

Roy Crisman's Hole in the Wall Star Frontiers Logs
last update: 980311
i'm hoping to get people to critique the heck out of this. there's a link to a win95 browserless version below. though you could also just save the shockwave file and run it with your browser. So please tell me what you do and don't like.

# Welcom e to 'The Hole In The 



est. FY64<br>(no pets or dralasites allowed)

The Hole In The Wall was established in Port Loren on Gran Quivera(Prenglar) as a dralasitefree bar for spacers on the remains of a porn shop soon after it was destroyed in FY63 due to unknown circumstances. The bar itself achieves the perfect 'spacer bar' feel for the rookie yet isn't flashy or expensive for the veteran. It also has the enough of a reputation as a rough joint to keep out the groundling gawkers. The building itself incorporates the burnt remains of the previous building and thus always has the hint of a wood and plastic ash which furthers to keep out the blobs. The exact reasons for the owner of the ruined porn shop of the same name to establish a dralasite free bar are unknown--rumor has that it is connected to the very disaster which brought down the porn house.
--from the spacer's FAQ of Port Loren

[^0]Star Frontiers was a science fiction role playing game produced by T\$R 1982-1985 with some support for the game in Dragon magazine for a while after that. It was dropped in the middle of being revamped because the two Blume
brothers working at T $\$$ R had interest in the Buck Rogers estate and Star Frontiers was dropped so they could produce a Buck Rogers game and thus profit themselves via licensing profits.

Some of us still like the game, the simplistic system of Alpha Dawn or the skill based system (not class based) in the Zebulon's Guide. The Knight Hawks space ship rules are also pretty good (though only 2 dimensional).

The Hole In The Wall contains a lot of my personal Star Frontiers Information. Some of this is 'canon' (copyright TSR) that I collected from various sources into one place for easy reference, most of it is my own creation. Official sources can easily be found in my item list

Use it however you wish, don't claim it as your own. I also think it would be kinda neat if you'd reference me Roy Crisman / roymeo@iastate.edu / roymeo@eai.com if you do run off with it somewhere. And join our listserver dammit.

## Chapter 1: Planet Catalog

## roymeo's star frontiers universe

## ARAKS

Hentz
Moons: None
Gravity: 0.7
Day: 25
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Industry
General Notes: Hentz is ruled by a religious clan, the Family of One. Everyone who lives on Hentz or works for GOD-Co. wears a uniform denoting their job and social position.

## Terrain/Climate:

Life: No life originated on Hentz. During the time of the Yazirian Relocation, the planet was terraformed using the flora, fauna, and environments from Waloo(Pavor).
Native Species: None. Home of native species from Waloo(Pavor).
History: Discovered in 341 pf, Hentz was the first colony world established by the Yazirians. It was merely a mining colony for 50 years. After the discovery of the weakening orbit of Levo, the planet became the first terraformed world during the Yazirian Relocation. This lasted, in full force, for 30 years,
the first 23 during which Waloo was still intact, and the latter during which environments were still being reconstructed and synthesized on Hentz. There were some changes made due to the new environment and new geography of Hentz, as well as several environmental rejections, but aside from the change the size and color of the sun and the absence of the moon, the planet is much like the original. This is a time of great social cohesion for the Yazirians as well as a time of great scientific learning about both systems, the life on the planet(s), terraforming, and transportation. The government of Waloo was similarly transported in whole to Hentz. At the end of the 30 years, the governments returned to their pre-disaster states.
Government: Theocracy. Hentz is ruled by a religious clan, the Family of One. This government evolved from that of the transplanted government from Waloo(Pavor). The head of the government is a high priest.
Law: (CR 5) Hand weapons allowed. Death due to honorable dueling is not uncommon and generally accepted with no retribution, though rivalries between various clans are entrenched.
Population: Yazirian Heavy. Surrogate Homeworld. Less than 5\% non-Yazirians.
Society/Culture: Argonian is the language of The People. It was believed that this language was given to all of god's chosen. When the Yazirians finally met non-Yazirians the realization that all sentient creatures did not speak the same tongue led to a dissident group forming. This group adopted a reconstructed ancient sub-language and eventually emigrated to Yast(Athor).
As a result of the uniforms, worn by everyone who lives or works on Hentz or works for GODCo. which displays their job and social position, the inhabitants of Hentz are generally very private with all other personal information. This leads to a view of them being secretive to outsiders. Generally they will be much more open with any beings who are of the same divisions.
The Yazirians of Hentz often duel using the Zamira. They hold the Zamira and (dueling in general) as a sacred institution, only to be used among Yazirians.
$¥$ Onehome: Headquarters of GODCo.

- § Artificial Satellites: FSS, DS II, TS


## ATHOR

## Yast

Moons: (2) Ime, Exib
Gravity: 1
Day: 15 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Agriculture
General Notes: Yazirians from Yast favor capes.

Terrain/Climate: Some desert. Harsh environment. Most ag on Exib, but 'new' plant in 'near desert' environs.
Life:
Native Species: Sailsnail, Fire Dragons?
History: Discovered by Yazirians in 250 pf.
Government: Athenian Democracy. All permanent residents of Yast vote in semi-annual elections. There are no 'politicians', instead every citizen serves a 2 year term depending upon need of their skills, volunteering when convienent, and random selection. Those who do well are paid well for their work. Corruption in this system is balanced, as everyone plays a part in the government eventually. Felons are of course removed from rotation (or occasionally put where their skills are needed but they can do little damage) and also pay a higher tax rate later.
Law: (CR 1-2) Most weapons are allowed because of the harsh environment. Zamira dueling deaths and related injuries are not uncommon, these honorable deaths are not pursued by the law as long as they are registered properly. Weapons of mass destruction are likely to cause attention of a somewhat autonomous and not always trustworthy police force. Use of such in public places is likely to be met with 'questions later'.
Population: Yazirian Moderate. Approximately 10\% non-Yazirian.
Society/Culture: The culture of Yast has been shaped primarily by two things: the original break from the theocratic government of Hentz and the harsh environment of Yast. Much of the culture was constructed from 'heretical' beliefs from the past of Hentz(and Waloo) and continues to react against Hentz. The official language of the planet is Gnarsh. The enforced expression of job and social rank on Hentz became a private matter on Yast. A person's profession is intimate information, though not a matter of shame. This has somewhat led to a double-life for those who work in service and public relations industries and has led to a reliance on robots or foreigners for many of these positions. The system of government also serves to equalize the status of all individuals, as opposed to an elitist hierarchy. This common ground is often the topic of casual conversation. Despite these differences with the society of Hentz, the Zamira and life-enemy are both held in high regard.
The environment has also played a key role in the shaping of the culture here. The harsh desert and little food led to Exib, and now crop in near desert areas. refugees had a hard tough life dour and grim folk even for Yaz "Dragon Hunting"
Eventually a Yazirian from Yast is going to push a high-priest type from Hentz into a pool and cause a big stir.
§ Ime:
§ Exib: Agriculture

## BELNAFAER

## Venturi

Venturi is a gas giant in this uninhabited system. It is one of the major sources of very complex, unstable biochemicals that are highly valued as catalysts for industrial processes.
§ Snobol: One of Venturi's many moons, it is a large, lumpy block of water ice and carbon dioxide ice to which is tethered the starship Moneyspider. The tether is a microdistilation column that helps to collect the valuable biochemicals. The system is being developed by ByChem, a subsidiary of AIPS.

## BOWMAN

System History:
Trade: Mine
General Notes: The Bowman system has been described as "an interstellar junk heap", and merits the appellation. Only one planet, a gas giant (Bowman Prime), orbits Bowman, along with its own miniature planetary system of satellites. The system's primary interest comes from its far-flung asteroid belt, the most extensive found yet in the Frontier. No habitable bodies are present in the system, and none of the gas giant satellites offers sufficient inducement to attract settlement. Hence the belt and other planetoid groupings in the system are the focus of primary interest.
Terrain/Climate: space
Life: none
Native Species: none
History:
Government: Anarchy, mostly. Some UPF and Corp localities. There is no system-wide government in the Bowman system. The only law is that of a locality, whether that be anarchy, under UPF juridiction, or megacorp control.
Law: (CR 0) Unless entering an area controlled by the UPF or a megacorp, there is no legal system in the Bowman System.
Population: Multi Outpost
Society/Culture:
Bowman Belt
§ Koenig's Rock:

## Bowman Prime

§ Bifrost:
§ Alpha:
a§ Epimetheus: station
a§ Prometheus: station
§ Beta:
§ Gamma:
§ Delta:
§ Epsilon: Archaeology
§ Zeta:
Leading Trojans
Trailing Trojans

## CASSIDINE

System History: First discovered in 370 pf. The Cassidine system was the second system to be attacked by Hatzck Naar's pirate fleet. The First Common Muster first attacked the pirate fleet after hiding in the asteroids here.
The Second Common Muster was moved to Cassidine and performed a surprise attack upon the Sathar during the Battle of Triad, in 4 pf.

## Asteroid Belt

This dense belt was used as hiding by the First Common Muster in 79pf, to sneak attack Hatzck Naar's pirate fleet.

## Rupert's Hole

Moons: None
Gravity: 0.9
Day: 20 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Industry, Agriculture
General Notes:
Terrain/Climate:
Life:
Native Species: Relp,
History: Rupert's Hole and Triad were discovered in 370 pf.
Government: CyberDemocracy. Every six months the entire population of Rupert's Hole votes on any new legislation. Because of this majority rule, the general population is content to have no privacy for the protection it provides.
Law: (CR 2/6) Any weapon may be carried. Public policy is enforced mainly by constant computer surveilence. Cameras and satellites watch nearly every bit of the planet. Police forces may be slow to respond as they are generally alerted to trouble by the sophisitcated automated surveilence network, but with nearly all actions recorded, there is generally little doubt as to who is responsible for wrongdoing. Murder, theft, etc. are all of course illegal, despite free weapon policies. Appeals are possible, but if an appeal is lost the punishment is doubled.
Population: Human Moderate.
Society/Culture:
¥ Lake Geneva: Headquarters of Oni-Senada.
$¥$ Pompeii: Headquarters of Trojan Enterprises.
a§ Artificial Satellites: ASS, DS III, TS
Triad
Moons: (1) Evergleem
Gravity: 1.1
Day: 30
Year:
Diameter:
Inclination: ${ }^{\circ}$

Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Industry, High Technology Industry
General Notes: Triad is a major industrial planet where high-technology items are manufactured and sold.
Terrain/Climate: Because of the influence governmentally and economically to Triad, industry has pushed much of the planet beyond the control of the terraforming devices which have held much potential discomfort at bay. Going outside for recreation is only considered in one of the few less tainted or terraformer protected areas.
Life:
Native Species:
History: Triad and Rupert's Hole were discovered in 370 pf. The Battle of Triad in 4 pf during the First Sathar War occurred here as the Second Common Muster performed a surprise attack upon the Sathar fleet in the first battle with the Sathar. It was here that images of Sathar were first obtained. The Sathar lose a third of their fleet here, and move out of the system to attack Dixon's Star. Admiral Morgaine moves the Muster to Prenglar.

The Cassidine Development Corporation mega-corp was formed at New Hope in FY10.
Government: The government of Triad is a representative democracy, with several tiers of voting. The various corps and megacorps which are integral to the economy of Triad generally have a lot of pull. Law: (CR 5/2) The only weapons allowed are registered and unconcealed projectile or gyroget weapons. Certain occupational waivers are of course possible.
Population: Multi Heavy.

## Society/Culture:

$¥$ Finti: Headquarters of Gangreel Industries.
$¥$ New Hope: Planetary Capital. Headquarters of the Cassidine Development Corporation and Ableman Properties.
$¥$ Lake Vast: Major starport. Fortress-like headquarters of Interplanetary Industries (I.I.), Omega Holdings, and Rajnot Finance Inc.
$¥$ Malicon Valley: Nesmith Enterprises of Triad occupies most of the Malicon Valley's developmental sites as its headquarters.

## § Evergleem:

a§ Artificial Satellites: SF, DS I, TS
a§ UPF Space Station Pinnacle: This is the largest of Triad's space stations(???), it is heavily armed and represents a major breastwork in the UPF plan for Frontier defense.
a§ Brazil: TS\&RRS(6x7\&6) The largest station in existence, this station is known by name around the Frontier. The latest edition of a rest and relaxation station has made Brazil an even more popular tourist attraction. The Hubstar Saloon is the oldest bar located on the original station module and holds the record for the longest business record in space.

## CAPELLA (RIM)

## Faire

$¥ \underline{\text { Minzii: }}$ Largest city. Located on Bizarre, the second largest continent.
$¥$ Red Island: Headquarters of the Capellan Free Merchants.
a§ Artificial Satellites: DS II
Homeworld
å Artificial Satellites: TS(6x3)
Ifshna
a§ Artificial Satellites: RRS

## CRYXIA (RIM)

Pi'Ka'Nair
T'zaan

## DEBARAN

## Arsolus

Moons: (2) Olen, Urel
Gravity: 1.0013
Day: 24 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Protected
General Notes: Homeworld of the Eorna race.
Terrain/Climate:
Life:
Native Species: Edesteki, Eorna, Kurrabanda, Ul-Mor
History: When the fate of the Eorna race was questionable due to the Sathar invasion (600-585 pf) the Eorna constructed a variety of escape ships in the hopes of these spawning colonies which would keep the race alive. These ships were launched in 599 pf. One of these made it to Volturnus(Zebulon) in 593 pf. The Sathar didn't completely wipe out the Eorna, but rather knocked out most of its technological achievement. They left an automated station to watch over the planet in their absence in 585 pf . The Eorna regrouped and, realizing that there was no longer a viable gene-pool, stored most members cryogenically. The unfrozen Eorna began work in 575 pf to evolve other races on the planet to sentience. The planet was eventually discovered by a Human merchant in FY124. He used the planet as a base from which to run a pirate organization as the Star Devil. These pirates began mining operations on the planet and enslaved one of the Eornan uplifted races via radio communicators surgically implanted into their
heads. They captured most of the original exploratory team sent in FY127.8. These pirates are also responsible for the hijacking of a starliner from Ken'zah-Kit(K'aken-Kar) to Arsolus in FY128.2.

Unfortunately for them, the ship was carrying a troop of Star Law cadets and their overseer. Some of these were able to escape the ship to the planet's surface. They eventually became responsible for the defeat of the pirates. They were also responsible for summoning help from the UPF to help ward off an immanent Sathar attack, bent upon destroying the Eorna culture completely.
Government: Protectorate of the UPF.
Law:
Population: Special Light.
Society/Culture:

## DEVCO

## Cass

Moons: None
Gravity: 1.6
Day: 12 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Mining
General Notes: Cass is a mega-corp planet founded by the Cassidine Development Corporation as a refuge for the multitudes that were left homeless by the Blue Plague?
Terrain/Climate:
Life:
Native Species:
History: Discovered by the Cassidine Development Corporation in FY70.
Government: The government of Cass is a confederation. Half of this confederation consists of the CDC corp. The other half consists of a representative democracy of the inhabitants of the planet. The CDC is seen with good feelings by the majority of the populace.
Law: (CR 3)
Population: Corp Light.
Society/Culture:
¥ City:

## DIXON'S STAR

## Laco

Moons: (1) Saucer

Gravity: 1.4
Day: 60 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range: Hot day and freezing night.
Average Surface Temperature: $22^{\circ} \mathrm{C}\left(45^{\circ}\right.$ at day, $-1^{\circ}$ at night)
\% Water: 8\%?
Trade: Industry, Mining
General Notes: Laco is famous for its copper and diamond mines. There are a great many far flung mining outposts located about the planet.
Laco is also headquarters of the Alliance for the Rights of the People cult.
Terrain/Climate: Most of Laco is dominated by desert climate and the Great Laconian Desert while not extremely hot is very rough and rugged terrain. Even the plains (known as boulder fields) have thousands of boulders scattered among them, from meters to hundred of meters in size. The 30 hour day is hot staying $45^{\circ} \mathrm{C}$ for most of it, and the night temperatures are generally just below freezing, causing the tiny bit of atmospheric water to condense on the ground which quickly evaporates in the morning.
The majority of civilization is focused in urban areas, where protection from the environment is available. This means that most of the outlying country is still very much wilderness. Many roads are nothing more than crushed rock obtained cheaply from mining enterprises.
Life: Plant life in rolling hills is generally scrub brush.

## Native Species:

History: Laco was originally founded by Humans in 322 pf.
After the fall of the Pales(Truane's Star) during the First Sathar War (5 pf), tens of thousands fled to Laco from Pale and New Pale after Sathar attacks. As Laco was a prime industrial planet with no agricultural production, the survivors quickly strained the system and began to starve to death. This was made an even more difficult situation when the Sathar ravaged the planet in 4 pf after the Battle of Triad, cutting off imported foodstuffs. If not for the intervention of the Capellan Free Merchants in FY2, the entire population might have been totally eliminated. Without any effective government and with a reduced population, Laco looked to the mega-corps for assistance. Conflicting interests soon arose and led to Laco's War between PGC and the Streel Corp (FY40-50). Today Laco's primary industries are owned by PGC.
Government: The government of Laco is a libertarian democracy. Due to the tremendous influenced of the Aliance for the Rights of the People (ARP) cult this government has become increasingly downsized and streamlined. This has caused no major changes in the way it is run as of yet.
Law: (CR 3) Weapons which are used in just one hand are all currently legal in settlements on Laco, though the only grenades allowed are ones which do not cause pain. Others are legal in the wilderness areas. This is likely to become more lenient under the influence of ARP, though the grenade law is to protect innocents.

Population: Human Moderate.
Society/Culture: Many of the inhabitants of Laco are sympathetic to the libertarian ideals of ARP. $¥$ Northslope: Headquarters of LRM Enterprises, the largest mining interest on the planet.
$¥$ Verbati: Headquarters of ARP (Alliance for the Rights of the People)
§ Saucer:
a§ Diamond Station: FSS, TS

## DRAMUNE

System History: The Dramune System was first colonized in 359 pf by Dralasites from Lomigleeb(Wotogon) who immediately started settlements on Inner Reach. It wasn't until 333 pf that mining operations started on Outer Reach. Within several decades of the founding of the first settlement, members of all four races were living on both Inner and Outer Reaches. At first, the two planets developed in peaceful harmony. Trade flourished between them, as this is one of the few systems having more than one habitable planet, and cheap system ships could be used for commerce. After several centuries, however, philosophical differences began to separate the two societies. The dramatically different living conditions of the two planets caused them to develop along dissimilar paths, creating one of the most bitter and long-standing conflicts in the Frontier.

## Close Reach

Close Reach is 90 million km from Dramune.

## Inner Reach

Moons: (1) Dayhigh
Gravity: . 8101
Day: 20 hours
Year:
Diameter: 8,892 km
Inclination: $9^{\circ}$
Orbit: 140 million km
Atmosphere: 70\% nitrogen, 21\% oxygen, 9\% inert gases
Climate Range: warm to hot, mostly humid
Average Surface Temperature: $29^{\circ} \mathrm{C}$
\% Water:
Trade: Agriculture, Industry
General Notes: Inner Reach is perhaps the most successful example of the ancient ideal of an enlightened society. Poverty and disease are almost nonexistent. A robust economy produces fruits, vegetables, and a wide variety of unique spices. The planet is famed for its many fine food products, some of which are so valued that they are shipped to all parts of the Frontier. A small industrial segment of the economy processes these foods and produces the machinery needed for farming Inner Reaches lands.

Terrain/Climate: Inner Reach is a world that most creatures would describe as "pleasant." Temperatures are warm, and a stable orbit creates little climate change from season to season. Large lakes and seas break up the land masses with an ever-flowing pattern or water. Rain usually falls at night, leaving days that are sunny and hot. The land masses of Inner Reach vary from rugged, snow-capped mountains to
lush, flat grasslands and towering forests. Flowers, in thousands of brilliant varieties, bloom year-round on every terrain.
Life: Inner Reach has very rich, lush vegetation of which most species continue to grow all year. A rich and varied animal life has evolved in this prime habitat, including insects, reptiles, mammals, and fish. The most intelligent animal is the chukkah, a mammal 1.5 meters from its nose to the tip of its tail. The chukkah does not have a high reasoning capacity, but it is far more intelligent than most animals. Native Species: Chukkah.
History: Inner Reach was originally settled by Dralasites from Lomigleeb(Wotogon) in 359 pf. The original Dralasite settlers have long been obscured by the many immigrants who continue to arrive, though Dralasites are still the major race. Despite the planet's population, there are still vast expanses of unsettled land. The chukkah became the planetary symbol several decades ago***.
First Dramune War FY35, Second Dramune War FY81, Third Dramune War FY131.
Government: A republican democracy forms the planetary government, which takes a remarkably casual approach to rule.
Law: (CR 2) No multi-target damaging weapons as innocents may be caught by these accidentally. Laws stress individual rights above all else. The system works because the population, by and large, is very responsible. Crimes are rare on Inner Reach and punishments generally involve reeducating the offenders. Surgical rehabilitation is used only in the most extreme cases. Strict laws exist to protect the environment and land has been set aside in the form of several small continents which serve as planetary parks and preserves. The chukkah, which is the planetary symbol, is also protected by stiff laws to deter any who would molest or harm the creature.

## Population: Dralasite Moderate. . 5 billion

Society/Culture: The inhabitants of Inner Reach harbor a burning hatred for their neighbors on Outer Reach, regarding them as a crude collection of lawless hoodlums and thugs. Friction is high between the governments of the two planets; every 50 or so years, the tension erupts into a shooting war. Outer reach can muster a large force of warships, and only the intervention of the UPF Spacefleet has saved Inner Reach from conquest by its militant neighbor.
Because of its lively economy, Inner Reach is well-represented in the Council of the United Planetary Federation. It is this influence that has allowed the planet to acquire the Spacefleet's aid; the fleet normally does not participate in interplanetary conflicts.
Aside from the rather infrequent shooting wars, the pleasant environment and great personal freedom combine to make Inner Reach one of the most desirable of the Frontier worlds for living, working, or playing.
The Dralasites who live on Inner Reach have an unusual planetary custom. They dye their skin various colors to show their mood for the day. The dyes wash off easily.
$¥$ Synthtown: Built by SynthCorp to become it's base of operations.
§ Dayhigh: Dayhigh is a blue moon which completes its orbit every 20 days.
a§ Artificial Satellites: FSS, TS Several commerce stations orbit Inner Reach, providing a base for the planet's militia and the trading vessels that cross the system dozens of times each day.
a§ Majora Station: TS\&FSS\&TS (3\&3\&3) The largest commerce station in orbit around Inner Reach. This base also serves as a base for Spacefleet vessels in the system.
Outer Reach

Moons: (5) Three Sisters, Diamond, Shadow
Gravity: 1.0
Day: 35 hours
Year:
Diameter: 13,045km
Inclination:
Orbit: 170 million km
Atmosphere: 77\% nitrogen, 15\% oxygen, $8 \%$ inert gases
Climate Range: cold to frigid, very dry
Average Surface Temperature: $-4^{\circ} \mathrm{C}$
\% Water: very little
Trade: Ind, Mine
General Notes: Outer Reach is known throughout the Frontier as home for gangsters, pirates, cheap thugs, and other interstellar scum. This reputation is richly deserved.
Terrain/Climate: Outer Reach is cold and inhospitable. The planet's original settlers were drawn by the lure of mineral wealth locked within the planet's rocky shell. Uranium, gold, and aluminum are just a few of the elements that have been extracted from Outer Reach by the millions of tons since they were first discovered.
Barren rock fields and harsh, craggy mountains cover much of the planet's surface. Chains of volcanos lace the lands, many of them constantly spouting masses of smoke and lava. The planet presents a bizarre picture from space: mile-wide streams of molten rock trace fiery paths through the landscape, crimson rivers of fire trickle like veins across her black surface, and huge lakes of lava scar her crust like open, bleeding sores.
Life: The severe environment on Outer Reach has prevented the development of any native life forms-plant or animal. Although the atmosphere contains breathable amounts of oxygen, the scarcity of water undoubtedly precluded any natural evolution.
History: Outer Reach was originally settled in 333 pf by freethinking individualists drawn by the planet's mineral resources. As these resources begun to diminish, competition for unclaimed territories became intense, and a "might makes right" philosophy evolved. A number of small kingdoms and dictatorships battled each other for decades, until finally the Styrigian nation emerged as the supreme power. After the warring ended, a fierce rivalry continued between the Styrigians and their closest contender for power: the Maltharian Confederation. Finally, the two forces worked out a unique compromise. The Styrigians gained control of the planet's surface, and the Maltharians took control of the space stations orbiting Outer Reach. The two governments have cooperated peacefully. Both the planetary and extraplanetary governments are dictatorships. The Maltharians are ruled by the Dralasite Malthar. The mines are playing out, so now the planet's main source of income is the production and smuggling of illegal commodities. Although not famed for quality, the products of Outer Reach can be purchased almost anywhere in the Frontier-if you have the right connections. According to some estimates, fully $50 \%$ of the planet's income is made in this way.
First Dramune War FY35, Second Dramune War FY81, Third Dramune War FY131.
Government: Outer Reach has two governments, both of which are dictatorships, the planetary government, the Styrigian nation, and the extra-planetary government, which controls the space
stations, the Maltharian Confederation.
The Maltharian Confederation is ruled by Malthar a Dralasite. Darkworld Station is his headquarters and is rumored to shelter the "home offices" of his massive crime syndicate, which has tentacles reaching to the farthest corners of the Frontier.

In recent years, the discovery of Ixiol has greatly increased the Malthar's profit margins. This drug is readily available on Outer Reach, selling at a street price of 100 credits per pill. The drug produces a long-lasting euphoria, but it is highly addictive; an lxiol habit debilitates and eventually kills its victim. The production of Ixiol is a closely guarded secret.
Outer Reach has a small, highly trained fleet of militia ships, and the Malthar can easily muster a good number of pirate vessels as allies. Because of this combination, the planet possesses the deadliest starship attack force of any single planet in the Frontier. Fortunately for peace-loving peoples, the criminal world has not been able to prevent the UPF Spacefleet from coming to the aid of some of the criminals' potential victims.
Law: (CR 6) Weapons are not allowed by inhabitants though police may look the other way when there is no threat to the safety of the state. Active secret police forces both in space and on the planet's surface quickly stomp out any dissident behavior. Generous bribes must be offered at every level of the bureaucracy before any kind of action is possible.

Outer Reach has the largest fees in the Frontier for docking, averaging 250 Cr per 10 hours.
Population: Multi Moderate. The population of Outer Reach numbers only 20 million. Most of these individuals, immigrants and their descendents, live in large, climate-controlled cities that draw energy from geothermal sources. In fact, the chief advantage of manufacturing on Outer Reach is the almost free energy that can be obtained from these underground sources.
Society/Culture: Outer Reach is known throughout the Frontier as home for gangsters, pirates, cheap thugs, and other interstellar scum. This reputation is richly deserved. It is a gathering place for criminals and outlaws of all types. People there do not ask strangers how they make their living.
¥ City:
§ Three Sisters: These three red moons share intertwining orbits which are completed every 18 days.
§ Diamond: Mining. This silver moon completes an orbit every 33 days and holds several colonies and research stations, as well as mining operations.
§ Shadow: Mining. Shadow is a brown moon which completes an orbit every 60 days.
a§ Artificial Satellites: ASS, RRS, DS III Several space stations orbit Outer Reach, holding a prime position on Frontier trade routes.
a§ Darkworld Station: ASS The headquarters of the Malthar; it is rumored to shelter the "home offices" of his massive crime syndicate. Darkworld Station has an unusual construction, a massive silver cylinder extends below the station's hub.
Lost Reach
Lost Reach orbits at 330 million km from Dramune. Tendrils of the Xagyg Dust Clouds extend into the system into the orbit of Lost Reach which becomes 'lost' for a fourth of its orbital period within.

## FOCHRIK(RIM)

## Forge

Hum

## Larg

## FROMELTAR

## Groth

Moons: None
Gravity: 1.2
Day: 45
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Agriculture
General Notes: Peaceful benevolent socialist agrarian society.
Terrain/Climate:
Life:
Native Species: Grapal vines
History: Dralasites discovered the Fromeltar system in 320 pf.
Government: Socialist. Everyone gets a base salary and supplies. This can be increased based upon job importance (telephone sanitizers vs. counsellors), skill, hazards, hours, etc. Patriotism has lessened the impact of laziness upon the system. People 'work' all the time in some way to improve the world for everyone. Visitors must pay for the services/products they use, or join the system with a work committment.
Law: (CR 5-6) Few weapons are available, and few are needed. Absolute weapons CR is 4 . The police force (generally deals with emergencies, not criminals) is armed and attacks primarily with knockout and deterrent weapons first. There is a dramatic import tax on any items being brought to the planet by nongovernment routes.
Population: Dralasite Light.
Society/Culture:
¥ City:
a§ Artificial Satellites: ASS

## Terledrom

Moons: (3) Wikk, Leen, Masg
Gravity: 1
Day: 60
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:

Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Industry (Little import, small export)
General Notes: Trans-Travel is a planetary corporation and the chief employer of Terledrom. Little is imported, small amounts of goods are exported.

## Terrain/Climate:

Life:

## Native Species:

History: Dralasites discovered the Fromeltar system in 320 pf.
Sathar Fleet \#1 moved into this system after being driven from Kdikit(Madderly's Star) during the Second Sathar War in FY96.

Government: Terledrom is ruled by a council of Vrusk companies (the Pak) and elected Dralasites (Draog Council). The Pak primarily oversees business concerns and the Draog Council oversees social concerns.
Law: (CR 3*) Pistols and rifles are allowed, no melee or grenades. Most businesses restrict bringing weapons into the premisses so there are a wide variety of storage bins available for rent.
Population: Dralasite/Vrusk Heavy
Society/Culture: Generally self-sufficient.
$¥ \underline{\text { Sengsen: }}$ Major city. Headquarters of Trans-Travel.
§ Wikk: Colony
§ Leen: Industry
§ Masg:
a§ Artificial Satellites: ASS, DS II

## GRUNA GARU

## Hargut

Moons: (1) Trefrom
Gravity: 1.1
Day: 20 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Business, Mining
General Notes:
Terrain/Climate:
Life:

## Native Species: Weeping Wallow

History: Discovered by Yazirians in 248 pf. Hargut suffered massive population losses due to the Blue Plague, and the planet was quarantined from FY62 to FY67.
Government: Confederation of clan-countries some of which are theocratic and answer to Hentz(Araks).
Law: (CR 2-3) Zebulon controls.
Population: Yazirian Heavy. 25\% non-Yazirian.
Society/Culture: This planet is a combination of cultures from Hentz(Araks) and Yast(Athor). Argonian and Gnarsh are spoken equally here, and all but the most seperatist citizens know both languages. Because of the high gravity zamira duels must take place on Trefrom. Because of this, only the most grave insults and those who can afford the time and credits to travel to the moon duel with such. This has led to dueling with swords on the planet. This also allows non-Yazirians to engage in duels as well.
$¥ \underline{\text { Heston: Major starport. Business headquarters for WarTech Inc. }}$
$¥$ Klaktow: Largest City. Headquarters of Association of Intergalactic Power Suppliers.
§ Trefrom: Colony, Main Starport
a§ Artificial Satellites: ASS

## K'AKEN-KAR

## Ken'zah-Kit

Moons: None
Gravity: 0.9
Day: 25 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Agriculture, Business
General Notes: Though the government of Ken'zah-Kit may parallel certain socialist societies, it's appearance is very much as a corporation controlled society.

## Terrain/Climate:

Life:
Native Species: Tick-tock Trees
History: Discovered by Vrusk in 280 pf. Task Force Prenglar regrouped in this system in FY97 during SWII. Sent an exploratory team to the Debaran system in FY127.8. A starliner was hijacked from this sytem and take to Arsolus(Debaran) by pirates in FY128.2.

Government: Ken'zah-Kit is a company owned planet. The government itself is Ken'zah Inc. Since nearly every native inhabitant works for the company, the government boasts the highest active participation by ruled members on the Frontier. Ken'zah Inc. is the company which was originally formed to facilitate the Flight of the Vrusk (see Kit-Kit(Kar)). Ken'zah Inc.'s sole purpose as a corporation is to look after the
well being of the inhabitants of the planet. It is thus a non-expansionistic corporation, and profits are generally used to better the environment of the planet and well-being of its workforce/populace. All of the business done by Ken'zah Inc.'s ultimate goal is to better the planet. Smaller businesses which aren't associated with KI are allowed to exist so as to provide competition for capitalistic impetus. These businesses pay taxes as if located in any other capitalistic government structure and are able to survive quite well if they are able to produce better goods. These businesses also help to keep 'rebels' of society satiated. KI is responsible for the education of the children of the planet, and ultimately ends up employing the vast majority of them. Thus the company controls the lives of its citizens, but has quite a broad education system, as opposed to creating mindless robots tailored for certain positions. Those who do not wish to work for KI are not penalized, though occasionally pitied.
Law: (CR 3) Weapons 6. No weapons are allowed to be carried by the general populace. Laws on other issues are generally far less controlling. If it's bad for business, it's bad for the planet.

## Population: Vrusk Heavy

Society/Culture: The culture of Ken'zah is much like a streamlined version of what once existed on KitKit(Kar). It has become 'streamlined' due to the merger of the society into a single corporation. Those who do not give their all for their job and thus the planet are held in very low regard. Most cases of violence reported on the planet is against those who seem to take more than they produce, slack, etc. This has on occasion led to violence against handicapped individuals, special interest groups, etc. There is also on occasion some hostility towards those beings who after being educated by the KI company leave the fold. Vrusk on Ken'zah-Kit almost never say their company name before their own, as that is almost a universal (and thus a waste of energy). Vrusk who do not work for the company (and other races) are required to use their company name first.
$¥$ Kra K'ow City: Starport.
$¥$ Valentina City: K'onklave Complex located there, as well as a Vrusk Center for Children.
$¥$ Southern Kalph: University of Southern Kalph: sciences and astrophysics
a§ Doliin Bay: FSS This, the first space station in orbit, was taken by the Sathar at the beginning of the SWII. (where did this come from?????***\#\#\#)(tom2)
a§ Ken'Zah Station: TS (4)

## KAR (EPSILON)

## Kit-Kit

Moons: (2) Kar'k-Tik, Zkik-Kzir-Tik
Gravity: 1.105
Day: 30 hours
Year: 300 days, 15 hours
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: $20^{\circ} \mathrm{C}$
\% Water:

Trade: None
General Notes: This is the Vrusk homeworld. It was abandoned and returned somewhat to its precivilization state because the Vrusk had depleted it, its proximity to the Ebony Eyes binary black holes, and Vrusk aesthetics.

## Terrain/Climate:

Life:
Native Species:
History: Kit-Kit became so infected with the Blue Plague virus that it was put under quarantine in FY58. Many inhabitants died before the Plague was eradicated and the ban lifted in FY67.
In FY71 the system was unreachable for an entire month, as an change in the gravitational fields of the Ebony Eyes singularities caused ships to misjump. The black holes had to be re-mapped to set up new astrogation charts. The following year the gravitational fields continued to change, causing many misjumps and required constant study to produce astrogation charts which soon expired. Because of these constant astrogation problems, the far future danger of the black holes upon the planet, observations of the effects of the Blue Plague upon the Human and Dralasite home worlds, and Vrusk aesthetics the Vrusk decide to vacate their home world. They chose to leave their world on their own terms, as opposed to having it take away from them (as well as the loss of profitability of a hard to reach planet). Vrusk corporations began moving headquarters to other locations and the population gradually began to shift to other worlds. In FY76 the Vrusk cease the releasing of astrological information necessary to reach the system. Vrusk ships are kept updated, so they may ferry away people and cargo, they also charter a great many ships from other organizations. On FY85.1.18, the Vrusk have completely evacuated the planet. Moreover, they have removed all obvious traces possible of their civilization, leaving the planet in it's pre-Vrusk state as much as was possible. The entire system is seeded with robot drones (some of which left over from the Blue Plague quarantine) which detect and warn trespassers as well as having a large arsenal. One moon base on Kar'k-Tik is left in case of emergency situations. It is during this final period of inhabitation that the Vrusk Lottery is conceived of. Sixteen Vrusk are given a chance each year to return to their home world for an entire local month sabbatical. The Lottery occurs annually (Kar time) on the anniversary of the leaving of the system (FY82.1.18) plus one FYday each year to account for local time. No winning Vrusk has ever refused or forfeited their trip. It is believed that no non-Vrusk knows about the Lottery.

## Government:

Law: Trespass is a capital crime.
Population: None. 16 at most.
Society/Culture:
§ Kar'k-Tik: The only structure left over from the Vrusk civilization is a base left here to deal with emergency situations. This is also the rendezvous point for the Vrusk Lottery winners and the debarkation point for their trip to the planet.

## § Zkik-Kzir-Tik

## KAZAK(RIM)

## Stenmar

a§ Artificial Satellites: DS II, RRS

## KIZK'-KAR

Zik-Kit
Moons: None
Gravity: 1
Day: 65 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Industry, Mining
General Notes: Zik-Kit has many rich mineral deposits. The raw ores are exported mainly to Terledrom (Fromeltar) for manufacturing. Home of Zik-kit Ordinance Industries.

## Terrain/Climate:

Life:
Native Species:
History:
Government: The government of Zik-Kit is a democratic syndicracy. Each company indigenous to the planet has a numebr of votes based upon the number of employees that company has employed.
Law: (CR 2) Unconcealed weapons are allowed on Zik-Kit. The logic being that everyone (especially law enforcement officers and company guards) knows what they are dealing with this way. This is somewhat strictly enforced as vehicles may have mounted weapons but no concealed weapons, helmet weapons are considered concealed, weapons may be carried in hard to get to places (such as deep in backpacks) but not hidden in a pocket. There are extremely stiff penalties for assaulting company property.
Population: Vrusk Heavy.
Society/Culture:
a§ Artificial Satellites: ASS, TS

KLAEOK(RIM)
Point
a§ Artificial Satellites: DS II, TS

K'TSA-KAR
Kawdl-Kit
Moons: (3) Skakis, Kubichev-Tik, Colos-Tik
Gravity: . 7105
Day: 30 hours
Year: 347 days

Diameter: 13,050 km
Inclination: $21^{\circ}$
Orbit:
Atmosphere: 72\% nitrogen, 22\% oxygen, 6\% other
Climate Range: Hot, Humid
Average Surface Temperature: $30^{\circ} \mathrm{C}$
\% Water: 73\%
Trade: Mining, Agriculture, (Education)
General Notes: Kawdl-Kit is a lush tropical world supporting a myriad of non-sentient life forms and has been charged by the UPF to scan for Sathar in the direction of the White Light Nebulae. It is rich in minerals and is ideal for agricultural development. It is also a prime candidate for a large tourism industry.
Kawdl-Kit is the object of a political struggle between the on world KUT conglomerate and Streel Corp. The dispute concerns the rightful claim to the territory, and therefore the right to exploit the planet's resources as well as determining the lifestyle of the people living there. However, a far more pressing problem has occurred recently; the mineral rich planet has been literally shaken by a disaster of global proportions.
Terrain/Climate: Kawdl-Kit's upper crust is still highly active, with large occurrences of volcanoes on the continent and several volcanic islands in the ocean ridges. It has small polar ice caps due to the planet's hot and humid climate.
Disaster: On FY128.11.18 a stray asteroid travelling at an extraordinary speed passed within 150,000km of the planet's surface. Scientists are still only guessing at the reasons why the asteroid's speed was unusually high, at nearly $3000 \mathrm{~km} / \mathrm{s}$ (.01c). None of the collected data suggests an artificial cause, but researchers cannot determine why the asteroid was not detected and its course plotted until moments before impact. The asteroid, about 1100 m in diameter, collided with the planet's smallest and closest moon Skakis ( 8000 km dia.). Both were destroyed on impact, but several large fragments remained. Nine of these shards, each 500-1000m wide, plunged into the atmosphere and onto the planet's surface. The unpredicted results of the asteroid/moon collision gave the citizens of Kawdl-Kit virtually no warning of the impending disaster. Three fragments impacted on the continents, while six others plunged into the oceans. The fragments struck the planet with a force equal to a 200-250 Megaton nuclear explosion each. A huge cloud of dust was thrown into the atmosphere, temporarily blocking out much of the planet's light. The fragments that hit the oceans caused massive shock waves in the water which resulted in waves exceeding 40 m in height. Finally, one of the fragments struck an unstable fault line on the continent's southern coast, triggering a devastating earthquake felt across the entire continent. Nearly all of the planet's communities were laid waste, and non escaped unscathed. By the time the last large fragment struck the planet, KUT operations around the Frontier were informed of the disaster and rescue preparations were under way.
An accurate account of casualties is still unknown, but the death toll is rising. Many experts estimate that about 45\% of Kawdl-Kit's inhabitants were killed or critically injured in the disaster (nearly 630,000 beings). KUT has asked for the help of anyone in the area who may be able to help with disaster relief and rescue operations and the UPF has sent its own rescue teams and offered funds for the payment and outfitting of others. The shifted weather patterns have not been helping; rescue attempts will be
difficult in the dim sunlight that pierces the dust clouds.
Life: Kawdl-Kit is a lush tropical world that supports myriad non-sentient life forms. The land as well as the seas is full of various flora and fauna.

## Native Species: Cephalopod

History: Kawdl-Kit is a contested world between the Vrusk Kttl'Ul'Tik conglomerate and Streel Corp. The claims to the planet go back to before either company existed. The corporation which later became the Streel mega-corp sent many unmanned probes to star systems near the expanding homeworlds of the Frontier Races. One such probe traveled to the K'tsa-Kar system during 88 pf and determined the planet inhabitable. Later ( 25 pf ), the GVMPI sent a manned (bugged?) expedition to the system and placed a claim beacon in orbit around the planet. When they returned, colonists were immediately sent to the system, as it was determined to be especially suited to Vrusk. Streel Corp saw to gain Kawdl-Kit when it was buying out GVMPI in FY13, and it very well could have been the first mega-corp system. But, GVMPI sold off all of its holdings on the planet during the final hours of autonomy to spare the inhabitants the heavy hand it was witnessing from Streel. The resulting holdings and other companies on the planet grouped together forming the Vrusk conglomerate KUT to further protect itself from further manipulations via Streel. After acquiring GVMPI, Streel sent a task force to the system to attempt to regain it in the usual Streel fashion. KUT took Streel to the UPF and development was halted until a decision was reached. Six months later, the courts ruled in favor of KUT. Naturally, Streel appealed the decision. Construction continued while the court reviewed the Streel case, again the court ruled in favor of KUT. Streel reluctantly agreed to the terms of the ruling, removed its task force, and tensions between the two corporations subsided.
Some thirty-five years later(FY125), after Hilo Headow took control at Streel and the rediscovery of logs of the original probe to Kawdl-Kit, Streel is once again focusing upon Kawdl-Kit. Hilo Headow is looking for a focus to strengthen his own power and reunite Streel under his new administration, and Kawdl-Kit is the perfect target.
The devastation on Kawdl-Kit was widespread, and the rescue operation would take a great deal of money, people, and equipment. In a "move of friendship," Streel has sent several rescue teams to the K'tsa-Kar system to help with the rescue effort. Streel may have found the opportunity it was looking for.
Government: The current government on Kawdl-Kit is a plutocracy: a government run by those with the most wealth. This is done somewhat 'democratically' with each being allowed a vote for every credit claimed on a yearly revenue report. A vote is allocated for solvent credits as well as property and holdings. Voting takes place approximately a month after the yearly reports are due and the validity of the claims are confirmed. Because of this system, the populace is usually very willing to make such reports on time and stiff penalties for fraud such as losing all voting rights keep the reports honest. While corporations do not get voting rights, because of the overwhelming employment of the citizens of Kawdl-Kit by the KUT conglomerate, it is generally seen with favor by the government. Due to the voting methods, public attitude is very important on Kawdl-Kit.
Law: (CR 2-3) Weapons upto and including rifles are allowed on Kawdl-Kit due to the low population and diverse life forms on the planet. In civilized areas only laser pistols and non-heavy PGS weapons are generally allowed.
Population: Vrusk Light. 1,395,900; roughly 1,000,000 Vrusk, 350,000 Humans, and the rest divided
amongst Dralasites who find the world too wet and Yazirians who find it too hot and distant from their homeworlds.

## Society/Culture:

$¥$ Zerich Atoll: This is the location of a large (100-150 person) sea bed farm home of the Zerich Commune. More than $2,000 \mathrm{~km}$ from the planet's main continent, the Zerich Farm was built in the tropics. The station was constructed on an atoll: the remains of a volcanically formed island which has been worn down by weather over a long period of time. This forms a large shallow area in the sea around a much smaller island. The Zerich atoll can be considered in the last stages of decay, for only a very small strip of land is present above water, ranging from as little as 8 m above water at the island, to as deep as 50 m or more at the southern tip. The Zerich farm was built at the center of the atoll to gain as much protection as possible, and keep a central location to monitor the agricultural activities. The central tower was built in a level area that is (or rather was), 35 meters under water. The central tower is 70 m in diameter, and 50 m in height, 15 m of which actually did remain above water. From the tower's base, three tunnels extended 300 meters from the center of the station out to smaller monitoring posts, where the robotic maintenance work was controlled. From these, a web of metal posts for supporting the sea-crop extended out in a radius of 750 meters. The sea-drones would monitor food levels and harvest each crop as it ripened.

After the disaster, though much of this has changed. Both the earthquake and the wave that hit the station have drastically altered the shape of the atoll. the earthquake caused the ground below the station to collapse, lowering the station 4 meters and tearing a gaping hole in the bottom of the structure itself. The quake weakened the station structurally as well, leaving it in a defenseless position when the wave struck. The station shifted five degrees, and the large communications tower toppled over. About $55 \%$ of the station has been flooded, and all survivors are trapped under sea level.
§ Skakis: 8000km in diameter, this moon is dust.
§ Kubichev-Tik: Second moon.
a§ Kooistra Station: ASS This satellite is placed in the L5 position of the orbit of Kubichev-Tik.
§ Colos-Tik: Third moon.

## LIBERTY

## Snowball

Snowball is on the of the newest inhabited planets. It has a Human-like native race (the Mhemne) that has split into three distinct societies, one of which inhabits its moon and artificial satellites. Snowball has a lot of trouble with Sathar which are believed to be the last surviving remnants of the Sathar Third Fleet that was driven into the Vast Expanse during the SWII. The safe star route to Liberty is unknown except to Star Lawmen.

## LYNCHPIN

## Moonworld

Moons: (9) Pen, Ringold, Dillon, Hachiman, Ares, Huan-Ti, Huitz, Nuada, Enlil
Gravity: 1.30
Day: 25 hours
Year:

Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Military
General Notes: Moonworld is a large planet with nine moons orbiting it, all belonging to the UPF. Access to the system is almost impossible due to it's military nature.
Terrain/Climate:
Life:
Native Species:
History: Discovered in FY15 by Vrusk. The system was turned over to the UPF for development as a military outpost to protect that sector of the Frontier. The system was a military secret until the middle of SWII when the Sathar Fleet \#3 attempted to circumnavigate the Greater Morass in FY96.8. This fleet was engaged by long-range fighters from Moonworld. Having no knowledge of the outpost in the system the Sathar attacked, expecting to find a single spaceship. Instead the Battle of Moonworld had begun. By FY97.1 three-quarters of Fleet \#3 is destroyed. The remaining vessles are forced into the Vast Expanse and the Battle of Moonworld ends.
Government: The only government in the Lynchpin system is that of the UPF. There is a small free market providing goods and services for the military officers.
Law: (CR 3) Hand weapons are allowed to be carried, but frequent military patrols (often on drill) generally abort trouble before it can begin. Weapon play must be justified to the UPF later.
Population: Human Heavy.
Society/Culture:
$¥$ Stronghold: Capital city.
§ Pen: Colonising
§ Ringold: Mining.
§ Dillon: Business. Home of the Star Law Ranger Academy.
§ Hachiman: Military
§ Ares: Military
§ Huan-Ti: Military
§ Huitz: Military
§ Nuada: Military
§ Enlil: Military
a§ Artificial Satellites: SF, DS II
a§ UPF Space Fortress Defiant:

## MADDERLY'S STAR

## Kdikit

Moons: (5) Shang-Ti, Tsukiy, Zeus, Jupiter, Odin

Gravity: 1
Day: 30 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Industry, Agriculture
General Notes:
Terrain/Climate:
Life:
Native Species:
History: The Madderly's Star system was discovered by Vrusk and Humans in 310 pf. Nine years later, the Humans on Kdikit, feeling the Vrusk were dominating the government system, revolt in what is known as the Freeworld Rebellion.
In FY96, Kdikit was attacked by Sathar Fleet \#1. The Space Fortress Kdikit resisted the attack and bought the time needed for reinforcements (from Dramune and the UPF militia) to arrive. Eventually the Sathar Fleet \#1 was driven from the system and pursued as it moved towards Fromeltar.
Government: The chief government of Kdikit is a council of 4 elected officials, one of each race. Each race elects its own races representative. This leads to various racial tensions as each representative is seen as the embodiment of each races desires and goals.
Law: (CR 2) Most weapons are allowed on the planet. Assaults and kills which are reported are generally dealt with in a much less strict manner than unreported ones, depending upon the justification given. A tribrunal is held to determine whether or not there was enough justification for the action allowing for the victim or victim's representatives to speak. Killing of humans by non-humans is still generally dealt with more harshly than other races, a throwback to past legal history.
Population: Human Moderate.
Society/Culture:
$¥$ Buckerton: Major city. Headquarters of MercCo and Estronsa Finance. A huge MercCo training base is located about five kilometers north of Buckerton.
$¥$ Stysor City: Location of Stysor Arms manufacturing and laboratories.
a§ Artificial Satellites: SF, DS II, TS
å UPF Space Fortress Kdikit:

## MECHAN

## Mechano

Moons: None
Gravity: 2.074
Day: 30 hours

Year: 563 days
Diameter: 18,000 km
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Industry, Technology
General Notes: Mechano is not yet a member of the UPF. It was founded before SWII by Mechanons escaping persecution on Volturnus. Because of the Mechanons' non-organic nature, the UPF is proceeding slowly with the Mechanon request to join the UPF. No known bioform has ever set foot on Mechano and its atmosphere is reported to be deadly to organic life.
Terrain/Climate:
Life: None
Native Species: None
History: Discovered in FY91 by the peaceful migrating Mechanons which had left Volturnus(Zebulon) in FY84.
Government:
Law:
Population: Mechanon Heavy.
Society/Culture:

## MIDWAY STATION ${ }^{\text {® }}$ §

General Notes:
Terrain/Climate:
Life:
Native Species:
History:
Government:
Law:
Population:
Society/Culture:

## NEW STREEL

## Corpco

Moons: None
Gravity: 1.
Day: 35 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:

Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Agriculture, Technology
General Notes: Corpco is a mega-corp planet, founded by the Streel Corporation in an attempt to enter the agricultural industry.

## Terrain/Climate:

Life:
Native Species:
History: Discovered by Streel in FY25.
Government: Corp.
Law: (CR 2) Though Streel controls this planet, it also contracts out lots of land for agricultural use.
Because of this, Streel has not limited weapons as much as many other corp controlled worlds.
Population: Corp Light.
Society/Culture:

OSAK(RIM)
Fhlold
Osaka
a§ Artificial Satellites: FSS, DS II
Piscatien
Reanee
Wonma
a§ Artificial Satellites: ASS

## PAN-GAL

## Exodus

Moons: None.
Gravity: 1.30
Day: 20 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Industry, Technology
General Notes: Exodus is a mega-corp planet founded by PGC. It's use is not known to any save PGC.
Terrain/Climate:

Life:
Native Species:
History: Discovered by PGC in FY20.
Government: Corp
Law: (CR 6) This world is restricted by the PGC.
Population: Corp Moderate.
Society/Culture:

## Genesis

Moons: (2) Asperon, Belv
Gravity: 0.80
Day: 25 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:

## Climate Range:

Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Education
General Notes: Genesis is a mega-corp planet founded by PGC for the purpose of establishing a secure base for their research labs.
Terrain/Climate:
Life:
Native Species:
History: Discovered by PGC in FY20.
Government: Corp
Law: (CR 6) Those who are not employed by the PGC and most employees are not allowed to carry
weapons of any sort.
Population: Corp Outpost.
Society/Culture:
§ Asperon: Military
§ Belv: Education

## PAVOR (BETA)

Waloo
This was the homeworld of the Yazirian species. Levo, the planet's only moon, was determined to be spiraling toward the planet in its orbit in the year 291 pf. The entire planet's resources then went to the transportation of as much of the ecosystem as possible to the inhabitable planet Hentz(Araks) upon which life had not yet evolved. Entire tracts of various environments were literally picked up and shipped to Hentz in what became known as the Yazirian Relocation. New discoveries about the life on the planet occured daily, as areas such as the deep ocean were thoroughly explored for the first time.

Many species were transported which have still to be discovered. This process (called the Yazirian Relocation) went for 23 years up until the final minutes of Waloo's existence, the majority of the population relocated within the first 20. Mining on Hentz was fierce in areas in which the Waloo environment would later be introduced to get the most resources from the planet without disturbing the adapting lifeforms from Waloo. The governmental structure of Waloo was also transported and this was the time of the most social cohesion the Yazirians ever experienced.

## Native Species: Creepspine

## PRENGLAR

System Notes: The Prenglar system was first discovered by a joint goodwill expedition composed of all four major races in 390 pf. Though Morgaine's World was noted, the only settlement was done on Gran Quivera. Prenglar was the first system to be attacked by the pirate fleet under the command of Hatzck Naar in 79 pf. During SWI, in late 4 pf, Admiral Morgaine moved the Second Common Muster to the Prenglar system to protect Gran Quivera. In early 3 pf, the Sathar moved to the Prenglar system after ravaging Laco(Dixon's Star) and engaged the Second Common Muster in the Battle of Two Fleets. In this battle, the Sathar fleet is finally routed and destroyed. Morgaine's fleet is also depleted and Morgaine dies near the end of the battle. The following year Morgaine's World was named for the fallen Admiral. During the Second Sathar War, The Sathar Fleet \#2 emerged in the Prenglar system in FY96. There, it scattered and defeated the remaining half of Task Force Prenglar. Then, instead of attacking the defenseless planets, the Sathar proceded recklessly into the Frontier, causing virtually no damage to any planet based structures.

## Gran Quivera

Moons: None
Gravity: 1.00
Day: 15
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Business, Industry
General Notes: Gran Quivera is known as the Hub of the Frontier.
Terrain/Climate:
Life:
Native Species:
History: Gran Quivera was discovered by a joint goodwill expedition composed of all four major races in 390 pf. Pan-Galactic Corp was started in Port Loren in 330 pf. Underwent attack by Hatzck Naar's pirate fleet in 79 pf. The Second Common Muster came to the Prenglar system in late 4 pf, to protect Gran Quivera from the Sathar fleet which arrived in early 3 pf. Gran Quivera provided supplies and support
for the Battle of The Two Fleets. It was this battle which saw the destruction of tha Sathar fleet, and also the death of Admiral Morgaine. His tomb lies in Port Loren.

Government: Democratic Councils are used as the governing method of the beings of Gran Quivera. Councils are 7 members strong at the city, continent, and planetary levels.
Law: (CR 2) Only exception is that laser rifles are also outlawed (in general, a less than 150 maxdam limit). Job related permits (requiring visible identification to be worn) allow denizens to carry larger ammo.

Population: Multi Heavy.
Society/Culture: Much pride in the Pan Galactic Corporation.
$¥$ Cortown: Headquarters of Pan Galactic Corporation. Located adjacent to Port Loren, construction on this small city began in FY50 and was completed in FY55. The city itself is self-sufficient, having it's own power, waste, transportation, and other municipal elements. They have direct monorail access to the starport and an exchange to the heart of Port Loren. Access to this city is controlled by PGC.
$¥$ Port Loren: Major city, Major Port. Star Law, Galactic Task Force Inc., and the United Planetary Federation all have headquarters at Port Loren. Pan Galactic's original headquarters were located here. Since FY55, the building has housed a museum dedicated to the history of the mega-corp, and the local computer and robotics training center.
å Morgaine's Tomb: The Tomb of Admiral Morgaine is surrounded by a beautiful park near the spaceport.
$¥$ Alaspin: Second largest city, Capital of Gran Quivera's government. Headquarters of Artemis Research.
$¥ a ̊$ Glory Down: This landmark rests at the crater of the only missile to reach the surface of Gran Quivera during the Second Sathar War.
a§ Artificial Satellites: FSS, TS(6x4)

## Morgaine's World

Moons: (4) Grey, Gold, White, Black
Gravity: . 85
Day: 40 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Business, Industry, Agriculture
General Notes: Morgaine's World is quickly developing into one of the finest planets on the Frontier. It is the only planet to have a UPF Space Fortress, a docking space station, a rest and relaxation space station, and a trading space station all orbiting it. Spacefleet's Golwin Academy also orbits it. Many investors look to Morgaine's World to usurp Gran Quivera's position as the Hub of the Frontier in the next few decades. Brilliant auroras light up the night sky over most of the planet (except for the equatorial regions) and rings are visible from most of the planet circling the equator at night as well
(these are visible near the equator even during the day).
Terrain/Climate:
Life:
Native Species:
History: Exploration of this planet was put off for a long time as developers focused upon Gran Quivera. After the First Sathar War, exploration efforts were planned, and the planet was named for Admiral Morgaine officially as the first being set foot on the planet on 2.1.1 pf. The following year the Grand Meeting of leaders of the four races took place.
The vaccine for the Blue Plague was found in FY64 in Cadecus, at the MSO headquarters established only the year before.
Government: Republican Democracy. The planetary government is well organized and has created some of the Frontier's most progressive laws for racial equality, religious rights, the concerns of the public vs. the government, and so forth. Instead of having what are considered laws created by the government, the law recognizes each individual as having certain rights. When these rights are violated, the individual merely uses the legal system to seek justice for the individual. A being is not charged with violating a law, but rather with violation of another being's rights. Even the government itself can be charged with such violations. Ordinarily the government takes on the role of arbiter between disputes, not prosecution or defense. The government is a republican democracy as opposed to a athenan democracy to ensure that the majority does not trample the rights of minority groups.
Law: (CR 1) Beings on Morgaine's World may carry sort of weaponry they so desire. Items which could damage innocents (grenades) are frowned upon. Infringing upon another's rights with these weapons though is deal with very severely, both in legal punishment and social disapproval. The very liberal personal freedom laws allow beings living on Morgaine's World any freedom desired so long as it does not infringe upon other's rights.
Population: Human Moderate. The steadily climbing population has yet to make use of more than 20\% of the surface area of this large planet.

## Society/Culture:

$¥$ Cadecus: Headquarters of the Medical Service Organization.
$¥$ Nuptiae: Major City, Major Starport. Built around the original site of the Grand Meeting.
à Conventio Area: Wide open area in the heart of the city. This was the actual site of the Grand Meeting.
§ Grey: Mining
§ Gold:
§ White: Military
§ Black:
a§ Artificial Satellites: SF, DS I, RRS, TS
a§ UPF Space Fortress Gollwin:
a§ Gollwin Academy: (3) Star Law Academy Enrollment and first semester training facilities.

## RHIANNA

## Alcazzar

Moons: (7) Fligorum, Vicar, Anakosus, Zi'Zakion, Gnos Go, Dagger, Gypsy
Gravity: 0.81

Day: 10,000 hours
Year: 10,000 hours (Summer/Winter 4000 hours each, Transitions 1000 hours each)
Diameter: 9,832km
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere: 75\% nitrogen, 20\% oxygen, 5\% inert elements
Climate Range: Seasonal: winter and summer both move east at $3 \mathrm{~km} /$ hour continuously.
Average Surface Temperature: Seasonal: -30 to $40^{\circ} \mathrm{C}$
\% Water:
Trade: Mining
General Notes: Alcazzar is unusual in that it has little rotation about its axis. This causes severe seasonal temperature variations. Only WarTech Inc. navigators know the star route to Rhianna?
Terrain/Climate: Alcazzar's climate and seasonal changes are very unusual because the planet barely rotates as it orbits its star. At any one time, $40 \%$ of the planet is in summer, another $40 \%$ is in winter, $10 \%$ is changing from summer to winter, and $10 \%$ is changing from summer to winter.
The entire summer in daytime, and the whole winter is nighttime. For approximately 160 GST days of the year each hemisphere is blessed with eternal daylight and warm, pleasant conditions, or plunged into an equally long night with frigid tempteratures and snow reaching depths of several dozen meters. A 40-day GST period occurs between each extreeme when each region passes through a twilight transition.
The winter area is blanketed by a heavy layer of clouds or blizzards approximately $50 \%$ of the time. During transition, the "beltline" region is cloudy $90 \%$ of the time, and suffers violent rainstorms $33 \%$ of the time. The summer region is $90 \%$ sunny, but when clouds drift from a transition zone, violent thunderstorms, tornadoes, and hurricanes are possible.
Only one third of Alcazzar's surface is land, but it's covered with a wide variety of terrain. Mudflats, wet lowlands with little plant or animal life, cover $58 \%$ of the land. These areas are most noted for clouds of insects thick enough to make breathing difficult, but otherwise harmless.
Several ranges of craggy mountains cut across the land. While not large by most standards--the highest peak is 3,230 meters above sea level--constant glaciation, rock slides, and wind and water erosion have carved them into rugged cliffs and crags. The higher valleys in these ranges are choked with ice fields all year around. the lower reaches are filled with rushing streams of icy water. Mountains cover $12 \%$ of the land area.

The plains and forest appear strikingly green from orbit. these fertile areas are made of flowering grasslands and towering karakah trees. Glaciers rolled much of these areas flat, but often piled the gravelly soil into rolling moraines along the sides of common glacial paths.
Life: The karakah trees, reaching more than 100 meters in height, are common to all of the planet's forests. The trunks are often 10 meters wide at the base. These trees have long, thick flexible needles that remain on the branch throughout the year. The thick porous bark insulates them during the winter. Karakah trees have developed a sap that does not thicken appreciably or freeze duing the severe cold season.
Karakah trees prduce a rich fruit in great numbers. These fruit seem to be the base of ther herivorous food chain. The fruit falls throughout the summer.

Many forms of animal life inhabit the planet, bu they have not been researched, so very little is known about them. All animal life must deal with the extended winters. Many animals migrate, resulting in masses of creatures moving around the planet's surface as the year goes by. All of these creatures travel a complete circle around the planet each year. Other animals hibernate. The mammals live off stored body fat; the insects lay eggs, then die off to be replaced next summer.
Native Species: Lokkuku, Fire Locust, Gnawhare, Gwerrah, Karakah Trees, Sea-Shrike, Sky-Shrike, Snow Sloth

History: Discovered by the Cassidine Development Corporation in FY50.12.21. The planet's existence and mineral wealth was kept secret and a mining operation began immediately.
Government: Corp. WarTech controls this system, though it doesn't really desire to continue control of the system. It has recently been using the system as a big-game hunter and survivalist retreat and naturalist vacation spot.
Law: (CR 0) There is no control on the weapons carried on the planet. WarTech controls access to the planet in order to keep this openness from becoming a detriment. The use of this planet as a game resort has led to drastic ill-effects upon the environment.

Population: Corp Light.
Society/Culture:
Economic Value: Alcazzar contains tremendous amounts of fairly accessible heavy metals, including gold, silver, lead, iron, and uranium. These minerals are located in rich veins in mountain bedrock, as well as many riverbeds.
§ Fligorum:
§ Vicar:
§ Anakosus: Here GTF and MercCo began the first post-SWII Corporate War which soon spread to all the moons and over half a dozen mega-corps.

## § Zi'Zakion:

§ Gnos Go:
§ Dagger:
§ Gypsy:

## SCREE FRON

## Hakosoar

Moons: (2) Inti, Infi
Gravity: 0.9
Day: 50 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:

Trade: Agriculture, Industry
General Notes: Some of the best pilots in the frontier are from Hakosoar.

## Terrain/Climate:

Life:
Native Species:
History: First discovered by Yazirians in 189 pf.
Government: Stratocracy. The leaders of Hakosoar are the planetwide career military leaders. All citizens are required to serve 2 years in the military, and it is considered an honor to be asked to stay. There is a very large standing military because of the mandatory military service. Some of the best pilots are trained here. Being stationed at Histran is generally a result of bringing negative attention to oneself in the military. Many career officers quit the military as opposed to taking the dishonor of the station. This is often an efficient tool to downsize the military, but the dishonor involved does not encourage a satisfied populace.
Law: (CR 5) Weapons of any identifiable type are only allowed to be carried by members of the military. Though because of the mandatory military service, the populace is generally versed in martial combat techniques. Undesireables are often transported to Histran to emsure the safety of the state.
Population: Yazirian Moderate. Approximately 2\% non-Yazirian, most in employ of UniHo. Well trained in self-defense.
Society/Culture: The population of Hakosoar are generally followers of the Family of One, but this organization does not hold the power that it does on Hentz(Araks). Argonian is the primary language. Zamira combats are only allowed in sanctioned arenas run by the military. These duels are supervised, thus honorable and the results posted publically, but are generally a last resort to settle disputes because of the high injury potential among military trained participants. Challenges are often met with public apology and supplication upont he part of the weaker participant. Those who make it a practice to challenge Yazirians from off-planet are frowned upon and known as 'trudos' or 'throwers' in Argonian. As undesireables, criminals, and other 'overflow' elements are often transported to Histran or move of their own accord, that planet is viewed as a cabal of criminals and malcontents.
$¥$ Hyyay: Headquarters of Universal Households.
§ Inti: Education
§ Infi: Mining
Histran
Moons: (7) Olim, Duae, Minae, Fornax, Ingris, Sedeo, Certus
Gravity: 0.6
Day: 25 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:

Trade: Education
General Notes: Histran is the location of the UPF outpost that keeps an eye on the Mechan system and the Lesser Morass.
Terrain/Climate:
Life:
Native Species:
History: First discovered by Yazirians in 189 pf.
Government: This planet is considered a colony of Hakosoar. It is under a more lax control of the same military as it's parent state. The majority of the military officers stationed here were sent here to get them out of the way. The officers who accept the position as opposed to de-enlisting are generally stubborn, believe they can regain favor, or are too obtuse to recognize the message they were being given by the station.
Law: (CR 3-4) Sidearms are allowed, because of the more dangerous terrain (and the government's inability to enforce controls).
Population: Yazirian Outpost. Most of the population of Histran have been relocated there from Hakosoar. 30\% non-Yazirian, many UPF officials.
Society/Culture: Many of the inhabitants of Histran were considered undesirable on Hakosoar. This includes criminal elements, political aggrivators and dissidents, dissatisfied persons who are unhappy with the strict military rule, etc. Many of the members of the military are inefficient and out of favor with the rulers of Hakosoar. Population overflow has also been moved to the planet, though generally the lower echelons of Hakosoar are moved. The planet shares the Argonian language with it's parent planet.
§ Olim:
§ Duae:
§ Minae:
§ Fornax:
§ Ingris:
§ Sedeo:
§ Certus:

## SOLAR MAJOR

Ringar
Moons: None
Gravity: 1.5
Day: 40 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Business, Industry
General Notes: Ringar is a mega-corp planet founded by WarTech Inc. for the purposes of expanding their production capabilities and establishing a secure and exclusive testing sight. Ringar is very heavily guarded.
Terrain/Climate:
Life:
Native Species:
History: Discovered in FY39.
In FY101.7 the Capellan Free Merchants transported half of Landfleet to the Solar Major system in preparation of the Battle of Five Fleets in FY102.
Government: Corp. WarTech mega-corp is the government on Ringar. There is often delay involving offical company policy though because of the tremendous communications lag between the planet and the WarTech HQ on Hargut(Gruna Garu).
Law: (CR 6) Because of the tight security on the planet, visitors and non-security employees are to remain weaponless at all times. Security officers are most often heavily armed.
Population: Vrusk Moderate.
Society/Culture:
¥ City:

## SOLAR MINOR

System History: The Solar Minor system was attacked in FY96 by Sathar Fleets \#2 \& \#3. The unexpected attack was so overpowering that no word of attack was able to be sent to Spacefleet. In FY98.5, most of the remaining population from Circe and Kir'-Kut are evacuated by Sathar warships and transported to Outpost \#1 and enslaved. Strike Force Nova retakes Solar Minor in FY98.8. Half of SFN is destroyed and all of the Sathar holding force is destroyed. Task Force Cassidine joined Strike Force Nova after the treaty talks fail in FY101.3. Four months later the Capellan Free Merchants brought half of Landfleet to the system. It isn't until FY107 that the system is resettled in any scale.

## Circe

Moons: (1) Ulysseus
Gravity: 1
Day: 20
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Agriculture
General Notes: Circe is a mega-corp planet that was colonized by SynthCorp for the purposes of
experimenting with foodstuffs required by Humans.
Terrain/Climate:
Life:
Native Species:
History: The Solar Minor system was discovered in FY78.
The entire system was overpowered by the Sathar Fleets \#2 \& \#3 in FY96 that no word of the attack was able to be sent to Spacefleet. The population of Circe was enslaved and moved to Outpost \#1 in FY98.8.
Resettlement began in full scale in FY107, no longer a mega-corp controlled planet.
Government: Anarchy/Military. The military organization exists only to defend the planet itself.
Everything else is under individual rule. The military as well as the general populace has a high level of anti-corp sentiment.
Law: (CR 1-0) As long as one doesn't draw attention from the military one's activites are generally unnoticed. It is generally agreed that no one can look after you better than yourself.
Population: Human/Vrusk Light. Because of the defeat of the Synth-Corp planetary defenses during SWII, there is a very strong anti-corp sentiment felt by nearly all members of this society.

Society/Culture: Much of the culture of Circe happens online. Nearly all of the inhabitants are frequent users of the planet-wide net system, and are always thirsting for more electronic information. Because of this and the lack of governmental controls, Circe has become a info-haven and repository for vast amounts of data. The usefulness of this data is almost irrelevant to the collectors.
¥ City:

## § Ulysseus:

a§ Artificial Satellites: ASS, RRS
Kir'-Kut
Moons: None
Gravity: 1.2
Day: 18 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: Business
General Notes: Kir'-Kut is a mega-corp planet that was colonized by SynthCorp for the purposes of experimenting with foodstuffs required by Vrusk.

## Terrain/Climate:

Life:
Native Species:
History: The Solar Minor system was discovered in FY78.
The entire system was overpowered by the Sathar Fleets \#2 \& \#3 in FY96 that no word of the attack was
able to be sent to Spacefleet. The population of Circe was enslaved and moved to Outpost \#1 in FY98.8. Resettlement began in full scale in FY107, no longer a mega-corp controlled planet.
Government: Plutocracy. Rule by the 109 richest beings on the planet (in three levels of control), with the term running for 10 years. Though Synth-Corp lost governmental control after the invasion, it is still in control of much of the planet. This stems from being allowed to maintain control of their pre-invasion properties and holdings and because the majority of the returning population after the war were apologists who defended the name of Synth-Corp.
Law: (CR 3-2) Unconcealed melee weapons and pistols are allowed. The majority of the law is for the protection of the wealthy, and thus the police have the power to further limit the weapons and rights of the less wealthy.
Population: Vrusk/Human Light.
Society/Culture: The majority of the population is concerned with wealth and trying to show that wealth whenever possible. Extremely touchy about Synth-Corp and SWII.

## ¥ City:

@§ Artificial Satellites: TS

## STELLA (ALPHA)

## Domus

Moons: (1) Lumina
Gravity: 1.1
Day: 24 hours
Year: 356 days (8544 hours)
Diameter: $12,000 \mathrm{~km}$
Inclination: $22^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: None
General Notes: This is the original homeworld of the human race. The planet was destroyed by full nuclear hostilities during the Blue Plague. Ironically, a the fighting was over the vaccine for the plague. No known complex organisms survived the hostilities which totally destroyed the ionosphere.

## Terrain/Climate:

Life:

## Native Species:

History: During the Tension ( $37 \mathrm{pf}-30 \mathrm{pf}$ ), the threat of nuclear hostilities hung over the planet because of in-system governments bickering over the resources in the system. Domus was quarantined in FY58 due to the Blue Plauge. All life on the planet was destroyed in nuclear hostilities in FY66 due to fighting over the Blue Plague vaccine and its method of distribution. Few off-planet facilities escape the madness that ensued. Following this, the system was neigh-unlivible and soon evacuated permanently. The UPF has some automatic sensors left in the system to check pirate operations and the like.

## Government: None

Law: Verboten
Population: None
Society/Culture:
§ Lumina: The single satellite of Domus which was similarly affected by the nuclear hostilities which destroyed its planet.

## SUNDOWN

## Starmist

Moons: None
Gravity: . 93
Day: 21 hours
Year:
Diameter: 9880 km
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere: $70 \%$ nitrogen, $24 \%$ oxygen, $6 \%$ inert gases
Climate Range: Cool; warm to frigid
Average Surface Temperature: $5^{\circ} \mathrm{C}$
\% Water:
Trade: Education
General Notes: Starmist is a UPF scientific base for the study of alien flora and fauna. It was the source of the Blue Plague. Only Starfleet has knowledge of the star route to Sundown. The nights are very dark on Starmist because there is no moon and few close stars.
Terrain/Climate: Plains: The plains area consists of rolling hills covered by grass 1-2 meters high.
Forest: Trees in the forests of Starmist grow 1-5 meters apart, of various sizes and shapes but most have drooping branches which block vision and hinder movement.
Rifts: Rift walls are approximately 7 km high. Temperature at more the 3 km above ground is subfreezing. Air pressure and temperature drop below life support levels at the top of the rift walls. Life: There are no intelligent, competitive species native to Starmist. The Heliopes, the humanoid inhabitants of Starmist, are from a different system. They were slaves of the Clikks, who were left on Starmist in suspended animation inside an incapacitated Clikk starship. Before leaving, the Clikks subjected the Heliopes to an amnesic mind-wipe. Centuries later, when the power for the suspended animation controls failed, automatic unloading procedures began, dumping the Heliopes on the planet. Heliopes who survived on the planet filled in their missing past by making up legends and stories that eventually became their history. Culture among the Heliopes is somewhat shallow due to this genesis and that they have developed on Starmist for only about 500 years (starting at 450 pf). The Heliope religion focuses around artifacts and relics left by the Clikks. All Heliopes on Starmist are descendants of the original group. There are approximately 200 tribes spread out over 5 large rifts (the ones visited by the Clikks).
Heliopes are superb fighters, and they have competed successfully for food and space with native plant and animal life. Warfare and violence between the various tribes is common. A few villages sprung up
near at the dump sights, where the artifacts were usually found. Villages contain reasonable complex but primitive homes, housing families and their primitive government. The Heliopes who are not villagers are nomadic.
Native Species: Bisron, Cudda, Gasp, Puff-Puckers, Snikker, Wispees
History: The planet Starmist was formed eons ago around an unknown star. Because of a number of factors, including slow rotation, the planet never formed any extensive soil depth. The poor development of soil coincided with the slow development of life forms. However, an orbital instability caused gravitational distortions in the bedrock so that massive splits occurred in the planet's crust. Huge rifts formed in the surface, much like gigantic canyons, many of them miles deep. The planet, unable to hold it orbit around the star, and finally hurtled into a space, a cold frozen ball of ice. After ages, it was captured by its present star, Sundown, taking an orbit somewhat tighter then it's original orbit. Gradually the planet warmed. Water and atmosphere collected in the rifts and they slowly became habitable. Vegetable, insectoid and fish-like forms were the first to appear and are now fairly widespread in the rifts. Mammals and related species are few in number.
The Sathar set up a training base for espionage agents on Starmist, nearby one of the villages. The base was also used for research on bio-genetic constructs. 14 years later in FY50 the planet was discovered by a Frontier merchant ship and evidence of an advanced ancient culture (the Clikk) was discovered. At this time, the Sathar began preparations to abandon the planet. A second return to the planet by a Frontier exploration team (ACE/Stratex) discovered a Clikk ship. The ship was destroyed in the investigation in an atomic explosion. The Sathar base was destroyed in an self-destruct which caused an atomic explosion. A Clikk tank artifact was destroyed by yet a third nuclear self-destruct sequence. (FY51.1.5-7) It was from these explosions that the Blue Plague virus was born.
The system was visited again in FY54, by explatory ships under the UPF and Vrusk merchants. It is at this time the Blue Plague was picked up. By FY56, the Heliope race was extinct on Starmist.
Government: The only government in the vicinity would be that of the UPF outpost.
Law: (CR 0) Any weapons are allowed, as the world is mostly a wasteland.
Population: Multi Outpost.

## Society/Culture:

## THESEUS

System History: 21 Saurian evacuation ships were discovered travelling through this system in FY120 and are currently in a secure orbit around Theseus.

## Minotaur

Moons: None
Gravity: 1.2
Day: 15
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:

Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Business, Industry
General Notes: The majority of the business of the planet is based upon the tourism industry.

## Terrain/Climate:

Life:
Native Species:
History: Discovered by Humans in 326 pf.
Government: Libertarian Democracy. The "hands-off" approach is the key element in Maze's
government. The only area where this has become somewhat challenged is in the area of tourism, the most important trade for the planet's economy
Law: (CR 6) No weapons are allowed on the planet by 'tourists'. The only area where weapons are allowed is in the various "wilds" where sport hunting is done, and this requires a slew of permits, though this process is streamlined to allow tourists to get validation immediately upon paying processing fees.
Weapon play in civilized areas is dealt with harshly to ensure safety of everyone concerned.
Population: Human Heavy
Society/Culture:
$¥$ Maze: Capital city. Headquarters of Starplay Enterprises.
Maze is the largest vacation spot on the Frontier, and home to Ninland (named after its founder, Siot Nin), an amusement park beyond belief.
a§ Artificial Satellites: FSS

## TIMEON

Lossend
Moons: (2) Gloeh, Rond
Gravity: . 7
Day: 72.94 hours
Year: 2165 hours (29 days, 49 hours, 45 minutes)
Diameter: 8014 km
Inclination: $61^{\circ}$
Orbit: 50.0 million km
Atmosphere: 80\% Nitrogen, 18\% Oxygen, 2\% Ar, CO2, N, He, H, K, X, H20, Methane
Climate Range: very hot to very cold, $70^{\circ}-70^{\circ}$
Average Surface Temperature: $4^{\circ}$
\% Water: 42\%
Trade: Agriculture, Industry
General Notes: Location for Tarsus module.
Terrain/Climate: Claims the Frontier's highest mountain peak, Mt. Spire.
Life:
Native Species:
History: First accidentally discovered in 380 pf when a Human colonizing ship bound for Solaris(Whorl) misjumps and is damaged in the (unexpected) asteroid field. The ship is able to land on Lossend, but the
inhabitants have no way of contacting the rest of the Frontier. These original colonizers eventually lose the use of their non-replaceable technology and take to the tanglewalds.

In 233 pf Lossend is discovered by Humans and settled.
The Regiment came to Lossend after hiding for a year in the asteroid system. Having changed their ships, they presented themselves to the Lossend governement as part of the First Common Muster and sought land on Lossend to settle upon.
Government: Athenian Democracy.
Law: (CR 0) The local laws of Lossend provide no effective restriction of weaponry.
Population: Human Light. 2.2 million.

## Society/Culture:

$¥$ Tachton: Headquarters of Tachton Instruments.
a§ Artificial Satellites: ASS

## Asteroid System

General Notes: The wing of Hatzck Naar's pirate fleet known as Regiment fleed to these asteroids during the final battle in which Naar was defeated in 74 pf. They hid here and disguised themselves, making changing the markings and even the aparent design of their ships. In 73 pf , they traveled to Lossend. The Timeon Asteroids are the location of a high security prison facility.

## TRISTKAR

## Denzart

Uninhabitable, scorched.

## Kraatar

Moons: (2)Tivalla, Setarz
Gravity: 0.6
Day: 18 hours
Year: 272 local days
Diameter: 9800km
Inclination: $20^{\circ}$
Orbit:
Atmosphere: Thin
Seasons: 68 days long and affecting average temperature by $+/-10^{\circ} \mathrm{C}$
Ave. Temp.: Temperate zone: $20^{\circ} \mathrm{C}$ (day $=30^{\circ}$, night $=10^{\circ}$ )
Equatorial zone: $30^{\circ} \mathrm{C}$ (day $=50^{\circ}$, night $=10^{\circ}$ )
\% Water: 20\%
Trade: Ag, Ind, Tech (Farming, electronics, metal extraction, glassware)
General Notes: Kraatar is a small world, covered by rugged, mountainous uplands and desert plateaus where the atmosphere is too thin to be breathable. Only in the lowland depressions (flatlands) scattered around Kraatar's temperate zones is the air dense enough to breathe, and only here are there rivers and lakes. Kraatar was first settled was first by Human colonists from White Light in 86 pf.
Terrain/Climate: Kraatar lies in a close orbit to the star Tristkar and has a thin atmosphere. Water covers only $20 \%$ of the planet and there is very little cloud cover. Being near the inner edge of the system's life zone, Kraatar receives large amounts of stellar radiation and temperatures at the equator range from 0
to $60^{\circ} \mathrm{C}$. As a result, deserts occupy most of the equatorial zone of the planet. The majority of Kraatar is covered by high altitude deserts and jagged mountain ranges rising up to heights of 10,000 meters. The atmosphere in the mountains is too thin to breathe without the aid of breathing apparatus, but numerous 'flatlands' exist around the planet, many of which are below sea level. These areas are very fertile and, more importantly the atmosphere here is sufficiently dense enough to allow the various races to breathe without assistance. However, the air is not as dense as most newcomers are used to, and persons attempting any strenuous activity (e.g. running, climbing or fighting) will lose 1 point of Stamina every 10 minutes. If the Stamina reaches zero, they will fall unconscious for $1 d 10+10$ turns. For each turn of rest, they can regain 1 point of Stamina lost this way. Natives of Kraatar are not subject to these effects, but they cannot function in the mountains without breathing apparatus, where unprotected persons lose 1 point of Stamina per turn until dead.
Life:
Native Species:
History: The first Human colonists landed at Gozzorf, on the shores of the Yatiz Sea in 86 pf. Soon small communities were established here, at Quazzt's Depression and in the other flatlands. Searches were made in the planet's mountains for heavy metals, but no rich deposits were ever found, and only a few iron and copper mines were established. Isolated in their communities many of the colonists took to a quiet life, tilling the land for crops and herding the few imported animals. As the years passes, the colonists lost many of their technological skills, and as machinery wore out, they were unable to replace it. Gradually they were reduced to a simple, self-sufficient existence where high technology was a thing of the past.

Few ships visited Kraatar until FY69, when the computer of a Vrusk trade ship suggested Kraatar as a "world suitable for commercialization." After a hesitant meeting, the two races struck up a rapport and the Vrusk traded technological hardware for agricultural produce. The Vrusk soon left Kraatar, only to return later with more machinery to trade with the Humans. Equipped with the latest farm machinery, the Humans were able to increase production, and buy more Vrusk goods. Soon Vrusk trading ships were flocking to Kraatar, trading up-to-date equipment for agricultural products. Many came to trade, but others brought settlers and with them Vrusk trade houses eager for new markets. The trade houses began to establish manufacturing plants and to conduct comprehensive surveys of the planet. This research revealed that the sands of Kraatar's deserts could provide an ideal source of silicon for computer manufacture, as well as producing some of the most beautiful glass ever seen by Vrusk. If cut and polished, the glass scintillates and sparkles with all the colors of the rainbow. Soon Kraatar glassware was sought by Vrusk art lovers all over the Frontier, and rapidly became one of Kraatar's major exports. At the same time, the two seas were discovered to be rich in mineral deposits. As news of these finds spread, more Vrusk trade houses came to Kraatar to exploit its new found wealth. In the early years, both races benefited from these developments. The Humans were supplied with much needed technology, and the Vrusk had markets both on and off planet with which to enrich themselves. The Vrusk trade houses established hospitals and a university at Gozzorf. They discovered the remains of the original Human settlers' ship, and set about restoring it. It would never fly again, but it was lovingly rebuilt by the Vrusk with a museum around it to honor the Humans on Kraatar and to display Vrusk art collections.
As more farm machinery became available, fewer Humans were needed to work the land, freeing them
for other activities. Many of them journeyed to the towns and cities where they found employment in the Vrusk electronics, glass and metal-extraction factories. Many others found work building the monorail which now circles the planet. It was in the factories that dissension first grew among the Humans who were unable to cope with an urban life-style. As the Vrusk became more established, more of their racial beliefs were introduced. To a Vrusk it is second nature to allow a trade house to determine one's life but, to many of the Humans of Kraatar, this was abhorrent. Used to a pastoral existence, with order imposed only by the seasons, many Humans refused to accept the full ramifications of Vrusk society. Dissatisfaction was first shown in a desire to return to the land, but Vrusk technology had changed the world. Now one machine could easily do the work of over a hundred laborers. A return to the old farming techniques was impossible, for Humans now relied heavily on Vrusk technology to maintain their farms and standard of living. Unable to return to the farms, most Humans have now adjusted to their new lives and accept the presence of the Vrusk as employers; but attempts to impose Vrusk beliefs have not been very successful. Few Humans have adopted Vrusk company names, and attempts by Vrusk executives to instill in Humans the Vrusk sense of belonging to a trade house have met with little success.
Many Vrusk executives are confused by these reactions; they see the situation as one of mutual interdependence--the good of the trade houses is the good of all, Humans and Vrusk alike. The trade houses offer medical, educational and recreational facilities to both their Vrusk and Human workers. Surely this is the road to harmony and prosperity for all? Yet many Humans insist on moving from one trade house to another, requiring new housing and causing disruptions in daily life and production. To help with this clash of cultures, many Vrusk trade houses have employed Human advisors in an attempt to sort out the problems as equitable as possible. For years it looks as though this approach was working; Vrusk and Humans began to work closely together and all benefited.
However, some Humans were determined to stop their fellows becoming ever more Vrusk-like, and $\left(^{* * *}\right) 30$ years ago the Kraatar Liberation Corps (KLC) was secretly founded by Jack Legrange and David Dever. The Commercial Council, a group of Vrusk executives monitor the situation on Kraatar, hoping for a return to the harmony and stabilization of life on Kraatar.
Government: The ruling body, a Syndicracy, of Kraatar is called the Commercial Council. The Council consists of representatives from Kraatar's trade houses. The major trade houses each have a representative; the lesser ones share representative between them on a rotating yearly basis. The Council is responsible for offworld relations, and major policy decisions concerning Kraatar, but is primarily concerned with co-ordinating the activities of Kraatar's trade houses. Local governments on Kraatar is mostly left up to trade houses or Human regional governments for more specific law, but is of course subject to the Commercial Council. The Commercial Council has contracted the RIK trade house to act as Kraatar's police force.
Trade houses are as common on Kraatar as they are wherever Vrusk are found in the Frontier. Six major trade houses exist on Kraatar, as well as hundreds of smaller ones.
Law: (CR 3) All weapons other than pistols or melee weapons are illegal. Persons found in possession of other weapons will be arrested, have their weapons confiscated and be fined a minimum of 500 Cr . Law enforcement is performed by the RIK trade house, under contract from the Commercial Council. Population: Vrusk/Human Moderate (60\% Human; 38\% Vrusk; 1\% Dralasite; 1\% Yazirian) Society/Culture:
$¥$ Azzort: This city occupies the second smaller flatland of the northern hemisphere and has monorail access.
$¥ \underline{\text { Bunada: }}$ This city is located in Quazzt's Depression on the southern shore of Quazzt's Sea. It has no direct monorail access.
$¥$ Clarist: A small city located on the small flatland in the southern hemisphere as Eldarg, no monorail service.
$¥$ Eldarg: A small city located on the small flatland in the southern hemisphere as Clarist, no monorail service.
$¥$ Gozzorf: Headquarters of Ral'Ik'Ka (RIK), Sik'Triksta (ST), and Vist'Lat (VL) trade houses. Population of approximately 1 million (divided more or less evenly between Human and Vrusk, with most of the small Yazirian and Dralasite population of the planet) and is the largest settlement on Kraatar. It was here that the first Human settlers landed, and is still the site of the planet's only starport (Gozzorf Starport). Gozzorf University which provides higher education for free to all natives of the planet is also located here. A monorail run by Sik'Triksta trade house links all areas of the city (as well as the transglobal lines which link most of the cities on Kraatar). Gozzorf is zoned into a number of districts, connected by monorail and roads: Jedsis, Business District, Industrial District, Pstriztz'kipur, and Fioust.
å Jedsis: Jedsis is the name of the area containing the starport and is home to numerous transients, plus indigenous Humans and Vrusk who have opted to stay outside mainstream Vrusk society.
å Business District: The Business District is located on the shores of the Yatiz Sea and includes numerous shopping plazas, several well-appointed hotels and important office buildings. Most Vrusk trade houses have their offices here. The district is usually crowded with Vrusk and Humans.
à Industrial District: The majority of factories and warehouse are located here. A small number of workers actually live here, but most Vrusk and Human workers commute here every day on the monorail.
å Pstriztz'kipur: Pstriztz'kipur is where the majority of the Vrusk executives live. It is a beautifully ornamented area. Open parklands and gardens are common, and its wide boulevards are lined with statues and sculptures pleasing to the Vrusk. In times of unrest this area may be out of bounds to anyone who does not have an entry permit.
å Fioust: The majority of Vrusk and Human workers live in Fioust. Although not as picturesque as Pstriztz'kipur, Fioust is still a pleasant area. Most of the workers live in three-story houses.
$¥$ Gyndon: City located on the Yatiz Sea and headquarters of the Adq'Bizz (AB) trade house. It has the western junction of the North Circle and the Southern Loop monorail circuits.
$¥$ Hargizt: Located in the uplands in the southern hemisphere. Monorail.
$¥$ Hift'Izt: Home of the computer and electronics industry this city is the headquarters of Gst'Gar'St (GGS) trade house. The city is located near the equator, south of Gyndon and connected to the transglobal monorail.
$¥$ Jeskeal: Located in the uplands of the northern hemisphere, this city has the eastern junction of the North Circle monorail line and the Southern Loop.
$¥$ Mariga: This uplands city has monorail access.
$¥$ Quazzt: Quazzt is a town of some 500,000 inhabitants ( $75 \%$ Human/25\% Vrusk) located in Quazzt's Depression. It is primarily a farming town with some light industry and is connected via transglobal monorail.
$¥$ Sarnist: Located in the uplands on the eastern edge of theYatiz Sea. Monorail.
$¥$ Stindarg: This city is the lone established city in a small flatland located in the southern hemisphere. The transglobal monorail runs through it.
$¥$ Toffaak: Toffaak is situated on the far eastern edge of the large flatlands which is part of the depression which contains the Yatiz Sea. Monorail.
$¥$ Trizz't: This city, located south of Gozzorf City near the equator in one of the large sand deserts, is headquarters of Clic'Aqat (CA) trade house and the glass making industry. Connected via transglobal monorail to Gozzorf City. The the main part of the city is encased in a dome made with Kraatar glass. Some buildings and other areas have seperate domes.
$¥ \underline{\text { Worfgar Bay: On the eastern shore of the Yatiz Sea in the flatlands. Monorail. }}$
§ Tivalla: Inner moon. The Shomtz Mining Colony is located here.
Atmosphere: None
Gravity: 0.2
Diameter: 1200km
\% Water: 0\%
§ Setarz: Outer moon.
Atmosphere: None
Gravity: Negligible
Diameter: 120 km
\% Water: 0\%

## Shridkai Belt

Asteroid belt

## Tridar

Gas giant with many moons.

## TRUANE'S STAR

System Notes: Pale/New Pale is the starting point of the only known starship route through the Xagyg Dust Nebula. Currently all travel to Rim planets must pass this way.
System History: Discovered in 140 pf. Pale is settled first by miners after its mineral wealth. The demand for food led to the settlement of New Pale in 135 pf.
Up until 109 pf, the governments of the two worlds were independent of each other, yet cooperated well. Pale knew its existence depended upon the continuation of food supply shipments from New Pale, the cheapest available external food source. New Pale relied on this demand for its food as its main source of income. In 109 pf the War of the Pales occured (see Pale for details).
In 6 pf, the Truane's Star system was attacked by the Sathar in the beginning of the First Sathar War. Within a year Pale and New Pale defenses fell. Everyone who could fled to Dixon's Star in the Great Exodus.

## New Pale

Moons: None
Gravity: 1.4
Day: 20 hours
Year:

Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Agriculture
General Notes: New Pale is an earth-like planet rich in vegetation and animal life. However, this planet is far more dangerous than Pale; huge, vicious dinosaurs roam its plains, jungles, and skies, very much like prehistoric earth. New Pale was settled by Humans to supply food to Pale.
Terrain/Climate: New Pale has many high plains on plateaus with thick gree forests and crystal lakes. Blue mannakan fields surround these plateaus in agricultural areas like a great ocean dotted with green islands. The planet is generally earth-like and pleasant.
Life: Mannakan is the most important plant on New Pale. Mannakan provides food and fuel for New Pale and is exported to Pale and the rest of the Frontier. This tassled blue plant is very efficient, the leaves are packed with protiens, the tuber roots are pure starch, and the rest of the plant is processed for alcohol fuel. Mannatodes, a root eating bacteria, and fieldbears, a largish bearlike omnivore, are the two major pests which attack Mannakan. These pests are controlled with a spray which kills mannatodes and keeps fieldbears from breeding.
The large dinosaurs are generally kept away from the populated and cultivated areas by sonic devices. The forests are teeming with life. Squirds, a feathered and furred bird creature that are commonly kept as pets, fill the air with their chatter-chirp. Whistlies are the alarm system of the forest, filling the forest with a loud whistling howl when disturbed. Whistlies are furry toad like creatures with round lipless mouths and an owl like head. Their fur coloration blends in with the colors of the forest floor. They can be quieted by holding a motionless hand in front of them.
Native Species: Fieldbears, Mannakan, Mannatodes, Squirds, Whistlies
History: Colonized in 135 pf when the demand for food on Pale made it profitable enough to risk the dangers. The colonizers consisted of Humans, the majority of which were Human Superioritists(HUSPs). This eventually led to the War of the Pales (see Pale).
The Sathar attacked in 6pf, and both planets fell the next year, leading to the Great Exodus to Dixon's Star, as the planet was evacuated to avoid the deadly Sathar.
Government: The post-SWII government is a theocracy.
Law: (CR 2) Weaponry is allowed as it is necessary for defense against the many dangerous lifeforms which inhabit the planet.
Population: Human Light.
Society/Culture:
$¥$ Station Alpha: Originally an agricultural station.
$¥$ Station Gamma: Originally an agricultural station.
$¥$ Station Epsilon: Originally an agricultural station.
$¥$ Truane City: Main Starport
å Commercial Center:

## å Computer Center:

å Entertainment Center:
å Security Center:
@§ Artificial Satellites: ASS
Pale
Moons: (3) Ember, Forge, Insipid Little Planetoid
Gravity: 0.9
Day: 55
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water: 63\%
Trade: Industry, Mining
General Notes: Pale was the first planet in the system to be colonized because of it's great mineral wealth.

Terrain/Climate: Pale is a cold planet with seasons defined only by the movement of polar ice over its equatorial oceans.
Life:

## Native Species:

History: The system was discovered in 140 pf, and Pale was very soon colonized by miners. The demand for food on Pale soon led to the colonization of New Pale because of it's abundant food supplies. When the Zebulon system was discovered, in 113 pf, the Pale government was able to purchase the rights from the Human merchant who discovered the system accidentally and provided him a remote island on New Pale where he could be watched. Pale's government created a Planetary Research and Development division to open up the new star route, and launched a deep-space robotic probe to explore the Zebulon system. The probe reported astrophysical data on the system and it's planets. When it was discovered that great mineral wealth existed on Volturnus, Pale became eager to colonize the planet. Because Plae itself was an ore-rich world, it already had many mining companies in operation on it. The Research division began taking bids, and the resulting competition was fierce. The contract was awarded, in 110 pf, to a healthy company called MINER, and plans and negotiations went on for a year and they planned to begin settlement in the next year.
Then two calamities struck the project in 109 pf, causing the whole thing to fall through. First, New Pale began to receive non-human colonists from Pale. A majority of Humans on Plae were HUSPs (a slang term for persons believing in a racist political policy called Human Superiority). The HUSPs preferred this racially isolated planet and didn't want it "contaminated". But Pale used military force to bully the weaker government into allowing other races to settle there. Pale saw this as a way to increase food production on New Pale and perhaps drive food sosts down. Several months later, the HUSPs banded together and began terrorizing hte new colonists, also attacking Pale's "Colonial protection" forces. New

Pale thus declared itself to be in a state of war with Pale.
The result of this was Pale's transference of money from "unnecessary" projects and personnel to the direct defense of its critical food supply source. Money from the Planetary Research division was diverted to this cause because it was felt profits from Volturnus operations would not be realized fast enough to help the war effort. Pale also believed that, if it could gain full control of New Pale, it could become a much more powerful stellar government.
The other calamity that struck was the kidnapping of the head of MINER, Hatzck Naar (Yazirian), who was later reported killed when the demanded ransom was not paid. His body was never recovered, and his will called for the liquidation of MINER, with all monies then deposited into a private bank account. It was widely believed that a rival company was responsible for his death. Because of the liquidation of the company and the war, records and personnel involved with the Volturnus project were lost and soon forgotten.
Hatzck Naar secretly retained all classified information on Volturnus and the Zebulon system. He had rigged his kidnapping and death, then assumed the identity of a pirate. His initial intent was to set up an illegal mining operation on Volturnus before the government of Pale could do so. To help realize his plas, he drew on the private bank account his will had set up. but as time went on, he instead became involved in pirating operations.

The war on New Pale consisted of a series of HUSP-led terrorist attacks on food service shipments to Pale. Pale was forced to continue to spend money on ensuring its food supply remained secure. This became difficult because Pale had an overabundance of resources which were in low demand from approximately 105-100 pf. It suffered an economic depression during this time, and many Pale-based mining companies went out of business. One mid-sized corporation, based in Point True, began to acquire these small companies hoping to gain a planet-wide monopoly. The corporation was Streel; by 100 pf, Streel completely controlled all mining operations on Pale.
Pirate activity increased in nearby systems starting about 103 pf, when Hatzck Naar's pirates began to prey upon merchant ships.
Aware of Streel's takeovers, Hatzck Naar approached Pan-Galactic and worked out an agreement with it in 99 pf. Naar, using bases in Gruna Garu, Prenglar, and Dixon's Star systems, ran weapons shipments from various weapons corporations to the HUSPs on New Pale. Pan-Gal financed the cost of the weapons, while Naar furnished the ships. Gun-running proved profitable for both PGC and Naar, allowing the latter to become a potent force. Naar was able to develop Volturnus before Truane's Star could do it (and unaware that Streel and the Pale goverment would lose all traces of information about Zebulon), while keeping Streel busy investing money in the war effort instead of in business projects like the PGC did. This activity went on from 99-90 pf. Naar expanded his pirate bases to Araks, Athor, and the Scree Fron systems. In 91 pf Naar began putting his Volturnus mining plans into operation. Streel struggled through the years of war, yet continued to grow into a larger corporation despite it. In 90 pf, in cooperation with the Pale Militia, Streel made an effort to end the war by pouring millions into the militia's coffers. Confronted by an army of far superior quantity and quality, the HUSPs were soon crushed out of existance, despite the best efforts of PGC and Naar to save them. New Pale became a stabilized planet. Its new government then joined Pale's, and the two began a united rulership of the Truane's Star system.
The Sathar captured the entire system in 5 pf in the first move of the First Sathar War. The Great Exodus
to Dixon's Star saw the flight of refugees who were hoping to avoid the destruction and capture of their planets.
Pale suffered massive population losses due to the Blue Plague and was quarantined from FY62 to FY67. Government: Socialist. Citizens of Pale are very heavily taxes, but the government provides free education, entertainment, medical care, utilities, etc. Visitors are allowed to use these same services free, but if they stay more than two weeks they will be taxed accordingly. if they choose not to pay, they are no longer allowed any government services and are taxed for any purchases as well. There is a private free market in effect for goods and services which either are not provided by the government or for higher quality goods and services (luxuries such as restaurants, etc.)
Law: (CR 6) No weapons are allowed to be carried by the general populace. Police have access to weapons but do not carry anything more than clubs in general.
Population: Multi Heavy.
Society/Culture:
$¥$ Point True: Capital city. Original headquarters of the Streel Corporation.
§ Ember: Colony.
§ Forge: Military.
§ Insipid Little Planetoid (also ILP): When Pale was discovered, the explorers divided up the rights to name the celestial bodies. The last being to pick a name was so sickened by the inspiring and slick names that he declared the third moon a name that would surely stand out from the others. Discovering his choice after it was too late to stop the processing, his companions spaced him.
a§ Artificial Satellites: SF, DS III, TS
a§ UPF Space Fortress Pale:

## WALLER NEXUS

## Mahg Mar

Mahg Mar was recently discovered and is not yet well explored. It has already gained notoriety, however, as the site of the first UPF spaceship mutiny (on the Eleanor Moreas). The star route to Mahg Mar is a guarded secret of the UPF's Planetary Survey Administration.

## WHITE LIGHT

Wheeling
550,000km from White Light
Gollywog (aka: Clarion)
Moons: None
Gravity: 0.9973
Day: 50 hours, 5 minutes
Year:
Diameter: 11,679Km
Inclination: ${ }^{\circ}$
Orbit: 950,000Km radius
Atmosphere: 60\% nitrogen, 24\% oxygen, 16\% other gasses
Climate Range: Humid throughout, Warm to very hot

Average Surface Temperature: $30^{\circ} \mathrm{C}$
\% Water:
Trade: Mine
General Notes: Gollywog is a flat, wet world on the edge of the White Light Nebulae. The resources which have made Gollywog a wealthy planet include uranium, which is found in all the low mountain ranges; high quantities of petroleum beneath the mud flats; and a few rich collections of bauxite (aluminum ore). The major industry of size is the petroleum refining industry which provides a wide variety of plastics.
Terrain/Climate: Most of the surface of Gollywog is covered by a large, flat land mass that is broken by eight seas and a number of huge lakes. A very few mountain ranges have risen above the surface, but most of Gollywog is covered by broad plains and mud flats. A few of the largest mud flats are thousands of kilometers in diameter. Constant rain, lasting for weeks, is the usual weather condition. Generally, these storms are punctuated by brief periods of fair weather before clouds collect and the showers begin again. At any one time, rain will be falling over $90 \%$ of the planet.
Life: No native animal life has been discovered on Gollywog. Much of the planet is covered with vegetation, but all of the plants are primitive such as lichens, mosses, algae and ferns.
History: Humans were the original colonizers of the planet known as Clarion in 364 pf. They are still the primary settlers although the planet has collected significant populations of the all the Four Races. The monarchy government was established in 354 pf and has continued ever since.
Humans from the White Light system were sent to colonize Kraatar(Tristkar) in 86 pf.
Because of the wet nature of the planet, the derogatory name Gollywog was attached. This name is almost the only one used for the planet, despite years of resistance by the residents. At one time the use of the name could provoke violence from loyal and peaceful citizens. Clarion is still used by some organizations despite the official name being Gollywog since it was officially changed in FY23. Gollywog suffered massive population losses during the Blue Plague. King Leotus XIX took the throne when his mother died of Blue Plague in FY62. His first act of office was requesting a quarantine (which was going to be declared by the UPF CoW shortly, anyway) to protect others from his mother's fate. The quarantine was lifted in FY67.
Strike Force Nova arrived in the system in FY96.7, awaiting a Sathar attack.
Government: All of Gollywog is ruled by a single government. This government is a capitalist monarchy which traditionally has enjoyed wide support form the population. The current king, Leotus XIX, has ruled since FY62 and soon will no doubt abdicate in favor of his daughter, Leotia XX. The Leotus Line has held the throne for nearly 500 years, always passing the crown from parent to child. There are a few agents of unrest, however. Leotus rules the planet through an elected parliament of 100 seats. Although 70 to 80 of these seats consistently support the king in all decisions, the remainder of the seats are held by the Liberation Party, which wishes to end the monarchistic government of Gollywog. The Liberation Party is rumored to support some of the pirate bands that are known to lurk in White Light's Asteroid Belt.
The Royal Marines are the Space Militia of Gollywog and are sworn to the crown of Gollywog. The Royal Marines consists of about 500 personnel and six ships ( 5 assault scouts (the GMS Falcon, Flitter, Osprey, Swallow, and Wasp) and 1 frigate (the GMS Leo)). Only 100 of the Marines are actually crew members; the remainder are station-based support personnel, such as technicians, computer programmers and
station police. The hierarchy of rank among officers is: Commander, only one individual hold this, the highest ranking officer position, usually a member of Gollywog's royalty; Captain, three officers hold captain's rank, the captain of the frigate Leo and two officers on the commander's staff; Lieutenant, many officers on the commander's staff as well as the officers in command of the assault scouts; Junior Lieutenant, consisting of most of the skilled crew members aboard the Royal Marine ships they also lead boarding parties; Midshipman, the rookies among the Royal Marine officers, generally not allowed to command enlisted men. All Royal Marines wear a holstered WarTech Ke-1500 and a skiensuit of Royal Marine uniform design at all times and an albedo screen when on duty. Other sidearms are allowed and ship boarding party members are furnished a ranged and a melee weapon of their choice. The Commander of the Royal Marines is David Arconium (Human), Duke of Hiatia, a grizzled veteran of the Royal Marines, having served more than 30 years. He is feared and respected throughout the ranks. Immediately after entering the Royal Marines, new enlistees are run through a brief training course on Clarion Station. This course lasts 20 days, and teaches the fundamentals of militia routine and standard procedures for dealing with various problems. Members of the Royal Marines live in a large area of the residence deck of Clarion Station. Actually spacers get their own cabins while lower level specialists are required to bunk two to four to a cabin. The Royal Marines have their own dining hall, but they may do their own cooking if they wish. Each cabin has a small kitchen area in it for this purpose. A large recreation area also is available for the use of the Royal Marines.
The Royal Marines main responsibility is checking incoming freighters cargo for appropriate taxation and confiscation of contraband. Because the majority of the government's income is from these taxes, this is a very important function. Contraband cargo and the penalties for importing are: Personal Weapons (20 to life), Heavy Weapons (death by vacuum), Streel property (10 to 20), Raw Uranium (5 to 10), Sathar or Sathar agents (death by vacuum), and addictive drugs (10 to 20). The Royal Marines are also responsible for the security of Clarion Station and while not on duty or working as police they may be called upon when trouble breaks out.
Law: (CR 5) Some significant laws exist on Gollywog that have contributed to the success of the monarchy. Trade with other systems is encouraged, and is profitable enough that most merchants do not mind the high tariffs assessed to all imports. Companies working on the planet's surface must demilitarize all operations, and this has contributed greatly to the state of perpetual peace that the planet has known.
Streel Corporation was banned from the planet for 20 years. Only *** eight years of this sentence remain, but already the rumors of subversive Streel activity are common. There are also reports that Streel is a heavy contributor to the coffers of the Liberation Party. Because of the UPF charter, the sentence against Streel does not extend into space, so the corporation has an active office on the commerce station orbiting Gollywog.
Population: Human Heavy. 4 billion. The population of Gollywog is centered in 12 great cities, each with a population measured in the billions.
Society/Culture:
$¥$ Efore: Headquarters of Shomtz Exploration, and the orgin of the original settlers on Kraatar(Tristkar) which is still of major public interest.
$¥$ Moline: Gollywog's major city. Base of operations for Eversafe Enterprises.
$¥$ Valentina: The Throne City where the incredible palace of the Leotine rulers sprawls over dozens of
square kilometers. Here, also, is the headquarters of the surface-based Royal Guards, the planetary militia. This militia numbers only a few thousand men, yet it has never been defeated in any land combat fought throughout the planet's generally peaceful history.

- ${ }^{\text {§ Artificial Satellites: SF, DS II, TS(4), AGS(4) Wheeling majestically through space, hundreds of }}$ kilometers above the planet's surface, are the Gollywog Stations. Fortress Redoubt, a major UPF base, is the largest. The others include a large commerce station (Clarion Station), a Class III spaceship construction center, and a half-dozen smaller research and observation stations.


## å UPF Space Fortress Redoubt:

a§ Clarion Station: TS(4) This spacestation consists of a docking hub, a residence deck, and a business deck. Elevators connect the three sections, with a 5 minute ride from the docking hub to the residence deck, and approximately 10 second ride from the residence deck to the business deck. There are additional mini-elevators between the residence deck and the business deck. Royal Marines are often found on their leisure hours on the business deck. The Royal Marines are in charge of station security. There is a separate branch responsible for police work, but all Royal Marines in the area can be called in to help when trouble breaks out.

A starship arrives at Clarion Station about once ever 100 to 200 minutes. Shuttles leave for the planet even more frequently. This heavy traffic brings thousands of characters of all four races through the stations, so huge crowds can be seen mingling about on the business deck at all hours with frantic haste. All of the major corporations in the Frontier have offices at Clarion Station. Agents for these companies can be encountered throughout the business deck. Independent freighter owners and pilots are also common, searching for cargo or buyers. Nightclubs and restaurants of all sorts are common on the station, from the cheapest dive to the most elegant dining room. A dinner can be purchased from 5Cr to 200Cr. Many places have live music. The 'Dance and Dice' is a favorite hangout for spacers of all types. Persons can try their luck gambling the minimum bet is 50Cr. Payoffs are (d100) $00,25 \mathrm{x}$ bet; $99,10 \mathrm{x}$ bet; other doubles, $7 \times$ bet; other result, nothing. There are rumors that the dice are the 'Dice and Dance' are not always honest. Of course, the club keeps a number of Goons on hand to reason with players who do not understand or appreciate such tactics.
-§ Ferno Station: AGS(4) This station produces plant nutrition for the planet Gollywog. Leot
1,700,000Km from White Light

## Asteroids

This small belt of asteroids spans the area from $2,850,000 \mathrm{Km}-3,000,000 \mathrm{Km}$. These asteroids may be the home of pirates rumored to be receiving aid from the Liberation Party as well as Streel Corporation.

## Demil

6,900,000Km from White Light

## WHORL (GAMMA)

## Solaris

Moons: None
Gravity: 1.00
Day: 20 hours
Year:

Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Business
General Notes: Go here. It cost me $\$ 22.50$. Have fun. Or else.

## Terrain/Climate:

Life:
Native Species:
History: Solaris was discovered in 383 pf by Human explorers. It was quarantined in FY58 due to infection with the Blue Plague virus. Many inhabitants died before the cure was discovered and the Plague was eradicated in FY67.
In FY96.8 the Sathar Fleet \#2, having just defeated half of Task Force Prenglar, moved into this system. It was soon engaged by Strike Force Nova from the White Light system and the remaining ships from Task Force Prenglar. The Sathar withdraw into the White Light Nebulae.
Government: Confederacy.
Law: (CR ) as box
Population: Multi - Human Moderate.
Society/Culture:

## WOTOGON (DELTA)

System Notes: It was here that Hatzck Naar's pirate fleet was finally defeated by the First Common Muster. Naar was ejected into space and slowly boiled in his spacesuit as he fell toward Wotogon.

## Lomigleeb

Moons: (1) Daal
Gravity: 0.802
Day: 32 hours
Year: 500 days (16,000 hours)
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade: None (Special: Mining)
General Notes: This is the homeworld of the Dralasites. The Blue Plague mutated once in the system and wiped out most life on the planet.
Terrain/Climate:

Life:
Native Species: Dralasite
History: Lomigleeb was quarantined in FY58 during the Blue Plague outbreak. The following year the plague infiltrated much of the ecosystem. A saturated system reacted with the Blue Plague and a change on the genetic level occured. Everyone on the planet died in the upheaval, which changed even the geology of the planet. The world is permanently set off limits as the plague infection, though changed, is infectious to nearly all biological organisms. The new existance of the Plague on the planet is different than that of the Blue Plague and cannot be cured.
Government: UPF. based upon Crystal Singer/Kilashandra by Anne McCaffery, this is where some really important crystal is mined. Nearly no one is aware that this system is still in use any more than the other homeworlds.

Law: Verboten
Population: None (Special: Multi Outpost).
Society/Culture:

## § Daal: Colony

## ZEBULON

System History: First discovered when a Human merchant's ship misjumped into the system from Truane's Star in 113 pf. He immediately returned and sold the information to the Pale government. The next year, the government of Pale sent out a robotic probe to explore the system's mining potential. The system was officially discovered in 46pf, when Professor Alorne Zebulon's mapping expedition found it. They discovered the empty towns and outposts which Hatzck Naar's pirates had left behind them on Volturnus, which was soon settled. Anker was noted, but not settled until 41 pf.

## Anker

Moons: (1) Plato
Gravity: 0.9
Day: 20 hours
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ}$
\% Water:
Trade: Education
General Notes: Anker is the site of the University of Zebulon, the Frontier's largest and most prestigious institutions of learning. The entire planet has been set aside for the University as well as one of the Frontier's largest zoos.

## Terrain/Climate:

Life:
Native Species:

History: Though this planet had been noted when the system was discovered in 46 pf , it was not settled until 41 pf when Alorne Zebulon, finished with mapping the Xagyg Dust Nebula, chose the planet as the place to found the University of Zebulon.
The University of Zebulon is receiving funding from most of the worlds on the Frontier, in FY106 following the Second Sathar War. Its facilites on Anker increase over the next 20 years until they are larger than most Frontier cities.
Government: The only government on Anker is that of the University of Zebulon. It is a bureacratic meritocracy. Those wishing to enter into the administration of the University are subjected to a variety of tests which evaluate the skills and abilities of the candidate. These allow the University to rate the individual as to how well they can perform any of the jobs which they they are interested in.
Law: (CR 6) No weapons are allowed.
Population: Multi Moderate.
Society/Culture:
$¥$ University of Zebulon: Larger than most Frontier cities.
$\S$ Plato:
a§ Artificial Satellites: RRS

## Volturnus

Moons: (2) Leo, Lulu
Gravity: 1.0013
Day: 24 hours, 3 minutes
Year:
Diameter: 12,895
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere: 78\% nitrogen, 21\% oygen, 1\% argon
Climate Range: Hot, arid to humid
Average Surface Temperature: $25^{\circ} \mathrm{C}$
\% Water:
Trade: Business, Industry
General Notes: Volturnus is a multi-cultured planet full of adventure. The Eornic robots of old have evolved into today's Mechanons. The few Mechanons who remain on Volturnus are hostile toward organic life forms. Since it became a UPF system, the Mechanons have had many social upheavals, including the exodus that lead to the founding of Mechan.
Terrain/Climate: Named after the Greek god of the southwest wind, Volturnus is a hot, dry world with many types of hostile terrain. The endless deserts, rugged mountains, volcanic wastes, and dangerous salt flats are constantly scoured by a stroung southwesterly wind. Despite these harsh conditions, rare patches of forest and even a few lakes have managed to maintain a perlious existance.
Life:
Native Species: Army Rats, Funnel Worm, Land Whale, Mechanon, Megasaurus, Queequeg, Sand Shark, Strangler Chutes, Tomar's Horses, Winged Rippers
History: An Eorna escape/colonizing ship landed on the lush planet in 593 pf. The life on the planet, however was incompatible with the Eorna physiology, lacking certain proteins they required. The Eorna
then set about to leave a progeny of robots and began a program of robotic development which outlasted them when they became extinct on the planet in 588 pf. This eventually led to the develop of the first sentient Mechanon in 580 pf.
The system was first discovered by the Frontier races when a Human merchant misjumped to the system from Truane's Star in 113 pf. When he returned to Pale(Truane's Star) he sold the location to the government of Pale. The following year Pale launched a deep space probe to explore the system. In 110 pf, the MINER corporation won the bid to develop the ore rich system for Pale. In 109pf, though, the head of MINER, Hatzck Naar, was apparently kidnapped and murdered. MINER was liquidated as per his will, and all the records about the mining operation are lost due to the War of the Pales. In 91pf, Naar finally begins his mining operation with the funds created from running guns to the HUSPs on New Pale. This becomes the base for his pirating operations and helps to build his fleet which began outright assault on Prenglar and Cassidine in 79pf. When Naar's fleet was destroyed in 74 pf, some 'support crew' were left stranded on the planet.
When the system was officially discovered in 46pf by Professor Alorne Zebulon's mapping expedition, they discovered the empty towns and outposts*** which Naar's pirates had left behind them. These habitations were quickly explored and settled.
The Mechanon's anti-biological life prejudices and the menace they represented first came to the attention of the UPF in FY65, during the Blue Plague. Because of the timing of this incident, it was not dealt with. The Mechanon Revolt occurred in FY75. A full-scale war is avoided only through quick action on the part of Star Law. In FY84, the Mechanon civilization underwent an upheaval. The majority of peaceful Mechanons migrate into the undeveloped space between Scree Fron and Dixon's Star. In FY91 they discover the Mechan system.
The first Sathar move during the Second Sathar War was to swarm through the Xagyg Nebula and attack Volturnus. New planetwide battle tactics were used (such as massive use of diversionary, seeded monsters and cybernetically controlled creatures). This was a feint to draw the Spacefleet to the Zebulon system. Task Force Cassidine is dispatched to Zebulon. This feint is crushed in FY96.6. The UPF then realized how vulnerable it was to land based attacks.
Government: Anarchy. Because of the small population on the planet, there is no governmental control. Law: (CR 0) There are currently no restrictions upon the weaponry allowed on the planet. Though of course Star Law has some jurisdiction upon grave infractions.
Population: Multi Light.
Society/Culture:
§ Leo: Reddish-orange. Orbits in 3 days.
§ Lulu: Bluish-silver. Orbits in 27 hours.
a§ Artificial Satellites: ASS

## Ebony Eyes

Binary black hole located two lightyears from the Kar (ie epsilon) system.

## Formad Cluster

## Greater Morass

Mapped in 204-158 pf.
When the area beyond the Greater Morass claimed hundred of exploration vessles (31-13 pf), exploration ceased and the area is named the Vast Expanse.

## Lesser Morass

Thirty-two exploration vessles are lost trying to map the Lesser Morass from 127 pf to 119 pf. Only the area between Scree Fron and Truane's Star is mapped.
The Rim side was mapped FY120-125.

## Muld Nebula

## Outpost \#1

A moon orbiting a gas giant in a system between Solar Major and Solar Minor. Found by the Sathar in FY95, when construction began upon a moon-wide military and industrial complex intended as a permanent base for incoming Sathar supply ships and troops.

The remains of Sathar Fleet \#1 arrive in FY97 prepared to defend Outpost \#1 to the death. The outpost was detected in FY98 by a Flight long-distance probe. Soon after, the remains of Sathar Fleet \#2 arrives. Despite the desperate shortage of supplies caused by the Flight blockade and the losses from previous engagements, the Sathar have created a formidable fortress from the world by FY98.3.

Sathar agents steal the Mist Stone (a sacred Cappellan icon) and the original copy of Reflections of a Humble Servant (considered by Humans to be the definitive philosophy of Dralasite civilization. Circe and Kir'-Kit both in the Solar Minor system have much of their populations evacuated by the Sathar and moved to Outpost \#1 as slaves. These three incidents combined assure that Outpost \#1 is not taken by orbital bombardment.

After stopping reinforcements from reaching Outpost \#1 in FY99.1, the Flight(Wing \#1) now travels to Outpost \#1 with Task Force Prenglar to join the siege. This wing soon gains notoriety and becomes known at the Raging Rimmers. Wing \#2 takes up the blockade position.
The Sathar begin mining operations on adjacent moons to Outpost \#1 in FY99.5.
Dralasites and the Coalition insist that a diplomatic mission be sent to Outpost \#1, and by FY99.9 the meeting takes place with non-Sathar agents representing the Sathar interests. These talks are held for 18 months with no results. The Sathar strengthen their defenses and repair their ships during this time. The Battle of Five Fleets occured in FY102. Task Force Prenglar, Wing \#1, Task Force Cassidine, and Strike Force Nova attack the system. They spend the entire year destroying the remnants of the Sathar fleets, the minefields orbiting the planet, the small fighter squadrons the Sathar captured from Solar Minor, and the moons' mining and defensive operations. FY103-105 is spent in the Siege of Outpost, primarily a land battle, with Landfleet being shuttled in under intense fire. In the end, no Sathar survive and 40\% of Landfleet is destroyed (30\% being Rimmers).
Outpost \#1 was established as a UPF military base in FY110. The "Hoppin' Hundred and Eighth," a spearhead Humma division, is stationed there permanently.

## Rim Coalition

(up to fy80?) Regular trade was established in FY80 with the UPF.
Following the defeat of the Sathar feint on Volturnus(Zebulon) the Rim Coalition dispatches the Flight to the other side of Klaeok in search of Sathar supply vessles. In return they ask the UPF to station Task Force Cassidine half way between Zebulon and Capella to protect the Rim home worlds in case of Sathar sneak attack through the Muld Nebula.
In FY97.1, the Flight discovers the Sathar supply route around the Xagyg Nebula. They station themselves in deep space and proceed to destroy all incoming Sathar ships. The following year a longdistance prove discovers Outpost \#1 and reports its location before it is destroyed.
When Landfleet is established in FY97.5, thousands of Humma and Osakar arrive from the Rim and enlist, hoping to stop the Sathar menace before it invades their homeworlds. Many die for the Frontier, but still more stay and become citizens after the war
In FY99.1 a reinforcement fleet from Sathar space is challeneged by the Flight. This becomes the Battle of the Blockade. Half of the Sathar fleet escapes but all of the troop ships are destroyed. About one half of the Flight was also destroyed. Bolstered by word of the triumph of their comrades, the Rim Coalition sends reinforcements to the Flight. Wing \#1, the remains of the original Flight join Task Force Prenglar and they all join the seige of Outpost \#1. This group of Rimmers quickly gains notoriety in the Frontier and greatly enhances UPF-Rim relations. They become known as the Raging Rimmers. Wing \#2 takes up the blockade position and Wing \#3 is charged with the defense of the home worlds allowing Task Force Cassidine to proceed to Solar Minor.
The Capellan Free Merchants are instrumental in transporting Landfleet to Solar Major and Solar Minor in FY101.7. Many of these Ifshnit remain in the Frontier after the war and begin the Free Merchant trade system throughout the UPF planets. The become so firmly entrenched here that the mega-corps are unable to unseat them.
Wing \#1 takes part in the Battle of Five Fleets in FY102, and when the war is ended in FY105, it is calculated that $30 \%$ of the casualties of Landfleet are Rim citizens. Most of the Ifshnit, Osakar and Humma who have served in the UPF during the war settle down on the UPF Frontier worlds.
In FY116 the Rim and UPF signed multiple defense treaties and economic trade agreements, though the Coalition gave severe warnings to all mega-corps that their militancy would not be tolerated in the Rim. Tourism between the UPF and Rim is established and is immediately sucessful. The Frontier now officially includes the Rim worlds. The following year Star Law is invited to the Rim to help the Coalition train their own planetary branches. The first Rim Star Law agents appear in FY122, the structure being identical to the UFP Star Law organization.
The Rim's Age of Adventure begins in FY118 as hundred of exploratory vessles are sent out to map the unknown regions surrounding the Rim. The Rim side of the Lesser Morass is mapped FY120-125. The Rim side of the Xagyg Dust Nebula is mapped up to the Klaeok system from FY126-138.

## Vast Expanse

The area beyond the Greater Morass claimed hundreds of exploration vessles from 31 pf to 13 pf. Exploration of the area ceased and the area was named the Vast Expanse.

## White Light Nebulae

Mapped in 157-137 pf. It is here that the first contact with the Sathar is made.

## Xagyg Dust Nebula

The area from K'aken-Kar to Fromeltar is mapped from 110 pf to 95 pf. Exploration is stopped because of pirate attacks. The mapping is completed under Professor Alorne Zebulon from 66 pf to 42 pf. The Rim side of the nebula is mapped up to the Klaeok system from FY126-138.

## Yreva Nebula

Mapped from 136 pf to 128 pf.

## STAR

System History:
Planet
Moons:
Gravity:
Day:
Year:
Diameter:
Inclination: ${ }^{\circ}$
Orbit:
Atmosphere:
Climate Range:
Average Surface Temperature: ${ }^{\circ} \mathrm{C}$
\% Water:
Trade:
General Notes:

## Terrain/Climate:

Life:
Native Species:
History:
Government:
Law: (CR ) (Control Rating 0(anarchy)-6(absolute facist))

- 0 anything goes
- 1 no mass carnage weapons
- 2 no multi-target weapons
- 3 pistols \& melee weapons
- 4 melee weapons
- 5 non-damaging weapons
- 6 nothing which appears injurious

Population: Outpost: Light: 1.4 mil 2.2 mil Moderate: 20 mil 500 mil Heavy: 80 million.
Society/Culture:
¥ City:

## å Area of City:

## § Satellite:

a§ Artificial Satellite:
ๆl Beanstalk:
alt $0165 ¥$ alt 0167 § alt 0170 a alt 0182 ๆ alt $0176^{\circ}$ alt 0229 å
a§ Artificial Satellite Codes Hull sizes 1-6 (dia. $=\mathrm{HS} \times 200 \mathrm{~m})(\mathrm{HP}=\mathrm{HS} \times 50 \mathrm{mil}, \times 30 \mathrm{civ}$ )
SF = UPF Space Fortress (size 6)
HP 300, DCR 200
Weapons: LB(x3), EB, PB, RB(x12)
Defenses: RH, MS (x3), ES, PS, ICM (x20)
FSS = Fortified Space Station (size 3)
HP 150, DCR 100
Weapons: LB (x2), RB (x8)
Defenses: RH, MS (x2), ICM (x10)
ASS = Armed Space Station (size 2)
HP 100, DCR 75
Weapons: LB, RB (x6)
Defenses: RH, MS (x2), ICM (x6)
TS = Trading Station (1-6)
These 'malls in space' are usually found in very secure space sectors. They are restricted by UPF law to sell only those items not produced on the planet they orbit. Trading stations also have facilities for restocking spaceships.
RRS = Rest \& Relaxation Station (1-6)
These space stations specialize in entertainment facilities such as holo-shows, live theatre, casinos, lounges, and sporting events. They also cover recreation facilities such as zoos, adventure theme parks, and, on some of the planets with more hostile environments, "outdoor" parks that offer hiking, biking, climbing, boating, etc. Usually there is a wide range of packages for the onboard hotel facilities so it is possible for people to vacation there over extended periods of time.
DS = Docking Station (6)
These space stations provide facilities for the repair, refurbishment, and complete overhaul of spaceships. They are also shipyards where new spaceships are built. Every type of space station can handle light repairs on space ships but only a docking station can handle seriously damaged ships. AGS = Agriculture Stations (4-6)
Agriculture space stations have the function to provide food, usually for planets or colonies which are incapable of producing food for themselves. Most are in permanent orbits around planets, but some are
placed nearer to a star to collect enough solar energy so they do not need auxilliary power, especially when the station is providing food for inhabitations located far from the sun.

## Chapter 2: Equipment for Star Frontiers

## Weapons

| Beam Weapons |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Laser Weapons use Struc | MaxDam | Ammo |  | ROF | Range | Mass | Cost | SEU |
| ---- |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Interstar KE-1000 } \\ & 4 \mathrm{pS} \end{aligned}$ | 7 p S |  | Clip | 2 | B | 1.5 | 550 | 1-10 |
| Interstar KE-1500 4 pS | 11 p |  | Clip | 2 | C | 2.5 | 700 | 1-10 |
| Interstar KE-2000 4 pS | 15pS |  | Clip | 2 | D | 3.5 | 750 | 1-15 |
| Oni-Senada KE-1000 4pS | 6 pS |  | Clip | 1 | B | 2 | 400 | 1-5 |
| ```Oni-Senada KE-1500 4pS``` | 10 ps |  | Clip | 1 | C | 3 | 475 | 1-5 |
| ```Oni-Senada KE-2000 4pS``` | 14 pS |  | Clip | 1 | D | 5 | 550 | 1-5 |
| Standard KE-1000 5pS | 8pS |  | Clip | 2 | B | 1 | 600 | 1-10 |
| Standard KE-1500 5pS | 12 pS |  | Clip | 2 | C | 2 | 750 | 1-10 |
| Standard KE-2000 5pS | 16 ps |  | Clip | 2 | D | 3 | 800 | 1-20 |
| Standard KE-5000 5pS | 20 ps | Bac | ckpack | 1 | E | 20 | 6000 | 5-20 |
| WarTech KE-1000 5pS | 8pS |  | Clip | 2 | B | 1 | 700 | 1-10 |
| ```WarTech KE-1500 5pS``` | 12 ps |  | Clip | 2 | C | 2 | 800 | 1-10 |
| WarTech KE-2000 5pS | 16 pS |  | Clip | 2 | D | 3 | 900 | 1-20 |
| WarTech KE-5000 5pS | 20ps | Bac | ckpack | 1 | E | 20 | 7000 | 5-20 |
| Rafflur Weapons | MaxDam | Ammo |  | RoF | Range | Mass | Cost | SEU use |
| Standard Rafflur M-1 1/4 max | 28 | Microdisc |  | 1 | A | . 5 | 300 | All |
| Standard Rafflur M-2 1/4 max | 32 |  | Clip | 2 | B | 1 | 650 | 2 |



## PGS Weapons




## PGS Descriptions

Whoomp Needler: These needler guns are capable of firing needles which can pierce skiensuits. The needles must be specially produced by Whoomp and are only capable of being fired by Whoomp needlers. Skiensuits provide no protection from these weapons and take no significant damage as the needles pass between the fibers.

- Whoomp Needler L1: This pistol (type I) version can only fire Whoomp needles.
- Whoomp Needler L2: This rifle (type III) version can only fire Whoomp needles.
- Whoomp Needler L3c: This pistol version fires Whoomp magazines or ordinary needler magazines.
- Whoomp Needler L4c: This rifle version fires Whoomp magazines or ordinary needler magazines.

Palmar Triad Auto-Rifle: (as pictured on the cover of the AD Basic Rules) This auto-rifle has three barrels arranged in a downward pointing pyramid. The triple barrel design allows the gun to fire much faster than an ordinary auto-rifle and each barrel has it's own separate clip, thus even a jam isn't disasterous. The single shot setting allows each barrel to be fired twice a round, thus a total of 6 shots can be fired in a single round. Another option is to have all three barrels fire at the same instant the trigger is pulled. This allows for 2 shots of this type per round. The first bullet is rolled for on the column as usual, and the second and third bullets are rolled on the $+X$ column if the first hit but can do damage of only one greater result shift (ie: if the first bullet was in the yellow, the second and third bullets can do green damage even if a cobolt result is rolled. Knockouts are only applicable on the first roll. If the first roll is a miss, all bullets miss. This type of firing counts as a single shot as far as careful aim is concerned. A burst with the Triad fires 12 bullets, cycling through each chamber four times. The gun also has two triggers which can be toggled to one or both of the pair to help increase firing speed. The gun automatically cycles through the barrels, even in the case of a jam or no ammo (which means a character pulling the trigger once on an empty magazine will dry fire and cycle to the next barrel). A digital read out on the number of shots left in each magazine is on the top of the gun which is powered by a microdisk which lasts about 100 magazines.

Palmar Triax Auto-Rifle: The Triad is an improved version of the Triad. This gun has an additional triburst option as well. This fires 10 shots from each magazine. The maximum damage is 100 points. This method of firing requires a STR check. If the check fails, the shot is wild and misses (possibly hitting others, via firing into a crowd). The Triax automatically cycles through the barrels, though a barrel may be switched off (such as in the case of having a jam or having only two ammo cartridges) which conserves trigger pulls. The digital readout can be modified in the case of differing sizes of magazines (the Triad's is set at 30 when a new magazine is fed in).

Standard Machine Gun: A machine gun is a fully automatic heavy weapon that must be mounted on a tripod or a swivel mount to fire. It fired 9 mm shells in bursts of 20 bullets. The maximum damage done to a single target is 80 points. If the burst is aimed at more then one target, each target takes a maximum of 20 points of damage.

Solvaway Grenade: This grenade releases foam which will dissolve the tangler threads of anyone in the blast radius of 3 meters.

## Melee Weapons

| Advanced Melee Cost | MaxDam | CS | Defense | Ammo | SEU's | Mass |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - |  |  |  |  |  |  |
| Standard Electric Sword 150 | $32 /$ stun | $\mathrm{n}+1$ | Gauss/A-S | 20 Clip | 2/hit | 1 |
| Standard Force Axe 450 | 48 | +2 | Inertia | 20 Clip | 2/hit | 2 |
| Standard Shock Gloves 50 | 16 | 0 | Gauss/A-S | Pack | 2/hit |  |
| Standard Sonic Knife 50 | 24 | +1 | Sonic | 20 Clip | 1/hit | 1 |
| $\begin{aligned} & \text { Standard Sonic Sword } \\ & 300 \end{aligned}$ | 40 | +2 | Sonic | 20 Clip | 2/hit | 1 |
| ```Standard Spray Hypo 10``` | spec. | -2 | STA check | varies |  | 1 |
| ```Standard Stunstick``` 75 | 24/stun | $\mathrm{n}+1$ | Gauss/A-S | 20 Clip | 2/hit | 1 |
| Standard Vibroknife 25 | 20 | +1 | Inertia | 20 Clip | 1/hit | 1 |
| WarTech Sonic Sword 400 | 40 | +2 | Sonic | 20 Clip | 2/hit | 1 |
| Primitive Melee Cost | MaxDam | CS | Defense | Ammo | SEU's | Mass |
| - |  |  |  |  |  |  |
| Axe 15 | 16 | +1 | Inertia |  |  | 1 |
| Bottle/Mug | 4 | -1 | Inertia |  |  | 1 |
| 50 |  |  |  |  |  | 1 |
| Brass Knuckles $10$ | 6 | 0 | Inertia |  |  |  |
| $20$ |  |  |  |  |  | 2 |
| Chair | 5 | -2 | Inertia |  |  | 2 |
| Club, small | 8 | 0 | Inertia |  |  | . 5-1 |
| Club, large | 15 | +1 | Inertia |  |  | 2 |
| ```Javelin 20``` | 14 R | Range B | Inertia |  |  | 2 |
| Knife $10$ | 10 | +1 | Inertia |  |  |  |


| Nightstick | 12 | +1 | Inertia |  | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 |  |  |  |  |  |
| Pistol Butt | 7 | 0 | Inertia |  |  |
| Polearm | 26 | -2 | Inertia |  | 4 |
| 40 |  |  |  |  |  |
| Rifle Butt | 10 | -1 | Inertia |  |  |
| Spear | 14 | +2 or B | Inertia |  | 2 |
| 20 |  |  |  |  |  |
| Staff | 15 | +2 | Inertia |  | 2 |
| 15 |  |  |  |  |  |
| Sword, small | 13 | +1 | Inertia |  | 1 |
| 15 |  |  |  |  |  |
| Sword, medium | 20 | +2 | Inertia |  | 2 |
| 30 |  |  |  |  |  |
| Sword, large | 28 | +2 | Inertia |  | 3 |
| 45 |  |  |  |  |  |
| Zamra | 10(6) | Range A | Inertia | itself | . 5 |
| 20 |  |  |  |  |  |

Staff: This is a wooden stick. You hit things with it.

Zamra: See Ares \#17.

Ammo


Power Econopack: This energy supply provides 250 SEU and has 4 weapon, 1 screen, and 5 miscellaneous attachments. It weighs 25 kg and the cost is 1250 credits.

Whoomp Needleclip: Only usable in Whoomp Needlers, these rounds are capable of piercing skiensuits.

## Defenses



Asbestos Suit: An asbestos suit is a fireproof garment that covers the entire body, including the head and extremities.

## Miscellaneous Equipment

Communication and Detection

| Name | Duration | Ammo | ROF | Range | Mass | Cost | SEU's |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NET Chrom |  |  |  | 5 km | --- | 200 |  |
| NET Chrom III |  |  |  | 10 km | --- | 400 |  |
| NET Ears | 60 hr. cont. |  |  | 1 km | --- | 30 |  |
| NETracers | $3 \mathrm{mo} \mathrm{cont}$. |  |  | 5 km | --- | 40 |  |
| NETracer Gun (spring action) | 1 | Tracer | 1 | A | --- | 30 |  |
| Pentax 1000 |  |  |  |  | 1 kg | 1000 |  |
| Pentax 2000 |  |  |  |  | . 5 kg | 2000 |  |
| Pentax 3000 |  |  |  |  | . 5 kg | 3000 |  |
| Pentax 1/10 |  |  |  |  |  | 1000 |  |
| Camdisk | 4 hours of film |  |  |  | --- | . 5 |  |
| Videocom Radio |  |  |  |  | 20 kg | 1000 |  |
| Videocom Screen |  |  |  |  | 1 kg | 100 |  |

NET Chrom: This chronocom from Nesmith Enterprises of Triad has the regular chronograph, calculator, and communicator equipment, as well as a compass which can be programmed to point to a magnetic pole or a specific frequency (such as NETracers). It has the standard chronocom range.

NET Chrom II: This chronocom improvement has twice the range of the standard chronocom (and the NET Chrom) as well as a fairly accurate range locator for the distance to the frequency transmitter.

NET Ears: This small ( $2 \mathrm{~cm} \times 2 \mathrm{~cm} \times 1 \mathrm{~cm}$ ) electronic bug can transmit all sound within it's hearing (slightly better than a human ear in whatever location it is placed) on some preselected channel. It will continue to broadcast for 60 hours continuously.

NETracers: These small ( $2 \mathrm{~cm} \times 1 \mathrm{~cm} \mathrm{x}=\mathrm{cm}$ ) tracers transmit a signal for a 5 km radius. They are able to do this for a total of 3 months continuously. This signal is subject to such limitations as concrete, being enclosed, etc. One side of the small box is sticky allowing it to attach itself to many surfaces.

NETracer Gun: This gun is advertised as energy efficient--and it is. It uses spring force to propel a NETracer towards the target. It must be reloaded for every shot.

Pentax 1000: This video camera is $9 \mathrm{~cm} \times 15 \mathrm{~cm} \times 20 \mathrm{~cm}$ and weighs 1 kg . Its information is stored on quarter-sized compact disks (camdisks). It has the capability to take stills, film in normal or infra-red, and has instant playback through the eye-piece or to a monitor hooked to it. In order to see the IR image, the image must be played back. It may hold up to 20 cam disks but may only write to a single one.

Pentax 2000: This $2.5 \mathrm{~cm} \times 10 \mathrm{~cm} \times 14 \mathrm{~cm}, 1 / 2 \mathrm{~kg}$ video camera is the next in the Pentax line. It has still capability, an adjustable pause rate for filming stills, may record and playback in variable speeds. It may also film normally, in infrared, or as per magnigoggles (x3), but for the altered image to be seen, it must still be played back. It can hold only 10 camdisks but may automatically switch between them.

Pentax 3000: This camera is the same size and weight as the 2000 line. It has still capability, an adjustable pause rate for filming stills, may record and playback in variable speeds. A motion detector may also allow it to start or stop filming when it is (in)activated for both video and still recording. It is able to film normally, in infrared, and up to x10 magnification and bee seen by the user as it is being recorded. There is also an IR light with a 100 m range. The lens may also have a 10 cm fiber-optic flexible extension added to it which allow it to film around corners, from concealment, etc. The Pentax 3000 also comes with a parabolic microphone built in with a range of up to 50 m . Also included is a pop-out swivel mount which allows the Pentax 3000 to be hooked to a wall or other surface to allow it to follow motion in it's range. There is also a remote control which allows the user to remotely program any of the features. The camera may hold up to 10 camdisks which it is able to record on individually or in various formats (such as disk one normal, disk two stills every 15 seconds, disk three infrared).

Pentax 1/10: This tiny camera is so small because it has no transmission or recording equipment within it. It is able to fit onto a chronocom in order to not be conspicuous and to transmit the images it creates. It may film in normal mode or infrared. It has still capability, and adjustable pause rate, a 60 degree directional control, and a motion detector. The simple remote also is made to hook into a chronocom and may switch filming modes and direct the lens. The remote also has a plug where it can be hooked into another camera to transmit the images to be recorded.

Camdisk: This small disk (american quarter sized) is capable of holding 4 hours of audio-video filmed at a normal/constant rate. Or a lot of stills and other stuff. Be reasonable.

Videocom Radio: This communication device broadcasts a combined picture and voice message that travels at the speed of light. It is useful over relatively short distances in space, and when communicating between points on a planet or from an orbiting vessel or station to the planet. Additional viewing screens an be added for 100 Cr apiece.

\footnotetext{
Vehicles

| Make/Type/Model | Acc/Dec/Top/Cr/Turn (up/dn) | HP |  |
| :---: | :---: | :---: | :---: |
| Passengers/Cargo Parabat | ttery Cost Spcs(Fuel) |  |  |
| Grubber Jetcopter Raven | 90m/90m/370k/55k/6*45 (25/25) | 130 | 4/500kg, |
| 2cu.m 4(1,200k+f) | 50,000 2 (4) |  |  |
| PRO-Con Echidna |  |  |  |
| PRO-Con Porcupine |  |  |  |
| PRO-Con Tapir |  |  |  |
| TransTravel Jetcopter KLX | $80 \mathrm{~m} / 100 \mathrm{~m} / 300 \mathrm{k} / 45 \mathrm{k} / 4 * 45$ (20/20) | 170 | $8 / 1000 \mathrm{~kg}$, |
| 6cu.m 4(900k+f) | 55,000 4 (6) |  |  |

```
Standard Ground Car 60m/40m/100k/60k/80m 100 6/150kg,
1cu.m 2(1000km) 5,000 6
Standard Hover Car 80m/40m/150k/60k/70m 100 6/100kg,
1cu.m 2(1000km) 8,000 4
Standard Ground Cycle 100m/40m/120k/60k/100m 75 2/20kg,
.5cu.m 1(1000km) 2,000 2
Standard Hover Cycle 100m/40m/100k/80k/90m 75 2/20kg,
.5cu.m 1(1000km) 2,000 1 
3/10,000kg, 30cu.m 3(1000km) 15,000 20
Standard Hover Transport 60m/30m/150k/90k/40m 200
3/10,000kg, 35cu.m 3(1000km) 20,000 16
Standard Explorer 60m/40m/90k/50k/100m(20% H20) 200 6/2000kg,
6cu.m 3(1000km) 20,000 12
Standard Glijet 100m/?/100m/50m/1-3*45(50/10!) 0(5)
.1cu.m 3,000 1 (20)
Standard Flit Board 100m/100m/200k/100k/6*45(20/20) 70 1/10kg,
lcu.m 
1(500km) 3,000 0
Standard Jetcopter 100m/100m/350k/50k/6*45(20/20) 150
4/500kg,5cu.m 4(1000k+f) 40,000 2 (5)
Standard Aircar 100m/100m/900k/400k/6*45(20/20) 200 4/1000kg,
2cu.m 4(1000km) 70,000 4
Standard Air Transport 90m/100m/750k/250k/6*45(20/20) 350 3
24/10,000k,40cu.4 4(1000km) 120,000 ?
Stewint Explorer Amphibian 50m/40m/75k/50k/50m(50% H2O) 225 8/2500kg,
6cu.m 4(2500km) 30,000 16
```

Jet Fuel: A single unit of jet fuel will allow a jet copter to travel for an hour at maximum speed. If the copter only travels at half of that maximum, then only half a unit is used. This jellied fuel will not burn on its own and is not explosive unless exposed to extreme temperature and pressure. Each unit of jet fuel costs 100 credits.

Amphibian Explorer (Stewint): This explorer uses the type 4 parabattery as opposed to the type 3 standard for explorers, thus giving it much greater range. It is very large in size and very rugged. It has a much faster water movement rate due to water-jets which propel the vehicle while in water.

Echidna (PRO-Con): Jul 31, 1994 09:04 from Istacaran SRM-6: Short Range Missle launcher that fires 6 missles per shot LRM-5: Long Range Missle launcher that fires 5 missles per shot ICE: Internal Combustion Engine (as opposed to the standard fusion engines)

KLX Jetcopter (TransTravel): This jetcopter is a workhorse. It is made to hold large cargos and provide transportation for up to 8 passengers. This has sliding doors on each side to allow loading and weapon positioning.

Raven Jetcopter (Grubber): This sleek beauty was built for speed. While it has less cargo and passenger space, it will blow away the competition on the long haul and go further before needing to refuel.

## Vehicle Devices


3\%

## Weapon Producers

```
Capellan Free Merchants
    Whoomp Weapons: Skiensuit Piercing Needle Technology. 150Cr+.
Malco
Oni-Senada: Larger, Slower, Less Effective, But Cheap. 200-250Cr less.
Palmar Projectiles patent on the triple barrel design
Stysor Arms
WarTech: Standard per rules. Cost 100Cr more. (Monopoly on energy
weapons.)
    Interstar Weaponry: Uses Lesser WarTech technology. 50Cr less.
    Nova Explosives Unlimited
    Newar Laboratories
    Zik-kit Ordinance Industries
```


## Miscellaneous Producers

```
Eversafe
    Wokeekoo Scanner Manufacturing Corporation
    Armorall Unlimited
    Guardall Inc.
    Mikooc Cardlock Manufacturing Firm
Interplanetary Industries(noncomm/noncomp tech)
NET
Pentax: High quality visual image equipment.
```

```
Sik'Triksta
Trans-Travel
    Interstellar Vehicles Co.
    Hickman Hovercraft
    Niles Vehicles
    Grubber Aircraft Industries
    Stewint Land Transport Company
    Curtis Cycle Corporation
    Dobson Security Vehicles Ltd.
    Moore Labs
ProCon: Military vehicles
```


## Chapter 3: Professions

## Administrator Profession

1. Analyze Business Systems
2. Analyze Social Systems
3. Appraisals
4. Bluff
5. Charisma* or Intelligence*
6. Communication Devices: Operate
7. Computers: Access \& Operate
8. Computers: Bypass Security (Computers: Access \& Operate)
9. Computers: Defeat Security (Computers: Access \& Operate)
10. Computers: Display Information (Computers: Access \& Operate)
11. Computers: Interface (Computers: Access \& Operate)
12. Computers: Program Manipulation (Computers: Access \& Operate)
13. Cryptography
14. Economics
15. Empathetic Understanding
16. Finance
17. Law
18. Mathematics
19. Machinery Operation
20. Management
21. Persuasion
22. Politics
23. Robotics: Identification
24. Security Systems: Activate \& Operate
25. Security Systems: Deactivate (Security Systems: Activate \& Operate; Detect)
26. Security Systems: Detect (Security Systems: Activate \& Operate)
27. Security Systems: Open Locks

## Biosocialist Profession

1. Analyze Ecosystems (Biology 3 (Botany 2; Zoology 2))
2. Archaeology
3. Biology (Botany 2; Zoology 2)
4. Botany
5. Chemistry
6. Communication
7. Empathetic Understanding
8. Find Directions
9. Geology
10. Hypnosis
11. Intelligence* or Charisma*
12. Making Items/Structures
13. Medical Diagnosis
14. Medical Treatment: Disease (Medical Diagnosis)
15. Medical Treatment: Infection (Medical Diagnosis)
16. Medical Treatment: Infestation (Medical Diagnosis)
17. Medical Treatment: Miscellaneous (Medical Diagnosis)
18. Medical Treatment: Poison (Medical Diagnosis)
19. Medical Treatment: Wounds I (Medical Diagnosis)
20. Medical Treatment: Wounds II (Medical Diagnosis; Wounds I)
21. Medical Treatment: Wounds III (Medical Diagnosis;Wounds I-II)
22. Persuasion
23. Psycho-pathology
24. Stealth
25. Survival
26. Tracking
27. Zoology

## Enforcer Profession

1. Body Speak
2. Communication Devices: Operate
3. Computers: Access \& Operate
4. Cryptography
5. Endurance*
6. Forgery
7. Law
8. Ride Mount
9. Robotics: Identification
10. Running
11. Security Systems: Access \& Operate
12. Security Systems: Deactivate (Security Systems: Activate \& Operate; Detect)
13. Security Systems: Detect (Security Systems: Activate \& Operate)
14. Security Systems: Open Locks
15. Vehicles: Aquatic
16. Vehicles: Atmospheric
17. Vehicles: Cars
18. Vehicles: Cycles
19. Vehicles: Transports
20. Weapons: Beam Weapons
21. Weapons: Demolitions
22. Weapons: Grenades
23. Weapons: Martial Arts
24. Weapons: Missiles
25. Weapons: PGS Weapons
26. Weapons: Powered Assault Armor
27. Weapons: Repair (Weapon Skill)

## Explorer Profession

1. Analye Animal Bhazuior Corrected 960913
2. Animal Taming
3. Animal Training (Animal Taming 2)
4. Body Speak
5. Camouflage
6. Charisma*
7. Climbing
8. Communication
9. Communication Devices: Operate
10. Communication Devices: Repair (Communication Devices: Operate)
11. Concealment
12. Find Directions
13. Geology
14. Geophysics
15. Haggling
16. Making Items/Structures
17. Medical Diagnosis
18. Medical Treatment: Veterinary (Medical Diagnosis)
19. Persuasion
20. Ride Mount
21. Stable Mounts (Ride Mounts)
22. Stealth
23. Survival
24. Tracking
25. Weapons: Martial Arts
26. Weapons: Melee Weapons

## Techex Profession

1. Acoustics (Physics)
2. Agility*
3. Computers: Access \& Operate
4. Computers: Bypass Security (Computers: Access \& Operate)
5. Computers: Defeat Security (Computers: Access \& Operate)
6. Computers: Display Information (Computers: Access \& Operate)
7. Computers: Interface (Computers: Access \& Operate)
8. Computers: Repair Bodycomp (Computers: Access \& Operate)
9. Computers: Repair Mainframe (Computers: Access \& Operate)
10. Computers: Repair Specialized (Computers: Access \& Operate)
11. Engineer: Mechanical (Physics 2)
12. Machinery: Operate
13. Machinery: Repair (Machinery: Operate)
14. Optics (Physics)
15. Physics
16. Robotics: Activate/Deactivate
17. Robotics: Alter Functions (Robotics: List Functions)
18. Robotics: Alter Mission (Robotics: List Functions; Alter Functions)
19. Robotics: Identification
20. Robotics: List Functions
21. Robotics: Modifications (Robotics: Repair(Identification))
22. Robotics: Remove Security Locks
23. Robotics: Repair (Robotics: Identification)
24. Security Systems: Open Locks
25. Vehicles: Machinery
26. Vehicles: Repair
27. Weapons: PGS Weapons

## Scispec Profession

1. Archaeology
2. Biology (Botany 2; Zoology 2)
3. Bionics (Medical: Wounds IV 3 (Diagnosis; I-III); Infection (Diagnosis))
4. Botany
5. Chemistry
6. Computers: Access \& Operate
7. Computers: Program Manipulation (Computers: Access \& Operate)
8. Computers: Program Writing (Computers: Access \& Operate; Program Manipulation)
9. Computers: Program Bodycomp (Computers: Access \& Operate)
10. Cybernetics (Bionics 3(Wounds IV 3 (Diagnosis; I-III); Infection (Diagnosis)))
11. Exobiology (Biology 3)
12. Forensics (Medical Treatment: All; Biology; Chemistry)
13. Genetics (Biology 5)
14. Intelligence*
15. Medical Devices
16. Medical Diagnosis
17. Medical Treatment: Disease (Medical Diagnosis)
18. Medical Treatment: Infection (Medical Diagnosis)
19. Medical Treatment: Infestation (Medical Diagnosis)
20. Medical Treatment: Poison (Medical Diagnosis)
21. Medical Treatment: Radiation (Medical Diagnosis)
22. Medical Treatment: Wounds I (Medical Diagnosis)
23. Medical Treatment: Wounds II (Medical Diagnosis; Wounds I)
24. Medical Treatment: Wounds III (Medical Diagnosis; Wounds I-II)
25. Medical Treatment: Wounds IV (Medical Diagnosis;Wounds I-III)
26. Physics
27. Zoology

## Spacer Profession

1. Astrophysics (Mathematics; Physics 2)
2. Communication Devices: Operate
3. Computers: Access \& Operate
4. Computers: Display Information (Computers: Access \& Operate)
5. Computers: Interface (Computers: Access \& Operate)
6. Computers: Program Manipulation (Computers: Access \& Operate)
7. Engineer: Alternate Energy (Physics 2)
8. Engineer: Architectural (Physics 2; Engineer: Civil (Physics))
9. Engineer: Hydraulic (Physics 2)
10. Engineer: Mechanical (Physics 2)
11. Engineer: Military (Physics 2)
12. Engineer: Nuclear (Physics 3)
13. Intelligence*
14. Machinery Operation
15. Machinery Repair (Machinery Operation)
16. Mathematics
17. Physics
18. Security Systems: Activate \& Operate
19. Vehicles: Atmospheric
20. Vehicles: Machinery
21. Weapons: Beam (above 4th)
22. Weapons: PGS (above 4th)

## Skills under no profession

- Appraisals
- Analyze Ecosystems (B)
- Bluff Hypnosis (B)
- Chef
- Disguise
- Dramatics
- Empathetic Understanding (B)
- Engineer: Alternate Energy (S)
- Engineer: Architectural (S)
- Engineer: Civil
- Engineer: Hydraulic (S)
- Engineer: Military (S)
- Engineer: Nuclear (S)
- Entertaining
- Finance
- Gemology
- Matter Transferal Devices
- Photography
- Politics
- Power Read
- Psycho-pathology (B)
- Pumping Federanium
- Robotics: Robopsychologist
- Running
- Society
- Theology


## Chapter 4: Skills

These are skills from the Zebulon's Guide, augmented with skills that I created, stole from other systems, or rewrote.

## Analyse Business System

Sucess Rate:
This skill is used to identify and assess the inner workings of a business, including management, communications, worker attitudes, etc.

## Analyse Social System

Success Rate:
This skill allows the user to analyse any sort of social system: social strata, religious organization, cult, sub-culture, native social unit, etc.

## Astrophysics

Success Rate: Skill Level
Pr: Physics 2, Mathematics 1
This skill allows a character to understand stellar phenomena, orbital physics, composition of bodies, the effects of gravity, etc. This skill also covers understanding of the void and space travel methods.

## Crossfire

Success Rate: Skill Level - 5CS
Pr: Weapons skill of the type being used, proper set up of enemies, missing shots.
This skill gives the character a chance to cause opponents to hit each other with shots fired at the character which miss.

## Economics

Success Rate: Skill Level
This skill gives the character an understanding of economics, micro and macro. This skill is essential to those who wish a business to flourish and grow.

## Mathematics

Success Rate: Skill Level + 2 Column Shift
This skill allows a character to understand and use complex mathematics.

## Management

Success Rate: $+10 \%$ to LDR roll
This skill gives the character the ability to manage others in some sort of business structure.

## Poison

Success Rate: Skill Level
Pr: Biology, Chemistry
The user of this skill is able to create various poisons from chemicals available to persons in technologically advanced cultures.

## Sporting

Success Rate: Skill Level
This skill covers in depth knowledge of any known sporting event. Characters with this skill know not only rules and regulations, but also famous figures from the sport, histories of famous games and figures, training procedures, common illegalities concerning the sport, and common strategies.

## Survival: Urban

Success Rate: Skill Level
Urban survival is the ability to survive for a limited time in a large metropolis, living off garbage dumps, gutters, and other unsavory food sources. This skill may only be used in truly desperate situations, as the person using it will loose one Stamina point for every three days the skill is in use. The damage is not permanent, but after all Stamina points are exhausted, the individual loses consciousness and has 2d6 hours to receive proper medical care before death occurs.

## Weapons: Martial Arts

Success Rate: Skill Level - Opponents Skill Level
This skill makes a character a better fighter in melee than an unskilled character. The skill also increases the damage caused by a sucessful bare-hands attack, adding one point of damage per skill level.

Martial Arts also teaches the character two important abilities: defensive throws and how to take a fall. When this skill is taken the character automatically learns how to reduce fall damage from falling by -1 point of damage per skill level. The character also automatically learns how to inflict damage when breaking out of a hold (see Wrestling under Special Actions in the ZG Melee Combat section). When a character with this skill breaks a hold, he automatically knocks his opponent down, causing damage equal to his punching score.

This skill also increases the chance to knockout an opponent by +1 per level. This is in addition to the 01-02 knockout chance.

## Weapons: Melee Skill

Success Rate: Skill Level - Opponent's Skill Level
This skill allows a character to use both modern and primitive melee weapons with better accuracy and damaging potential than an unskilled character. This skill also teaches characters how to throw weapons (primitive javelins) and shoot primitive weapons (usually bows). Other throwing weapons are usually alien in origin, but can be learned quickly by a character with this skill. Any instances of a civilization using projectile weapons other than bows and arrows or auto-weapons is rare.

This skill also increases the chance to knockout an opponent by +1 per skill level in addition to the 01-02 knockout chance.

## Weapons: Weightless Combat

## Success Rate: Varies

Pr: Weightless environment.
Due to the lack of gravity, combat in a weightless environment becomes much more difficult. Recoil on some ranged weapons and the varied effects of hitting and missing in melee require training in order to be effective. Characters with the Weightless Combat skill are only required to make a check to maintain control if they roll 98-00 or miss in melee combat. In ranged combat, characters with any level Weightless Combat skill are allowed to use their full weapon skill level, as opposed to $1 / 2$ level.

In melee combat characters with the Weightless Combat skill are allowed to use the Weightless Combat skill level and $1 / 2$ (round down) of their Melee or Martial Arts (if applicable) level up to the level of Weightless combat.

## Chapter 5: timeline

- 21,000 pf (Pre-Frontier) Tetrarchs transport S'sessu.
- $10,500 \mathrm{pf}$ Last remnants of the mysterious Tetrarch Societies die out.
- 850 pf Heliopes left on Starmist(Sundown) by Clikks after a Clikk military exploration vessel misjumps and is forced to jettison unnecessary cargo.
- 750 pf Sathar attack Saurians relentlessly.
- 745 pf Saurians begin their Exodus.
- 744 pf Sathar reach Saurian homeworld, Kishen.
- 650 pf Heliopes are released from suspended animation on Starmist(Sundown).
- 600-585 pf Sathar attack the Eorna on Arsolus(Debaran).
- 599 pf Eorna send out several escape ships.
- 593 pf Eorna ship lands on Volturnus(Zebulon). Due to the lack of certain protiens, Eorna are unable to survive there. Realizing this, they work to leave their robots as a progeny.
- 588 pf Eorna extinct on Volturnus.
- 585 pf Sathar leave a pyramid on Arsolus(Debaran) to alert them of ships in the system.
- 580 pf The evolution of the Mechanons as a sentient race begins on Volturnus(Zebulon).
- 575 pf Eorna on Arsolus(Debaran) regroup and begin to evolve other species towards sentience.
- 510 pf First Vrusk/Dralasite contact (1/18/510pf).
- 470 pf First Vrusk/Human contact (8/22/470pf).
- 450 pf Vrusk, Dralasites, and Humans meet for the first time on the Frontier.
- 420 pf Yazirians enter the Frontier ( $6 / 9 / 420 \mathrm{pf}$ ).
- 390-15 pf The Frontier is founded.
- 390 pf Gran Quivera(Prenglar) discovered by a joint expedition composed of all four races 12/20/390pf.
- 383 pf Humans discover the Whorl system and the planet Solaris.
- 380 pf Human colonizing ship misjumps into the Timeon system and is damaged. It is landed on Lossend.
- 370 pf Triad(Cassidine) and Rupert's Hole(Cassidine) discovered.
- 364 pf White Light system discovered by Humans.
- 359 pf Dralasite explorers discover Inner Reach in the Dramune system.
- 354 pf The White Light monarchy is founded on Clarion/Gollywog.
- 341 pf Yazirians discover the Araks system.
- 333 pf Dralasites start mining operations on Outer Reach(Dramune).
- 330 pf Pan-Galactic Corporation started on Gran Quivera(Prenglar).
- 326 pf Theseus system discovered by Humans.
- 322 pf Dixon's Star system discovered by Humans.
- 320 pf Fromeltar system discovered by Dralasites.
- 310 pf Madderly's Star system discovered by Vrusk and Humans.
- 301 pf Madderly's Star system becomes a Human system after the Freeworld Rebellion on Kdikit.
- 291-261 pf The Yazirian Relocation.
- 291 pf Waloo's moon, Levo, is discovered to have a deteriorating orbit and will hit the planet in 23 years.

Terraforming started on Hentz(Araks).

- 280 pf K'aken-Kar system discovered by Vrusk.
- 271 pf All non-essential Yazirians have been moved to Hentz(Araks).
- 268 pf Waloo(Pavor) destroyed by the moon Levo.
- 261 pf Yazirian Relocation completed. Governments return to pre-distaster state.
- 250 pf Athor system discovered by Yazirians.
- 248 pf Gruna Garu system discovered by Yazirians.
- 246 pf Kizk'-Kar system discovered by Vrusk.
- 240 pf The Pangal language accepted throughout the Frontier as a common trade tongue.
- 233 pf Lossend(Timeon) discovered by Humans.
- 230-220 pf Pirates first appear in various sectors throughout the Frontier in small numbers.
- 210-15 pf The Age of Adventure. The discovery and exploration of new planets slows down for the next two centuries while the major races concentrate on mapping the
hazards and boundaries of the Frontier. Hundreds of exploration vessles and brave spacers are lost during this time. Meanwhile, the discovered planets begin to develop. Thousands of fortunes are made and lost during the Age of Adventure.
- 204-158 pf The Greater Morass is mapped.
- 189 pf Scree Fron system discovered by the Yazirians.
- 157-137 pf The White Light Nebulae are mapped.
- 157 pf First contact with the Sathar. Only a couple ships are encountered. It is not discovered what the aliens look like.
- 140 pf Pale and New Pale discovered in the Truane's Star system. Pale settled.
- 136-128 pf The Yreva Nebula is mapped.
- 135 pf New Pale(Truane's Star) settled to provide food for Pale.
- 133 pf Pan-Galactic becomes the first megacorp in the Frontier (5/26/135pf).
- 127-119 pf Thirty-two exploration vessles are lost trying to map the Lesser Morass. Only the area between Scree Fron and Truane's Star is mapped.
- 113 pf Zebulon system discovered by a Human merchant who misjumped out of the Truane's Star system. Upon return to Pale, he sold the location to the government of Pale.
- 112 pf Pale(Truane's Star) launched a deep space probe to explore the (then unnamed) Zebulon system.
- 110-95 pf The Xagyg Dust Nebula is mapped from K'aken-Kar to Fromeltar. Exploration is stopped due to pirate attacks.
- 110 pf MINER wins the bid to develop the ore rich Volturnus(Zebulon) for Pale(Truane's Star).
- 109-90 pf War of the Pales.
- 109 pf Pale sends non-Human colonists to New Pale. Several months later the HUSPs on New Pale began terrorizing these new colonists and Pale's "colonial protection" agents. New Pale declares itself to be in a state of war with Pale.

The head of MINER, Hatzck Naar, is kidnapped and murdered. MINER is liquidated.
The Volturnus(Zebulon) mining operation is put on hold and all records are lost.

- 105-100 pf Depression on Pale due to overabundance of low demand resources and the amount of money going into the war effort. HUSPs on New Pale continue to attack Pale's food shipments.

One mid-sized corporation (Streel Corp.) begins to acquire small businesses on Pale which are run out of business due to the depression.

- 103 pf The number of pirates increases in the Truane's Star system and neighboring systems.
- 100 pf Streel controlls all mining operations on Pale.
- 99 pf Hatzck Naar contacts PGC and begins running guns from Gruna Garu, Prenglar, and Dixon's Star to the HUSPs on New Pale.
- 91 pf Naar begins mining operation on Zebulon(Volturnus).
- 90 pf Streel pours money into Pale's militia. HUSPs are crushed out of existance.

New Pale becomes a stabilized planet and its government joins that of Pale.

- 88 pf Streel sends out probes into several promising systems near the Frontier.
- 86 pf Kraatar(Tristkar) is colonized by Humans from White Light.
- 79 pf A small pirate fleet under Hatzck Naar raids the Prenglar and Cassidine systems. The First Common Muster is called.
- 74 pf Hatzck Naar's pirate fleet is defeated off Wotogon. Naar is ejected into space and slowly boils inside his spacesuit as he falls toward Wotogon. The Muster is dismissed.

A wing of the pirate fleet known as Regiment flees to the Timeon asteroids. Here they change the markings and even the line of their ships.

- 73 pf The Regiment approaches the Lossend(Timeon) government as part of the First Common Muster and seeks land to settle upon.
- 66-42 pf Professor Alorne Zebulon, the Frontier's most noted scientist, explorer, and educator, leads a new mapping expedition of the Xagyg Dust Nebula from Fromeltar to Zebulon.
- 46 pf The Zebulon system is discovered. The planet Volturnus is settled almost immediately after discovering several well-preserved, empty sites which had been used by Naar's pirates. Anker is discovered but not settled.
- 41 pf Anker(Zebulon) is explored and settled. Professor Zebulon founds the University of Zebulon.
- $\quad 37-30 \mathrm{pf}$ The Tension on Domus. Bickering over in-system resources in the Stella sytem. The threat of nuclear hostilities hangs in the air.
- 31-13 pf The area beyond the Greater Morass claims hundreds of exploration vessles. Exploration of the area ceases and the area is named the Vast Expanse.
- 25 pf Kawdl-Kit(K'tsa-Kar) discovered by GVMPI.
- 15 pf Representatives of the four major races request that all explorations cease while delegates meet to form a unified defense and mutual interest organization.
- 6-3 pf The First Sathar War (SW I) is fought.
- 6 pf The Sathar fleet first appears. It attacks the Truane's Star system.
- 5 pf Pale and New Pale fall. The Great Exodus to Dixon's Star system takes place.
- 4 pf The four races muster a spaceship fleet. The Second Common Muster is called and put under the command of Admiral Morgaine, who immediately moves the fleet into the Cassidine system.

The Battle of Triad. Morgaine's fleet performs a surprise attack on the invading Sathar fleet intent on ravaging Triad. The Sathar lose a third of their fleet.

Dixon's Star system is attacked by the Sathar fleet. Completely unprotected it is soon ravaged. Meanwhile Morgaine moves his fleet to the Prenglar system.

- 3 pf The Sathar attack Gran Quivera in the Prenglar system. The Battle of the Two Fleets is fought. The Sathar fleet is routed and destroyed. Morgaine's fleet is depleted and Morgaine dies in battle. With this mutual devastation the First Sathar War comes to an end ( $2 / 16 / 3 \mathrm{pf}$ ).
- 2 pf Morgaine's World in the Prenglar system is named after the fallen Admiral.
- 1 pf The "Grand Meeting" of leaders of the four races takes place on Morgaine's World.
- ---------
- FY1 (Federation Year) The United Planetary Federation, a mutual defense organization, is established (FY1.3.18). All the worlds of the Frontier, expecting another Sathar invasion, immediately join. Under UPF authority, Spacefleet becomes a permanent defensive force.
- FY2 The Capellan Free Merchants first appear on the Frontier bringing news of the Rim and their fight with the Sathar, and supplying desperately needed food to the survivors on Laco and Gran Quivera.
- FY4 The Brotherhood of Spacers becomes the first cadre on the Frontier?
- FY5 The Streel Corporation, now a true megacorp, returns its headquarters to Pale, encouraging a full corporate return and rebuild the Sathar ravaged worlds.
- FY6 Star Law is established by the UPF.
- FY10 Cassidine Development Corporation is founded on Triad. The creation and growth of megacorps proceeds at an ever-accelerating pace.
- FY12 Frontier ships enter Rim space for the first time.
- FY13 GVMPI sells off all holdings on Kawdl-Kit(K'tsa-Kar).

Streel buys GVMPI.
The Kttl'Ul'Tik conglomerate is formed on Kawdl-Kit to resist Streel buyouts.

Streel sends a task force to attempt to repossess Kawdl-Kit holdings.
KUT takes Streel to the UPF. Six months later KUT wins the decision.

- FY14 Streel appeals UPF's decision. Streel loses and then withdraws its task force.
- FY15 The Lynchpin system is discovered by Vrusk. They turn the system over to the UPF for development as a military outpost to protect that sector of the Frontier. The Lynchpin system is a military secret until the middle of SWII.
- FY20 Pan-Gal system is discovered by the Pan-Galactic Corporation and becomes the first mega-corp star system.
- FY23 The name of the planet Clarion(White Light) is officially changed to Gollywog.
- FY25 New Streel system is discovered by the Streel Corporation.
- FY35 The First Dramune War is fought.
- FY36 Sathar set up training base on Starmist(Sundown).
- FY39 Solar Major system is discovered by WarTech Incorporated.
- FY40-50 Laco's War. PGC and Streel wage the first Corporate War on Laco(Dixon's Star).
- FY49 The UPF steps in on Laco's War and empowers an inter-mega-corporate commission to resolve the differences. Other mega-corps study Laco's War as a possible legal precedent for solving disputes.
- FY50 Sundown system discovered by Vrusk merchant ship.

What will become the ACE team hired to explore Starmist(Sundown) by Maximillian Malligigg, second-master of the Vrusk ship (50.12.20).

The PGC begins construction of their future headquarters, Cortown adjacent to Port Loren, Gran Quivera(Prenglar).

The Rhianna system is discovered by the Cassidine Development Corporation, but is kept secret (50.12.21).

- FY51 Clikk spaceship, Clikk wartank, and Sathar base are destroyed in nuclear selfdestruction on Starmist(51.1.5-7). The Blue Plague virus is born.

Alpha-Con Exploration (ACE) founded(51.2.1)

- FY52 Streel attacks CDC operations on Alcazzar(Rhianna). Star Law intervenes and averts a potential Corporate War.
- FY54 The Sundown system visited by exploratory ships under the UPF and Vrusk merchants.
- FY55 PGC completes the move to the new Cortown, Gran Quivera(Prenglar) headquarters.
- FY56 The Heliope race is extinct on Starmist(Sundown).
- FY57-67 The Blue Plague sweeps the Frontier. Scientists believe it was a virus strain which was mutuated by the nuclear explosions which happened on Starmist(Sundown). It is believed that vermin from the planet became infested and somehow gained entry to an exploration vessle. The ship makes several stops on the Frontier and the plague spreads rapidly. It is called the Blue Plague because of its earliest symptoms--large blue welts that appear about the face and extremities. These welts leave horrible black scars even if the victim survives the plague.
- FY58 Four star systems: Kar, Stella, Whorl, and Wotogon; have become so infested with the Blue Plague that the Council of Worlds, the diplomatic organization of the UPF, requests that all races recognize an indefinite quarantine of these systems. A spaceship seen leaving one of these systems is to be destroyed by Spacefleet before it has a chance to spread the plague any further.
- FY59 The entire ecology of the Dralasite homeworld Lomigleeb(Wotogon) undergoes a change due to saturation of the Blue Plague. The genetic makeup of all living things on the planet is changed. The world is permanently set off limits as it is found to be deadly to nearly all lifeforms.
- FY62 Hargut(Gruna Garu), Pale(Truane's Star), and Gollywog(White Light) suffer massive population losses due to the Blue Plague. All three planets are quarantined.

Leotus XIX takes the Gollywog(White Light) throne after his mother dies of the Plague.

- FY63 The Medical Services Organization is founded. Funding pours in from most of the Frontier worlds. Gretl Grohn (Vrusk) is named the MSO Chief Surgeon.
- FY64 Vaccine for the Blue Plague is discovered at the MSO Center in Cadecus on Morgaine's World(Prenglar) on FY64.7.17.
- FY65 The Mechanon menace on Volturnus first comes to the UPF's attention, but cannot be dealt with because of the Blue Plague.
- FY66 Domus(Stella), the Human homeworld, is annihilated in nuclear hostilities due to fighting over distribution of the Blue Plague vaccine. So complete is the destruction that all life on the planet is destroyed. Bases located on Lumina, and in the asteroids are also attacked.
- FY67 The Blue Plague is eradicated form inhabited planets in the Frontier. In total, 17 million victims fell to the plague. All planet and system quarantines are lifted (excluding the Wotogon system).
- FY68 Very tough laws and penalties are laid down by both the UPF and the Council of Worlds concerning the intersystem transportation and handling of flora and fauna. Star Law is given jurisdiction over planetary imports and exports.
- FY69 Vrusk merchants start expanding into Kraatar(Tristkar) markets.
- FY70 Devco system is discovered by the Cassidine Development Corporation.
- FY71 The Kar system is unreachable for a month as a change in the gravatational fields of the Ebony Eyes singularities causes ships using old data to misjump. The black holes are re-mapped.
- FY72-82 The Flight of the Vrusk.
- FY72 Continued changes in the Ebony Eyes cause many misjumps and require constant study. Due to this and other factors the Vrusk decide to vacate their home world rather than lose it some other way. Vrusk corporations begin moving headquarters to other locations and gradual population shift begins.
- FY75 The Mechanon Revolt. Mechanons on Volturnus revolt. Only through quick action on the part of Star Law is a full-scale war avoided.
- FY76 The Vrusk cease releasing astrological information needed to reach Kar.
- FY78 Solar Minor system discovered by SynthCorp.
- FY80 Regular trade established with the Rim planets.
- FY81 The Second Dramune War is fought.
- FY82 The Vrusk planet has been evacuated. All obvious traces of Vrusk civilization have been removed, and the planet is returned to its pre-Vrusk civilzation state as much as possible. The system is seeded with robot drones (some left over from the Blue Plague quarantine) and one moon base on Kar'k-Tik is left in case of emergency situations.
- FY84 The Mechanon civilization on Volturnus undergoes an upheaval. The majority of peaceful Mechanons migrate into the undeveloped space between Scree Fron and Dixon's Star.
- FY91 Mechan is discovered by migrating Mechanons. Its entry into the UPF is blocked until the legal status of the Mechanons can be established.
- FY92 Tough new guidelines for legal ownership of a system or planet are laid down by the UPF and the Council of Worlds. The guidelines are designed to halt mega-corp expansion and to prevent occurances such as the Mechanon problem.
- FY95-105 The Second Sathar War.
- FY95 The Sathar discover a non-UPF system between Solar Major and Solar Minor. They find a small moon orbiting a gas giant and dub it Outpost \#1. Construction begins on a moon-wide military and industrial complex intended as a permanent base for incoming Sathar supply ships and troops.

The Sathar swarm through the Xagyg Nebula and attack Volturnus. New planetwide battle tactics are used by the Sathar (including the massive use of diversionary, seeded monsters and cybernetically controlled creatures). The attack is a feint to draw Spacefleet to Zebulon. Task Force Cassidine is dispatched to Zebulon.

By going through the White Light Nebulae, Sathar Fleet \#1 enters the Frontier undetected. FY96 Sathar Fleets \#2 \& 3 attack Solar Minor. So overpowering are they that no word of attack reaches Spacefleet.

Sathar Fleet \#1 attacks Kdikit(Madderly's Star). They encounter the new Spacefleet fortress on Kdikit. Its resistance is fierce and buys the needed time for reinforcements to arrive. Dramune sends three frigates and a destroyer from its militia while the UPF dispatches two destroyers and two light cruisers from its non-attached ships roster.

The UPF mines the sector between Cassidine and Madderly's Star. Sathar Fleet \#1 is driven from Madderly's Star and pursued as it tries to makes its way to Fromeltar. All militia ships in the sector, including half of Task Force Prenglar, are engaged in the pursuit.

Task Force Cassidine crushes the Sathar feint on Zebulon, but with heavy losses (96.6). The UPF now realizes how vulnerable it is to land attacks.

At this time, the Rim Coalition dispatches the Flight to the other side of Klaeok in search of Sathar supply vessles. In return they ask the UPF to station Task Force Cassidine half way between Zebulon and Capella to protect the Rim home worlds in case of Sathar sneak attack through the Muld Nebula.

Strike Force Nova arrives secretly at White Light (96.7). Admiral Niles believe more of the Sathar fleet may attack through the White Light Nebulae.

Sathar Fleet \#2 emerges at the Prenglar system(96.8), placing itself in front of the remains of Task Force Prenglar. The Battle of Prenglar begins two hours later and results in Sathar Fleet \#2 scattering or destroying the reduced Task Force Prenglar.

Flush with victory, the Sathar proceed recklessly into the Frontier. Strike Force Nova soon engages Sathar Fleet \#2 in the Whorl system. The remaining Task Force Prenglar ships return and join the battle. This running battle results in the eventual withdrawl of Sathar Fleet \#2 into the White Light Nebulae.

Sathar Fleet \#3 attempts to circumnavigate the Greater Morass(96.8). Two weeks later it is engaged by long-range fighters from Moonworld(Lynchpin). Without any knowledge of the existance of the Lynchpin system, the Sathar forge ahead expecting to find a lone spaceship. Instead the Battle of Moonworld is joined.

- FY97 The Coalition's Flight discovers the Sathar supply route around the Xagyg Nebula. They station themselves in deep space and proceed to destroy all incoming Sathar ships.

The final dregs of Sathar Fleet \#1, after slipping into the Xagyg Nebula off Fromeltar, arrive back at Sathar Outpost \#1 and prepare to defend to the death.

The Battle of Moonworld ends (97.1) with three-quarters of Sathar Fleet \#3 destroyed. The remaining Sathar vessles are forced into the Vast Expanse.

Task Force Prenglar regroups off K'aken $\operatorname{Kar}(97.2)$.
The UPF extablishes the United Planetary Federation Landfleet in 97.5, the first interplanetary army raised on the Frontier. Thousands of Humma and Osakar arrive from the Rim and enlist, hoping to stop the Sathar menace before it invades their homeworlds. Many die for the Frontier, but still more stay and become citizens after the war.

Strike Force Nova secures the Frontier inward from Theseus.

- FY98 A Coalition Flight long-distance probe discovers Sathar Outpost \#1 and reports its location before it is destroyed.

The remains of Sathar Fleet \#2 arrive at Outpost \#1.
Despite a desperate shortage of supplies caused by the Flight blockade and terrible losses from previous engagements, the Sathar have finally completed their construction by FY98.3. Outpost \#1 is now a formidable fortress.

The Mist Stone, a sacred Capellan icon, is stolen by Sathar agents and smuggled into Outpost \#1. The original copy of Reflections of a Humble Servant is also stolen and smuggled into Outpost \#1. This work is considered by Humans to be the definitive philosophy of Dralasite civilization. Sathar war ships force the populations of Circe(Solar Minor) and Kir'-Kit(Solar Minor) to evacuate their planets (98.5). They are transported to Outpost \#1 and enslaved. All three incidents combine to assure that Outpost \#1 is not taken by orbital bombardment.

Strike Force Nova retakes Solar Minor by 98.7. The fighting is fierce and half of the Strike Force and all of the Sathar holding force is destroyed.

- FY99 The Battle of the Blockade(99.1). A reinforcement fleet from Sathar space is challenged by the Flight. Half of the Sathar fleet, most of them fighting ships, escape but all troop ships are destroyed. About one half of the Flight is eliminated.

The Flight is greatly increased by reinforcements from the Rim. Wing \#1, the original Flight, rendezvous with Task Force Prenglar. Battered and weary, they still insist on joining the siege of Outpost \#1 with the Frontier forces. This group of Rim spacers quickly gains notoriety in the Frontier and greatly enhances UPF-Rim relations. They are known as the Raging Rimmers.

Wing \#2 takes up the blockade position. Wing \#3 is charged with the defense of the home worlds. Task Force Cassidine sails for Solar Minor.

The Sathar begin mining operations on adjacent moons to Outpost \#1 (99.5).
Dralasites and the Coalition insist that a diplomatic mission be sent to Outpost \#1 (99.6). The Sathar agree to meet three months later to discuss possible treaty. Non-Sathar agents represent Sathar interests at the meetings. Diplomatic talks are held for another 18 months with no results. During that time the Sathar strengthen their defenses and repair their ships. The UPF Landfleet is given time to become a formidable army.

- FY101 Task Force Cassidine joins Strike Force Nova around Solar Minor after the talks fail. Four months later (101.7), Capellan Free Merchantsmen transport the Landfleet to the Solar Major and Solar Minor Fleets. Many Ifshnit remain in the Frontier after the war and begin the Free Merchant trade system throughout the UPF planets. They will become so firmly entrenched in Frontier life that the mega-corps will not be able to force them out, and eventually accept them as another mega-corp.
- FY102 The Battle of Five Fleets. In a pincer action, Task Force Prenglar, Coalition Wing \#1, Task Force Cassidine, and the remnants of Strike Force Nova attack the Outpost \#1 system. Outpost \#1 itself is an almost planet-sized moon and has two moon sized companions. The entire year is spent destroying the remnants of the Sathar Fleet, the minefields orbiting the planet, the small fighter squadrons the Sathar captured from the Solar Minor system, and the moons' mining and defensive operations. Lost in the action is the rest of Strike Force Nova, except for the battleship Quasar, half of Task Force Cassidine, and all but two destroyers from Coalition Wing \#1.
- FY103-105 The Siege of Outpost. Task Force Prenglar blockades Outpost \#1 while Landfleet is shuttled in under intense fire. The land battles take two years to complete. At the end of the hostilities (FY105.11.20), no Sathar survive and $40 \%$ of Landfleet is destroyed. Among the Landfleet dead, $30 \%$ are Rim citizens. Most of the Ifshnit, Osakar, and Humma who have served the UPF during the war settle down on the UPF Frontier worlds.
- FY106 The university of Zebulon receives funding from most of the worlds on the Frontier. Its facilities on Anker increase over the next 20 years until they are larger than most Frontier cities.
- FY107 Solar Minor is resettled and is no longer a corporation system due to the changes in UPF law in FY95.

The Gullwind is built.

- FY108 The Frontier worlds decide that a permanent, but scaled down, UPF Landfleet force must be maintained at all times for the defense of the Frontier.
- FY110 Outpost \#1 is established as a UPF military base. The "Hoppin' Hundred and Eighth," a spearhead Humma division, is stationed there permanently.
- FY114 The first Star Law graduating class containing Ifshnits, Humma, and Osakar finish their training. The violent outbursts threatened by a few radical cults never appear.
- FY115 Galactic Task Force and MercCo fight the first post-SWII Corporate War over settlement rights on Anakosus, third moon of Alcazzar(Rhianna). Hostilities quicly spread to include all seven of Alcazzar's moons and over half a dozen mega-corps. The Corporate Wars begin in earnest.
- FY116 The Rim and the UPF enter into multiple defense treaties and economic trade agreements, but the Coalition gives severe warnings to all mega-corps that their militancy will not be tolerated in the Rim. Tourism between the UPF and Rim is established and is immediately sucessful. The Frontier now officially includes the Rim worlds (FY116.5.3).
- FY117 Star Law is invited to the Rim to help the Coalition train their own planetary branches.
- FY118 The Rim's Age of Adventure begins as hundreds of exploratory vessles are sent out to map the unknown regions surrounding the Rim.
- FY120-125 The Rim side of the Lesser Morass is mapped.
- FY120 Several Saurian escape ships are found travelling through the Theseus system.
- FY121 The AIPS is formed. Except for the Capellan Free Merchants, who were introduced into UPF society under unusual circumstances, it is the first mega-corp voluntarily created by smaller companies in an effort to resist merger or take-over attempts by existing mega-corps.
- FY122 The first Rim Star Law agents appear. The structure is identical to the UPF Star Law organization.
- FY124 A Human merchant discovers the Debaran system. He uses this as a base from which to run a pirate organization as the Star Devil.
- FY125 Hilo Headow becomes the chief executive of Streel Corp.
- FY126-138 The Rim side of the Xagyg Dust Nebula is mapped up to the Klaeok system.
- FY127.5 Christian Fisher enters Star Law Academy.
- FY127.8 An exploratory team is sent to the Debaran system from K'aken-Kar.
- FY128.2 Crash on Arsolus(Debaran). A starliner is hijacked and taken to the Arsolus(Debaran) system. This ship has onboard a large number of Star Law recruits and their instructor who escape the ship in the Debaran system and crash on Arsolus. They eventually defeat the pirates and bring help to stop the Sathar fleet intent upon destroying the Eorna and the races they have uplifted.
- FY128.9 Star Law is given equal powers, rights, and jurisdiction in both the Rim and UPF systems for interplanetary and interstellar crimes. The UPF and Rim branches of Star Law unite to become one cohesive force. While it works mainly with the local law enforcement agencies, Star Law is recognized as the only law enforcement force with full authority throughout the entire Frontier.
- FY128.11.18 Disaster on Kawdl-Kit. An asteroid strikes a moon of Kawdl-Kit(K'tsaKar).
- ==============> Current Time Line <==============
- FY129 An altered Mechanon assassinated the Governor of Zebulon. The UPF suspects that the Sathar may be establishing an extensive spy and terrorist network. The possible Sathar use of mechanical life forms, such as the Mechanons, as agents becomes a prime investigative goal of Star Law.
- FY129.11 Eorna pods.
- FY130 The Mechanons are officially informed by the UPF that they are not considered a stable enough society, at this time, to be allowed equal status in the UPF. they are
forthwith considered "wards of the Federation." Their protection and supervision are the responsibility of the Council of Worlds. While most Mechanons accept this as a necessary step toward independence, some rebel, and go underground, swearing to avenge their race. Many of these are suspected of being Sathar agents.
- FY131.3-9 The Dramune Run.
- FY131.10 Third Dramune War is fought.
- FY132 In an effort to stem the growing numbers of Corporate Wars, the UPF and Coalition worlds grant Star Law the authority to recruit and use mercenaries.
- FY135 Mega-corp recruitment doubles in non-enforcer professions. A rend of smaller and cheaper skirmishes or espionage missions to replace the larger, more expensive Corporate Wars begins to show. Over the next several years the term "Corporate War" comes to mean a war of intelligence gathering, tactical enforcement procedures, and industrial sabotage rather than full-scale military operations.
- FY137 A human assassin fails in his attempt to shoot Queanee Kloonane, chairman of the Council of Worlds. A small bioform is found attached to the human's back. Scientific studies show it to be some kind of intelligent, parasitic organism with the same genetic make-up as Sathar specimens. Authorities believe it to be a new Sathar method of controlling agents. See-through apparel becomes fashionable almost immediately.
- FY138-145 Mapping of the Xagyg Dust Nebula continues form Klaeok and K'aken-Kar.
- FY140 The University of Zebulon publishes the first volume of Zebulon's Guide to Frontier Space, a multi-volume collection of confirmed flora, fauna, cultures, devices, custons, and history of the known Frontier. It is considered the definitive work ont he Frontier and is immensely popular.
- FY150 The Grand celebration, commemorating 150 years of the UPF treaty is planned for the entire year. Gala social functions, parades, and celebrations are planned on every planet in the UPF and even some on the Rim.
- --- The Waller Nexus system is disscovered by the UPF survey ship Eleanor Moraes. The only habitable planet, Mahg Mar, is the site of the first UPF mutiny.
- --- Liberty system discovered by the UPF. The planet Snowball is liberated from Sathar tyranny. Tacticians, politicians, and exobiologists are given a chance to study Sathar machinery and methods first hand because of the information gathered by the populace during their occupations. It is feared that many pockets of Sathar tyranny exist all around the Frontier and Rim. ~135 fy Long-range probe ships are sent into suspected Sathar space away from the Rim and UPF systems on the other side of the Xagyg Dust Nebula. It is hoped these probes can answer the question of where the Sathar come from.


## Chapter 6: FORWARD

Lately, I have noted a small revival of Star Frontiers, with several articles and rules variants. Here is my contribution-- an article I wrote several years ago to flesh out interstellar travel via 'the Void'. I hope you enjoy it. Please write TimC27@aol.com if you have any comments. Please share and enjoy.... just don't take any money, give any money, give proper attribution, etc.

# How to Handle the Void 

## -Or-

## Making Something Out of Nothing

Shah KRaaakkk!!! Laser light raked out form the darkness, tracing a blackened scar across the wing. The retreating assault scout, smooth and clean an instant before, now had a jagged exclamation mark of fused metal next to the name-plate of the fleeing ship. The "Moondancer" was lucky. The blast was a solid hit, but a few feet to the left, and one atomic motor would be useless slag.
"That one came damn close to making us into cut bait, Tragg" Ktree cried. The 'monkey' as usual made no attempt to hide his anger, barely containing his characteristic war-whooping. His long, spidery fingers danced over the engineering console, which now lit up with several dozen red lights insisting on attention.
"Cool year jets, you ape," came the terse response, "I got my face full 'a bogies on radar, and I don't have time for it!" Almost casually, the glossy black face-plate slid up and away from the face of the visor, and covered the name stenciled onto the plastic crown "Cap. Traggert Moldo". He squinted his already pinched eyes as he bent over to look in the hooded display of the nav' computer. His face lit up with the reflected blasts of AR's, assault rockets exploding just out of range. For the moment the dancer was safe. The 'worms' never got the first few rockets on target. Lasers were one thing, AR's another. But a few more volleys,...

Tragg peered deeper into the green terminal, watching the numbers roll by. He was almost willing the right combination to lock the astrogation fix., but for the moment he had to wait. What good would it be to jump out of a system swarming with Sathar, only to wind up lost in deep space.

Another explosion. Waves of concussive force made the welds in the 'Dancer groan. The violence of the blast meant this time it was no 'AR'.
"Torpedo's, 'Mon Capitan'," The hollow. booming voice crackled over the intercom, "Don't worry, Fool gave it a good-bye kiss." The comment ended with the familiar smack of pseudopodal lips.
"Nice going, Fool," Tragg crackled back. He felt funny saying it that way, especially when the little blob, a crack shot with the laser battery, had just saved their lives, blasting the torp moments before it struck. But after all, it was the Dral's name.
"No Fool like an old fool", Fool Bol yelled up from the gunnery deck. Urgency checked his voice, and he immediately sobered up. "Looks like her sisters are looking for revenge!"
"How many?"
"Looks to be about twelve, ..., all torpedoes."
Tragg didn't have to wait to hear the last part. His visor slid back into place, and ignoring the numbers on the nav' computer, he punched the throttle.
"We're smoking this jump, boys and blobs."
From below, came the echo-laugh, "if we can't stand the heat, let's take our fishing pole and go home, eh?"

The Yazirian engineer looked up from his console snarling. Dralasite humor and not even enough time to take a sedative before crossing that mess called The Void.

To many an adventurer in Star Frontiers, there really is not much to worry about when crossing the mysterious region of non-space non-time called the Void. It is merely a way of making short hops across and otherwise vast Cosmos. What would take years, decades, or even centuries following the laws of the relativistic universe in Real Space, can be accomplished in weeks, days, hours, even minutes in the non-relativistic universe of the Void. But should this incredible phenomenon, the very thing that makes the Star Frontiers milieu possible, be treated in such a routine manner?

Granted, making too much of the generally mundane matter of interstellar travel mundane, (that is, by Star Frontiers standards) would threaten to bog down play. But ignoring The Void leaves unanswered some serious, nagging questions.

In the Star Frontiers expansion, Knight Hawks, The Void is described as a physical reality of space apparent when a space ship accelerates to a speed of about 12 million kilometers per hour, roughly one percent of the speed of light in a vacuum. When this speed is reached, "a ship will disappear from the space known as the Universe, and enter a region called 'The Void'." This discovery was 'accidental'.

No doubt is was an accident. Every scientist, every school child, indeed every thinking human being should have been shocked by such a discovery, since no evidence had ever been even slightly hinted at in all the countless hours of experiment and observation in all of known scientific endeavor throughout time! Were this phenomenon to actually exist solely in the manner described, all matter would have long ago slipped the 'bonds' of reality and entered The Void, since the Big Bang surely propelled all matter easily beyond that speed by several orders of magnitude. Discounting that event, even common occurrences such a super-novae, super gravity, and earth-bound particle accelerators propel quantities of mass at nearly the cosmic
speed limit of $180,000+$ miles per second. No, indeed, jumping across The Void is a bit trickier than that.

To understand how travel across (through, over,...?) The Void is accomplished, it is necessary to understand what this region/condition is, or is not, compared to the universe of Real Space. Frontier scientists generally accept the notion of the Meta-Cosmos, a kind of super-universal theory which includes Real Space as simply one aspect of it, while the Void is simply another. The best 'model' for the Meta-Cosmos is the so-called "Stellar Ocean" model first postulated by a renowned Dralasite philosopher. According to the model, Real Space is like a four dimensional ocean surface, rippled with slow-moving waves and inexorable currents: Matter provides the substance; energy, the motion. Significant concentrations of either can cause whirlpools, breakers, and storms on this Meta-Cosmic Sea. But for every wave of Real Space, there is a subsequent trough of Non Space. It is these troughs that Spacers now refer to as the Void. By skipping across the surface of Real Space through these valleys of emptiness, much like stone skipping across water, starships can by-pass vast tracts of Real Space. Thus, faster-than-light travel is possible. But herein lies the trick-- getting the stone to skip. Common sense says that some unusual outside force must act upon the stone to make the skip possible, to cause it to enter The Void.

One answer to the problem of including such a major new factor into a Star Frontiers campaign is to ignore the problem. Another might be a bit more elegant - to include another element in the equation of Void travel-- The Transit Field.

The Transit field is a variation on the field technology basic to the frontier races. Already, they are familiar with albedo screens, gauss screens, sonic screens, stasis fields, etc. All are envelopes of various forms of energy that wholly or partially nullify their complementary forms of energy (lasers, electromagnetism, sound, particle beams, etc.). The Transit Field is most closely related to the freeze field, the relatively common temporal stasis device used by field medics to preserve the near-dead until better treatment can be administered. The freeze field was first discovered by pre-starfaring Vrusks, and later by humans. The experiments with tachyon hyperwave energy were found to slow the metabolism by taking the life force to the fringe of the time stream. Later experiments created the sub-space radio, which eventually opened up communications between Humans and Vrusk. It was the latter race, experimenting with sub-light sleeper ships employing freeze fields destined for long term colonization, that first found the Void.

The event resulting in the discovery was completely serendipitous, but for the unlucky passengers of the first Void faring ship, it was a disaster. The fateful ship was outfitted with a new, large scale freeze field, one that enveloped the entire vessel in hyperwave. Moments before the ship reached the speed of 12 million $\mathrm{km} / \mathrm{hr}$, barely a tenth of the sleeper ships ultimate speed, the chief engineer reported via sub-space radio that a malfunction had altered the field pattern of the hyperwave envelope, nullifying its stasis effect. In a garbled, barely understandable, and subsequently historic message, the engineer stated that the ship was still accelerating to meet its schedule, with the altered field effect still wrapping around the ship. Fortunately for posterity, that engineer thought the unusual effects of the damaged field interesting enough to beam a continual stream of telemetry back to the launch control base. Abruptly, just after the ship passed the mark of .01 light speed, the message ceased.

No wreckage of the ship was ever found, and none probably ever will be, since this first ever journey across The Void by a frontier race was totally unexpected. The telemetry data, however, held infinite value. Within months, the unusual field malfunction was reliably duplicated, and hundreds of remote probes equipped with it, along with sensors and subspace radio were soon launched into the uncharted Void. Eventually, the Vruskan scientists had enough information to begin limited Void transits with the first generation of Vruskan spacers on board. Thus began the modern era of the Frontier.

## IN 'TRANSIT'

"Eleven point Eight, ugh..., five kloms per, Tragg," Ktree shouted, "Another minute's acceleration and we're out'a here!"
"I only hope that screwball jump circuit you rigged works" Tragg said back. "it looks like spaghetti in a blender."

The Yazirian bared his fangs in an ugly gesture that would have meant Time for you and me to step outside' to another Ape. Instead, he only growled backs "Curse your ancestors, bare-skin. Maybe you'd like to try better. It is not a fault of mine you forgot to get that old piece of junk overhauled."
'True enough' thought Tragg. But to admit it to that bloody ape was against his philosophy- 'be honest with yourself, but that's all'. His reply was a feeble, "Hey, I ran a little short this month."

Tragg would have followed up with some well-honed insult, but the torpedo explosion cut him off. It was too, too close.
"Mon Capitan," The dral's bellows voice from below came in an urgent sing-song, "we only have about twenty seconds before the worms catch the fish this time"
"Roger. We're just waiting for the speed." Tragg answered the wheezing voice with his own up-and-down tremulous tone.
"Ten seconds!"
"Roger!"
"Five,. . four,. . THREE! "
Tragg nearly screamed with joy as the velocity indicator gave him the magic twelve million kloms per hour. He could just about feel the heat of the fission engines powering the torpedoes when he engaged the jump circuit. Instantly, the cobalt-blue blanket of energy called the 'Transit Field' wrapped around the hull. Suddenly, warning signals that blazed away a second before
ceased. All of the hundreds of gauges flashed their last Real Space readings, unable to make sense of the non-sense wonder realm of the Void. Through the faint bluish shimmer of the Transit Field, Tragg saw the unsettling ephemeral gray infinity. Later, when the computer switched off the field, he was going to kiss that monkey on the lips. That can of metallic spaghetti held together! They were in the Void.

The current method for generating the Transit Field is reliable even in the face of the rigors of space travel and ship-to-ship combat. The field is distributed much like the various ship wide defensive screens in common use, and is treated exactly like them in regards to malfunctions, jerry-rigging and repairs. The Transit Field generator is called a jump circuit. While not very delicate, jump circuits are still expensive, costing usually 100,000 credits to replace. Pro-rated ones from salvaged vessels cost less based on the estimated number of remaining jumps at about $1,000 \mathrm{cr}$ per jump.

The circuit itself consists of a delicate balance of rare earth metals in an alloy created in huge, orbiting cyclotrons. These alloys are then tightly wrapped with metallic hydrogen in a precise configuration. Electrical current pumped through this device at specific polarization patterns produces the hyperwave field, which is then shunted along conductive matrices around the hull creating the field effect. Operating the field at less than .01 light speed has no other effect than to make the ship easier to detect on energy sensors (+20 \% effective range for energy sensors actively probing the ship), since substantial velocity is needed to skip across the waves of Real Space. Each 'jump circuit', as the device is often called, is guaranteed by the manufacturer for 1000 jumps (the actual number of jumps should be rolled secretly by the game
master[2D10+901]). Jumps made on a worn jump circuit will either fail completely ( $80 \%$ chance) or result in a misjump ( $20 \%$ chance) as per the Knight Hawks rules. If the unit burns out, and no replacement is available, a level 5 or higher technician has a chance to jury rig a temporary jump circuit using parts from five freeze fields (roll on repair machinery with a modifier of $\mathbf{- 4 0 \%}$, starship engineers add $+\mathbf{5 \%}$ per level of experience). Such a makeshift circuit will be good for only one jump before its unrefined components disintegrate.

## A'VOID'ING MISTAKES

The enormous complexities with regards to astrogating a starship across The Void are the reasons for the length of time an astrogator must plot even a well known course between the stars. The field can be activated effectively at any time between the speeds of 12.00 and 12.03 million kph. Subtle variations can result in longer or shorter jumps. Direction in Real Space is even more exacting, with variance from the plotted course in thousandths of a degree resulting in mis-jumps light-years from the intended destination. As stated in Knight Hawks, theories of Void transit say that practically any distance can be traversed by a starship. However, the practical limits appear to be about 30 light-years. Any jump over that distance has never been successfully attempted. The difficulty lies in the vast number of computer calculations necessary to maneuver a vessel across the undulations of the Meta-Cosmos. Computers capable of handling the incredible task have not yet been developed in the era of Star Frontiers.

Countless are the stars in the heavens, and to the poor astrogator adventuring into the unknown, countless are the risks to a good Void transit. Unusual solar activities, intense gravitational field, or even simple cosmic dust can seriously affect the accuracy of calculations when plotting new courses or when taking the risk of 'smoking the jump'. Below is a list of some disruptive phenomena and the appropriate adjustment to astrogation.

|  |  |
| :--- | :--- |
| PHENOMENON | MISCALCULATION |
| Solar Flare, Destination | -10 |
| Solar Flare, Departure | -15 |
| Solar Flare, Intermediate | -20 |
| Super Nova, Destination | -30 |
| Super Nova, Departure | -45 |
| Super Nova, Intermediate | -60 |
| Neutron Star, Intermediate | -15 |
| Oort Cloud, Intermediate | -15 |
| Black Hole, Destination | -30 |
| Black Hole, Departure | -60 |
| Black Hole, Intermediate | -50 |
|  |  |
| (Departure refers to the area in Real Space the starship is exiting Destination refers to the area in Real |  |
| Space to which the starship is heading. Intermediate refers to the points in Real Space between the |  |
| Destination and Departure points.) |  |

Other cosmic or interstellar phenomenon can have a similar effect on the plotting of new courses and in the attempt at risk jumps. The distortion effects, however, do not necessarily mean a vessel's course affected by them will always draw the vessel to that vicinity. Once a misjump occurs, determine the outcome according to Knight Hawks rules.

## "VOID" AVERSION

'Like getting your bell rung in the fun house.' Before Traggert Molds had ever dreamed of being a 'spacer' himself, his uncle, Bodius told him the sensation of passing through The Void was something like that. 'it gets you dizzy like you never been before. Sort'a like looking down the whole time while bein' hung out a window by year ankle-bones on a foggy day.'

Tragg's uncle had been a hard-core merchant 'spacer' for years. But never as a pilot. Pilots, it seemed to Tragg --who had also been a 'hand'-- had to meet the Void face-to-face. A pilot somehow had to wrestle with the beast and come to some kind of terms with it, or else go mad.

Not that it was so hard to actually travel through The Void. In fact, this was usually the smoothest part of the trip. Everything on automatic. Just let the Field do the jump, and computer tells it how long. Simple enough. No, it was how The Void messed with your mend.

Tragg had seen men go right out of theirs just moments after transit, they would sometimes just lose it. Some get giggles, becoming "Space happy" the old timer's like his uncle used to call it before the "Psych's" came up with 'VTS'. But the Void Transit Syndrome could also make a man sick as a dog, or drunk as a dry-dock spacer. Tragg had seen men weep like the Universe itself was coming to an end. Or nearly rip a vessel apart with a high-g maneuver to avoid a swarm of comets they 'swear was headed at me!' The funny thing was that The Void seldom treated anyone equally.

Now, the little Dralasite, Fool Bol, didn't mind jumping one bit. That little blob seemed to love it, in fact. He'd stand there and gaze out the portholes into the 'Great Gray Yonder', smiling the whole time.

That Vrusk, down in the hold, was another story. Tragg had begged the bug for its freeze field to fix the failing jump circuit. The response was a firm 'no'. And not just a 'no', but "Hell No!" It was a damn good medic, but there was no way it would go through a Transit without a freeze field. Said the last time it did, it was in the 'rubber room' for three month, convinced the Universe was slowly unraveling into permanent chaos. Tragg guessed that meant something like the can of worms for a jump circuit Ktree had assembled from the rest of the ships freeze fields.

Ktree was the big variable. Tragg had hoped there would be time to stick him with a sedative before the jump. About every other transit, the bellicose monkey wound go berserk, attacking the security robot with any handy piece of equipment. Last time. it was the circuit board for the subspace radio, and it cost a few thousand credit --all of Tragg's vacation money-- to replace. Tragg laughed to himself thinking of how hard he had knocked the whooping and screeching ape on the head with the butt of his laser pistol.
"This time will be fun, too." Tragg thought, smiling wickedly as he unhitched the holster at his waist. Just then Moondancer emerged from The Void.

Potentially more disturbing to adventurers than the remote chance of mis-jump are the numerous neuro-physiological problems that can result when crossing the Void: The so-called Void Transit Syndrome, or V.T.S. Physicians and psycho-pathologists are at the time of Star Frontiers only just beginning to understand the effects of traveling through the para-dimensional Void. They have compiled some reasonably accurate data on some of the known effects of V.T.S.

For one thing, the actual perception of The Void seems to be mostly subjective. Some who have traveled across the empty gaps in the Meta-Cosmos say The Void appears as a kind of limitless gray nothingness lacking any normal sensations of spatiality and a queer, disoriented sense of the passage of time. Others report a serene whiteness beyond the windows of the ship, all the while the ships sensors indicate the last readings they received from Real Space. Occasionally, some report hearing voices, or seeing strange beings, or even feeling the presence of some dead or missing friend, companion, or relative. Most psycho-sociologists dispute these last reports as merely one aspect of V.T.S.

After traveling through the Void, occupants of a starship will all experience a brief feeling of disorientation (-10 to both DX and RS. Effects last 2D10 minutes). For most, the 'star spinners', as the effect is referred to, is the only problem they will ever experience after a Void transit. Others can suffer from more severe V.T.S., with symptoms ranging from mild anxiety, to paranoid delusions; minor nausea. to debilitating illness.

Each of the four races dominating the frontier reacts differently to the transit. Dralasites seem best adapted to the jumps, their peculiar, non-objective physique apparently providing relative resistance to the spatial/temporal displacement. Vrusk, on the other hand, generally dislike the transit. Scientists studying the physical and emotional effects of the Void believe that the Vruskan mind, with its logical, pragmatic outlook, is distraught at the nonsensical method of interstellar travel (Ironic, considering the Vrusk first discovered the Void). Vrusk tend to get depressed following jumps, some even become suicidal. The average Vrusk will take a sedative, or better yet, strap on a freeze field (Yes the freeze field still works when crossing The Void!) before transit begins (Sedative will add $+\mathbf{3 0}$ to saving rolls when crossing the Void properly activated freeze fields will negate any effects of VTS. Sedation and freeze fields work equally for all character races.). Humans and Yazirians have a much wider range of reactions, including those the Vrusk suffer, to queasiness, euphoria, even madness.

Characters passing through The Void must roll versus their combined Intuition and Stamina. For example, a Character with an Intuition of 40 and a Stamina of 37 adds the two scores for a total of 77 . Roll percentage. Roll of 77 or less indicates a save; anything over that means the character suffers from V.T.S. Any roll of 95 or higher always indicates failure to save even if the combined scores total 100 or more. Failure to save means the character has been affected by some aspect of Void Transit Syndrome. To determine which, use the following chart:

| Reaction | Human | Yazirian | Vrusk | Dralasite |
| :---: | :---: | :---: | :---: | :---: |
| Depression, Mild | 01-03 | 01-05 | 01-40 | 01-20 |
| Depression, Normal | 04-08 | 06-11 | 41-60 | ------ |
| Depression, Severe | 09-11 | 11-12 | 61-80 | ------ |
| Catatonia | 12-13 | ------- | 81-97 | ------ |
| Nausea, Mild | 13-20 | 13-22 | ------ | ------ |
| Nausea, Severe | 21-27 | 23-27 | ------ | ------ |
| Fever/Chills | 28-30 | 28-30 | ------ | ------ |
| Euphoria, Mild | 31-50 | 31-44 | ------ | 21-50 |
| Euphoria, Extreme | 51-60 | 45-49 | ------ | 51-75 |
| Intoxication | 61-80 | ------- | ------ | 76-87 |
| Hallucination | 81-86 | 50-64 | ------ | 88-92 |
| Battle Rage | 87-89 | 65-9 4 | ------ | ------ |
| Dream Trance | 90-100 | 95-100 | 98-100 | 93-100 |

- DEPRESSION, MILD. Characters suffering from this symptom are only slightly down in the mouth. the feeling is similar to losing your favorite pair of sunglasses.
- DEPRESSION, NORMAL. A vague sense of purposelessness, Reaction times are slower
- (-1D10 to RS score). Drugs, hypnotherapy, or a combination represent the common and usually effective treatment.
- DEPRESSION, SEVERE. Electroshock, heavy sedation, and/or extensive psychotherapy are typical treatments. Without treatment, severe and lasting trauma may result. The character will weep continuously in heavy sobs (Vrusk characters will secrete mucous from their breathing holes). Strength, Intelligence, Dexterity, and Reaction Speed are all lowered 1D10. Furthermore, the character must make a save versus Intuition or become suicidal. The effect lasts up to one week.
- CATATONIA. Characters suffering from catatonia will be absolutely immobile. He or she will stare blankly into space, will not take food or water and must be force-fed, or fed intravenously. Electroshock treatments, if administered by a Psycho-sociologist, may bring a character up to a state of Severe Depression, which may then be treated accordingly.
- NAUSEA, MILD. This effect results in a sour, uncomfortable stomach. subtract 1D5 from Physical Strength and Reaction Speed. Usually, the effect last 1D5 hours. Standard motion sickness drugs available in most well-stocked sick bays will eliminate any discomfort.
- NAUSEA, SEVERE. Victims are subject to bouts of vomiting. Strength, Stamina, Dexterity, and Reaction Speed all drop 1D5+2 points. The effects last 1D5 hours, then 1D5 hours of mild nausea follow. A medical specialist must properly diagnose and administer drugs to lower the severity to mild nausea.
- FEVER/CHILLS. Flu-like symptoms, starting with mild faintness, which rapidly progresses within three hours to full effect. The character will break out in sweats, alternating with chills, slipping in and out of consciousness. Stamina points are reduced to 10, while all other ability scores are dropped to $2 / 3$ rds normal, making this the most devastating form of VTS. Reports have listed a few deaths from this ravaging symptom. There is a $10 \%$ chance characters will die from this, if no adequate medical facilities are on board ship. Stay dose or freeze fields, properly used by a medical specialist, can preserve the near-dead victim until the effects dissipate in 1D10 days.
- EUPHORIA, MILD. Character is overly happy, even jubilant regardless or the circumstances. The character's Intelligence drops by 1D10, while his or her bravado seems to rise proportionately. This is the mild manifestation of the syndrome referred to as going "Space Happy". A brief hypnotic session can correct this symptom, which will otherwise go away in 1 Do hours.
- EUPHORIA, EXTREME. The lucky(?) character who enters this jovial frame of mind is subject to rampant giggling, an overly bright outlook, and bouts of "Yippy-yi-yo-ing", all this in spite of the fact that all of his or her companions are wrenching, sobbing, or dying. He or she will get rid of anything that seems even mildly saddening (including the shackles on dangerous prisoners!). Generally, the Intelligence of a truly 'Space Happy' goon will be 1D10. This effect lasts 2D10 hours. Immediate sedation followed by hypnotherapy can bring the character to a state of mild euphoria within 2D20 turns.
- INTOXICATION. For some unexplained reason, some Humans and Dralasites will experience an effect almost identical to extreme drunkenness. They will become dizzy, lack sensory focus, talk loudly, even pass out at the controls of the ship. Subtract 1 D5+3 from Intelligence and Dexterity subtract 2D10 from Reaction Speed. The effects last 3D5 hours, with a doozy of a hangover to follow!
- HALLUCINATION. This is a purely psychological effect. The victim will have any number of strange and diverse perceptual illusion: Visual, audible, scent, touch, or taste. The actual hallucination will seem real, but can be doubted if the character makes an Intelligence check. Examples include such things as seeing a meteor swarm outside the ship, hearing some huge beast roaring below decks, or even watching a dozen cooked turkeys dance tango's on the bridge. These hallucinations will persist for 3D10 turns. After that, if other players have not yet convinced the character of his delusion, reality will become evident.
- BERSERK BATTLE RAGE. With a few exceptions, Yazirians are alone in being subject to this effect. The manifestation apparently focuses upon those neural centers associated with the Yazirian
battle rage capability (and in rare cases with humans who seem to share the same fixated hatred upon a person or group). Afflicted characters perceive someone or something on-board ship as their life enemies or the object of fixated hate, and immediately attack with whatever means handy. The character will fight blindly, ignoring his own or others safety until he succeeds in slaying the foe, being himself slain, or being subdued. Yazirians gain a battle rage bonus of +25 for facing this 'final enemy'. Once subdued, attempts at reason will be successful, if reasonably approached (The game master should encourage a role played solution to this problem). Characters attempting to reason should make carefully stated, delicate overtures, and roll a Personality check at -10 , because of the enraged state of the berserker. The effects can last up to 1D10 turns before wearing away.
- DREAM TRANCE. This is perhaps the most unusual and difficult to explain of any VTS symptom, perhaps because it is so rare, and its effects so unsettling. Characters experiencing this phenomenon often claim to have been visited by some dead or long-forgotten friend, companion, or family member. The reports often say the images are substantial, realistic, and present fully detailed impressions of past experiences and emotions. Occasionally, some who have experienced the 'dream' say the vision presented to them otherwise unknowable information, such as circumstances surrounding their death or disappearance, fore-warnings of unforeseen problems, etc. To date, no scientist has adequately explained these disturbing occurrences, since occasionally the vision appears to be eerily accurate. However, no lack of religious figures, legitimate and sham, point to the dream trance as proof of the existence of their beliefs. Some believe the occurrences are actually the souls of the departed or the out of body consciousness of unknown persons. These explanations gained credence as a result of the reports that Admiral Morgaine was twice visited by his dead brother's spirit during a void transit. Following both instances, Morgaine lead the UPF forces in stunning victories in the First Sathar War.

These are only the officially identified effects of VTS. Scientists studying the phenomena are only beginning to understand and prevent the disorders. However, these efforts remain experimental and not commonly available. But who is to say a few less-honorable types might not sell some latter day version of snake oil.

As a rule, machinery is unaffected by Void transit. However, there is a 5\% chance that unusual conditions of a jump may cause a system failure if such a malfunction is indicated, roll percentage dice again, consulting the following chart:

```
    Malfunction
Robot Malfunction
Computer Malfunction
Other Malfunction 95-100
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- ROBOT MALFUNCTION: 1D5 robots are affected with a random software malfunction, consult the Star Frontiers rules to determine malfunction and remedy. No special plusses or minuses are encountered for transit-related malfunctions.
- COMPUTER MALFUNCTION: Result means 1D5 programs have been damaged. Damage can, of course, cause hardware destruction and threaten life and limb. Roll D10 to determine program damaged. Damaged programs can be replaced by a backup or must be repaired using a Computer Specialist Manipulate Program Skill.

| Program | 1D10 |
| :--- | ---: |
|  |  |
| Drive | $1-2$ |
| Astrogation | 3 |
| Life support | $4-5$ |
| Weapons | 6 |
| Damage Control | 7 |
| Security | 8 |
| Communications | 9 |
| Miscellaneous | 10 |

- MISCELLANEOUS MALFUNCTION: A spaceship has onboard literally thousands of items controlled to some degree by software. This can range from the robots and computers, to the indicator lights on a laser pistol or the refrigerator controls in the galley. The latter types of problems can occasionally occur following void transit, causing all manner of headaches to player-characters. The game master should determine what effects Void transit might have on ship-board equipment. In any case, these are minor, yet perplexing effects, easily fixed by appropriate skills.



[^0]:    Disclaimer and Basic Information:

