SKYMARSHAL 8

THE WARBOTS (part 1) The history of armored war from 1990 to 17,500 A.D.

With the improvement of lethal weapons, soldiers on a battlefield have shown great and understandable interest in staying out of the line of fire. In early wars, where sticks, stones, and lances and bows were the main medium of battlefield commerce, this goal could be accomplished by hiding behind any bulky object, or through desertion. However, as time went on this became increasingly difficult. Either the bulky objects were not as strong as they had been once or the weapons used were less aware of said barriers. Some soldiers adopted a rigid code of martial etiquette and tin suits, but the effectiveness of the knight grew limited when gunpowder was invented.

In the twentieth century great powered suits of armor, called "tanks," came into common use. They required a concentrated barrage to stop them and definitely provided their pilots and crew a more salubrious environment within than they could expect to find without. Nonetheless, a tank still had a great deal of vulnerable places, was far too heavy and noisy, and had limited mobility. In the 1990's the tanks which were covered with borosilicate fiber plates were much lighter and more mobile than their predecessors, but still lacked ideal conditions for operation. They could not wade through swamps nor avoid being attacked from behind any more easily than the old tanks, nor could they retreat very fast. Clearly, there had to be something better.

The General Motors Terrain Walker (ca. 1995)

Originally developed for construction work and back-echelon packhorsing, the GM Walker was quickly accepted by the armies of America, Earth, when it was proved that the machine could carry a gun. Standing twelve feet tall and weighing eight tons, the Walker could stride down a highway at 30 mph and do 20 mph on rough terrain, such as burnt-out slums. Nuclear powered, it required little servicing and often powered its weapons directly from its own power system. Great hydraulic pistons operated its arms and legs, which followed every movement made by the pilot. The pilot was strapped in a control cradle that translated every motion to the Walker, and he had a clear view fore and aft through a plexiglass bubble. The Walker was equipped with a wide range of sensory devices, among them snooperscopes, radar, amplified hearing, some primitive smell detection devices and tactile pads on the hands and feet, all of which were wired to the pilot.

It was equipped to retreat fast, attack faster and explode when hit, with a satisfying nuclear blast. When this was commonly learned, there were very few enemy soldiers who were willing to harm the things, which made them extremely effective in clearing out potential battlefields. But it also made getting them to a battlefield to begin with a touchy proposition.

Few soldiers liked sitting on an atomic bomb, even though it would only go off if they were killed, and a Geneva Convention in 1992 declared them formal nuclear weapons. However, with the turmoil of the late twentieth and early twenty-first centuries growing out of hand, they were used with increasing frequency.

In October, 2000, an armed insurrection in Harlem City, America, caused Walkers to be brought out into the streets. Patrolling the city with squads of armed soldiers (and their nuclear explosion capacities secretly damped), they effectively cleared the rioters out of the burning city, and into a large prison combine, where they were kept until their tempers were drowned in rainy weather. Of fifty Walkers shipped in, only two were disabled. One had a department store, its pilot had rashly pushed over, fall in on it; the other had broken legs from a kamikaze automobile.

In November, 2020, the great series of civil wars in China were formally entered by the United States of America, Earth, and Walkers painted with ominous designs marched through the burning cities and villages,
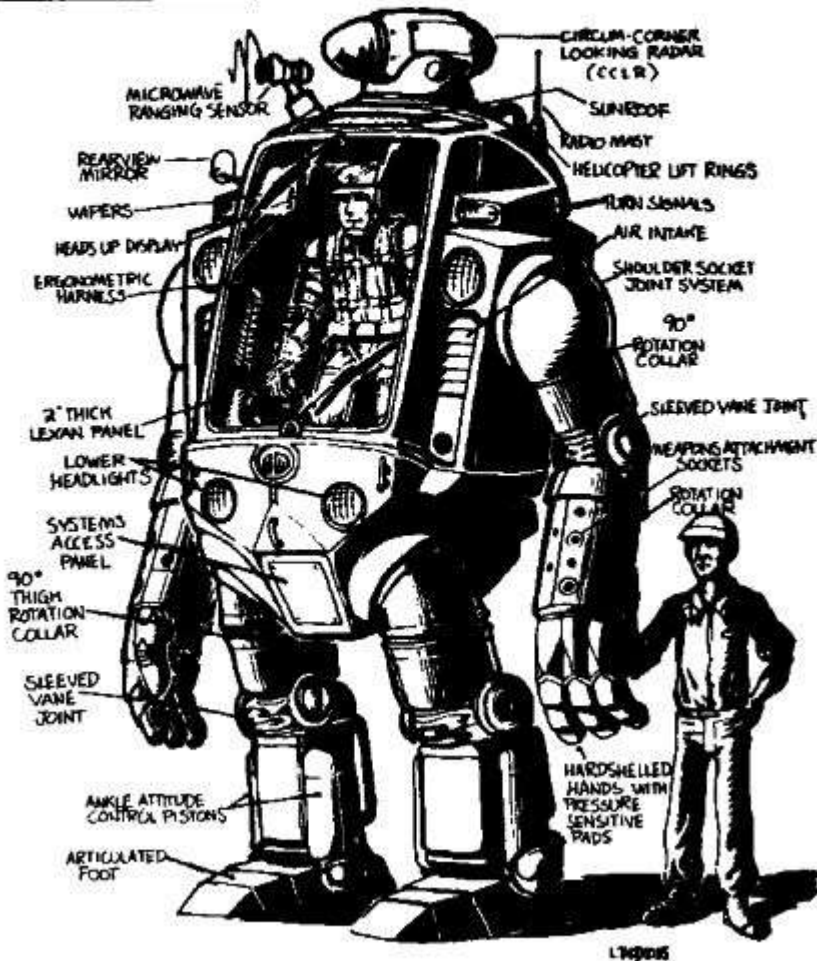
panicking those Chinese who would be panicked and nuking' those who felt compelled to fight back. Four nuclear explosions in Peking were enough to show the Red Chinese that fighting the things was useless, so they were given a wide berth and finally succeeded in bottling ninety per cent of the Red Chinese army in a small part of Manchuria, Earth. The Terran Federation was then formed using the Walkers as their primary military force.

After this, the Walkers were instrumental in assisting in heavy construction. They rebuilt the foundations of many of the worlds' cities, realigned the world's power conduits, built dams and, in one fierce burst of zealous activity, built almost a hundred thousand miles of beautiful roadway in North America in four years. Three years after that commercial aircars were produced in profusion. The new roads were ignored and slowly cracked while approaching obsolescence.

GENERAL MOTORS TERRAIN WALKER

HEIGHT: 4.5m   ARMAMENT: NONE   SENSORIES: CCLR, IR, MIDAR, SLODAR
MASS: 7500 kg   ON-BOARD CREW: 1   MAINTENANCE CREW: 17
POWER OUTPUT: 2500 HP   COST: 4,000,000 NEOBUCKS
CONSTRUCTION: METAL, CERMETS, COMPOSITES, PLASTIC, RUBBER, SILICONITE
SPEED: 50 kph
LIFTING STRENGTH: 3500 kg
CARRYING STRENGTH: 2500 kg

GENERAL MOTORS CORPORATION
DETROIT FREE STATE, NEOMERICA

The McCauley Walker (ca. 2065)

The year 2065 was an eventful year. The first complete cities were incorporated on Mars; the moon formally declared independence of the Terran Federation; the first non-government sponsored spaceship lines went into business, and a new Walker was released to the anti-riot squads.

Called "pinheads" because of its set of electric binoculars (which could see from electricity up through the spectrum to X-rays) which functioned as a head, the McCauley Walker had far more flexibility than the GM. Nearly sixteen feet of tempered aluminum and borosilicates, yet weighing only four tons, the McCauley could duplicate all human movements except those requiring bending in the trunk or waist. It could run 55km/ hr, was able to lift objects of up to ten tons and turned out to be a massive failure.

The McCauley Walker was a total weapon, designed for optimum placement of components in the least space. The structural members were cast or electroblown around the defense systems, so that it was impossible to deactivate them. The defense systems were inexorably bound with the machine's own conscious battlefield computers. To activate the Walker meant it would at once be at top fighting condition, ready to blast out with weapons which could not be removed from its hull without expenditures of twice its original cost. This did not make it a noteworthy construction machine. Its one experiment in this use had it firing lasers at bulldozers, graders, solidifiers and road crews. The unions kicked up a fuss. It was obviously not a very good construction machine.
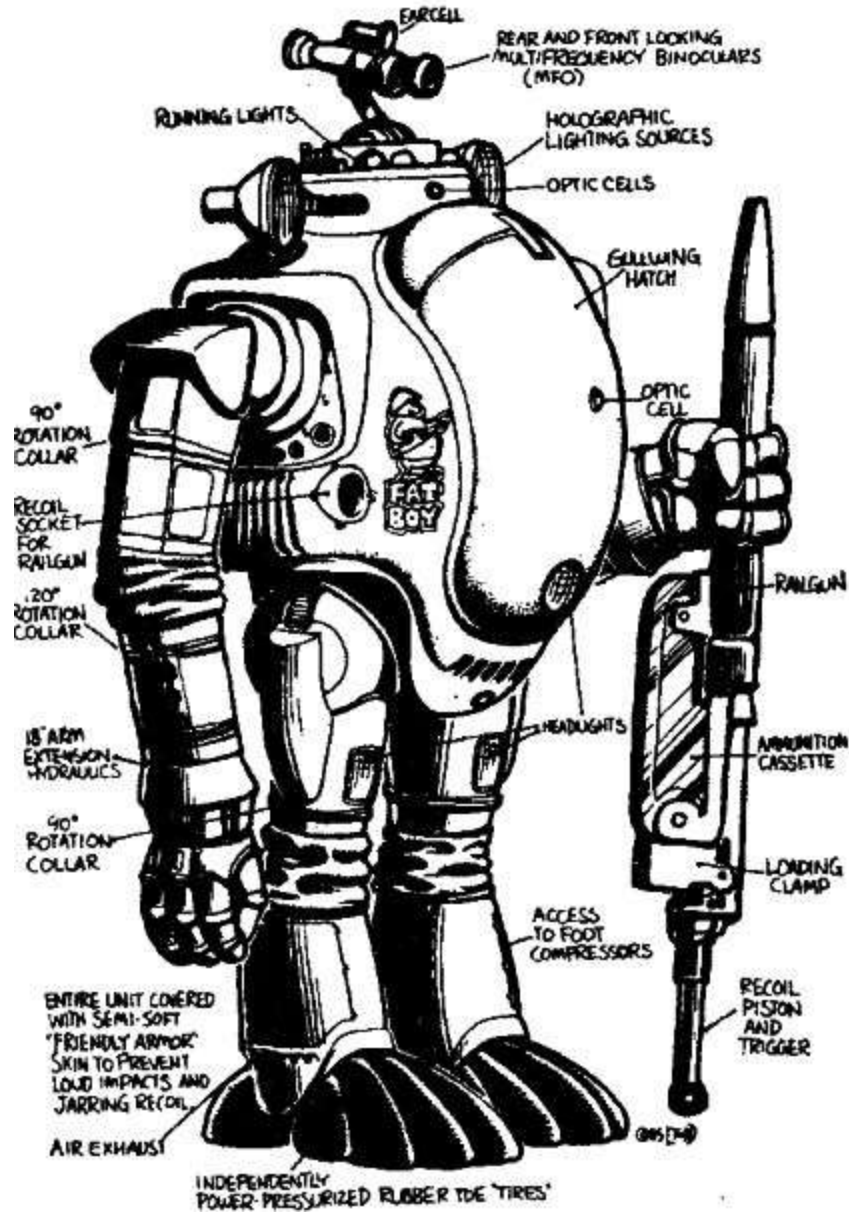
Ten thousand of them were built at a cost of two million credits apiece, and it cost four thousand credits to maintain each per year, whether or not they were used. A fortune was spent on the hundred acres of sheds outside of Indianapolis in which they were housed, and it was here that the Walkers remained for eighty years, unused except for occasional exercises to keep them from rusting or whatever it was they did.

But there were no wars. Riots were fairly common, but rarely large enough for Walkers to be brought out for them, and never located close enough to an airport to have Walkers in on them before they were effectively over. In 2070 the Martian Colonial Government declared formal independence of the Terran Federation and confiscated all Federation military property to see that their constitution was respected. It wasn't however, for the Federation were full of people who would suffer great financial losses if. Mars became free. So the First Interplanetary War was begun.

Terran troop transports landed four hundred Walkers on the Syrtis Greenspot, where they were jeered and mocked by a large army of Martian colonists. Following the Martians out across the desert, the Walkers made rapid progress on them until the old plastic sleeves that kept dirt and abrasives out of the leg joints began to crack from age. Martian sand got in and jammed the joints, and the Martian Colonial Armor walked a safe distance around the field of immobile Walkers, attacked the Terran positions from behind and won their independence. It was never disputed again.

McCAULEY WALKER (AMBULANT)

HEIGHT: 4.9 m
MASS: 5900 kg
POWER OUTPUT: 3000 kw COST: G 4,000,000
CONSTRUCTION: CERMET, SKINLON, COMPOSOT, PARAPRENE, GLASAL
SPEED: 55 km
LIFTING STRENGTH: 10,000 kg
CARRYING STRENGTH: 4,000 kg

ARMAMENT: NONE SENSORIES: MFO, MFA, SOC, SLR, CCLR
ONBOARD CREW: 1 MAINTENANCE CREW: 12

DESIGN: AMBULANT DIVISION,
McCAULEY INDUSTRIES,
DEXATRON ISLAND, LS

EARCELL

REAR AND FRONT LOOKING MULTI-FREQUENCY BINOCULARS (MFO)

RUNNING LIGHTS

HOLOGRAPHIC LIGHTING SOURCES

OPTIC CELLS

GULLWING HATCH

OPTIC CELL

90° ROTATION COLLAR

RECOIL SOCKET FOR RAILGUN

20° ROTATION COLLAR

RAILGUN

18" ARM EXTENSION HYDRAULICS

HEADLIGHTS

AMMUNITION CASSETTE

90° ROTATION COLLAR

ACCESS TO FOOT COMPRESSORS

LOADING CLAMP

ENTIRE UNIT COVERED WITH SEMI-SOFT "FRIENDLY ARMOR" SKIN TO PREVENT LOUD IMPACTS AND JARRING RECOIL

RECOIL PISTON AND TRIGGER

AIR EXHAUST

INDEPENDENTLY POWER-PRESSURIZED RUBBER TOE 'TIRES'

FAT BOY

*Part Two will be published in Skymarshal 9.

Damon's 3rd Edition Timeline

EVENT	DATES	LENGTH
ISW1	2205-2212	6 years
ISW2	2228-2230	2 years
ISW3	2244-2247	3 years
Theban War	2298-2302	4 years
ISW4	2360-2370	10 years
Insurrection	2438-2444	6 years
2nd Arachnid War	2450-2454	4 years
Olympus Affair	2459	3 months
Biomech Conflict	2459	4 months
Armageddon War	2464-2466	2 years
Tiamat Lost	2468	---------

Interstellar War One: The first truly intergalactic conflict for mankind, this war was sparked over tension between the Terran Federation and the Khanate of Orion, a race of cat-like beings who at the time had a much larger empire than humanity. ISW1 was a six-year series of battles that ended with a slight human victory, leaving the opening for a much larger and more deadly conflict 16 years later (Interstellar War Two, ISW2).

Interstellar War Two: A multi-sided battle between humanity and the Khanate of Orion and a newly discover bird-race (the Ophiuchi) who eventually sided with humans and brought about an end to this two year war. ISW2 was marked by the first large and decisive fleet battles.

Interstellar War Three: A four-way conflict between the genocidal Rigelian Protectorate on one side and humanity, the Orions, and the Ophiuchi on the other side. The conflict ended after three bloody years with an allied victory and the total destruction of the weasel-like Rigelians. However, billions of innocent civilians were wiped out by the fanatical Rigelians before they could be stopped. The first large scale genocidal war in galactic history.

Theban War: A desperate war fought between the non-human Thebans and mankind, this war lasted four years due to the fact that the Terran Federation Navy was badly understrength at the beginning of the conflict. Humanity eventually won the war and occupied the Theban Homeworld. However, the Thebans (a single system polity) certainly gave humanity a run for its money during this war.

Interstellar War Four: The longest war to date (ten years) and by far the bloodiest, ISW4 war fought between the genocidal Arachnid Omnivoracity and the Allied Races: mankind, the Orions and Gorm, the Ophiuchi, and the newly discovered multiracial Crucian Union. The Terran Federation had a large navy at the time and effectively blocked the invading Bug forces in the fringe area of the Federation but billions of civilians were eaten alive when the Arachnids overran human and Orion colonies early in the conflict. The war ended with the total annihilation of the inhuman Bugs, and the loss of some of humanity's greatest heroes: Admiral Hannah Avram, Admiral Ivan Antonov, and Admiral Andrew Prescott.

Insurrection: A devastating civil war that ripped apart the Terran Federation, the "Insurrection" lasted years due to the fact that humanity had not forgotten the lessons of being militarily unprepared from the Theban War and had large standing warfleets spread across Federation space. The initial spark was the Corporate Worlds proposal of joining the newly forming Pan-Sentient Union (with the Orions), while the "Fringe" worlds resisted violently against this "amalgamation". This brutal six year fight cost humanity more lives than all its' previous wars combined.

Second Arachnid War: Although they were thought to have utterly perished in ISW4, some surviving Bugs
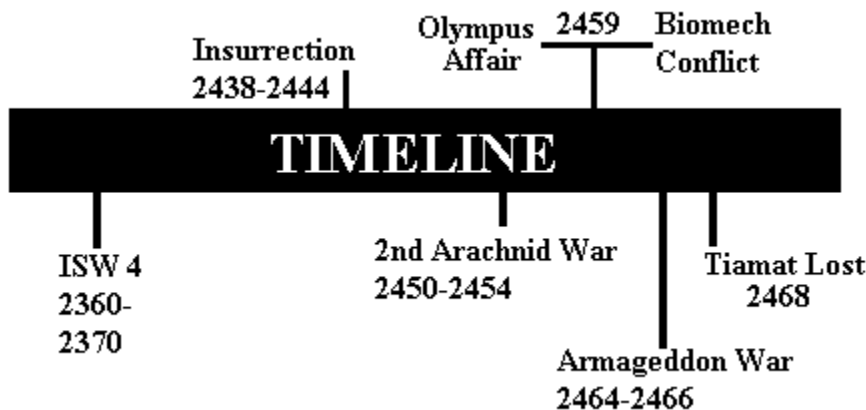
tried to revive their former empire six years after that conflict ended. Early discovery by the Reformation Group (a Fringe world polity) halted their efforts only after the Pan-Sentient Union sent major fleets to bomb them into oblivion. Revelation of the uber-tech crab-like Tolat race took place during this conflict, which lasted four years.

Olympus Affair: A crisis which threatened to tear apart the joint human-Orion Pan-Sentient Union. Discovery of a quadruple star system in human space (with eight habitable worlds) sparked a colonization crisis among the human and Orion parts of the federal PSU government. The four month affair ended when half of the Olympus System worlds were given to the Orions to colonize, but left a bitter taste in the mouths of many humans.

Biomechphilist Conflict: Located next to the fantastically productive Olympus System, the Biomechphilist homeworld reacted aggressively when they discovered humans initially exploring their home system. Invasion of the Olympus System was desperately averted only by the maverick human Admiral Frank Cavalier. The Biomech homeworld was occupied and their unique technologies were confiscated and investigated, resulting in major newly weaponry for humanity (just in time for the Armageddon War).

Armageddon War: The war to end all wars. Invasion of known space by the ancient and highly technological Hre'Daak race brought about the most deadly conflict that anyone had ever seen. Hundreds of PSU warships were crushed by Hre'Daak uber technology and entire star systems were induced to nova by Hre'Daak weapons. Terra herself and the Orion capital were both reduced to smoking balls of ruin before the PSU and her allies could finally halt the Hre'Daak advance. Humanity suffered greatly during the war and most galactic states collapsed in on themselves after the fighting stopped. The galaxy would never be the same.....

***Tiamat* Lost:** The human warship *Tiamat* (juggernaut size) became lost on her way home from the warfront after passing through a highly unstable warpoint. Several years passed before the surviving crew could find their way home, after discovering many different new races in the Sagittarius Arm of the galaxy. The *Tiamat* also found the Tolat homeworld and the super conglomeration of races known as "Civilization".

Historical Timeline: Civilization

Progenitors Rule
Some 800,000 years ago the Progenitors ruled all known space, including nearly all the sectors that make up the interstellar organization called "Civilization". Ancient artifacts like the Labyrinth on Kesse and bombardment patterns on many nearby worlds prior to Civilization colonization stand as mute symbols of the Progenitors power, especially the "End-of-all-Wars" which virtually wiped out every trace of their race from the galaxy.

Mechanoid Reign

Known to exist for over 100,000 years, the Mechanoids are an insane race of bio-mechanical beings bent on the total genocide of all humanoid life. Their terrorizing of bipedal races is legendary, and their loyal insectoid allies (the Dionii) are only slightly less cruel. Only the amalgamation of races within Civilization has been able to fend off their attacks with any measure of success. The Mechanoids are an ultra-tech race, discovering how to implode stars, create black hole projectors, and build continent-sized warships.
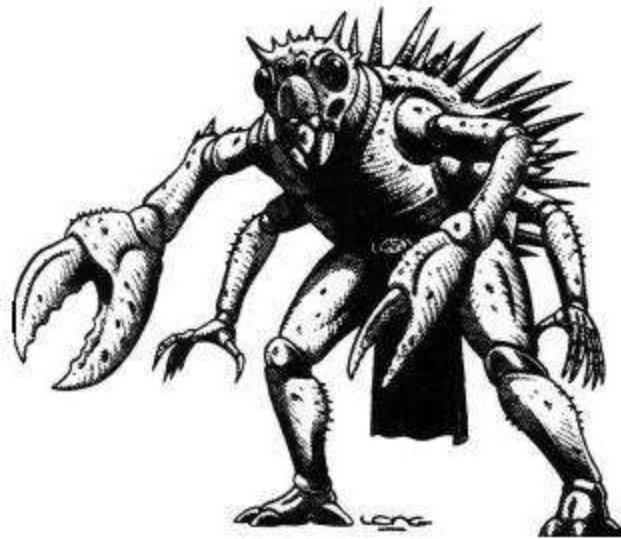
Metamorph Wars

Recorded in many local alien histories, the Metamorph Wars devastated the Orion arm of the galaxy between 30 and 50,000 years ago but little is known about the Metamorphs' themselves. The Califax Pontificate, one of the oldest recorded civilizations in the galaxy, was destroyed during the fighting which lasted over 2,000 years and included several starfaring races.

Indil-Waro Conflict

From -40,500 AD to -40,000 AD the Indil (a bug-like race) and the Waro (a lizoid species) colonized the Sagittarius and Orion areas. After several brief contacts fighting broke out between the two aggressive races, reducing both empires to minor states as entire colonies were bombed out of existence. Eventually both races became extinct but their legendary battles were recorded by the long-lived Dushau.

INDIL

Dilgar Conquest

A slave race of the Indil, the Dilgar were an extremely aggressive and innovative race that rose out of the ashes of the Indil-Waro Conflict. Lasting from –38,900 AD to 35,000 AD , the Dilgar Empire reached a high level of technology, especially in the area of interstellar transportation. Building the only known Stargates in existence, many of which are still operational to this day, the Dilgar rapidly expanded after the fall of the Indil, completely wiping out their masters in just a few centuries. Using their newly created Stargates, the Dilgar went on to conquer the entire Sagittarius arm, annihilating the weakened Waro and the more powerful Laowon Federation before they met their own demise at the hands of an unknown race in the -34,400s.

Omnipotus the World Shaper: A massive sentient bent on creating and destroying habitable worlds throughout the galaxy, the first records of Omnipotus (also known as "the Chaos-Bringer") begin around -30,000 AD when

he destroyed the Skrull Homeworld. Races of Civilization have waged constant warfare against this being when he is discovered but he has to date never been defeated.

OMNIPOTUS

CIVILIZATION

A super-conglomerate of races joined in mortal combat against the utterly vicious Hre'Daak race, Civilization is an association of races that have vowed to stop the Hre'Daak invasions into their vast space no matter what the cost. Civilization itself is ancient, the organization dates back nearly 30,000 years although most of the originator races have "moved on". Now, nearly 3,000 races have combined their defensive firepower to withstand the overwhelming might of the Hre'Daak Dominate whose ultra-tech has substantially mitigated Civilizations' numerical superiority. Although combat has been waged on and off for hundreds of years, the major races of Civilization: the Bushi, Deeorti, Chatovatrians, and the Nev Dominion refused to give in and have totally geared their empires towards weapons production. Civilization has suffered some significant defeats within the last two years, including the fall of the Talo'sian homeworld, the destruction of the Grand Fleet at Norcross, and the reduction of the fortifications along Civilizations' border with the Hre'Daak. These failures have many races threatening to sue for peace, an offer the Hre'Daak surely won't accept. Below is a listing of major races within Civilization that have pledged to fight the Hre'Daak menace:

Acceptors, The	Arkarian, New People's Republic
Akaffi Sucessionist Realm	Arkonide Greater Imperium
Alar Commonwealth	Athenian Diktats
Altess Dynasty	Avoosl Concordium
Amalfi Conglomerate	Axon Hierate
Apis	Azuli Union
Aquila	Balteen Confederation
Archosaurian Empire	Basmoli Commonwealth

Baufrin Diaspora	Halvesh'oid Builders
Bese Alliance	Hani Federation
Bhor	Hartigal Combine
Bolbod Equality Empire	Hawvin Interrelated Confederation of Stars
Boxnard Empire	Heechee Space
Bozog Protectorate	Hees Reformed Domain
Branx Concordat	Hermat Alliance
Bree-all Federation	Hert Confederacy
Brodkil	Hhirl Commotion
Brrralk Commonality	Hockner Theocratic Realm
Bushi Federation	Horune
Caan	Hroshii Sojourn
Cenobite Confederacy	Hrubban Alliance
Chatovarian Empire	Hubri Esoterica
Children of the Night	Hudlar Realm
Chinko Republic	I'Ikalka Nation
Choraii	Ian Confederation
Chosen of God	Iborian Realm
Communion of Worlds	Im'kek Federation
Crescent Moon, Empire of the	Imperial Worlds
Cronosaurian Empire	In'Valian Space
Crystal Star Dominion	Izzian Empire
Cyberian Network	J'8lek Realm
Czill, United Planets of	Jambitchow Empire
Dakn Empire	Jast Heirate
Darcanan People's Republic	Jophur Realm
Deeorti Realms	K!ozn Continium
Deeper Covenant	Kalderhut Empire
Dilbian	Kamean/Kruskal Federation
Dilgar Expanse	Karpo Regime
Dillian Coalition	Kelgian Realm
Dominators, The	Kess'Rith Polity
Dreamers of the Mists	Keter Dominion
E'aij Foundation	Kezfi Federation
Ekh'l CoDominion	Kirlan Exiogeny
Emple-dokcetic Empire	Kittani Empire
Endori Republics	K'Kree Wastage
Esalin Heterodoxy	Koalian States
Eumohr Central Worlds	K'pitt't Stellar Union
Eurekan Cybercracy	Kreeghor Dominion
Faustian Alliance	Kreel Space
Fiian Apostasy	Kroddic Union
Fiordan Ordinate	Lehiroh Federation
Freighnar Commonwealth	Luren Federation
Ftanss Stellar Union	Lurgess Federation
Furtar Progression	M'Dok Patriarchy
Garthog Xenium	Mandru Collective
Glevv Federation	Masters of the Iron Star
Golgan League	Mech'onian Union
Grus	Melfan Federation
Gubru Legates	Metasoft Version Tree
Haak Alliance	Metzla

M'Gewn Socialist Spehere	Seti Alliance
Mibrannu, United Federation of	Shad, Dynasty of
Minthisti	Shadgui
Mizlaplan	Shaydor
Mohd Assembly	Shern/Shraix Subjugation
Mqdrekkor Union	Shumai Federation
Mu'atahl	Simiu Worlds
Mycohlian Union	Siwannese Worlds
Nactern Alliance	Skreen Worlds
Naram Confederacy	Skrull Pantheistic States
Naruni Enterprises	Solipsist Panvirtuality
Nathi Democratic Realm	Sophic League
Nation, The	Soro Realm
Navigators, The	Spreen
Negentropy Alliance	Ssli
Nev Dominion	Ssora Confederacy
Niamese Coalition	Synthian Realm
Nidorian Alliance	Tagoniglomerate
Nigelian Confederacy (Nigelians, Gendo, and Ostrac)	Talo'sian Federation
Nix(ians) Commonwealth	Tandu Empire
Non-Coersive Zone(the NoCoZo)	Tantal
Noro Realm	Tchork
N'Rog Empire	Teckla
Onctillian Order	Tele'Logoth
Oni Aliance	Telfi Union
Oon Federated Alliance	Thennanin Realm
Orgilian Federation	Thissera-Micean Cooperative
Orintergen Federation	Thranx Unity League
Overmind of Traal	Tolnep Empire
Po'mahn Collective	Toxx/Vess New Union
Poncan Empire	Tralthan Federation
Poorgl Star Empire	Tripean Union
Quern Hegemony	Troft
Quintesson Tyranny	Tssilka Federation
Raiders of the Verge	Tymbrimi Worlds
Rao Worlds	Tzu, Grandmaster of
Ratanoid Federation	Ultrovian Alliance
Reydovan Empire	Unitarian Agglomerate
Rh/attes Federation	Uroquex of Culthon
Rhyxnahr Alliance	Ursa Electronica
Rii Worlds	Uteni Association
Rishatha Empire	Utopia Sphere
Rogor, Warmasters of	Vahran Star Fellowship
Rurel Federation	Virh Commorium
Ryxi Federation	Vishnu/Vlathu Associated Worlds
Ryxx Combine	Vlathu Realm
Sadrao Aggregation	Vreed Federation
Sah'ot Realm	Vrest, Syndicracy of
Sat'htine, Planetary Confederation of	Vroon Organization of Planets
Seeronian Federation	Wazoon Worlds
Selachee Supremacy	Wazuli Federation
Sentani Federation	Weft Realm

Whimed Federation
Whorsk Space
Wulfen Khanate
Xatinni Worlds
Xiticix Conquest
Xmtlca, Republic of
Xodian Collective
Yavac Space
Zaal, Warlords of

Zebuloid Space
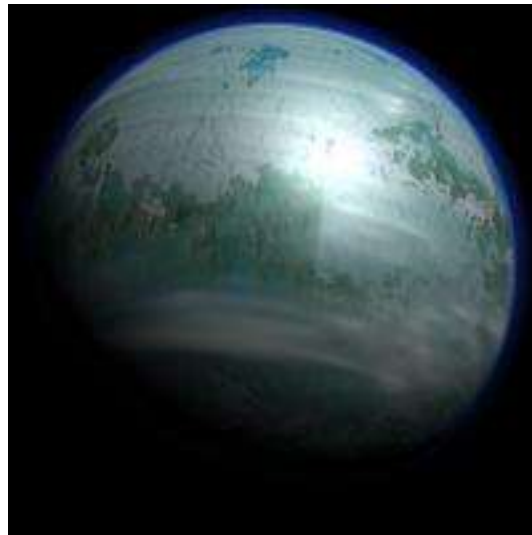Zilleo Harmony

Zoeific Biopolity
Zoni Federation

Map labels:
- Dionii
- Mechanoid Space
- GALACTIC CORE
- Dreamers Homeworld
- Former Mandru Homeworld
- Parliament World
- Talos
- CIVILIZATION
- HRE'DAAK SPACE
- Client States
- PSU
- ORION ARM

The Dionii

This race of man-sized intelligent insects seek to learn all Mechanoid knowledge, particularly the secrets of the power crystals, cloning, genetic reconstruction, and robotics. They have been (and apparently still are) the Mechanoids' oldest and most loyal allies. Like the Mechanoids, they loathe humans and humanoids (as well as all animal life), using them for slaves, playthings, food and experimentation. The Dioniis' cruelty is nearly as

legendary as the Mechanoids. These are devastatingly ruthless, methodical creatures that engage in the conflicts of war as a way of life. The Dionii are composed of four species of insects, combining to create a powerful warlike society bent on expansion and intergalactic dominance of all other life. The four insect species are the victors of a great interracial conflict, in which they proved to be the strongest of their people. As with all Dionii battles, there was no place for the weak; thus, all other species (some 37 intelligent insect species) were annihilated. Total genocide. The four victorious Dionii types are the Drone, Warrior Beetle, Scout, and Vanguard. All Dionii possess some type of natural body armor (exoskeleton) in addition to any artificial armor or protection they might employ. Compounded with their super physical endurance, strength, speed, and predatory instincts, they are the deadliest creatures in the galaxy. Their natural vision is also superior to most animals', being sensitive to ultra-violet and infrared spectrum's as well as normal color vision. They communicate with each other by using an elaborate code of clicks and whines. These sounds are transmitted by a type of natural low-frequency radio wavelength. This unique form of communication has a range of about 200 m unless artificially enhanced. Fortunately, the Dionii are devoid of any form of psionics.

DIONII HOMEWORLD

Other Notes about Dionii

Drone females lay 8-80 eggs per 6 month cycle.
Eggs hatch within 3 months.
Larva reach maturity in 4 years.

Warrior Beetle females lay 6-60 eggs per 6 month cycle.
Eggs hatch within 3 months.
Larvae reach maturity in 5 years.

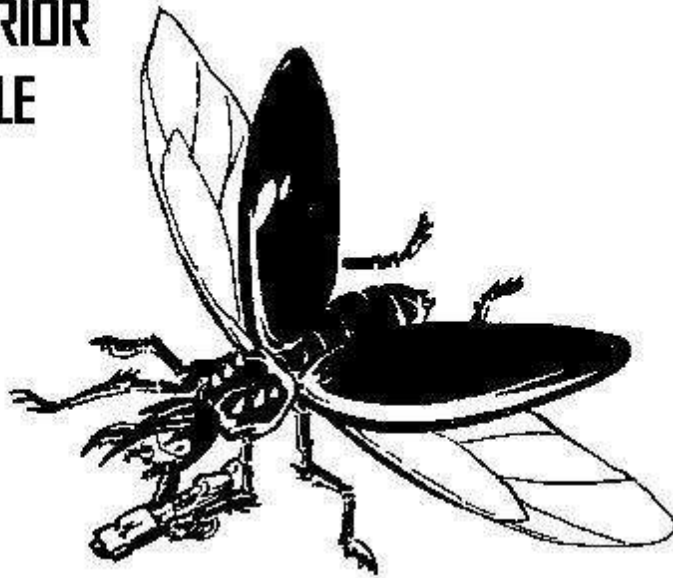Scout females lay 5-50 eggs per 10 month cycle.
Eggs hatch within 6 months.
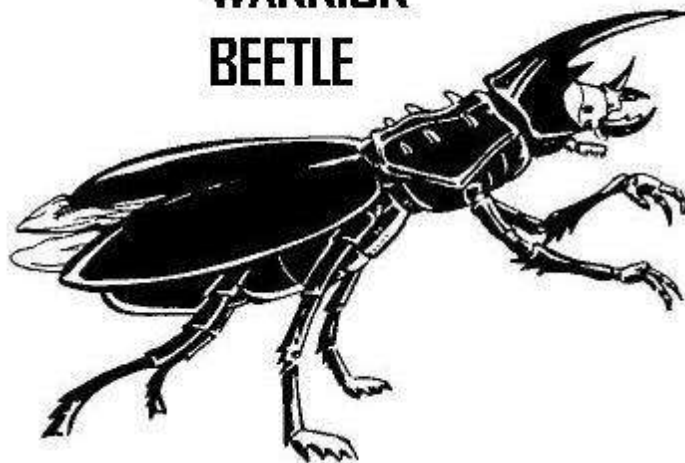Larvae reach maturity in 7 years.

Vanguard females lay 5-30 eggs per 11 month cycle.
(laid in the host bodies of living animals).
Eggs hatch within 6 months.
Larvae reach maturity in 7 years.

All Dionii larvae and adults; are carnivores, feeding on humanoids..
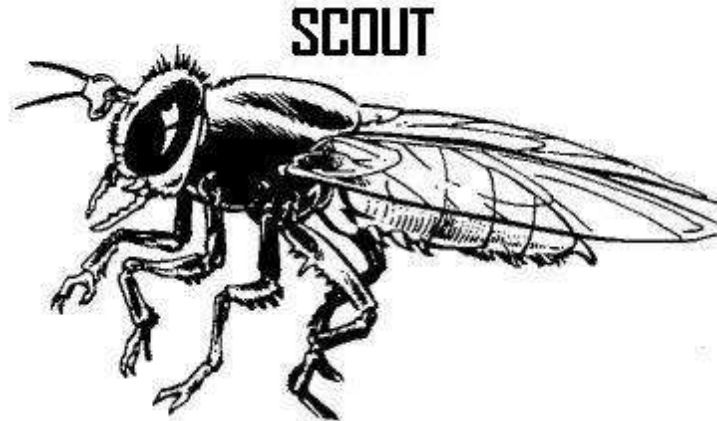Natural predators. Evil and Selfish alignments. Average life span; 120 years.
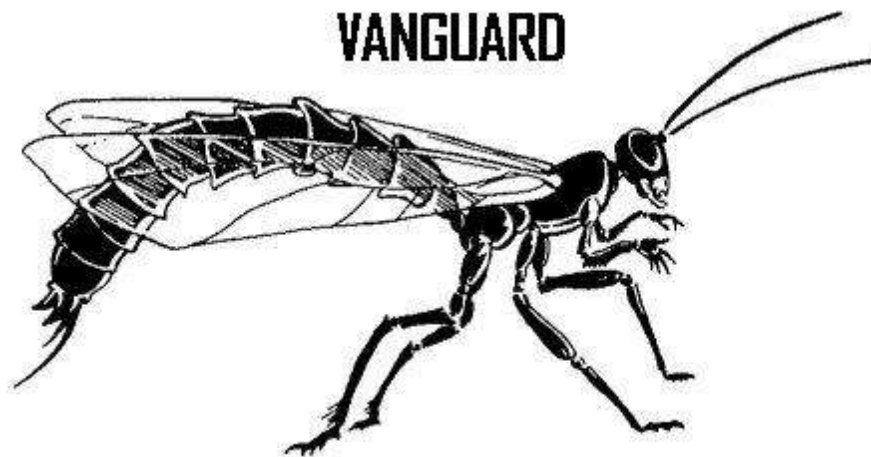
WARRIOR
BEETLE

WARRIOR
BEETLE

The Warrior Beetle is a relatively intelligent, surprisingly quick and deadly predators. Their attacks are as brutal as they are devastating. They will relentlessly fight on until the last one has died (never surrenders) or until the objective has been attained. The perfect soldiers, they do exactly as ordered without question or concern for

personal safety. Powerful in limb and natural body armor, they are twice as deadly when cast in artificial body armor and wielding energy weapons They are obedient to both Scouts and Vanguards.
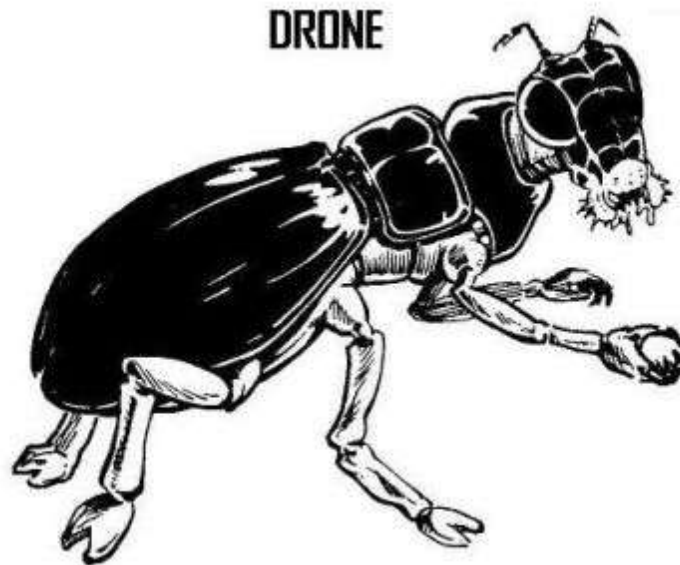
SCOUT

Scouts are the fly-like creatures that are the smallest and fastest of all the Dionii. In the air, few can match their natural prowess. They can fly forwards, backwards, up, down and hover with equal ease; their wings beating so quickly they are nearly lost to sight. Scouts, like the Vanguard, are very intelligent, free-thinkers.

VANGUARD

The elite of the Dionii are the parasitic wasp-like insects known as the Vanguard. They are the electrical engineers, navigators, pilots, research and field scientists, and leaders of the Dionii. They are brilliant, cunning and quick thinking. The Vanguard, as any Dionii, hate all animal life. As far as the Vanguard are concerned, animals (including intelligent animals and humanoids) but three purposes: to serve as Dionii slaves, food and host bodies. The Vanguard lay their eggs in a host body of a living animal. The eggs (1-6 in a human-size host)

are laid just under the skin, where they draw nourishment from the host body. As the larvae within the eggs grow, the host slowly withers and finally dies; the young larvae hatching from a midst its rotted remains.

DRONE

Drones are heavily armored and slow (by Dionii standards) moving beetles that are the largest of the Dionii, standing 2.7 meters tall and 6.1 meters long. Drones, being the least intelligent, are limited to physical labor, construction maintenance, and nursery (in the hatchery) work. They will obey any of the other Dionii, and dislike animals/humanoids.

THEBAN WAR WARSHIPS

Human Ships in the Theban War

ACTIVE BATTLEFLEET UNITS (pre-war)
Achilles-class CL
Apache-class CL
Cat-class DD
Cobra-class BB
Fletcher-class DD
Guardian-class DD
Independence-class CVL
Iowa-class CA
Kongo-class BC
Majestic-class CA
McKinley-class SD
Scimitar-class BC
Shark-class DD
Wolfhound-class CV

RESERVE FLEET UNITS
Chihuahua-class CA
Comet-class CLE
Cromwell/Churchill-class SD
Essex-class CV
Guderian II-class DD
King Louis-class BC
Pegasus CVL
Prince of Wales-class BC
Thunderer-class BB

NEW UNITS
Constitution-class BC
Finsteraarhorn-class SD
Nanda Devi-class SD
Sandy Fly-class CVE
Victory-class BB
Wellington III-class DD

Cobra-class Battleship

Fletcher-class Destroyer

Sand Fly-class CVE

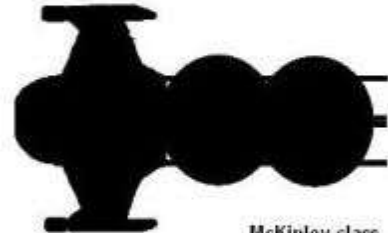Wolfhound-class Battle Carrier

Independence-class Light Carrier

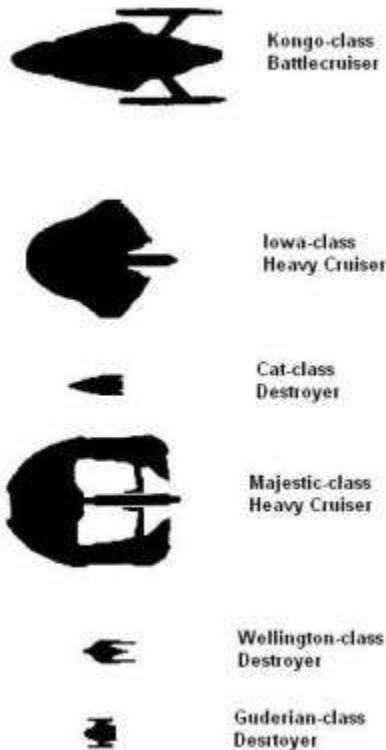Shark-class Destroyer

Achilles-class Light Cruiser

McKinley-class Superdreadnought

Apache-class Light Cruiser

Scimitar-class Battlecruiser

Kongo-class
Battlecruiser

Iowa-class
Heavy Cruiser

Cat-class
Destroyer

Majestic-class
Heavy Cruiser

Wellington-class
Destroyer

Guderian-class
Destroyer

Datafile: Operation Dumbstruck
The Tragedy of Bucks Rock, 3 July 2442

The Terran Civil War was traumatic for the Terran Federation Navy: from its impotence against the rebels forces to Twelfth Fleets' ultimate suicide in the Torbruk System were devastating experiences. But no event in the war left a greater mark on the local Fringe psyche or had a more far-reaching effect on the course of the war than the Federations' attacks on its' own local fleets in the Akwaterra area following the regional armistice in June 2442.

Fighting in the Terran Civil War was brutal, brutal because both sides knew the operations, tactics, and procedures of the enemy because the enemy were fellow humans. The Insurrection pitted the much larger Terran Federation against the smaller rebel fringe worlds of its' own empire. Humans however are remarkably adaptive creatures and fighting between these two groups dragged on for years. Once the rebel forces reached the forward areas near the Corporate Worlds (at Jestacoat on 20 May) thus cutting off Akwaterra and the bulk of the federal mobile troops in their forward locations near the Reformation Group, there could be little doubt about the ultimate outcome of the war. Successive Federation defensive lines were established and destroyed along the approaches to the Corporate World Akwaterra, with Reformation forces capturing most of the

Akwaterra Chain earlier in the month. With the rest of the Terran Federation unable to provide significant ground forces and unwilling to commit their navy to a losing battle, it was only a question of time until the Akwaterrans would be forced to sue for peace or be totally overrun by the Reformation forces.

One great question remained in the minds of the Reformation leaders, and of their distant Rim allies as well: what would become of the Akwaterra fleet? While certainly not in the class of the Federation, Fringe, or Reformation fleets, the local Akwaterra Navy possessed a number of fast, modern battleships and a large force of cruisers, destroyers, and other ships, all of which could prove vital to any Federation attempt to launch a counter-invasion of Reformation space or to interdict shipping across the rest of the Terran Federation. Consequently, the Federation and Rim governments both sought repeated assurances from the Akwaterra government that under no circumstances would their fleet be allowed to fall intact into Reformation hands.

The loyalists had a strong ally in the person of Admiral Montgomery Harlan, Commander of the local Akwaterra Navy, but not for reasons of solidarity. Harlan had created the modern Akwaterran Navy, virtually singlehandedly, during the hard years of the expansion into the Fringe and considered the navy his personal fiefdom, his claim to power within the Akwaterra government. Thus, he would not lightly surrender this force to anyone. As the news from the front became increasingly desperate, Harlan issued orders that no Akwaterran ship was to be allowed to fall into enemy hands in usable condition.

As one by one the warp points leading deeper into Federation space fell to the advancing Reformers, it was apparent that Harlan's orders were being obeyed. Just hours before the Reformer arrival the new battleship *Vigilance*, just undergoing space trials, sailed from an orbital civilian slip in Craigsmont for Hardway carrying the cadets of the local naval academy. With the help of no less than six tugs, the unfinished battleship *Revenge* made an even more daring escape from Rockhaven to the Trieste System, which was under the time facing continual Reformation bombardment. Those few ships whose battle damage prevented their taking to friendly territory were scuttled on the spot, and no warship was seized intact by the advancing Reformation forces.

On 24 June the new Akwaterra government headed by Planetary Marshal Jacob Yanos signed an armistice with the Reformation forces, bringing the fighting to an end. Article 6 of the armistice agreement was to cause great misunderstanding among the Federation diplomatic corps and, ultimately, hundreds of Akwaterran deaths. The article stated that units of the Akwaterran fleet would return to their peacetime ports for disarmament under Reformation supervision. The Akwaterrans were eventually able to have the terms changed to permit the disarmament to take place in non-occupied ports in the Fringe or at New Toulon, thus eliminating the risk of the Reformers seizing their ships. However, the Federation protested strongly. Regardless of the actual wording of the document, and certainly regardless of solemn Reformation promises not to seize the fleet, the Federation questioned whether the local Akwaterran government might not be convinced or obliged to surrender the fleet in any case, in the face of possible Reformer threats over the safety of the hundreds of thousands of Akwaterran POW's or in return for less harsh peace terms for Akwaterra.

At all levels the Akwaterran government, Harlan himself, and various other senior naval officers informed the Federation that strict orders had been given to all ranks that any Akwaterran warship was to be scuttled in case of any danger of seizure by any power. The Akwaterran were scrupulous in referring to any power, despite Federation pleas to Akwaterra to send the fleet to Federation or Rim ports and to continue the fight, as the Reformers would certainly take revenge on Akwaterra for signing an armistice and then blithely turning over her most sophisticated and expensive weapons to the Reformers' enemies for use against them. These assurances made little impression on their recipients. In any event, the Federation had decided to take matters into their own hands.

The end of June found the Akwaterra fleet divided into several detachments. Two elderly battleships, plus a number of destroyers, cruisers, and about 20 merchant vessels had found safe haven in the Terran Federation ports of Newholme and Rainmountain. Force 7, comprising three old *Kobra*-class battleships, three heavy cruisers, and a number of destroyers and supporting vessels which had been cooperating with the Terran

Federation in the Rockhaven Chain, were orbiting the planet Calabria. Other small groups of Akwaterra cruisers and destroyers were scattered among the Fringe ports and in the Ivy Chain, while Akwaterra's only aircraft carrier was in the Tri-System. However the most significant concentration was at Bucks Rock, the naval base at Clydiff, under Admiral Raoul Gevosa. Gevosa had the modern battleships *Centurion* and *Audacious*, the older battleships *Warspite* and *Ramillies*, and six destroyers. *Centurion* and *Audacious* had been built especially to match the heavy Reformation dreadnoughts *Restitution* and *Edification*, and were the units about which the Terran Federation were most concerned. The still unfinished *Revenge* in the Trieste System and *Vigilance* in Hardway posed little immediate threat as there were no facilities in the area capable of making them battle-ready. The Terran Federation quickly devised a plan, Operation Resolution, designed to bring major portions of the Akwaterra fleet under their control or see them interned in safe neutral ports, ideally in the nearby Rim systems, or, as a last resort, to see to it that the ships would not be used by the Fringers by wiping them out.

The first phase of the operation took place in Newholme and Rainmountain, where the crews of the Akwaterra ships had been lulled into a false sense of security as they awaited what they assumed would be an end to their part in the war. Officers from Terran Federation ships in the ports made frequent "courtesy calls" on their Akwaterra counterparts, both to reinforce this sense of security and to conduct detailed reconnaissance of the Akwaterra ships. Well before dawn on 3 July, heavily armed Terran Federation commandos and marines leapt aboard the docked ships, overcoming the watch and forcing the sleepy crewmen and officers landside in their pajamas. Only aboard the cruiser *Ramage* did a scuffle result in the deaths of three Terran Federation and one Akwaterra officer. The remaining ten thousand or more Akwaterra crewmen were treated with good care until they could go home as they were viewed politically unreliable at that point.
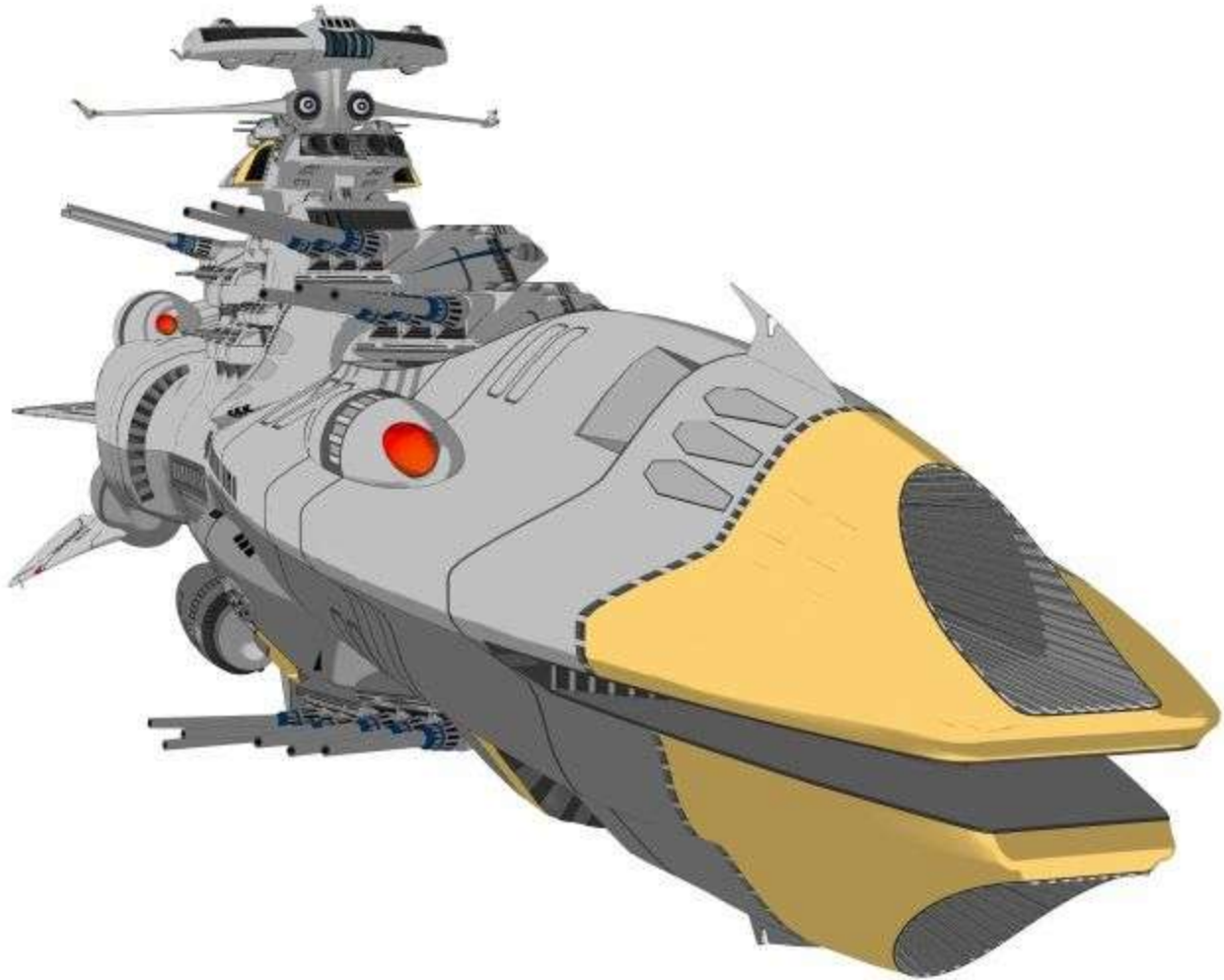
A few hours later, Force M under the Terran Federation Admiral Rory Wainwright, built around the battleships *Ajax, Culpable,* and *Yuletide,* and the aircraft carrier *Unicorn*, appeared off Bucks Rock and sent an ultimatum to Admiral Gevosa.

The Akwaterrans had five choices:
1) To follow Wainwright and join the war alongside the Terran Federation,
2) To allow themselves to be interned in Terran Federation ports under escort by Force M,
3) To allow internment in Rim ports,
4) To scuttle their ships immediately, or
5) To be destroyed by gunfire by the Terran Federation squadron.

The original deadline given by the Terran Federation was 1400 hours, but Gevosa stalled for time while messages flashed back and forth between Akwaterra and Bucks Rock. Gevosa was ordered to under no circumstances surrender or scuttle his ships and to shoot his way out to Bucks Rock if necessary. Meanwhile, the docks at Calabria swarmed with crewmen frantically trying to load the ships with fuel, ammunition, and weapons which had already been removed under terms of the armistice. At the nearby aerospace fields on Bucks Rock, warplanes were similarly being fitted with armament, also removed for the armistice, and Harlan ordered the cruiser squadrons in the Ivy Chain to arm themselves to rush to Gevosa's aid.

Terran Federation warplanes which circled lazily near the main naval base reported all this to Wainwright, who announced his final deadline for 1630 hours. The time came and passed with no Terran Federation reaction. Then at 1655 the Terran Federation opened fire. The first salvo fell short, and the Akwaterra ships, now with reactors hot, hastily cast off and made for the nearest warp point.

Centurion went first, plowing through a forest of missile strikes from Terran Federation ships. *Ramillies* had only just cast off when she was struck in rapid succession by first one, then three more monstrous HBM missiles, which set off secondary explosions. The great ship shuddered, lost control, and then exploded, carrying several thousand officers and men with her. *Audacious* started off well, as a Terran Federation missile ricocheted off a forward turret with minor damage, and a second penetrated the CIC without detonating, but two more hits cut power, and her captain was obliged to put her back into the orbital shipyard. *Warspite* came next and nearly made it out of orbit when repeated large carrier fighter strikes hits forced her to be abandoned.

The six destroyers in port raced for the warp point, but *Mogador* took a fighter strike aft which set off her XO ordinance and shattered the rear third of the ship. The other five vessels broke free and joined *Centurion* in her successful escape as she raced for the warp point to safety. Akwaterra orbital batteries as well as the guns of space station had fired back bravely and planetary-based aerospace fighters strafed the Terran Federation fleet but appear to have done no serious damage to Force M. Furiously Harlan ordered immediate reprisal air raids against the Terran Federation naval base at Regulus IX. The raid, carried out by less than-enthusiastic ships, apparently caused no damage.

The same could not be said for the second Terran Federation raid against Bucks Rock on 6 July. Having received reconnaissance reports that *Centurion* had only been slightly damaged, the Terran Federation government ordered Force M back out to strike again. Waves of torpedo bombers and fighters found *Centurion* surrounded by auxiliary ships striving to aid the stricken giant. One torpedo meant for *Centurion* struck a patrol

boat, setting off her magazine. *Centurion* also suffered more serious damage and would not sail again until nearly two years later.

Vigilance had also been attacked and damaged at Hardway, but without the tremendous loss of life of Bucks Rock, while, at the other end of the Chain a more peaceable solution had been found by the opposing Terran Federation and Akwaterra fleets. Unable to comply with orders to return to Akwaterra upon the signing of the armistice, Force 7 had remained bottled up in Calabria. But the fully armed and alerted ships were not vulnerable to commando attack and any attempt to destroy them by the Terran Federation fleet would have provoked a bloodbath on both sides. The Terran Federation Admiral Cunningham, resisting pressure from senior Corporate World leaders for more drastic action, therefore reached a compromise with the Akwaterra Admiral Godfroy whereby the Akwaterra would offload the bulk of their fuel, thus preventing their escape, and their electronic sensory equipment, thus making them defenseless in open space but still a potent force in the confines of a space station, and the Terran Federation would swear not to attempt a coup de main. A nervous truce thus developed which lasted until the end of the war. The total of Akwaterra dead reached 5,000, mostly among the crew of *Ramillies*. Harlan and other Akwaterran hotheads called for an immediate declaration of war against Terran Federation, although not an alliance with Reformation, but cooler heads prevailed and Akwaterra accepted the fait accompli.

Was it worth it? Probably not for the Federation and the attack certainly created great bitterness in Akwaterra which has not totally disappeared to this day. It is safe to say that the Akwaterra did deserve better from their erstwhile allies.

STRANGE TECH

These new technologies are intended to "fill the gap" in for GSF between level 12-20. These are ideas only and are a brainstorm only; they are not fully complete. Feel free to experiment. Damon

Advanced Farming Tech(Farm): +1% GPV per world when developed. Can only be implemented empire-wide. Total all T/ST worlds in your area and x100 MCr; that is the fee for implementation. Farming worlds (T-worlds with less than 500 PU) get +5% bonus to their GPV from this technology.

Antimatter Refineries (-AM) : Usually built in orbit due to the fact that when a field failure tends to annihilate the area of a small moon, Antimatter Refineries create antimatter used as fuel and warheads for missiles.

Aquaculture(Aqua): +1% GPV per world when developed. Can only be implemented empire-wide. Total all T/ST worlds in your area and x100 MCr; that is the fee for implementation. Aqua worlds (T10 worlds) get +5% bonus to their GPV from this technology.

Army Academies(ArmAcad): Armies, all non-PCF army units, may increase their abilities using this technology. Every ten turns *any* army unit stays on a planet with an Army Academy there is a 5% chance (non-cumulative) that their combat rating goes up by one, maximum is Crack. Army Academy maintenance is 80 MCr a turn. Units that spend more than 2 months away from the Army Academy, not including combat duty, lose grade (one grade level per month) unless in combat or pacifying duties.

Bio-Sphere Expansion(BSE): The *first* inner O2 world in any system can be modified into a habitable world using this technology, but only if it is a mass 3 world. Once implemented, an O2 world becomes a T1 world within 15 turns.

Bombardment Terraforming(BT): A nasty but efficient way to colonize someone else's planet, Bombardment terraforming moves comets and icy asteroids into orbit of a planet and bombards it until the habibility index matches that of the race using this technique. Of course it also kills all the inhabitants of the planet but within 20 turns the ecosphere stabilizes and becomes a benign world for the terraforming race. Genocidal tactic! Using this tactic costs 15,000 per planet it is used against (many ships and resources are used to divert the comets and such).

Commercial Passenger Liners(FT P): These vessels travel between major worlds (VL or L) and they generate large amounts of additional cash for your empire. These types of ships contain casinos, pools, zero gravity gyms, theaters, and a large number of luxury quarters: one Qo costs 10MC each and holds 200 luxury quarters each. Money generated is 10 MCr for every Qo, up to 15% of a players total CFN capacity. These types of vessels are made out of FT hulls and are kept track of as a separate third freighter pool. The monies earned are not noted as part of a players TGI and they are useless for colonization or evacuation. These types of freighters are known as FT P, like FT H and FT Q.

Commercial Shipbuilding(CS): This unique technology enables an empire to produce freighter hulls at a -10% discount once produced.

Communication Centers(CC+): Important strategic facilities, Communications Centers are built as a PDC, SS, AF, or Base and must mount at least one "Hyperwave" system. These centers enable system-wide communication that is instantaneous and they can query CDs once they transit into the system, and once the CD announces its presence via burst transmission (2 hour lag time usually). Communication Centers are useful when a CFN hasn't been emplaced in a system.

Concentrated Intelligence(CI): A Concentrated Intelligence is a massive AI computer system concentrated into a computing node which is located in one small area (10hs in size). This AI can be located anywhere in a star system but communication lag hinders it from using its' fullest potential system-wide, thus most naval strategists place them at vulnerable points in a star system, mainly WPs. A CI gives +1 to all initiatives to ships mounting cyberlink (Cyb) within 120 tH.

Corporate World(CW): A Corporate World is a planet that has reached Large size and must be designated "Corporate World" by a player. This allows IU to be purchased up to the full amount of the population number and has other benefits as well: see Fighter Factories.

Dispersed Intelligence(DI): A Dispersed Intelligence is a massive AI computer system spread across a star system. The AI can detect any and all forces in its' system. It can also direct defenders to better attack positions if cyberlink (Cyb) is installed on each ship (+1 to all initiative rolls throughout *all* combat in that system!). The AI can also give a major bonus to asteroid mining (the AI directs efficient mining), +10% MCr to all mining in-system. DI is a higher tech level than CI.

Farming World(FW): Farming worlds are specific planets (T worlds) that have been set aside to produce food. For every one Very Large population there must be one "farming world" in your empire (this is a mandatory rule). Farming worlds receive a bonus from the "Agricultural Tech" and cannot have more than 500 PU on them: once a planet reaches 500 PU there is little room for wide-spread agriculture on the planet.

Fighter Factories(FF): Located on Corporate Worlds only, Fighter Factories allow the construction of specialized fighter designs (Build-Your-Own Fighters) instead of traditional standard fighters. These facilities also allow the construction of *all* small craft at a -10% cost when they are built in the zero-G environment of a space station.

FTL Communication(FTL): Faster-than-Light communication has been a dream for humanity for thousands of years and only the Grand Empire has the blueprints to this very unique system. Hyperwave Generators use high-speed tachyons dropped into a massively rotating black hole to produce near-instantaneous contact across a star system, seriously decreasing lag-time between commanders, ships, and system-wide defenses. However, HG use active portable black holes which are not usually put on planets (if the HD fails the entire planet could be consumed or destroyed).

Gas Giant Ignition(GGI): An uber-tech ability, Gas Giant Ignition is *not* used lightly by the Grand Empire. The process goes like this: large quantities of antimatter are gathered together in close orbit of any large gas giant. At the right moment these antimatter packages are directed at the planet and it is "ignited". The result is a small solar system in and of itself. The gas giant is now a small sun and all moons in orbit become habitable: a harsh T world capable or supporting up to 800 PU each. Cost for this process is 40,000 MCr. The time it takes between ignition and colonization is approximately 6 months. However, there is a 40% chance that the gas giant doesn't ignite but actually explodes, wiping out all life within the system (no surviving PUs except underground shelters). With this in mind, the Grand Empire has only used this in uninhabited backwaters systems, typically Red Dwarf systems.

Gas Giant Reengineering(GGR): An uber-tech ability, GGR is a highly complex project that involves years of work. However, the pay-off is huge: when completed large numbers of gases and other elements have been lifted off and can be used for terraforming projects, development of Nova Bombs, and construction of very large warships and even small Dyson Spheres.

Heavy Industry(HI): Heavy Industry is a very productive technology. Built only on Corporate Worlds, HI allows the use of IU as SY. For every 100IU you receive the ability to build things as if you built 1 SY. This techology only has to be bought once. HI also give a slight increase in hull production: +2 HS per TL for hull space planetary construction rates. HI also allows the ability to produce atmosphere capable ships on a planet at the *same* cost as orbital SY.

Hull Exploitation(HE): A unique technology that allows a race to mass produce *warship* hulls at a -10% discount.

Industrial Megaplex(IM): And IM is a large facility that is easily seen from orbit and produces IU at reduced cost: -10%, allows the production of Armys (they cannot be built anywhere else), and can process elements from GGR.

Industrial Studies Center(ISC): A research facility that allows development of all Industrial Technology: HI, IM, etc. Without this facility no Industrial technologies may be developed (please name your facility).

Interstellar Research Hospital(IRH): Built as a space station, the Interstellar Research Hospital is a true life-saver; building an IRH negates any biological outbreak except J'Rill and the Vang within 10 systems of its' creation. Size is 50 HS. (Sector General Hospital is a type of IRH).

Living (bio)armor(LA): A very rare ability, living armor regenerates 1 hs per day automatically, without cost. However, this ship is "alive" and all weapons damage mounted on these vessels (except missiles and small craft) are at -20% efficiency. Note: LA ships will *not* enter nebulas that cause armor damage.

Medical Centers(MedCen): Building one on any planet negates any biological outbreak except J'Rill. One Medical Center per planet. Costs 100MCr per month to maintain.

Mining Stations(Mine): Emplaced on planets, typically O1 and O2 planets or moons, these facilities are deep mining projects that have their own independent life support and maintenance support (no cost to you for

maintenance). Each station gives 50MCr per turn, only three per moon or 5 per planet size one, ten per planet that is size two. Mining Stations are built with ground PU, SY, or MS in orbit.

Missile Factories(MF): A very cost effective facility, a MF pays no maintenance costs and builds missiles at a -10% discount cost when they are built in the zero-G environment of a space station.

National University(NU): One NU equals +5 RP bonus per turn to any technology being currently developed. Up to 5 NU can be built per empire. Only 5 RP can be added onto any one single project, any more and there is no benefit.

Naval Academies(NaAc): A Naval Academy is the central point of learning about naval tactics and strategies in an empire. A NaAc that has an Admiral assigned to it allows a fleet in orbit of it to gain grade much faster than any normal fleet. To keep the grade however is different: an Admiral must accompany the fleet when it leaves the Academy, otherwise it loses grade, once per month, until "average" is achieved. Based in a space station, AF, or base only.

Nebula Exploitation(Neb): A unique technology, Nebula Exploitation allows civilian resources to process and mine nebula gases efficiently. Development of this technology allows an *income* of 500MCr times the TL income every month per nebula mined. Civilians ships must be diverted here (FT) and permanently stationed within the nebula (no maser or emission nebulas allowed). Ten FT3 per 500MCr, per system (no maintenance costs for the FTs).

Regenerating Hulls: A more advanced version of Living Armor, RH are very effective but also very costly and are mounted typically only on large capital ships.

Research Megaplex: (TL or two items, or tree breakthroughs). A series of research stations (RDS) located underground or on a moon. This location allows for security and the quite needed to do research stuff.

Simulator Craft: Initially started as a target enhancement program, this system has evolved into something radically superior. The Simulator Craft program enables the crew of a warship to train and increase their abilities even before their ship is even constructed. Usually capital-sized vessels, simulator craft increases the crew grade of a single vessel. The crew must train for 3 months before increasing in grade one level. This may be done for two 3 month terms, increasing grade +2. However, there are some drawbacks and prerequisites: if the crew of a dreadnought is being trained, the simulator craft must be dreadnought sized. These vessels are usually outdated and do NOT cost maintenance.

Solar Arrays: Medium pop, +15% to GPV? 20HS SS built like this A(SA)(SA)QHBbS

Spaceport: SP build ships at planetary construction rates and costs, (AC) only warships.

Subterranean Colonies: The construction of SC allows a double benefit: protection of substantial portions of a planet from orbital bombardment/eradication and this system adds more PU to a planet. Rules: one vast system is bought and it can hold 1,200 additional PU (30MC per PU). The PU on the planet continues to grow by 2% per turn until 4,400 is reached. SC and all inhabitants in them cannot be destroyed by planetary bombardment. This system can only be bought once per planet.

TECH TREES
CIVILIAN TECH
Advanced Farming Tech

Aquaculture
Commercial Passenger Liners
Commercial Shipbuilding
Farming Worlds
Interstellar Research Hospital
Medical Centers
National University

COMPUTER TECH
Communication Centers
Concentrated Intelligence
Dispersed Intelligence
Research Megaplex

GEOLOGICAL TECH
Bio-sphere Expansion
Bombardment Terraforming
Gas Giant Ignition
Gas Giant Reengineering
Mining Stations
Nebula Exploitation
Subterranean Colonies

INDUSTRIAL TECH
Corporate Worlds
Fighter Factories
Heavy Industry
Industrial Megaplex
Industrial Studies Center
Missile Factories
Refineries
Solar Arrays
Spaceport

MILITARY TECH
Army Academies
FTL Communication
Hull Exploitation
Naval Academies
Living Armor
Regenerating Hulls
Simulator Craft

OTHER TECH
Access Ports
Etc

DAMONS NEW GSF RULES

1)Any ship, base, AF, or SS 30hs or larger must have a boat bay built into the design.

2)Troops must be carried by troopships that are specially built by the player.

3)Colliers must be used for missile re-supply, the CFN will not deliver munitions to an active battle zone.
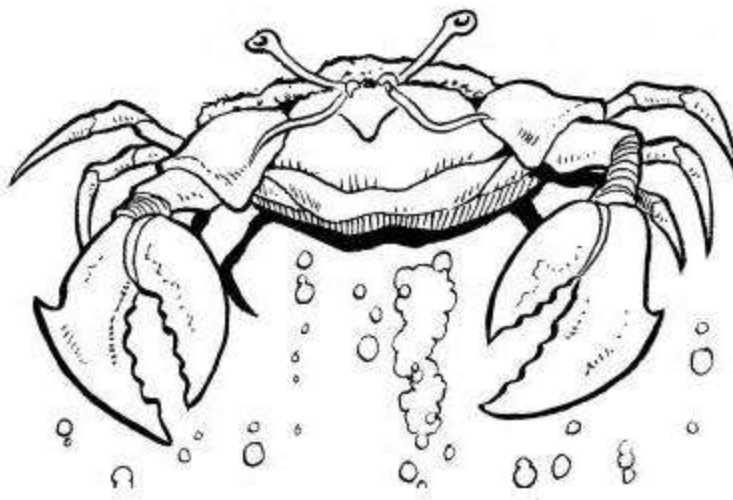
4)CiC gives bonuses in the following way:

CICa: +1 to damage control roles *and* +1 to hit mines (all types).
CICb: +1 to strike in beam combat *and* +1 to shoot down plasma gun fire.
CICc: +1 to all point defense rolls *and* +10% to alien comm rolls.
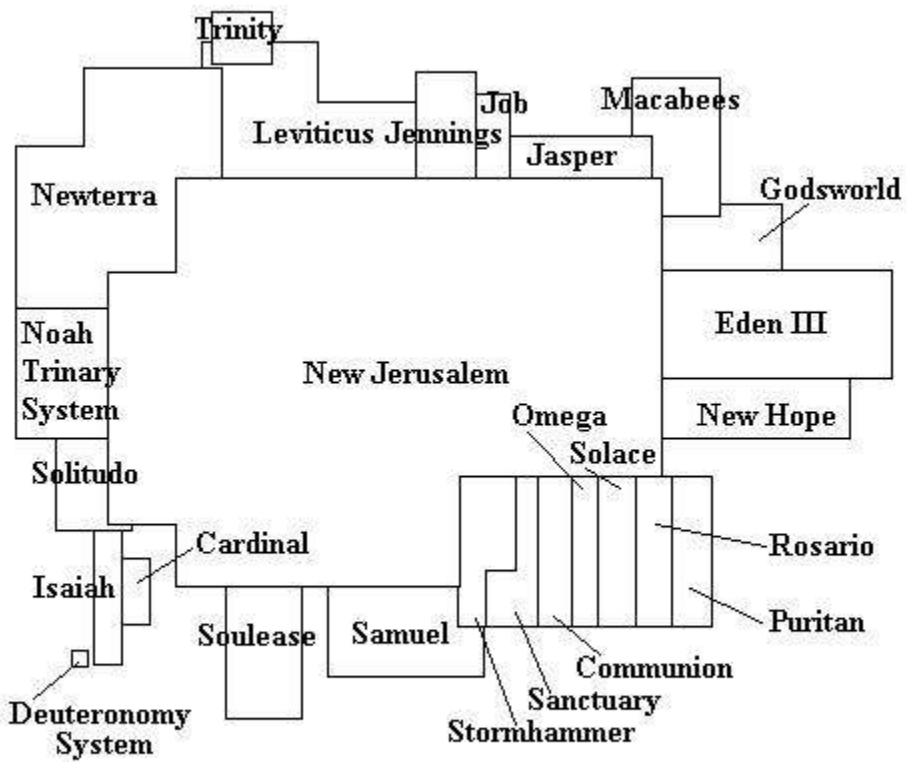

REFORMATION GROUP POPULATION

   The Reformation Group is a mid-sized Fringe polity cut off from the rest of the Terran Republic. Initially settled by religious pacifists, the region is lightly populated and has faced several attacks by outside powers, all of which have been beaten back. The Reformation Group is strongly allied with the crab-like Tolat race who possess extremely advanced technology. The Tolats have shared this technology with their allies (the Reformers), much to the consternation of the newly formed Pan-Sentient Union. The Tolats are a genetically engineered race who are capable of breathing chlorine, methane, hydrogen, helium, and a number of other gases besides oxygen, as well as surviving in vacuum. They also have the ability to not breathe for long periods of time, if necessary. Tolats do not suffer illness and all injuries repair themselves quickly and they can eat just about anything made of organic molecules, including all animal and vegetable matter or by-products, even petroleum. Their history goes back over 2 million years.

TOLAT

The graphic below is a representation of the population of the Reformation Group shortly after their break-away from the Terran Federation. The population of New Jerusalem, the capital of the Group and the largest concentration of peoples in the region, is just over 150 million people (a very lightly populated section of the galaxy). The Deuteronomy System, at 50,000 people, is the other end of the spectrum. After the disaster that depopulated that planet, most civilian survivors in the orbital stations and moon bases were moved to more secure locations within the Group while military forces still occupied the strategically important Toricelli Naval R&D Center. Located in Deuteronomy, the Toricelli Center was the site of **the Boneyard**, the long-term storage facility set up to hold out-of-date warships (for refitting or scrapping) and the huge Jehovah Station Fleet Yards. During the Arachnid War the Terran Federations' first monitors were laid down here (the *TFNS Horatio Spruance* and *TFNS Thomas Anderson*) as well as the leading units in the *Minerva Waldeck*-class MT/V (the *TFNS Antonio Lopez*) and during the Terran Civil War the first Fringer heavy capital ships were laid down here as well; the *RNS King Solomon* and the *RNS King David* (both *Christ the King*-class supermonitors). Toricelli was also the site of the First and Second Battle for Deuteronomy and the location of initial contact with the crab-like Tolat race. The planet Deuteronomy was (accidentally?) depopulated by Federation forces during the brutal fighting of the Terran Civil War when a Federation battleship ignited the planets' volatile atmosphere, an event which sparked the uprising in this region.

Sime/Gen Race

   One of the most fascinating worlds ever discovered, the Sime/Gen Homeworld is one of the most unique in known space, with two different races inhabiting the same planet. Actually the Simes and Gens are a mutation,

and a symbiotic one. When first discovered by the bird-like Ophiuchi race, the vampiric Simes and the *selyn-producing* Gens had been at war for centuries, crushing the planets' industrial development to substinance levels. Divided into Sime and Gen Territories, of which Nivet Sime Territory was the largest, these areas were continually at war, the Gen Territories fighting Sime Territories. At the time of First Contact with the Ophiuchi, the Maple Sime Territory had just been overrun and destroyed by hordes of unstoppable *Freeband Raiders*, a vicious group of Simes intent only on getting their next *kill*. The Gens, who produced the biologic energy known as selyn, fought desperately to keep their borders secure from Sime raiders, who came only to kill. And they also fought an internal war, as a teenager Gen in Gen Territory could *changeover*, at puberty, turning into a killer Sime. Within Sime Territories the same was true, except at puberty if the teenager didn't turn into a Sime, he/she became a selyn-producing Gen, which was quickly sold into the *Pens* or as a *Choice Kill*. Only the *Channels*, a Sime capable of taking selyn from a Gen without killing him/her had any hope of avoiding *Zerlerod's Doom*. These Channels, if discovered early enough after changeover, were trained to transfer selyn to the majority *renSimes*. These Channels founded the first *Householdings*, a group of people banding together to stop killing Gens and centered on a high-level First Channel. Householding *Zeor*, a major economic House was one of the leading Houses in Nivet Sime Territory and is headed by one of the most famous Simes, *Sectuib Klyd Farris*. Householding *Keon*, Headed by *Sectuib Risa Tigue*, is Gulf Sime Territory's President as well as the head of her House. Householders, and especially all Channels, are seen as *perverts* by most renSimes because they channel selyn to other Simes instead of killing the Gens like most other Simes. Sime Territories have a vast system of *Pen Gens* to have a on-hand supply of victims. Simes must kill one Gen a month to survive, except the Channels and Householding Simes, who have pledged not to kill Gens.

The murderous Freeband Raiders had created a desperate situation on the Sime/Gen Homeworld immediately before the arrival of the Ophiuchi. The Maple Sime Territory had collapsed when a rampant flu and serious drought destroyed most of it's pen Gens, forcing the entire Territory to become Freeband Raiders. This news shocked the nearby Nivet Sime Territory, which was also suffering from the same severe drought and serious illness among the mindless pen Gens. At this time, Householdings were barely legal in Nivet, although Gulf Sime Territory had converted to a stable Territory-wide Householding by this time. Desperately trying to avoid the collapse of nearby Nivet Sime Territory, Gulf sent advisors and food supplies, only to have the situation completely fall apart when the huge band of Freeband Raiders attacked Nivet's northern region, undermining the Nivet government, demoralizing the Nivet Army, and causing the collapse of the Nivet economy. A run on the pen Gens by wealthy and middle income Simes nearly destroyed Nivet's pen system, causing widespread panic among Nivet's populace. Although the Nivet government tried to reassure it's citizens and tried confiscating House Gens, the situation deteriorated out of control as a large Gen Army also attacked Nivet. Sectuib Klyd Farris, and the Household organization the *Tecton* overthrew the corrupt Nivet Sime government in a desperate attempt to save the situation.

The Tecton went on to forge a shaky cease fire with the Gen Army, which was in serious danger by the massive flood of Freeband Raiders that was coming it's way. Now head of Nivet Territory, Klyd Farris forced the Nivet Sime Army and the Gen Army to cooperate and destroy the much larger Freeband Raiders. And it worked. The minor intervention of off-world forces in the form of the Ophiuchi turned the tide. Householding Channels traveled with the Nivet Sime Army, supplying selyn after serious *augmentation* by the Simes and preventing kills among the allied Gen Army. This shaky alliance was forged permanently when the Channels were able to ask the Gen Army for selyn donations, and the Gens fearfully allowed it. The Ophiuchi allied with the newly formed Tecton government, helping the Householdings take over the planet with relative ease. Centuries of warfare was at an end. The Sime/Gen New Union was formed.

The Sime/Gen homeworld has many strange biologic/cultural differences compared to most worlds. Below is a list of words and their meanings:

Augmentation: The Sime ability to speed up to nearly ten times faster than a normal human. This rapid consumption of selyn can be dangerous is the Sime is low on selyn but also increases a Simes mental processes

and physical strength. A augmenting Sime can easily hold a desperately struggling Gen.

Channels: A very rare Sime, the channel has the ability to shunt selyn from his own personal inner reserves to other Simes. This is considered a total perversion by 'normal' junct Simes. There are three types of Channels; 1_{st}, 2_{nd}, and 3_{rd} Channels. The 3_{rd} Channels are by far the most populous of all Channels. The First Channels are very rare, and are primary the heads of Households because they have greater endurance and capabilities.

Choice Kill: These are Gens captured from Gen territories or Sime children that become Gens at puberty. The awareness of their oncoming death heightens the kill, making the Gen that much more desirable to killer Simes.

Householdings: The foundation of Channels beliefs, the Householding attracts Simes who want to stop killing, and Gens who want to help them. These Houses are located in Sime Territories only.

Junct: A Sime addicted to the Kill. Simes who live in Householding are non-Junct.

Kill: When a Sime kills a Gen for it's selyn, the Sime undergoes a physical/emotional rush. The Sime has a special sense called zlinning and can 'feel' when the Gen dies in his arms, which increases his/her rush. The Kill is highly addictive and only Simes in their First Year of changeover can stop killing and become a non-junct.

Pen Gens: Born and raised in a pen like cattle, pen gens are so heavily drugged that they do not have a language and are bred like cattle. The Pens are run by the government and each Sime receives a Gen from the pens once per month.

renSimes: Most Simes are renSimes, a non-channel. The Tecton is working towards stopping all Simes from killing, but knows it will take generations.

Selyn Consumption: While Gens have caloric consumption, a Sime consumes selyn. Simes eat little food and kill one Gen a month to supply their monthly need for selyn.

Selyn Production: Selyn, the biologic lifeforce, is a by-product of a Gen's chemistry. Although a Gen needs a extremely small amount of this life energy to live, the Simes do not produce selyn, and need much more than a Gen to survive.

Tecton: The political organization of Householdings in Sime Territories, the Tecton was just a forum until the Nivet collapsed, and the Tecton was forced to take over the government.

Tentacles: Simes have six tentacles on each lower arm. The dorsals and ventrals are very strong, meant to hold a struggling Gen in place while the laterals(the selyn-conducting tentacles) withdraw the selyn from a Gen. A fifth contact, usually on the mouth, is necessary for the transfer of selyn to begin. Tentacles are normally sheathed until the are used.

Zerlerod's Doom: A famous Sime mathematician, Zelerod speculated that when the world population of Simes and Gens equalized, then all the Gens would die that month, and then all the Simes would die the next of selyn attrition since all the Gens were dead. Widely disseminated throughout Nivet Territory, his theories supported the Channels, who could 'use' a Gen over and over without killing him/her.

Zlinning: The Sime ability to find/hunt a Gen while miles away. This is an inward sense that can be used in the dark or far away.

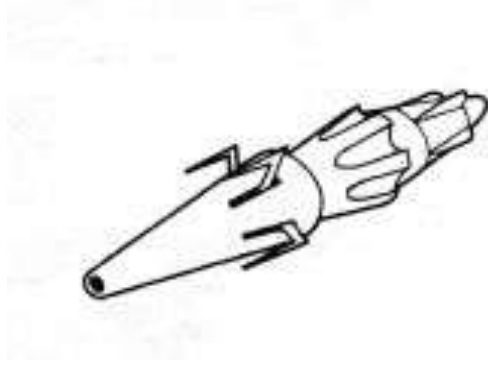# NEW MISSILES (3rd EDITION)

Fighter Close Assault Missile, Advanced (fCAM3): At the height of the Arachnid War, the Inheiritors developed the fCAM3, the third generation version of the fighter CAM. Still longer ranged than most missiles the fCAM3 was primarily mounted on smallcraft, TL12, .25 csp, 3MCr, 6,000 development.

Bombardment Missile Launcher, Light(Rh1): The HBM is great if you have monitors, the Ophiuchi of course don't, their largest non-carriers are battlecruisers, but they felt they needed the range and punch of the HBM. They began work on and finally introduced the LBM and MBM which are cut down versions of the HBM. This is the launcher for the LBM. It has all the restrictions of the HBM and advantages with one

exception, one can be fitted for every 30 hull spaces of the mounting ship, this allows HBM range on DD size units. It can only fire LBMs; four points of damage per missile. Cost 200, six hull spaces, dev cost 25,000.
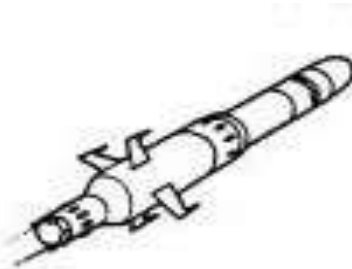
Bombardment Missile, Light(LBM): This is a lighter version of the HBM that can only be fired from an Rh1. Cost 1, dev cost 10,000, 10 csp. Initially invented by the Crucian Union during the brutal battles against the Rh/een Empire and their allies the Dreamers in the Mists.

Gun/Missile Launcher, Advanced 3rd Generation(Wa3): A critical system crash developed after the discovery of the Rishatha Imperium, the Wa3 system was refitted into only 20% of Horune destroyers before the Totality was overrun. The Wa3 system fires four standard missiles per turn and the use of *protomatter* warheads enabled the Horune to destroy hundreds of Rish capital ships in the last days of the war, and destroy every habitat in the Hainurrabi System. TL16, 3hs, 160MCr, 40,000 to develop. Courtesy of Todd Kes

AMBAM3
The creation of the AMBAM3 by the Pan-Sentient Union began right before the outbreak of the Armageddon War and only a few of these enormous antimatter-packed devices were ever fielded during that conflict. With a warhead 150% more powerful than it predecessor, the AMBAM3 had an unfortunate problem: it's antimatter containment field failed to often (about 3% of cases). Storage of AMBAM3's typically took place on armory moons in peacetime and never on habitable planets as a result of this weakness. Only a limited production run of these awesome missiles occurred before the wars' end. Deemed completely useless against Hre'Daak warships, they were discontinued by allied races after the destruction of Terra and New Valkha.
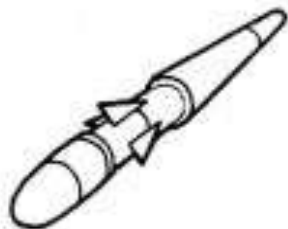

AFMc2
The anti-fighter capital missile was a huge success for the Terran Federation and a second generation was fielded in 2459 during the Biomechphilist Conflict. During that conflict the Biomechs used automated ram

platforms (packed with huge antimatter warheads) that were not much bigger than standard Gunboats and the AFMc2 were a potent counter to this weaponry. With a 50% increase in range and auto-return software embedded, the AFMc2 could make several passes at enemy targets if it missed, but at a decreasing opportunity to hit. A brainstorm of Doctor Howard Magellan at the Nuovo Reunion Research Institute on Nemo.
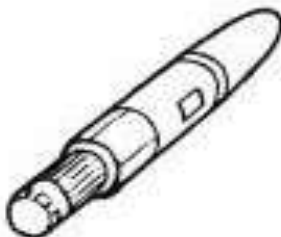
fFK2

The first fFK was developed at the Spaniel Research Station in the Fringe and palyed a significant part in the Battle of Zapata during the Terran Insurrection. Each fFK is a bundle of sophisticated counter missiles, each with a potent radiochemical warhead surrounded by a jacket of crystallized rods. Point defense cannot stop fFK. The new version (fFK2) has 25% increased range and capability and the new design was created at the Spectre B Missile R&D facility. Fired from small craft (fighters and gunboats) as well as warships. Costs 6 MCr, TL16.

CAM3

Close assault missiles have been a mainstay of the Terran Navy throughout its' history and it was adopted as its' standard missile by the newly forming PSU fleet early on. However, more advanced armor and shields being developed by nearby navies forced a review and upgrading of the latest CAM. The CAM3 was developed and has a warhead that is 100% larger, costs 50% more, and has an increased range and targeting capability. These missiles were fielded in huge numbers during the Armageddon War as the PSU Navy's preferred missile launcher was the Wca. Developed by a team of missile specialists at the Spectre B Missile and Space Test Center.

EDM4

The Enhanced Drive Missile (version 4) is a smaller version of the original EDM with enormously miniaturized internal electronics which allows the user to not only fire this defensive weapon from "Rc" and "Wc", but also from Bays as well. The EDM4 functions exactly as the EDM3, but with its much smaller size means much greater numbers can be carried in a spacecraft's magazine. EDM can also be XO mounted, one per XO rack. Cost is 6 MCr. TL16.

WEAPONRY USED DURING THE ARMAGEDDON WAR
(3rd Edition Technology)

TL16
Adaption Module(Mad)
Converging Anti-Matter Beam, Capital(Cbc)
Gun/Missile Launcher, Advanced 3rd Generation(Wa3)
Hetlaser, 3rd Gen. Spinal Mount(HET3-SpM)
LHAWK, 2nd Generation (LHAWK2)
Nano-Fabrication Units(Nfb)
Phased Communication Array(Pha)
Primary Beam, Third Generation Capital(Pc3)
Regeneration Module(Mrg)
Uninhabited Combat Aerospace Vehicle(UCAV)

TL17
Alpha-Synth Technology
Armorplast, Advanced(Ab2)
Antimatter Generator, Second Generation(AMG2)
Black Hole Point Defense(Dh)
Drone Fighters(Fr1)
Fold Space Power Transmitter(FST)
Gigaton Warheads(-GT)
Protomatter Warheads(-o)
Plasma Energy Core, Advanced(Pec2)
Planetbuster(PB)
Pod Bay (PBay)
Targeting Pod(TGP)

TL18
Anti-Technic Field(ATF)
Anti-Drive Battlepod(ADP)
Advanced Strategic Bombardment Missiles(ASBM)
Drone Bay(DBay)
Gun/Missile Launcher, 4th Generation(Wa4)
Hetlaser, Fourth Generation(HET4)
Shield Regeneration, 2nd Generation($R2)
Small Craft Bay(BbC)
Tractor Beam, Micro-(Ta)
Variable Focus Beam, 2nd Generation Capital(Fvc2)

TL19
Advanced Command Center(C41)
Automatic Attack Bits(AAB)
Armorplast, Improved(Ab3)
Anti-Drive Cannon(AdC)
Battleriders(brr)
Damage Control Network(DCN)
Drone Fighter, Second Generation(Fr2)
Quark Cannon(Qb)
Quantum Armor, First Generation(Aq1)
Proton Torpedoes(Pt)

TL20
Battle Pod, Heavy(HBP)
Black Globe Generator(BGG)
Dis Warhead(-dis)
Globular Shields(GS*)
Hyper Engines(Ihi)
Hyper-L Missile Launcher(HLM)
Hyper Missiles(HM)
Multiphasic Sensors(Xz)
Nova Bomb(NvB)
Phase Torpedoes(PTorp)
Quantum Armor, Second Generation(Aq2)
Torpedo Bay(TBay)
White Globe Generator(WGG)

OFFICIAL TERRAN FEDERATION WORLDS (PART 1)

Bantu: Located in the Kontravian Cluster. A Fringe world.

Beaufort: Located in the Bigelow Cluster of the Terran Federation, the massive gravity planet Beaufort has a cold environment and was the location of the beginning of the Fringe rebellion against the hated central

government on Terra, which was dominated more and more by the Corporate Worlds. Beaufort also has a massive moon (larger than Mars), called Bowditch. Beaufort is the new capital of the "Terran Republic".

Bigelow: Located in the Kontravian Cluster. A WP cluster. A Frontier Fleet orbital base is located there. Fringe world

Christophon: A Corporate World, well represented in the Terran Federation. Infamous for food rioting several hundred years ago.

Cimmaron: Located near the Kontravian Cluster. A large Loyalist Fleet base is located there. Also located near Novaya Rodina.

DuPont: A Corporate World.

Galloway's World: A Fisk planet with a G4 primary, the largest concentration of ship construction facilities outside of Zephrain Base in the Terran Federation. Suffered a nuclear strike at the beginning of the "Insurrection" that killed millions and set-back the Federations' construction schedules by two years.

Hangchow: Ethnic Chinese colony world in the Fringe.

Hasdruble: Located in the Kontravian Cluster. Fringe world

Heidi's World: A Fringe world.

Hokkaido: A Japanese ethnic world located in the Fringe.

Killiman: Located in the Kontravian Cluster. A WP cluster and Fringe world. Large repair yards here as well as a large Skywatch (numerous fortresses).

Lancelot: A Fringe world, nobles rule it, technologically backwards on purpose.

New Covenant: A very religious Fringe world. Noted for being cold and bleak.

New Detroit: A Corporate World noted for its' slums.

New Zurich: A Corporate World ruled by conservative oligarchs. The planet switched sides during the succession showdown between the Corporate Worlds and the Fringe, seeking a moderate "third way" in the Federation government. New Zurich's main representative (Oskar Dieter) took over the federal government of the Terran Federation after the previous administration collapsed in the face of serious initial losses at the beginning of the civil war. Dieter's even-handed handling of the following military crisis helped end the fighting after a brutal six years of fighting.

Novaya Rodina: A large WP cluster and strategic choke-point leading into the Fringe. An ethnic Russian world. Population is 20 million people. Located next to Redwing, a major fortification system that is part of "the Line".

Osterman's Star: A Fringe world.

Shiloh: A Fringe world, known for its ruthless for-hire killers.

Topaz: A Fringe world. American Indians settled it.

Xanadu: A Fringe world

Xhosa: An ethnically black African Fringe world.

PALMA SOLA DISTRICT OF THE TERRAN FEDERATION

The Palma Sola District of the Terran Federation is a rich and fairly populous sector of space, including popular resort locations for civilians from the Heart Worlds. Located near the supergiant star Antares, Palma Sola was discovered early on in 2144 and was noted for the large number of human habitable worlds located in the area. Colonization from Terra's Asian areas was heavy, giving the region a strong ethnic influence. With the heavy influx of colonists to Palma Sola, the entire district became fabulously wealthy but in late 2464 the area was scouting by the enemy Hre'Daak forces before the outbreak of the Armageddon War. This event sparked fears and a massive military build-up within the district. When fighting finally broke out between the newly integrated Pan-Sentient Union (PSU) and the Hre'Daak, the Palma Sola District found itself on the front-lines of the galaxys' worst-ever fighting. Nova bombs used by advancing Hre'Daak forces crushed the human defenders in the district, with nova detonations taking place at:

Arretria	Hamimoto	Mannerheim	Maui System
Myanmar III	Pi Puma	Terra Sola	Upland System
Yangtze System			

By the end of the war the district was crushed by invading Hre'Daak forces and loss of life was heavy, with over *twelve billion* Palma Sola civilians being killed in nova bomb attacks. Enemy forces retreated after the destruction of Terra and the region became semi-independent after the break-up of the Pan-Sentient Union into its' component parts in 2466, with Governor Alexander Crow ruling the district for over 20 years thereafter. Additional information on random planets in the area is listed below.

Irrawadday: This planet is a breadbasket world capable of producing huge quantities of nearly every kind of agriculture known. The soil here is a special combination of minerals, enzymes, and microorganisms that make it the most perfect growing medium in the galaxy. The Terran Federation has tried to send some of the soil to other worlds to "seed" them and hopefully transform them into breadbasket world as well, but to no avail. Irrawaddy is a Fringe world with only 5 million citizens.

Mannerheim: A mysterious force on this planet virtually halts the aging process of any creature living on it. Off-worlders who know about this planet suspect that humanity's own potential for immortality is bolstered by the planets' energy, or something. To keep from being overrun by masses of humans, a large contingent of armed warships blockades the world at all times, intercepting traffic before it gets within the planets atmosphere. Mannerheim is a Corporate World with 25 million citizens. Depopulated by nova bomb in 2464.

Noche Brasilia: For years, Noche Brasilia has made its mark as a data processing center. A place where backup copies of data can be safely stored and replicated without fear of corruption or security breach. The Terran Federation government has also made heavy use of Noche Brasilias' data banks to store official government archives. Furthermore, hundreds of worlds maintain backup copies of their entire economies' action on Noche Brasilia. The artificial intelligences used to manage all of this information are a marvel of technology themselves, possessing organic structures and capable of genuine emotions. Thought a bit freakish at first, these "organic AIs" were found to be alot more reliable than standard Artificial Intelligences, since they had feelings of loyalty and pride in their work. Noche Brasilia is a major Corporate World with over 80 million people, most from Terra's Brazil sub-region.

Palma Sola: This system has the galaxys' largest known artifact: an artificial ring orbiting the planet built by aliens who have long since disappeared. Like a ring of Saturn, this ring circles Palma Sola, way out on the edges of the planets' gravity well, only instead of rocks and ice particles, this ring is a continuous space station. Though it is ribbon-thin compared to the bulk of the planet, this station is a huge habitat capable of housing billions of people. It is the gateway through which all visitors to Palma Sola come and go, and it is practically a society unto itself. A ring of elevators connect to Palma Solas' surface by way of thin, nearly indestructible cords. Huge gondola-type craft ride on these cables which winch up and down from the ring in a continuous circuit, giving the folks on the world and cheap and easy way to reach orbit. Palma Sola is a major Corporate World with over 200 million people living on the planets' surface and 10 million on the ring. Bypassed by Hre'Daak forces during the Armageddon War.