (large clippers) (3 lbs., .06 cf, \$75, LC 5), two Cyborg Arm Swords (each 3 lbs., .06 cf, \$225, LC 5), Heavy Cyborg Grenade Launcher (20 lbs., .4 cf, \$1,365, LC 0). Weaponry costs 106 points.

Accessories: Spray Gun (1 lb., .05 cf, \$50).

Modular Sockets: One modular socket for a component weighing 10 lbs. and with volume .2 cf (\$100). It is generally used to house a Cyborg Flamethrower (10 lbs., .2 cf, \$1,000, LC 0) or Cyborg Machinegun (10 lbs., .2 cf, \$890, LC0). Adding a flamethrower costs an additional 20 character points and \$1,200. A machinegun adds 20 points and costs \$1068. Neither affect performance or stats.

Cargo Space: A single 1.5 cf cargo space capable of holding up to 75 lbs. of assorted gear. (Gear is usually not carried, and is therefore not factored into the design weight of the robot.)

Power: Power requirement .6 KW. MHD Turbine with .6 KW output (4.8 lbs., uses .012 GPH hydrox, .096 cf, \$500, 20 points). Standard fuel tank with 1.875 gallons hydrox (10.3125 lbs., .2813 cf, \$18.75, fire 11, -11 points). Endurance 156.25 hours (5 points).

Subassemblies: Two arms, head, tracks (two).

Head Design: Head houses computer brain, sensors, and communicator (.256 cf).

Body Design: Body houses organic slave brain, MHD turbine, fuel tank, waste space for head rotation, and 1 cf cargo space (2.3029 cf).

Arm Design: Right arm houses ST 20 motor, Cyborg Arm Sword, Heavy Cyborg Grenade Launcher, and modular socket (.69 cf). Left arm houses ST 20 motor, Cyborg Rippers, Cyborg Arm Sword, Spray Gun, and .49 cf empty space (.69 cf).

Motive System: Tracked motive system (1.3817 cf.) with two tracks.

Surface Area: Head area 2.5, body area 11, arms each area 5, tracks area 8, total surface area 31.5.

Structure: Cheap, extra-heavy biomechanical (no extra cost for biomechanical structure since each slave supplies its own flesh for "free"). 283.5 lbs., \$7875.

Hit Points: Head 15, body 66, each arm 60, each track 48.

Armor and Threat Protection: DR 24 (48 vs. shaped-charge warheads) laminate armor (45.36 lbs., \$4,536, PD 4, LC 2, 196 points); sealed (\$315, 20 points).

Biomorphics: Horrific appearance (-30 points, no monetary cost as it occurs "naturally" as a result of the quick-and-dirty melding of flesh and machine).

Statistics: 425.7725 lbs. (.21289 tons), 5.3206 cf (Inconvenient Size, -10 points), \$55,780. Body ST 33 (106 points), Arm ST 20 each (2 points), DX 11 (10 points), IQ 10, HT 12/66 (290 points). Ground speed

11.27 (25 points). Legality Class 0. Point Cost: 805.

Standard Programming: Guns/TL9 (Flamethrower) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Guns/TL9 (Light Automatic) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Guns/TL9 (Grenade Launcher) Skill Program (P/E) DX+2 [4 points; Complexity 4]-13 (\$4,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Pffhor Language Skill Program (M/A) IQ [0 points; Complexity 1]-10 (\$250), Shortsword Skill Program (P/A) DX+1 [4 points; Complexity 4]-12 (\$4,000), Tactics (M/H) IQ+4 [3 points with Eidetic Memory bonus; Complexity 4]-14 (\$1,500). Special Note: Combat Cyborgs do not retain strong enough memories of their pasts to still keep old skills; their minds are wiped and reprogrammed.

Total Cost with Programming: \$73,930; 824 points.

Juggernaut, Mk I

The massive armored cavalry units known as "juggernauts" provide hard-hitting first strike capabilities to the legions of the Empire. These highly-mobile assault units are the primary source of fire support for deep strike infantry units and therefore play an integral role in any Pffhor unit that requires heavy firepower.

There are two models of Juggernaut (a lighter and a heavier version). Each is equipped with dual long-range RPG launchers and two modular sockets that can accept a range of heavy assault weapons for anti-personnel fire at closer range. A typical armament usually includes dual ballistic cannons or assault plasma cannons, but other weapons are available for different mission imperatives.

The juggernaut features a standard computing unit with a high-powered coprocessor for boosting physical coordination and optical systems to prevent damage from electromagnetic pulse attacks. The standard software package features advanced targeting and tactics programs that allow the juggernaut to be one of the most effective automated assault units ever created.

Brain: TL10 hardened standard computer brain with +3 DX booster (30 lbs., .6 cf, \$56,250, -5 points), Complexity 5.

Sensors: Basic sensors with acute vision +3, independently focusable eyes, laser rangefinder, night vision, telescopic zoom 5, thermograph vision, parabolic hearing 1, imaging radar 5, search radar 5, radar/laser locator, radiation detector, and no sense of smell/taste (7 lbs., .14 cf, \$10,675, 1.25 KW, 186 points).

Communicator: Basic communicator with mute option, long-range radio, and IFF scanner (2.3 lbs., .046 cf, \$300, -3 points).

Arm Motors: No arms or legs (-50 points).

Thrust-Based Propulsion: Two TL10 fusion rockets, each with 3,250 lb. thrust and vectored thrust option (each 159.375 lbs., 3.1875 cf, 65 GPH water consumption, \$15,375).

Weaponry: Two Light Assault RPGs (each 165 lbs., 3.3 cf, \$37,125, LC 0). Weaponry costs 120 points.

Accessories: Siren (.25 lb., .05 cf, \$25), spotlight (2.5 lbs., .05 cf, \$25).

Modular Sockets: Two modular sockets for components weighing 35 lbs. and with volume .7 cf (\$350 each). These sockets are used for mounted assault weapons, a variety of which can be attached on short notice based upon the nature of the mission at hand. An Assault Plasma Cannon (35 lbs., .7 cf, \$6,000, LC 0) can be mounted for \$7,200. An Electrothermal Ballistic Cannon (35 lbs., .7 cf, \$5,000, LC 0) can be mounted for \$6,000. A Heavy Plasma Cannon (35 lbs., .7 cf, \$6,500, LC 0) can be mounted for \$7,800. A Heavy Flamethrower (35 lbs., .7 cf, \$645, LC 0) can be mounted for \$775. Each weapon costs 20 character points. None of them affect performance or stats.

Power: Power requirement 1.25 KW. Nuclear power unit (TL10) with 1.25 KW output powers brain, sensors, and communicator (7.5 lbs., .075 cf, \$20,000, 20 points). Fusion rockets provide their own power, and take fuel from a self-sealing fuel tank with 390 gallons water (3,705 lbs., 58.5 cf, \$15,600, no fire danger, 0 points). Endurance 3 hours flying (-10 points); brain, communicators, radar, etc. can operate for two years without maintenance.

Subassemblies: Head, six pods (two on shoulders, two on sides, two beneath the body).

Head Design: Head houses brain, sensors, communicator, siren, spotlight, and 1.814 cf empty space (2.3 cf). It does not rotate.

Body Design: Body houses nuclear power unit and fusion rocket fuel tank (58.575 cf).

Upper Pod Design: Each upper pod houses one Light Assault RPG and 6 cf empty space (9.3 cf each).

Side Pod Design: Each side pod houses one .7 cf modular socket and .3 cf empty space (1 cf each).

Lower Pod Design: Each lower pod houses one fusion rocket and 4 cf empty space (7.1875 cf each).

Surface Area: Head area 11, body area 100, upper pods each area 27, side pods each area 6, lower pods each area 23, total surface area 223.

Structure: Normal frame made from expensive materials. 501.75 lbs., \$44,600.

Hit Points: Head 17, body 150, each upper pod 41, each side pod 9, each lower pod 35.

Armor and Threat Protection: DR 100 (200 vs. shaped-charge warheads) laminate armor (1,338 lbs., \$133,800, PD 4, LC 1, 499 points); sealed (\$2,230, 20 points).

Statistics: 6,313.05 lbs. (3.1565 tons), 95.85 cf (Inconvenient Size, -10 points), \$389,995. Body ST 0, no arms (-100 points), DX 13 (30 points), IQ 8 (-20 points), HT 10/150 (700 points). Air speed (vectored thrust flight) 39.4 (75 points). Cannot float (-5 points). Legality Class 0. Point Cost: 1,447.

Standard Programming: Beam Weapons/TL9 (Blaster) Skill Program (P/E) DX+2 [4 points; Complexity 4]-15 (\$4,000), Combat Reflexes Advantage Program [15 points; Complexity 4] (\$15,000), Full Coordination Advantage Program level 1 [50 points; Complexity 4] (\$10,000), Gunner/TL9 (Rocket launcher) Skill Program (P/A) DX+1 [4 points; Complexity 5]-14 (\$4,000), Gunner/TL9 (Machinegun) Skill Program (P/A) DX+1 [4 points; Complexity 4]-14 (\$4,000), Guns/TL9 (Flamethrower) Skill Program (P/E) DX+2 [4 points; Complexity 4]-15 (\$4,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Pffhor Language

Skill Program (M/A) IQ [0 points; Complexity 1]-8 (\$250), Tactics (M/H) IQ+6 [4 points with Eidetic Memory bonus; Complexity 4]-14 (\$2,000).

Total Cost with Programming: \$433,645; 1,532 points.

Juggernaut, Mk II

The heavier juggernaut features a more advanced robot brain, heavier missile launchers, and a substantially larger payload. Its structure is also made from more durable, damage-resistant alloys and thicker, heavier construction. Its armor is significantly improved, as well. To accomodate all these additions, this model includes more powerful fusion jets and auxiliary fuel tanks.

Brain: TL10 hardened, compact microframe with +3 DX booster (75 lbs., 1.5 cf, \$300,000, .1 KW, -5 points), Complexity 6.

Sensors: Basic sensors with acute vision +3, independently focusable eyes, laser rangefinder, night vision, telescopic zoom 5, thermograph vision, parabolic hearing 1, imaging radar 5, search radar 5, radar/laser locator, radiation detector, and no sense of smell/taste (7 lbs., .14 cf, \$10,675, 1.25 KW, 186 points).

Communicator: Basic communicator with mute option, long-range radio, and IFF scanner (2.3 lbs., .046 cf, \$300, -3 points).

Arm Motors: No arms or legs (-50 points).

Thrust-Based Propulsion: Two TL10 fusion rockets, each with 4,594 lb. thrust and vectored thrust option (each 209.775 lbs., 4.1955 cf, 91.88 GPH water consumption, \$20,977.5).

Weaponry: Two Heavy Assault RPGs (each 250 lbs., 5 cf, \$56,700, LC 0). Weaponry costs 120 points.

Accessories: Siren (.25 lb., .05 cf, \$25), spotlight (2.5 lbs., .05 cf, \$25).

Modular Sockets: Two modular sockets for components weighing 35 lbs. and with volume .7 cf (\$350 each). These sockets are used for mounted assault weapons, a variety of which can be attached on short notice based upon the nature of the mission at hand. An Assault Plasma Cannon (35 lbs., .7 cf, \$6,000, LC 0) can be mounted for \$7,200. An Electrothermal Ballistic Cannon (35 lbs., .7 cf, \$5,000, LC 0) can be mounted for \$6,000. A Heavy Plasma Cannon (35 lbs., .7 cf, \$6,500, LC 0) can be mounted for \$7,800. A Heavy Flamethrower (35 lbs., .7 cf, \$645, LC 0) can be mounted for \$775. Each weapon module costs 20 character points. None of them affect performance or stats.

Power: Power requirement 1.35 KW. Nuclear power unit (TL10) with 1.35 KW output powers brain, sensors, and communicator (8.1 lbs., .081 cf, \$20,000, 20 points). Fusion rockets provide their own power, and take fuel from a self-sealing fuel tank with 450 gallons water (4,275 lbs., 67.5 cf, \$18,000, no fire danger, 0 points). There are also four auxiliary fuel tanks; two standard fuel tanks with 20.67 gallons water (186 lbs., 3.1 cf, \$206.67 each) and two standard fuel tanks with 30 gallons water (270 lbs., 4.5 cf, \$300 each). Endurance 3 hours in flight (-10 points); brain, communicators, radar, etc. can operate for two years without maintenance.

Subassemblies: Head, six pods (two on shoulders, two on sides, two beneath the body).

Head Design: Head houses brain, sensors, communicator, siren, spotlight, and .364 cf empty space (2.3 cf). It does not rotate.

Body Design: Body houses nuclear power unit and primary fuel tank (67.581 cf).

Upper Pod Design: Each upper pod houses one Heavy Assault RPG and a 4.5 cf auxiliary fuel tank (9.5 cf each).

Side Pod Design: Each side pod houses one .7 cf modular socket and .3 cf empty space (1 cf each).

Lower Pod Design: Each lower pod houses one fusion rocket and a 3.1 cf auxiliary fuel tank (7.2955 cf each).

Surface Area: Head area 11, body area 100, upper pods each area 27, side pods each area 6, lower pods each area 23, total surface area 223.

Structure: Extra-heavy frame made from expensive materials. 1,003.5 lbs., \$223,000.

Hit Points: Head 66, body 600, each upper pod 162, each side pod 36, each lower pod 138.

Armor and Threat Protection: DR 125 (250 vs. shaped-charge warheads) laminate armor (1,645.74 lbs., \$164,574, PD 4, LC 1, 599 points); sealed (\$2,230, 20 points).

Statistics: 8,920.94 lbs. (4.4605 tons), 105.472 cf (Inconvenient Size, -10 points), \$895,897.34. Body ST 0, no arms (-100 points), DX 14 (45 points), IQ 9 (-10 points), HT 12/600 (2,960 points). Air speed (vectored thrust flight) 47.4 (80 points). Cannot float (-5 points). Legality Class 0. Point Cost: 3,837.

Standard Programming: Beam Weapons/TL9 (Blaster) Skill Program (P/E) DX+3 [8 points; Complexity 5]-17 (\$8,000), Combat Reflexes Advantage Program [15 points; Complexity 4] (\$15,000), Full Coordination Advantage Program level 2 [100 points; Complexity 5] (\$20,000), Gunner/TL9 (Rocket launcher) Skill Program (P/A) DX+2 [8 points; Complexity 5]-16 (\$8,000), Gunner/TL9 (Machinegun) Skill Program (P/A) DX+2 [8 points; Complexity 5]-16 (\$8,000), Guns/TL9 (Flamethrower) Skill Program (P/E) DX+3 [8 points; Complexity 5]-17 (\$8,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Pfhor Language Skill Program (M/A) IQ [0 points; Complexity 1]-9 (\$250), Tactics (M/H) IQ+7 [8 points with Eidetic Memory bonus; Complexity 5]-16 (\$4,000).

Total Cost with Programming: \$967,547.34; 3,992 points.

Simulacrum

After making contact with the humans, the Pfhor began to produce simulacrums: vat-grown biological androids designed to infiltrate the human ranks and detonate a hidden cybernetic explosive implant, causing massive damage to any nearby targets. These simulacrums are the ultimate suicide bombers; not only do they carry their cargo inside their bodies, but they also lack the independent will required to turn away from their grisly mission.

Simulacrums are extremely imperfect replicas; this is the result of a combination of the designers' limited knowledge of human anatomy and the fact that the technology required to create these androids is new and unrefined. The Pfhor are a species of robot builders, and while they are old hands at creating artificial combat machines, they are not used to manipulating biological material with such precision. Furthermore, the androids have very limited intelligence, and the personality programs downloaded into their artificially-grown brains are almost comically bad imitations of human psychology. Simulacrums can barely carry on simple conversations and are known for making jarringly inappropriate or bizarre statements when trying to interact with real humans.

Virtually all simulacrums are modeled after males of European descent, since the original human corpses dissected during the design phase fit this description. Lately, simulacrums of other ethnicities have appeared in larger numbers. At this point there are no known female models, although it can be reasonably assumed that these will appear soon, given the increased contact between the two species. Simulacrums will no doubt improve in physical and psychological realism for the same reason, and this is a frightening prospect indeed.

At present, simulacrums can be physically indentified in a number of ways. They have hideously bad (indeed, inhuman) teeth, red eyes, two enormous toes, and no genitalia. A medical examination would also reveal yellow-green blood and alien internal organs, but external markers are quite sufficient for simple identification.

Simulacrums are programmed to detonate their internal explosive devices when they are near a human target that has been identified as a military threat. Some are reprogrammed for assassinations, and will only detonate when near a specific individual; others are programmed for wanton terror and are designed not to maximize military effectiveness, but overall body count. The bomb is activated neurally; there is no switch or verbal command required. It will also detonate automatically when the simulacrum's systems fail (i.e., when it dies). When the bomb goes off, it does 6d x 12 explosive damage and 2d cutting fragmentation damage from pieces of jagged plastic and bone-like materials designed to break apart and fly outward upon detonation. Having this bomb is considered a 0-point Advantage (Simulacrum Bomb) for the purposes of character creation.

Attributes: ST 10 [0]; DX 9 [-10]; IQ 7 [-20]; HT 12 [20].

Advantages: Hyper-Reflexes [15], Increased Speed +1 [25], Simulacrum Bomb (see above for description) [0].

Disadvantages: Appearance: Hideous [-20], Sterile [-3], Stress Atavism [-16], Unusual Biochemistry [-5], Unusual Feature (red eyes) [-5], Unusual Feature (no genitals) [-5], Unusual Feature (two large toes on each foot) [-5].

Primary Skills: Acting (M/A) IQ+1 [4]-8, Shadowing (M/A) IQ+1 [4]-8, Stealth (P/A) DX+1 [4]-10, Tactics (M/H) IQ [4]-7.

Secondary Skills: Computer Operation/TL12 (M/E) IQ-1 [1/2]-6, Running (P/H) HT-3 [1/2]-9, Swimming (P/E) DX [1]-9, Vacc Suit (M/A) IQ+1 [4]-11.

Languages: English (M/A) IQ-1 [1]-6, Pfhor (M/A) IQ [0]-7.

Model Point Cost (skills included): -6 points.

Price: \$70,000.

Striker Attack Drone

The Striker is a light attack robot built by the Pfhor to provide recon and fire support for light infantry units. It is also an excellent defense drone, and is well-suited to the task of short-term patrols over small areas that need to be well-protected. The Striker is armed with a small plasma gun and has impressive sensor and communication arrays for a drone of its size.

Brain: Small TL10 brain with +3 DX booster (.5 lbs., .01 cf, \$750, -5 points), Complexity 4.

Sensors: Basic sensors with laser rangefinder, night vision, telescopic zoom 4, parabolic hearing 1, no sense of smell/taste, search radar system with one mile range, radiation detector (3.3 lbs., .066 cf, \$8,900, .25 KW, 43 points).

Communicator: Basic communicator with mute option, medium-range radio, and IFF (.6 lb., .002 cf, \$300, -5 points).

Arm Motors: No arms or legs (-50 points).

Thrust-Based Propulsion: TL10 fusion rocket system with 85 lb. thrust and vectored thrust option (40.6875 lbs., .8138 cf, 1.7 GPH water consumption, \$4,068.75).

Weaponry: Light Pulse Gun (4.83 lbs., .0966 cf, \$1,665, LC 2). Weaponry costs 25 points.

Power: Power requirement .25 KW. Energy bank with one C cell (1 lb., .01 cf, \$100, 20 points) with 5,400 KWS stored power. Fusion rocket provides its own power. Standard tank with 1.7 gallons water (15.3 lbs., .255 cf, \$17, no fire danger, 0 points). Endurance 1 hour flying (-25 points); brain, communicators, radar, etc. can operate for 6 hours.

Subassemblies: Head.

Head Design: Head houses brain, sensors, communicators, energy banks, and .042 cf empty space (.13 cf). It does not rotate.

Body Design: Body houses Light Pulse Gun, fusion rocket, and water tank (1.1654 cf).

Surface Area: Head area 2, body area 7, total surface area 9.

Structure: Light, expensive structure. 10.125 lbs., \$900.

Hit Points: Head 2, body 5.

Armor and Threat Protection: DR 12 (24 vs. shaped-charge warheads) laminate armor (6.48 lbs., \$648, PD 3, LC 3, 123 points); sealed (\$90, 20 points).

Statistics: 82.8225 lbs. (.041411 tons), 1.2954 cf, \$17,438.75. Body ST 0, no arms (-100 points), DX 13 (30 points), IQ 7 (-20 points), HT 12/5 (-15 points). Air speed (vectored thrust flight) 21.30 (75 points). Cannot float (-5 points). Legality Class 2. Point Cost: 91.

Standard Programming: Beam Weapons/TL9 (Blaster) Skill Program (P/E) DX+1 [2 points; Complexity 3]-14 (\$2,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Pffhor Language Skill Program (M/A) IQ [0 points; Complexity 1]-7 (\$250), Tactics (M/H) IQ+2 [1 point with Eidetic Memory bonus; Complexity 2]-9 (\$500).

Total Cost with Programming: \$20,588.75; 94 points.

Striker Drone (Advanced Upgrade Model)

The more advanced Striker model features a superior computer brain, stronger internal structure, and improved armor. It is also somewhat heavier as a result, but its movement is not affected greatly. In general, these robots are more likely to be deployed in known combat zones.

Brain: Standard compact TL10 brain with +3 DX booster (5 lbs., .1 cf, \$7,500, -5 points), Complexity 5.

Sensors: Basic sensors with laser rangefinder, night vision, telescopic zoom 4, parabolic hearing 1, no sense of smell/taste, search radar system with one mile range, radiation detector (3.3 lbs., .066 cf, \$8,900, .25 KW, 43 points).

Communicator: Basic communicator with mute option, medium-range radio, and IFF (.6 lb., .002 cf, \$300, -5 points).

Arm Motors: No arms or legs (-50 points).

Thrust-Based Propulsion: TL10 fusion rocket system with 105 lb. thrust and vectored thrust option (41.4375 lbs., .8288 cf, 2.1 GPH water consumption, \$4,143.75).

Weaponry: Light Pulse Gun (4.83 lbs., .0966 cf, \$1,666, LC 2). Weaponry costs 25 points.

Power: Power requirement .25 KW. Energy bank with one C cell (1 lb., .01 cf, \$100, 20 points) with 5,400 KWS stored power. Fusion rocket provides its own power. Standard tank with 2.1 gallons water (18.9 lbs., .315 cf, \$21, no fire danger, 0 points). Endurance 1 hour flying (-25 points); brain, communicators, radar, etc. can operate for 6 hours.

Subassemblies: Head.

Head Design: Head houses brain, sensors, communicators, and energy banks (.178 cf). It does not rotate.

Body Design: Body houses Light Pulse Gun, fusion rocket, and water tank (1.2404 cf).

Surface Area: Head area 2, body area 7, total surface area 9.

Structure: Expensive structure. 20.25 lbs., \$1800.

Hit Points: Head 3, body 8.

Armor and Threat Protection: DR 14 (28 vs. shaped-charge warheads) laminate armor (7.56 lbs., \$756, PD 3, LC 3, 131 points); sealed (\$90, 20 points).

Statistics: 102.8775 lbs. (.051439 tons), 1.4184 cf, \$25,276.75. Body ST 0, no arms (-100 points), DX 13 (30 points), IQ 8 (-15 points), HT 12/8 (0 points). Air speed (vectored thrust flight) 21.03 (75 points). Cannot float (-5 points). Legality Class 2. Point Cost: 119.

Standard Programming: Beam Weapons/TL9 (Blaster) Skill Program (P/E) DX+2 [4 points; Complexity 4]-15 (\$4,000), Literacy Advantage Program [0 points; Complexity 2] (\$400), Pffhor Language Skill Program (M/A) IQ [0 points; Complexity 1]-7 (\$250), Tactics (M/H) IQ+6 [4 points with Eidetic Memory bonus; Complexity 4]-14 (\$2,000).

Total Cost with Programming: \$31,926.75; 127 points.

Powered Armor

"Powered armor" is a term used to describe fully mechanized, self-powered suits that combine armor, weapons, sensors, and life support systems. The S'pht'Kr Elite Guard and the Pffhor Imperial Guard ("Hunters") both use powered armor. The S'pht (both enslaved and free) can also use cybernetic weapon and equipment modules that are rather similar to powered armor, although they are only partial systems.

Pffhor Powered Armor

Guardsmen Armor

The highly selective Imperial Guard uses this powered armor to give their guardsmen the edge in mobility, armor, and firepower. Few sights can inspire more fear in the hearts of the foes of the Empire than a unit of the Guards marching relentlessly forward in their nearly invincible powered armor. Guardsman armor is completely vacuum-capable and includes built-in life support systems. It is able to run continuously for years without maintenance on its internal nuclear power unit. Although uniform colors vary between different chapters of the Imperial Guard, most Guardsman suits are tan or light brown.

Battlesuit System: The system supports a wearer of weight between 124 and 155 lbs. It is designed for quick access and can be donned in (30-Battlesuit skill) seconds and removed in half that. The battlesuit system, including the pilot himself, weighs approximately 186 lbs. and costs \$3,550.

Life Support: The life support system functions without maintenance or refueling for 12 hours (50 lbs., 1 cf, \$500).

Sensors: Basic sensors with laser rangefinder, night vision, telescopic zoom 5, thermograph vision, parabolic hearing 5, and imaging ladar 3 (6 lbs., .12 cf, \$15,050, .75 KW).

Communicator: Basic communicator with internal bullhorn (.55 lb., .011 cf, \$275).

Arm Motors: Two ST 20 arm motors (each 3 lbs., .06 cf, \$6,000, .1 KW).

Drivetrain: Leg drivetrain with two legs and .6 KW motive power (each leg motor 12 lbs., .24 cf., \$2,400, .3 KW).

Weaponry: V1 Shoulder-Mounted Pulse Gun (9.875 lbs., .1975 cf, \$8,400, LC 1).

Accessories: Cutting torch (3 lbs., .06 cf, \$20), flashlight (.5 lbs., .01 cf, \$5), spray gun (1 lb., .05 cf, \$50), global positioning system (.25 lbs., .005 cf, \$50), gyrobalance (\$2,500), inertial compass (.5 lbs., .01 cf, \$125), lockpick (\$50), electronic lockpick (1.5 lbs., .03 cf, \$750).

Power: Power requirement 1.55 KW. Nuclear power unit (TL10) with 1.55 KW output (9.3 lbs., .093 cf, \$20,000). Endurance two years.

Subassemblies: Head, two arms, two legs.

Head Design: Head houses sensors, communicator, global positioning system, inertial compass, and .3875 cf of space for the pilot (.5335 cf).

Body Design: Body houses life support system, Shoulder-Mounted Pulse Gun, gyrobalance, nuclear power unit, waste space for head rotation, and 1.55 cf of space for the pilot (2.69635 cf).

Arm Design: Right arm houses ST 20 motor, spray gun, lockpick, electronic lockpick, and .155 cf of space for the pilot (.295 cf). Left arm houses ST 20 motor, cutting torch, flashlight, .155 cf of space for the pilot, and .01 cf empty space (.295 cf).

Leg Design: Each leg houses one leg motor, .3875 cf of space for the pilot, and .1815 cf empty space (.809 cf each).

Surface Area: Head area 4, body area 12, arms each area 3, legs each area 6, total surface area 34.

Structure: Standard frame made from expensive materials. 76.5 lbs., \$6,800.

Hit Points: Head 6, body 18, each arm 9, each leg 9.

Armor and Threat Protection: DR 40 (80 vs. shaped-charge warheads) laminate armor (81.6 lbs., \$8,160, PD 4, LC 2); sealed (\$340).

Statistics: 456.575 lbs. (.22829 tons), 5.43785 cf, \$83,425. Body ST 30, Arm ST 20 each, HT 12/18. Ground speed 10.51. Cannot float. Legality Class 1.

Elite Guardsman Armor

After graduating into the ranks of the elite Imperial Guard officers, Guardsmen are given this more advanced armor suit. It features better protection and a fully automatic weapon. Typical color schemes involve a green base coat.

Battlesuit System: The system supports a wearer of weight between 124 and 155 lbs. It is designed for quick access and can be donned in (30-Battlesuit skill) seconds and removed in half that. The battlesuit system, including the pilot himself, weighs approximately 186 lbs. and costs \$3,550.

Life Support: The life support system functions without maintenance or refueling for 12 hours (50 lbs., 1 cf, \$500).

Sensors: Basic sensors with laser rangefinder, night vision, telescopic zoom 5, thermograph vision, parabolic hearing 5, and imaging ladar 3 (6 lbs., .12 cf, \$15,050, .75 KW).

Communicator: Basic communicator with internal bullhorn (.55 lb., .011 cf, \$275).

Arm Motors: Two ST 30 arm motors (each 4.5 lbs., .09 cf, \$9,000, .15 KW).

Drivetrain: Leg drivetrain with two legs and .8 KW motive power (each leg motor 16 lbs., .32 cf, \$3,200, .4 KW).

Weaponry: V2 Shoulder-Mounted Pulse Gun (13.125 lbs., .2625 cf, \$11,000, LC 0).

Accessories: Cutting torch (3 lbs., .06 cf, \$20), flashlight (.5 lbs., .01 cf, \$5), spray gun (1 lb., .05 cf, \$50), global positioning system (.25 lbs., .005 cf, \$50), gyrobalance (\$2,500), inertial compass (.5 lbs., .01 cf, \$125), lockpick (\$50), electronic lockpick (1.5 lbs., .03 cf, \$750).

Power: Power requirement 1.85 KW. Nuclear power unit (TL10) with 1.85 KW output (11.1 lbs., .111 cf, \$20,000). Endurance two years.

Subassemblies: Head, two arms, two legs.

Head Design: Head houses sensors, communicator, global positioning system, inertial compass, and .3875 cf of space for the pilot (.5335 cf).

Body Design: Body houses life support system, V2 Shoulder-Mounted Pulse Gun, gyrobalance, nuclear power unit, waste space for head rotation, and 1.55 cf of space for the pilot (2.97685 cf).

Arm Design: Right arm houses ST 30 motor, spray gun, lockpick, electronic lockpick, and .155 cf of space for the pilot (.325 cf). Left arm houses ST 30 motor, cutting torch, flashlight, .155 cf of space for the pilot, and .05 cf empty space (.325 cf).

Leg Design: Each leg houses one leg motor, .3875 cf of space for the pilot, and .1865 cf empty space (.894 cf each).

Surface Area: Head area 4, body area 13, arms each area 3, legs each area 6, total surface area 35.

Structure: Heavy frame made from expensive materials. 118.125 lbs., \$14,000.

Hit Points: Head 12, body 40, each arm 18, each leg 18.

Armor and Threat Protection: DR 60 (120 vs. shaped-charge warheads) laminate armor (126 lbs., \$12,600, PD 4, LC 2); sealed (\$350).

Statistics: 558.65 lbs. (.27933 tons), 5.94835 cf, \$105,245. Body ST 42, Arm ST 30 each, HT 12/40. Ground speed 11.46. Cannot float. Legality Class 0.

Commandant Armor

The commandants of the Imperial Guard wear this massive armor, making them invulnerable against all but the heaviest weapons. Only the absolute most elite warriors, selected for leadership and tactical abilities as well as physical strength, are privileged to wear this armor. Commandants' uniform color schemes often vary greatly; their suits may even be painted with scenes of their exploits. Blue, however, is often a common base color.

Battlesuit System: The system supports a wearer of weight between 144 and 180 lbs. It is designed for quick access and can be donned in (30-Battlesuit skill) seconds and removed in half that. The battlesuit system, including the pilot himself, weighs approximately 216 lbs. and costs \$3,800.

Life Support: The life support system functions without maintenance or refueling for 18 hours (75 lbs., 1.5 cf, \$750).

Sensors: Basic sensors with laser rangefinder, night vision, telescopic zoom 5, thermograph vision, parabolic hearing 5, and imaging ladar 3 (6 lbs., .12 cf, \$15,050, .75 KW).

Communicator: Basic communicator with internal bullhorn (.55 lb., .011 cf, \$275).

Arm Motors: Two ST 45 arm motors (each 6.75 lbs., .135 cf, \$13,500, .225 KW).

Drivetrain: Leg drivetrain with two legs and 1.2 KW motive power (each leg motor 24 lbs., .48 cf., \$4,800, .6 KW).

Weaponry: V3 Shoulder-Mounted Pulse Gun (18.125 lbs., .3625 cf, \$11,500, LC 0).

Accessories: Cutting torch (3 lbs., .06 cf, \$20), flashlight (.5 lbs., .01 cf, \$5), spray gun (1 lb., .05 cf, \$50), global positioning system (.25 lbs., .005 cf, \$50), gyrobalance (\$2,500), inertial navigation system (10 lbs., .2 cf, \$12,500), lockpick (\$50), electronic lockpick (1.5 lbs., .03 cf, \$750).

Power: Power requirement 2.4 KW. Nuclear power unit (TL10) with 2.4 KW output (14.4 lbs., .144 cf, \$20,000). Endurance two years.

Subassemblies: Head, two arms, two legs.

Head Design: Head houses sensors, communicator, global positioning system, inertial navigation system, and .45 cf of space for the pilot (.786 cf).

Body Design: Body houses life support system, V2 Shoulder-Mounted Pulse Gun, gyrobalance, nuclear power unit, waste space for head rotation, and 1.8 cf of space for the pilot (3.8851 cf).

Arm Design: Right arm houses ST 45 motor, spray gun, lockpick, electronic lockpick, .18 cf of space for the pilot, and .005 cf empty space (.4 cf). Left arm houses ST 45 motor, cutting torch, flashlight, .18 cf of space for the pilot, and .015 cf empty space (.4 cf).

Leg Design: Each leg houses one leg motor, .45 cf of space for the pilot, and .23553 cf empty space (1.16553 cf each).

Surface Area: Head area 5, body area 15, arms each area 4, legs each area 7, total surface area 42.

Structure: Extra-heavy frame made from expensive materials. 189 lbs., \$42,000.

Hit Points: Head 30, body 90, each arm 48, each leg 42.

Armor and Threat Protection: DR 80 (160 vs. shaped-charge warheads) laminate armor (201.6 lbs., \$20,160, PD 4, LC 1); sealed (\$420).

Statistics: 793.425 lbs. (.39671 tons), 7.80216 cf, \$166,480. Body ST 64, Arm ST 45 each, HT 12/90. Ground speed 12.10. Cannot float. Legality Class 0.

S'pht Cybernetic Interface Modules

The Pffhor war industry manufactures a number of cybernetic interface modules that are securely attached to a S'pht compiler's body and then plugged into its cybernetic nervous system, giving it mental control over the weapons and tools integrated into the module. When used, these modules are treated as pieces of equipment: they count toward encumbrance and can be targeted as separate hit locations much like a sword or gun carried by a human.

The stats for weapons are listed in the Robot and Battlesuit Armaments table. Cybernetic module weapons have very low snap shot numbers because of the neural targeting system. Common modules include:

Light Weapons Module. This module includes a Light Compiler Weapon, computer link cable (+2 to all computer skills), and a neural interface system. The weapon is fueled by a single D cell; the other systems are powered by the S'pht's internal reactor. The module weighs 15 lbs. and costs \$3,000.

Heavy Weapons Module. This module includes a Heavy Compiler Weapon, targeting computer (+3 to Beam Weapons skill at 30 yards or closer), computer link cable (+2 to all computer skills), and a neural interface system. The weapon is fueled by a single D cell; the other systems are powered by the S'pht's internal reactor. The module weighs 25 lbs. and costs \$5,000.

Mechanical and Electrical Engineering Module. This non-combat module features a complete tool kit with all the necessary equipment for Engineering, Mechanic, Armoury, Electronics, and Electronics Operation skills. All skills are at -3 to skill when used with this module. The module also features the standard computer link cable (+2 to all computer skills) and neural interface system. The entire system is powered by the S'pht's internal reactor. It weighs 30 lbs. and costs \$2,500.

Computerized Command Module. This module includes a computer link cable (+2 to all computer skills), a global positioning system (GPS) unit, an inertial navigation system (granting +7 to Navigation skill and

Absolute Direction), and a SQUID (superconducting quantum interference detector) that gives the user a +3 to probe or hack a computer linked through the module's cable. The entire system is powered by the S'pht's internal reactor. It weighs 30 lbs. and costs \$38,000.

S'pht'Kr Powered Armor

Defender Powered Armor

The S'pht'Kr Elite Guard uses this powered armor. Far more advanced than any human or Pfhor design, this suit is the ultimate weapon on the 29th-century battlefield. The suit's internal weapon uses an ultra-focused magnetically-shielded particle bolt ejector that creates an extremely tight blast of energy with improved armor piercing capabilities.

Battlesuit System: The system supports a wearer of weight between 192 and 240 lbs. It is designed for quick access and can be donned in (30-Battlesuit skill) seconds and removed in half that. The battlesuit system, including the pilot himself, weighs approximately 288 lbs. and costs \$2,450.

Life Support: The life support system functions without maintenance or refueling for 6 hours (12.5 lbs., .25 cf, \$125).

Sensors: Basic sensors with laser rangefinder, spectrum vision, telescopic zoom 5, parabolic hearing 5, and imaging radar 2 (2.8 lbs., .056 cf, \$7,875, .5 KW).

Communicator: Basic communicator (.25 lb., .005 cf, \$125).

Arm Motors: One ST 5 striker arm motor (.25 lb., .01 cf, \$200, .025 KW).

Thrust-Based Propulsion: Vents for biomechanical flight system allows the weight of the pilot and battlesuit system to be supported without artificial systems. A TL10 fusion rocket system with 200 lb. thrust and vectored thrust option (45 lbs., .9 cf, 4 GPH water consumption, \$4,500) adds extra thrust.

Weaponry: Bolt Cannon (6.7 lbs., .134 cf, \$3,100, LC 0).

Accessories: Global positioning system (.25 lb., .005 cf, \$50), inertial compass (.5 lb., .01 cf, \$125).

Power: Power requirement .525 KW. Energy bank with one C cell (1 lb., .01 cf, \$100) with 7,200 KWS stored power. Fusion rocket provides its own power. Standard tank with 6 gallons water (54 lbs., .9 cf, \$60, no fire danger). Endurance 1.5 hours flying; communicator, radar, etc. can operate for 3.8 hours.

Subassemblies: Body, one arm.

Body Design: Body houses life support system, sensors, communicator, fusion rocket, global positioning system, inertial compass, energy bank, fuel tank, and 2.5 cf of space for the pilot (4.646 cf).

Arm Design: Arm houses Bolt Cannon (.134 cf).

Surface Area: Body area 17, arm area 2, total surface area 19.

Structure: Heavy frame. 57 lbs., \$3,800.

Hit Points: Body 51, arm 12.

Armor and Threat Protection: DR 20 (40 vs. shaped-charge warheads) laminate armor (15.2 lbs., \$1,440, PD 4, LC 3); sealed (\$190).

Statistics: 483.45 lbs. (.24173 tons), 5.43785 cf, \$24,140. Body ST 0, Arm ST 5, HT 12/25. Air speed (vectored thrust flight) 21.19. Cannot float. Legality Class 0.

Defender Superior

This more advanced model of Defender was introduced recently to the S'pht'Kr Elite Guard. It is given only to the most skilled warriors in the army of K'lia.

Battlesuit System: The system supports a wearer of weight between 192 and 240 lbs. It is designed for quick access and can be donned in (30-Battlesuit skill) seconds and removed in half that. The battlesuit system, including the pilot himself, weighs approximately 288 lbs. and costs \$2,450.

Life Support: The life support system functions without maintenance or refueling for 6 hours (12.5 lbs., .25 cf, \$125).

Sensors: Basic sensors with laser rangefinder, spectrum vision, telescopic zoom 5, parabolic hearing 5, and imaging radar 2 (2.8 lbs., .056 cf, \$7,875, .5 KW).

Communicator: Basic communicator (.25 lb., .005 cf, \$125).

Arm Motors: One ST 5 striker arm motor (.25 lb., .01 cf, \$200, .025 KW).

Thrust-Based Propulsion: Vents for biomechanical flight system allows the weight of the pilot and battlesuit system to be supported without artificial systems. A TL10 fusion rocket system with 200 lb. thrust and vectored thrust option (45 lbs., .9 cf, 4 GPH water consumption, \$4,500) adds extra thrust.

Weaponry: Advanced Bolt Cannon (11.8 lbs., .236 cf, \$9,900, LC 0).

Accessories: Global positioning system (.25 lb., .005 cf, \$50), inertial compass (.5 lb., .01 cf, \$125).

Power: Power requirement .525 KW. Energy bank with one C cell (1 lb., .01 cf, \$100) with 7,200 KWS stored power. Fusion rocket provides its own power. Standard tank with 6 gallons water (54 lbs., .9 cf, \$60, no fire danger). Endurance 1.5 hours flying; communicator, radar, etc. can operate for 3.8 hours.

Subassemblies: Body, one arm.

Body Design: Body houses life support system, sensors, communicator, fusion rocket, global positioning system, inertial compass, energy bank, fuel tank, and 2.5 cf of space for the pilot (4.646 cf).

Arm Design: Arm houses Bolt Cannon (.236 cf).

Surface Area: Body area 17, arm area 2, total surface area 19.

Structure: Heavy frame made from expensive materials. 42.75 lbs., \$7,600.

Hit Points: Body 51, arm 12.

Armor and Threat Protection: DR 32 (64 vs. shaped-charge warheads) laminate armor (24.32 lbs., \$2,432, PD 4, LC 3); sealed (\$190).

Statistics: 483.42 lbs. (.24171 tons), 5.53985 cf, \$35,732. Body ST 0, Arm ST 5, HT 12/25. Air speed (vectored thrust flight) 21.26. Cannot float. Legality Class 0.

Robot and Powered Armor Weapons

This table uses the same format as the weapon tables in Chapter 6.

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Wt.	RoF	Shots	Cost	LC	TL	Vac.
MADD Light Machinegun	Ver.	Cr.	4d+1	12	10	330	2,500	4	10	140	1,480	1	8/9	+
MADD Grenade Launcher	Ver.	Exp.	12d[4d]	12	6	-	1,200	7	1/2	8	950	0	8/9	+
Light Cyborg Grenade Launcher	Ver.	Exp.	8d+1 [2d]	12	6	-	1,100	7.5	1/2	22	770	1	9	+
Medium Cyborg Grenade Launcher	Ver.	Exp.	11d[2d]	12	6	-	1,200	13.5	1	32	930	0	9	+
Heavy Cyborg Grenade Launcher	Ver.	Exp.	11d[2d]	12	6	-	1,200	20	2	38	1,365	0	9	+
Cyborg Flamethrower	Crit.	Burn	5d	5	8	20	35	10	4	20	1,000	0	9	+
Cyborg Machinegun	Ver.	Cr.	5d+1	12	11	500	3,200	10	15	295	890	0	9	+
Light Assault RPG	Crit.	Exp.	45d(5) [6d]	17	S-16*	-	2,100	165	2	30	37,125	0	9	+
Heavy Assault RPG	Crit.	Exp.	45d(5) [6d]	17	S-16*	-	2,100	250	4	46	57,700	0	9	+

Assault Plasma Cannon	Ver.	Plas.	3d+2	14	17	-	1,000	2,000	35	3,800/E	6,000	0	9	R-50
Electrothermal Ballistic Cannon	Ver. (Crit)	Cr.	13d+2	17	14	1,300	6,800	35	20	320/2C**	5,000	0	9	+
Heavy Plasma Cannon	Ver.	Plas.	31d	17	18	1,500	3,000	35	3~	420/E	6,500	0	9	R-50
Heavy Flamethrower	Crit.	Burn	5d	5	8	45	63	35	4	40	645	0	9	+
Light Pulse Gun	Crit.	Plas.	3d	11	13	240	480	4.83	6	130/3C	1,665	2	9	R-50
V1 Shoulder-Mounted Pulse Gun	Ver.	Plas.	10d	12	18	1,700	3,500	9.875	3~	130/D	8,400	1	9	R-50
V2 Shoulder-Mounted Pulse Gun	Ver.	Plas.	10d	12	18	1,700	3,500	13.125	6	130/D	11,000	0	9	R-50
V3 Shoulder-Mounted Pulse Gun	Ver.	Plas.	10d	12	18	1,700	3,500	18.125	6	260/2D	11,500	0	9	R-50
Light Compiler Weapon	Crit.	Plas.	14d	10	17	1,000	2,000	9.5	1	92/D	1,900	0	9	R-50
Heavy Compiler Weapon	Crit.	Plas.	14d	8	19	2,000	4,000	14	1	92/D	3,325	0	9	R-50
Bolt Cannon	Ver. (Crit)	Foc. †	9d(2)	11	16	800	1,600	6.7	3~	248/D	3,100	0	10	R-50
Advanced Bolt Cannon	Ver. (Crit)	Foc. †	9d(2)	12	18	1,600	3,200	11.8	8	248/D	9,900	0	10	R-50

*The Light and Heavy Assault RPGs are guided by optical homing and have a tracking skill of 16. (See *GURPS Vehicles*.)

**The Electrothermal Ballistic Cannon fires solid rounds, but needs batteries for its electrothermal firing mechanism.

†The damage type "Foc." means "focused plasma." It does burn damage and has an armor divisor of (2). It is also treated as Impaling for most purposes; thus, damage that gets through armor is doubled (but halved by the divisor, thus cancelling out.)

Robot Melee Weapons

Weapon	Type	Damage	Reach	Cost	Weight	LC	TL
Cyborg Clippers	Cut	sw+3	C	50	2 lbs.	5	9
Cyborg Cutlass	Cut	sw	1	125	2 lbs.	5	9
Cyborg Ripper	Cut	sw+4	C	75	3 lbs.	5	9
Cyborg Arm Sword	Cut	sw+1	1	225	3 lbs.	5	9

[Back to Main Site Menu](#)

[Back to Table of Contents](#)

[Back to Previous Section](#)

[On to Next Section](#)

8. Marathon Campaigns

Crisis on PS 244

The projector cast ghostly, flickering images over the uniform of Col. James Searle as he squinted against the bright light. He stepped out of the way to allow the soldiers in the room a clear view of the data on the screen.

"As you can see, PS 244 is an unoccupied system about 19.61 parsecs from Sol. Our destroyer went down here..." he said, using a laser pointer to indicate a portion of the map projected onto the wall. "In the southern ice desert of the fifth planet from the star." He paused for effect, pacing back across the room. "You might ask why you are being sent," he smiled, with a look of almost sinister self-satisfaction that sent chills through his subordinates. "It's a fair question. The answer is simple: the ship's payload. It's equipped to carry over 200 heavy fusion missiles."

He sat down in his chair, taking a moment to let his last statement sink in, and to smell the strangely fascinating chemical odor that hung in the battlecruiser's conference room. Proper military etiquette didn't really apply with this particular group of infantrymen. After all, this crack team had been working with him for over five years now, and although they respected him, the formalities of U.E.G. naval protocol felt useless at this point. Besides which, somehow they seemed to pay more attention when Col. Searle didn't bark at them like an overzealous guard dog on a chronic power trip.

One of the troops, a man with dark brown skin--Winter was his name, or at least what his comrades called him--raised his hand and began to ask a question. "Fusion missiles--what, is this a MIDA job? Terrorists trying to get some WMDs?"

Col. Searle laughed and gently rubbed his chin. He hadn't been able to shave in three days, and his blonde stubble had grown out considerably. "If only we were dealing with a group of pissant wannabes like MIDA, we wouldn't be sending you," he said. "No, no. This is the Pfhor we're talking about."

Another one of the soldiers spoke up this time, his chair squeaking on the floor slightly as he unconsciously pushed forward in his seat. "Wait a minute...what do the Pfhor want with a bunch of nukes?"

Col. Searle smiled. "As I said, the ship is equipped to carry over 200 heavy fusion missiles. But it's not carrying missiles at all, and you're about to be the only people without Omega security clearance to learn what its real payload is." Murmurs started to rise from the soldiers. Col. Searle looked at them for a moment with his piercing blue eyes, and then proceeded to explain. "This ship was carrying the core of a prototype battle AI to our science fleet in the Coreward periphery. Unfortunately, it was intercepted. It would be disastrous if the Pfhor were allowed to steal this technology."

"So, we go in, wipe the floor with the three-eyed buggers, extract the survivors and nuke the remains?" asked Winter.

"More or less," replied Col. Searle. "There's not much else to do. We can't take on the Pfhor fleet without some warships for support, and all our main FTL cruisers are posted along the border of Klaatfar and Grinebedre," he said, using the Anglicized pronunciations of the Pfhor names, even though he was fluent in the language of the slavers. "We have all the schematics and plans for the AI back on Earth, so it'll be a loss, but nothing we can't handle.

"Now," he said. "You'll have to sneak in by taking a dropship into orbit and then teleporting down from there. The Pfhor will notice anything larger. You have..." he checked his watch, doing quick subtraction in his head. "Two hours and fifteen minutes to get ready. Ready your armor and weapons, check your oxygen, and get psyched for a tough drop. I'll see you planetside."

"You're coming with us, Colonel?" asked a surprised soldier in the back, her voice betraying a note of surprise.

"Of course, Corporal Taine," he replied. "We're going all-out this time. I'll be right with you through Hell and high water."

"Lock and load, people," said Winter, slamming a clip into his submachinegun and shouldering it.

Playing Marathon

In order to effectively present the **Marathon** universe to the players, you will want to understand the themes, atmosphere, and mood with which you'll be working as a GM. This will also give you ideas for creating a good plot, which, of course, is critical to any roleplaying campaign.

Themes

The following themes are common to a "canon" **Marathon** campaign, i.e., one that pretty much adheres to the style of the original game series. You can use these as inspiration for a plot or simply modify them to tailor the world to your personal tastes.

Ceaseless War

The Pfhor, of course, having been pursuing the war path for endless ages. The humans, in defying the Pfhor Empire, have embarked upon a terrible path of their own; decades of war will follow without end. There will be no end to the blood that will be spilled in this galaxy-spanning conflict, and the characters most likely know it. In circumstances like these, war becomes a way of life for common people, tinting the way they view the world, even down to the smallest details (see "Militarism" below).

Death and Glory

Characters in the **Marathon** universe must have the kind of reckless courage necessary to inspire them to great (and risky) deeds like those portrayed in the original games. This is not a world where cowardice pays: ultimately, the war will affect everybody, and the best that anyone can hope for is to go down in a flash of glory.

To this end, the plot shouldn't always go as planned. Risks must be taken, and lives will most likely be lost. Players should be aware that their characters may die, and that it will be much better for them to die leaping out in front of a Juggernaut and using their last bit of strength to send a HEAT rocket sailing into its metal shell, rather than hiding in a corner and being carried away for interrogation by an Enforcer squad.

Insanity in an Insane World

It takes a madman to comprehend an insane world. Insanity is a key theme in the original trilogy, especially with the character of Durandal. When entire species are fighting to obliterate one another and when technology clouds the line between dreams and reality, a mad genius is a rare and useful resource indeed. Arguments based on rationality don't always apply in situations like this, and enlightened characters will ultimately come to see this.

This is, of course, a variation on a very ancient theme: that of "madness' insight." This goes back to prehistoric shamanism, and can be a powerful way of introducing a psychological element to a plot. When an apparently insane character manages to accurately predict and respond to dire situations, others will be forced to question their notions of truth and falsehood, rationality and irrationality, and so forth.

Of course, this is all starting to sound a little bit pretentious. In reality, it's just more fun to be a lunatic.

Militarism

The world of **Marathon** is one in which military responses work. Whatever your political beliefs are outside the game, the **Marathon** universe is one in which the hawks are right. The military-industrial complex may be corrupt, the government may be inefficient, but force is the method by which order is maintained in the universe, and by which the humans beat back the invading slaver hordes. Of course, this is only necessarily true in a "canon" campaign, and you could change this in your own version of the universe. But the fact remains that the zeitgeist of this world is one of righteous, militant passion, and the pacifists have been drowned out in a great swell of zeal for the war effort.

Overwhelming Odds

In the original games, the odds are literally a thousand to one against the protagonist. Although **GURPS** is a bit too realistic for a situation like that (except in a cinematic campaign), a sense of overwhelming odds should be a part of the game. After all, compare the size of the fledgling human interstellar state with the awesome might of the Pfhor Empire. Can human spirit and ingenuity really conquer the might of tens of thousands of worlds? The odds look bad, but there's no turning back.

Atmosphere

It's a good idea to put some elements of atmosphere into your game. The themes above can help give you some inspiration, but ultimately it's up to the GM to make the atmosphere work.

Marathon is a military science fiction background. Technology should be emphasized and described in loving detail, for it permeates the entire world. Everything is high tech, and it is this technology that can save a character's life--or take it. This isn't a game about emotions, but hard survival. Circumstances have caused people to take a more practical view of the world, and therefore technology takes center stage.

The effects of war can be seen everywhere, as well; describing war-torn planets and scarred battleships is a great way of emphasizing the theme of ceaseless war. The **Marathon** universe is not clean or sterile; it's dirty, gritty, and always about to break from some gear or belt that's been worked too hard. This, again, is a product of the times: instead of building art museums, people build orbital shipyards. It's just the facts of life.

Mood

The **Marathon** universe would probably be very grim and dark indeed, if it weren't for the fact that the protagonists tend to be too driven to notice it. The circumstances are bad, to say the least. But characters in the **Marathon** universe somehow find a way to draw strength from the events around them. They may find war glorious, or get a rush from the thrill of combat. Perhaps a sense of duty or code of conduct (backed by the appropriate Disadvantage) keeps their spirits alive, or surviving might be a noble enough goal to allow them to endure. Alternatively, they may simply be insane.

In short, the mood of a standard **Marathon** campaign is dark, but not brooding. It is a world in which endurance and pressing ever onward is the key to survival; hence the double meaning of the title.

FPS vs. RPG

There is an enormous difference between the plot arc of a first-person shooter game and a well-played table-top RPG. **GURPS Marathon** has a military science fiction setting, but that doesn't mean it's all combat.

More specifically, even when there is combat, it needs to have a purpose in the story. Many FPS games simply have aliens placed in random rooms for no apparent reason except to be slaughtered by the protagonist. This style is at least as trite and boring as the most blatantly mindless "dungeon crawl" plots. That doesn't mean it isn't fun to play this kind of game on the computer, but there are a few key differences between computer games and table-top roleplaying.

First of all, combat is much slower in an RPG, and less intense. This means that you won't get players' hearts pounding simply by throwing monsters at them. There should be less combat, but it should be

more interesting, because you aren't limited by the game engine. You can set up ambushes, use creative tactics and techniques, and let the players interact with their surroundings in ways that are not currently possible in a computer game.

Second, RPGs are much better suited for mental and social tasks. In most computer games, mental tasks tend to consist of contrived puzzles, and social tasks don't even exist. Take advantage of your ability to utilize these plot elements in your game. This will allow the RPG to add flavor, depth, and a sense of adventure to the setting, giving your players a real reason to get involved in the plot.

If your players are familiar with the **Marathon** computer games and seem to be making entirely combat-oriented characters, consider reminding them that roleplaying games almost always involve more than just combat, and that even soldiers have mental and social skills. Encourage your players to make characters who aren't just mindless terminators. Playing a game with seven characters whose backgrounds consist of, "His parents were killed by the Pfhor, and now he is on a quest to take revenge" will not be particularly fun or fulfilling.

Combat in Marathon

Since **Marathon** campaigns are likely to have a good deal of combat, it's good to have some idea of how to roleplay it effectively.

The first point to consider is realism versus speed. There are many rules in **GURPS** for both simplifying and expanding combat. Choosing when to use these rules is a critical part of making combat fun, interesting, and pleasing to everybody.

Naturally, battles against simple cannon fodder don't need to be overly complex. The player characters are intended to win, and it doesn't particularly matter if they quickly dispatch their foes without a lot of consultation of charts and tables. But important battles, such as the climactic encounters of an adventure, should probably be treated in more depth. The players will want to vividly imagine each moment, so it's a good idea to capture as much realism and drama as possible.

Note that combat balance will be somewhat different in **GURPS Marathon** than in the original games. The complexity and realism of the **GURPS** combat system is the reason for this. It's fairly difficult to get around this, and you may not want to get around it: after all, in table-top roleplaying, enemies can be more intelligent and combat much more vivid and interesting. If you do want combat that more closely reflects the feel of the original games, you may wish to follow a few pointers. First of all, play the enemies as fairly mindless warriors. If they make stupid choices, the PCs will be able to beat more of them. Second, you may wish to simplify combat so that, for example, Pfhor fighters can only take two or three bullets before going down, no matter what. This simplifies record-keeping and makes the game feel more like the original series.

Also remember that most armored targets will be unharmed by very small weapons, such as pistols. This is, of course, realistic; you can't kill a tank with a sidearm. This will require the players to make smart choices about their equipment, just like in real life.

Marathon Music

You can use music to help set the mood of a **Marathon** campaign. In general, the best music will be futuristic and hard-edged, to reflect the style of the background.

Of course, a good starting point is the music from the games, such as the two theme songs by Power of Seven. From there, the following suggestions may suit your tastes:

The Crystal Method. The progressive techno/trance sounds of TCM are perfect for a **Marathon** game. Their first album, *Vegas*, is highly atmospheric and manages to be both aesthetic and hard-edged. Be sure to check out "High Roller," a heavy bass track that samples transmissions from astronauts, and "Keep Hope Alive," the lyrics of which clearly fit the **Marathon** world. The Crystal Method's later albums, *Tweekend* and *Community Service*, also have some gems, such as "Name of the Game," "Ready for Action," and a remix of P.O.D.'s "Boom."

Metallica. Metallica's sound is very fitting for the **Marathon** universe; it's tough, cool, and (most importantly) high-quality. Check them out for the single "Fuel" if nothing else.

The Prodigy. The Prodigy, a very well-known electronic group from Britain, has a lot to add to any **Marathon** campaign. Their album *Music for the Gilded Generation* has classics like "Voodoo People" and "One Love," but it's *The Fat of the Land* that really provides the hard-edged ambiance. "Diesel Power," "Serial Thrilla," and "Firestarter" are all good choices.

Psykosonik. Psykosonik, which shares roots with Power of Seven, has created the perfect sound for **Marathon**. Their first, self-titled CD is the most appropriate; cyberpunk, technology, anarchy, drugs, sex, and religion are favorite topics of this techno group. Their second album, *Unlearn*, is also wonderful.

Rage Against the Machine. RATM's style is, quite literally, militant. Songs like "Know Your Enemy," "Tire Me," and "Guerrilla Radio" were frequent choices during the writing of this book!

Marathon Plotlines

There are a number of different plot styles that fit the **Marathon** universe. Some of the most obvious ones are described here. Note that these can be expanded, combined and refined into something you find most suitable.

In the Trenches

Of course, perhaps the most obvious style of **Marathon** plot is the simple war story. The player characters, presumably, will be infantrymen fighting to save the human race from the grip of the Pthor Empire. In this type of campaign, each player will most likely have some kind of individual military specialization, making the group as a whole form a coherent combat unit.

A possible variation on this plot would be to have the players take the role of officers, each commanding a small unit.

Covert Ops

A variation on the military campaign is the covert ops style. Instead of simple soldiers, the player characters work as secret agents carrying out missions behind the lines. This adds more room for intrigue, social interaction, and problem-solving plots. Furthermore, each player may be a more unique and independent entity than they would be if restricted by the rigid confines of a traditional military organization.

Soldiers of Fortune

Perhaps the player characters aren't interested in the U.E.G. at all. They answer only to themselves, and this leads them on many grand adventures in the pursuit of cash. The protagonists may be mercenaries who are hired by governments and corporations or, for an even more ruthless style, space pirates who hijack FTL couriers. This is a great opportunity for a mixed-species campaign: since pirates don't care about the war, the crew may be composed of a mix of different races, including minor species like the Nar.

Renegades

To take the above idea to an even more radical level, consider protagonists who may be actively opposed to their government. They could be terrorists, such as MIDA members, or spies selling information to the other side. (If the human race can't win the war, wouldn't it be worthwhile to secure at least a decent living after the slavers make their sweep?) Of course, it's hard to play characters who seem totally vile or inhuman, so the GM may have to modify the mood (or even the facts) of the background to make this work well.

Aliens

Campaigns could also take place entirely in alien space. The player characters could be Imperial Guardsmen defending the honor of the Empire against the petulant humans, or they could be noble S'pht'Kr warriors.

Adventure Seeds

Infighting and Politics. A U.E.G. primus has just been found dead. It is believed to be a political plot. But who is to blame? Could it be a rival political faction, MIDA, another terrorist group, or possibly even the Pfhor? The player characters are assigned on a special investigative task force sent to discover the truth behind the primus' death. A politically-oriented campaign is one great way of getting away from the extremely combat-centered norm.

Deep Strike. The player characters are going deep into Pfhor space on a dangerous sabotage mission. They will be cut off from additional support and supplies, and may have to rely on Pfhor equipment after their own ammo and power supplies run out. Even after the mission is complete, there's the problem of getting out. In the wake of a massive attack on a Pfhor military target, how will a band of humans sneak thousands of light years back to their home system?

Liberation. The player characters are either S'pht slaves or human or S'pht'Kr soldiers sent to liberate them. Not only must the Pfhor lines be infiltrated, but the slaves must be liberated without harm. This is a more difficult task considering that the S'pht themselves may, through some form of extreme subjugation (such as cybernetic control) be fighting against their own liberators!

Space Relic. A strange spacecraft of unknown origin has been discovered. The player characters are sent to investigate. Does it hold the secret to long-lost Jjaro technologies, or is it the creation of the hideous W'rkncacnter, whose vile technologies might be able to rend the very fabric of reality? Perhaps this vessel comes from somewhere else entirely. This makes a great "haunted house" horror campaign, in the great tradition of ghost ship stories.

Technology Crisis. Some piece of technology has fallen into enemy hands and must be recovered at all costs. For an example of this kind of plot, see the introductory story at the beginning of this chapter, "Crisis on PS 244."

Alternative Styles

You don't have to play with traditional themes, mood, and plot ideas presented here. The *Marathon* universe can easily be altered to your personal tastes. The following are some ideas for different styles and plotlines that may inspire you to "alternative" interpretations of the *Marathon* universe.

Humor

Although it doesn't always fit with a serious campaign, the humorous elements in the original *Marathon* games are hard to miss. From shrieking BOBs to Durandal's wry wit, the game does have a comedic streak. This could be emphasized in a roleplaying campaign, even for a downright silly game (perhaps along with a few extra rules from *Compendium I*, such as Bulletproof Nudity, thrown in for good measure).

Pacifism

Perhaps the war isn't justified at all. Perhaps peace is the only way to save the future of the galaxy. If you wish, you could alter the background ever so slightly, letting the players play characters who can see through the propaganda and lies that fuel the war machine.

City Campaigns

It's also possible to set a campaign entirely in a particular city, most likely on Earth or Mars. The war is merely the backdrop for a more cyberpunk, urban-flavored campaign. Intrigue, street wars, and the politics of corporations and crime syndicates are the emphasis of this type of campaign.

Cinematic Campaigns

One might argue that a cinematic style would actually be more true to the feel of the original games than a realistic one, although this book is written with realistic campaigns in mind. In a cinematic campaign, a few PCs could actually hope to take out an entire ship full of Pthor warriors.

There's something to be said for the cinematic style: although it is blatantly unrealistic, it allows for quick combat and a lot of excitement. Furthermore, it's probably the only way to justify a party of player characters with high enough point totals to be Mjolnir cyborgs or other "super soldiers."

Computer Integration

Another interesting "alternative gameplay" possibility is the integration of the computer game with the roleplaying game. Combat scenes could be played out on the computer with maps made in Forge. The GM could also make custom opponents and weapons with Anvil. This allows for faster combat and a cinematic, visual feel.

Crossovers

GURPS Marathon can be combined with other settings and styles for different types of campaigns. Some examples are given below:

Cyberpunk. Cyberpunk is an excellent crossover setting for **GURPS Marathon**. Indeed, many human cities likely resemble the urban sprawls of the cyberpunk genre. **Marathon** is military science fiction at its heart, and space travel is one of the key elements to its backstory. But planetside, cyberpunk elements could add a great deal of depth to the background. Consider, for example, the military-industrial complex. No doubt a plot centered on this aspect of 29th-century society could benefit from cyberpunk elements.

Horror. Horror is one of the key elements in the original computer games. The terror of walking through dark, abandoned corridors, your oxygen running out, and silent, invisible alien foes stalking your footsteps... clearly a plot without at least some horror elements wouldn't be faithful to the feel of the original. But what about a horror-centered plot? This could be purely psychological, or you could even introduce more traditional horror elements guised in futuristic technology. For example, the Pthor cyborgs are very much like the zombies of B-movie horror: they are living things transformed into soulless killers, and if you let one catch you, you might end up as one of them!

In Nomine. This, of course, is going out on a limb, but **Marathon** does have a cosmology not unlike that of **In Nomine**, which is based largely on Christian theology. The benevolent Jjaro and terrifying

W'rknacnter are, essentially, omnipotent precursors to the current dominant species. Perhaps these are merely corporeal guises for the forces of Heaven and Hell. Could there be angels and demons battling for the souls of human beings even in the 2800s Anno Domini? And what about the souls of the Pfhor, S'pht, and other species?

Special Ops. The players need not be regular U.E.G. infantrymen or U.E.S.C. employees. Perhaps a special force of elite warriors exists for carrying out covert, behind-the-lines missions in Pfhor space.

[Back to Main Site Menu](#) [Back to Table of Contents](#) [Back to Previous Section](#) On to Next Section