

Homeworld: @

MANUAL AND README

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PART 0: MOD INFORMATION

INSTALL INSTRUCTIONS

Classically people would have Homeworld 2 installed in:

C:\Program Files\Sierra\Homeworld2

Or on more modern systems,

C:\Program Files (x86)\Sierra\Homeworld2

Or if you have it via steam:

C:\Program Files (x86)\Steam\SteamApps\Common\Homeworld\Homeworld2Classic

Or if you are installing a homeworld remastered mod, you will need to refer to:

C:\Program Files (x86)\Steam\SteamApps\Common\Homeworld\HomeworldRM

You may also install it in other locations. For the ends of these instructions, I will assume you have installed it the first location. If not, make the appropriate substitutions in the following instructions.

This mod, and many others, comes in one of two ways, as a collection of files in a .rar, .zip, or other kind of archive file or as one or a small number of big files. In either case, put these files in **C:\Program Files\Sierra\Homeworld2\Data**, then find a shortcut to the game, or create one. If you don't know how to create a shortcut, ask someone. Right click on this shortcut and select Properties, then go to the shortcut tab of the window you get. There should be a line marked "Target", and in it should be the following:

C:\Program Files\Sierra\Homeworld2\Bin\Release\Homeworld2.exe

You must change this line in order to play a mod. If you have a mod composed of individual files, change it to read:

C:\Program Files\Sierra\Homeworld2\Bin\Release\Homeworld2.exe -overrideBigFile -luatrace

If you have a mod with a .big file, change it to:

C:\Program Files\Sierra\Homeworld2\Bin\Release\Homeworld2.exe -mod Modname.big -luatrace

Replacing modname.big with the name of file that you downloaded.

With the addition of localization files, the mod includes the directory:

\Homeworld2\Locale\English

If you are using a non-english version of the game, you will have to rename the "English" directory to the proper name for your localization.

LICENSE AND DISCLAIMER

Homeworld isn't ours. It is currently owned by Gearbox Software, or a related company.. We make no money off of this, and have no plans to, ever.

1. You are free to use the Homeworld:@ assets to whatever you legal ends you desire, as long as you follow these simple rules. Our objective is not to show off screenshots, but to make something that can be played with.

*2. We require you credit us **and notify us** of the use. We'd like to know what you're up to, and see how you're using our work. Not only does it make us happy, but often times people will think of implementations and tweaks we never would that might be better than our current plans.*

3. If a team member objects to the use of their specific work by a specific party, we ask that these requests be honored.

4. We also require that you consent to us incorporating any improvements you make back into Homeworld:@. Any content we use in this fashion would of course be with credit, and freely available under this same arrangement.

5. With respect to the music and effects that we are distributing but did not produce, we require you to credit the original artists. Many of these are labors of love in free time, freely distributed with no strings attached. The smallest gesture of respect we can give as consumers is to credit these artists when we use their art.

LIST OF EXCEPTIONS

None at this time! Happy Modding!

USING HW:@ CONTENT IN YOUR PROJECT

Since this has been a problem apparently, this will be reiterated in its own section. If you want to use some of our stuff – effects, survival mode code, meshes or textures – we want to be informed of it. When we notice our stuff floating around in somebody else's screenshots prominently without our names attached to it, some of us get upset. So, if you want to use HW@ content in your project – by all means, go for it as long as it doesn't violate the list of exceptions. Just please inform us first and at the very least credit us appropriately during. Proper attribution is not just polite, it's vital to the survival of a modding community that is comfortable sharing and cooperating, and the Homeworld 2 modding scene can use all the help it can get. Do your part today, and make sure you properly credit everyone who has helped your project.

MISSION STATEMENT

Homeworld:@ aims to replace Homeworld 2 as a sequel to Homeworld 1 and Homeworld Cataclysm, using the Homeworld 2 engine. The end goal is to have as complete a game as possible: two engrossing single player campaigns, full voice acting, animated cutscenes, multiple skirmish gamemodes, and a rich art style paying homage to the original Homeworld's unique and striking aesthetic.

Homeworld:@'s contents are not yet rigorously balanced. This will happen when a sufficient number of ships are created.

A NOTE ON CANON

When one sets out to create a sequel to any work, particularly a work you were not privy to the original creation process, it becomes necessary to make more or less arbitrary decisions about how certain conflicts or discordances will be resolved. One must define what the canon of the universe is. Our decisions are as follows.

Homeworld 1 and its manual as it was originally printed are canonical, with a Kushan player faction and Taiidani opponent.

Homeworld Cataclysm was an idealized retelling of a much larger story and is tangentially canonical, representing a story told with large Kushan bias. The Cataclysm manual is canonical.

Homeworld 2 and all attendant story material has been discarded for the purposes of canon. Species, characters, locations, and events may recur in the Homeworld @ story but there is no direct correlation.

Homeworld Cataclysm, and to a lesser degree Homeworld 1 are treated largely as entertainment products depicting events with varying degrees of faithfulness, but useful to get the whole shape of the events. For example, the Homeworld Cataclysm manual describes the events of Homeworld 1 game as taking place over six months, as opposed to the matter of hours that a strict interpretation of gameplay would indicate. Homeworld:@ gameplay will almost certainly be best interpreted through a similar lens.

Finally, the Homeworld:@'s story began well before *Homeworld: Deserts of Kharak* began production, let alone became available to the public, and as such should not be expected to conform to it at any level.

PART 1: HISTORICAL BRIEFING

THE OLD HIGAARAN EMPIRE

Far in the past, on the planet known as Higaara, there arose a people calling themselves the Kushan. From their position in the rich and violent galactic core, their star shielded from the deadly upheavals there by a particularly dense shroud of protective dust, they spread forth and established the Grand Kushan Empire, at a time considered the foremost nation in the junion council.

In their ascent the Kushan inevitably made enemies. Most are lost to history, but one name stands out across the ages. The Taiidani, hailing from the north-western inner rim, became bitter rivals of the Kushan, eventually descending into a long war, spiraling deeper into brutality as it dragged on. When the Taiidani finally gained the upper hand, they pushed the Kushan all the way back to Higaara, and there prepared to exterminate their old foes so they would never again face them in battle.

The story could have ended there, but the Galactic Council, abhorring an outright genocide, stepped in then and demanded that the Taiidani show at least the slightest mercy. Finally relenting, the Taiidani grudgingly exiled the Kushan people, instead of annihilating them outright as they original intended. The entire population of Higaara was loaded into a massive fleet of transport ships, cheap things with barely the power to run their undersized hyperdrives, and sent them away to find a new home.

The inner area of the galaxy is entirely claimed by various nations, if not actively inhabited or developed. The Kushan were hard pressed to find a welcome refuge. Few wished to incur the wrath of the emboldened Taiidan Empire that had been founded by their victorious war-leader by giving the refugees safe harbor, and so the Kushan passed out of the dense inner areas of the galaxy and traveled into the outer rim, where civilization is more sparse.

How long it took them to find Kharak is uncertain. What is known is that along the way ships in the convoy malfunctioned, strayed, broke, or simply left, and in the end only one of the thousands of vessels successfully landed on the surface of the sandy, barren, sunscorched world intact, far away from any civilization. That one ship, the Khar-Toba, set down in the equatorial deserts, and its people began to eke out a living there.

Eventually the harshness of the desert forced those struggling Kushan to abandon the ship, now converted to a ground-bound city, and flee to the poles. It is thought that this move is when we forgot much of our history. We forgot that we had ever lived anywhere but Kharak, forgot about the Taiidan, forgot everything but our most basic family ties and religion.

EXILES

Millennia passed before the Khar-Toba was rediscovered by archeologists from our recovered society, and we received our first hints that we might have another home out there in the stars. A map, etched in stone, hidden in an ancient observatory temple. That find launched the greatest endeavor the people of Kharak would ever undertake, greater than even they knew. A grand ship, part colony ship, part explorer, part mobile shipyard, ready for anything, even war, was created, outfitted with the marvelous hyperdrive technology recovered from the Khar-Toba, and the best and brightest of the world aboard it to seek Higaara. Home.

When the great ship was launched, none could know that the Taiidan had been watching, had detected the tests of the hyperdrive, and would come to punish the exiles for violating the terms of their banishment. The Mothership, and its six hundred thousand colonists in cryogenic suspension escaped, but Kharak itself was bombarded with horrific weapons that set the air itself ablaze and rendered the entire planet uninhabitable.

What followed was a frightening display of Kushan ingenuity and determination as over the next six months the Mothership stole, bought, reverse engineered, and developed its own warships, constructing a formidable fleet. They went on to destroy the fleet that had attacked Kharak, then blazed a bloody trail across the galaxy straight to Higaara, tearing through the Taiidan as they went before finally defeating Mad Emperor Riesstiu IV over their ancient homeworld, reclaiming it for themselves.

THE CHAOS OF LANDFALL

Following Landfall, few were interested in keeping records or histories, swept up in the fervor of reconstruction and exploration. Thus it is that our most accurate and complete early records of Kushan life on Higaara come from republican Taiidan and Galactic Council observers, supplemented by often incomplete archives of the hastily established journalistic publications, personal diaries, and New Daamid records.

The death of the last Kharak-born in AL 86 spurred a renewed sense of the urgency of keeping strong our links to the past. Strong history initiatives have since been adopted by nearly all Kiith, at all levels of education. Never again will we forget where we came from, be it Higaara or Kharak.

THE ROLE OF KARAN S'JET

Among the modern Kushan people, there are a great many universal stories, shared experiences that all partake of. Even now, when none yet live who knew the sands of Kharak, few stories can match that of Karan S'Jet. Her tale is already reaching legendary proportions, reaching it's current zenith in the entertainment series *Ascension* where she was portrayed as half genius and half mad warrior woman who moved the mothership and conjured fleets through will alone, and who defeated the mad emperor with an ion sword in a psychic duel on the surface of the Angel Moon.

The truth of the matter is somewhat less glamorous, but no less dramatic. Rising from relative obscurity in the latter days of the construction of the Mothership, she proposed a daring plan to solve the growing command, control, and communication crises, using techniques she developed to wire a living brain directly into the computer core.

At first she was accused of a grand power play when she insisted that she would not have the procedure preformed on any but herself, and considering the place of authority she eventually assumed, these worries were not without merit. However when the great risk that the subject would be irreversibly tied to the ship came to light and was independently verified, her terms were eventually accepted. Under her detailed instructions a team of neurosurgeons and computer specialists installed her successfully into the Mothership.

AFTER LANDFALL

The Mothership command crew took it upon themselves to ensure that among the first of the Sleepers awakened after reaching Higaara where the most skilled neurobiologists and surgeons available, many having been part of the original team that integrated Karan with the Mothership. They were immediately set to work devising a plan to extract her safely from the Mothership, and by the time the last cryo pod was empty, they were ready. With their success, the living heart of the Mothership became the last Kushan to touch the soil of the Homeworld.

Regrettably, Karan's recovery was not as swift nor as complete as the public at first assumed. Years of prolonged training to use the interface followed by months of frenzied activity as the guiding will of the fleet meant that large swaths of her brain, in particular those areas typically devoted to motor control and sensory perception, had reconfigured themselves around the data shunts, adapting to serve and use the Mothership she was no longer installed in. Even beyond that, the years spent inside the living coffin of her life support cocoon had robbed her body of its strength in the long inactivity.

It was not widely publicized that her iconic walk off the shuttle onto Higaara was only made possible by an advanced system of mechanical braces beneath her clothes, purchased from the Bentusi at considerable cost and controlled through those same shunts, or that her handful of speeches at the time were made through the same voice synthesizing program she had used as Fleet Command. After those few appearances, she slipped away from the public eye to begin her decades-long recovery process.

However, even when her body was weak her mind was as sharp as ever, and she continued her research where she had been forced to abandon it years ago. Access to the knowledge of the galactic scientific community revealed something startling; even in the annals of galactic history, her time as

Fleet Command was very nearly unique. While the integration process was not unknown, its use was traditionally only the purview of the leaders of grand empires, particularly the paranoid tyrants who wished to personally and completely control all around them.

This realization revealed one more piece of a puzzle that had plagued the military minds of Higaara for years: the fantastic success of the Exile fleet against the mighty Taiidan empire. Numerous theories have been proposed by top Kushan strategists; some maintain that the rigorous destruction of every FTL-capable Taiidani warship allowed the original Mothership to proceed through much of the Taiidani Empire untracked. The fleet was able to achieve total surprise successively, a feat almost unheard of at the time as military strength and fleet dispositions of the various powers was critical to the Empire-era Council politics. Others theorize that the Bentusi orchestrated the Exiles' successful return by delaying Imperial message couriers or altering orders to thin out the forces the Kushan would face. All agree that internal strife and poor leadership in the Imperial forces were certainly major factors; none believe that alone can account for the fantastic success. In truth, the independence of the Kushan fleet, made possible by the long range capabilities built into the Mothership for its role as an explorer and colonizer, and the sheer size and coordination of the fleet, made possible only by the presence of Fleet Command, were unmatched. While the Taiidan and other galactic empires could field far greater numbers of ships, they could not effectively use them together in the concentrations or to the effect that the Kushan could.

When this information was brought to the attention of the Daiamid and the UNH admiralty, with the evidence of the constant logistical issues suffered by Kiith Somtaaw's efforts at reproducing the success of the Mothership, it became clear that integration and effective Mothership-led fleets were one of the few advantages Higaara could use to defend itself from its enemies. Plans were immediately drawn up to construct new Mothership class ships in addition to the numerous carrier groups already in service.

Karan S'jet initially mounted an impassioned campaign against this move, not wanting anyone else to suffer the same lasting disabilities she endured, but when it became clear that the Daiamid was willing and able to carry on without her, she relented and devoted herself to improving the technology and tutoring the candidates chosen to take the position of Fleet Command in the new motherships.

She helped to found the Higaaran School of Command, where scientists gathered to refine the integration process, and students were brought to learn to use it. There she worked until she died of an aggressive brain infection. After her death, the school was renamed in her honor, a move she opposed in life.

EXCERPT FROM THE KARAN S'JET SCHOOL OF COMMAND ARCHIVES

Topic: Unique vulnerabilities of Fleet Command

- ...the emergency disconnect protected the ship from serious damage, but after enough time connected to the your brain comes to depend on it. The sudden sensory deprivation sent me into shock, and I very nearly died.

- There is good news. The computers you'll be interfacing with will be better, more secure, and designed all at once instead of upgraded a little at a time over most of a century. Your support engineers won't be tempted to splice scavenged enemy technology into your network, and you know the dangers if you let them.

- We know a lot more about information security now. Now the bad news. Our enemies are still centuries ahead of us in electronic and information warfare. Your networks are built and designed from the ground up by our people, but they are built on patterns that the galaxy knew well before we knew what a computer was.

- Worse, despite our best efforts, the connections your brains will make to your networks are intrinsically unpredictable. If we forced them into rigid shapes this would all be a waste. That means there is a limit to how much we can sanitize the input; what is safe traffic for one may be dangerous to

the next.

- When you are first connected a few of your basic faculties, such as balance, will be taken over for monitoring programs. Keeping these in the green will be reflex, but if anything attacks you mentally they will alert your support team. With luck they'll be able to isolate the problem inputs gracefully instead of resorting to a hard disconnect.

- Doctor Subatoi will now walk you through the new network architecture, and how you will be able to manipulate it. Pay attention and you may be able to resolve this kind of problem yourself without intervention from your support team.

THE HIGAARA SYSTEM

Higaara's sun¹ is an ordinary yellow star located itself in a very anomalous region of space. Higaara is shielded by a large neutral hydrogen gas cloud² in which dust bands are located, yet is far from current major hydrogen gas reserves in the arms. Higaara is much older than the interaction between our galaxy and its satellite some half a billion years ago and so is a native to this galaxy. As we understand gravitational processes and the distribution of enriched gas throughout our galaxy, star formation peaked towards the inner edge of the Galactic disc where Higaara was born.

While most stars formed at the inner edge of the galactic disc and migrated outwards, Higaara was disturbed by our satellite galaxy's initial interaction 500-600 million years ago and traveled inwards until it reached a semi-stable state at our current position at the outer edges of the galactic Bulge. Higaara is presently too far from the current interaction with our satellite galaxy to be noticeably effected by tidal forces. Most neutral gas in the galaxy is diffuse, concentrated into knots of star formation by periodic density waves traveling through the disc and forming the leading edges of the arms. Higaara's host gas cloud is an artifact of its relocation into the Bulge. Our original stellar neighborhood appears to have directly interacted with a protostellar nebula at the edge of the galactic disc half a billion years ago, becoming temporarily bound to one another by gravity. These interactions quenched the formation of a star in this nebula, fortuitously for our species letting it remain as a shield against ionizing radiation. As our orbit became dominated by the Galactic nucleus, this structure dissolved relatively quickly by cosmic time-scales, leaving Higaara and two of its sibling stars embedded in this gas cloud.

Higaara's night skies are mostly dominated by the Galactic Bulge from one side and the stars at the inner edge of the disc. The light from the Bulge is reddened significantly by the presence of our gas shield leading to a characteristic orange glow. During the day the glow of Higaara's atmosphere drowns out this yellow-orange glow.

ADAPTING TO HIGAARA

Kharak's years were long due to its wide orbit around the bright primary F0V³ type star. Additionally, the Kiith originally split its annual cycles into triads. Kharak had high axial tilt leading to very extreme seasonal changes at the high latitudes. In the mid-upper latitudes, however, temperature did not change very much and water remained liquid year-round.

Higaara has lower axial tilt leading to very little change in day length through the year, and temperate

- 1 HIGAARA'S SUN IS A MAIN-SEQUENCE G TYPE STAR, MASSING 2×10^{30} KG, WITH RADIUS OF 695000 KM, SURFACE TEMPERATURE 5778 K, AND LUMINOSITY 3.85×10^{26} W. HIGAARA IS APPROXIMATELY 4.6 BILLION YEARS OF AGE. ITS STATISTICS WERE MADE A STANDARD UNIT IN IMPERIAL TIMES, SO ALL STARS ARE MEASURED RELATIVE TO IT.
- 2 THIS GAS CLOUD MASSES SOME 80 TIMES AS MUCH AS HIGAARA'S SUN AND AT GREATEST EXTENT IS APPROXIMATELY 5 PARSECS. HIGAARA IS LOCATED TWO THIRDS ALONG ITS EXTENT. IONIZING RADIATION AND LIGHT PRESSURE IS RAPIDLY CAUSING ITS BREAKDOWN, WHICH WILL COMPLETE IN LESS THAN A HUNDRED MILLION YEARS AS NEUTRAL HYDROGEN WILL ABSORB AND BE IONIZED BY THE ULTRAVIOLET RADIATION FROM THE CORE.
- 3 KHARAK'S PRIMARY HAD A MASS OF 1.42, A RADIUS OF 2.05, AND A LUMINOSITY OF 6.93 TIMES THAT OF HIGAARA. IT WAS APPROXIMATELY 3 BILLION YEARS OF AGE. IT WAS REPRESENTATIVE OF THE UPPER END OF THE MASS SCALE FOR MAIN-SEQUENCE F TYPE STARS.

climates range over much of the surface. This is thought to be a result of the Angel Moon's presence. The Angel Moon's gravity also effects the atmosphere and oceans of Higaara, leading to variations in the waterline over the course of the day. Higaara's oceans have somewhat similar effects on weather as Kharak's deserts; they allow winds to reach high speeds and great storms grow. The much larger amount of moisture in Higaara's atmosphere allows for much greater precipitation than any of our people could imagine coming from Kharak, and many Kiith still hold the great rainstorms that sweep the middle latitudes during summer in awe.

The Angel Moon is thought to be a recent capture and has an elliptical orbit. It is quite iron rich, with a massive metallic core that is 70% of its mass. This core is liquid and generates a weak magnetic field ~ approximately 1% that of Higaara's. The crust is extremely rich in iron and magnesium silicates, and much of Higaara's industry was exported to the less-scenic Angel Moon because of it. This allowed the Empire to focus on making Higaara into a resort-like throne world with expansive cities and nature preserves. The Daiamid found this policy to be one of the few of Riesstiu IV's worth propagating, and thus the majority of Higaara's surface is natural preserves owned collectively by all Kiith.

Though it was the hub of the truly massive Imperial Guard fleet and many regular Imperial fleets, Higaara still possesses an abundant asteroid belt. All Kiith have manufacturing facilities and habitats that have been nudged onto orbits that cross near Higaara. This allows affordable, low-energy transits from the capital planet.

THE LOST CENTURY

Historians often marvel at the optimism of the Kushan people before the Homeworld War: their population, small compared to the galactic whole, was unified. Yet comparing the economics of the hundred years preceding the Homeworld war for the Kushan on Kharak and the rest of the Galaxy is an amazing exercise in contrast. Vast as it is, the Council territories take months to cross. Travel, communication, and the sharing of knowledge towards a sum goal was difficult at best and impossible during Riesstiu IV's frequent pogroms.

Following the discovery of the Khar-Toba, Kharak's technological and industrial base exploded. Kharak's people went from backwards savages to a starflight nation capable of winning its engagements with the Imperial Navy, the most powerful military the Galaxy has ever seen. After reclaiming their Homeworld, however, the Kushan people were plunged into a century-long struggle to ward off a collapse of civilization along with the rest of the Galaxy.

The fall of Riesstiu IV and the Council intervention threatened to destroy the Council utterly – the unilateral action of evicting the huge Imperial population that had lived in the Higaara system amounted to a statement of tacit support for the rebellion which galvanized the conflict. What had begun as a decapitation effort by Captain Elson and the rest of the rebellion quickly transformed into a massive civil war. The rebels had initially hoped that by destroying the leadership of the Empire they would be able to avoid a prolonged struggle. The intercession of the Council, however, forced every Imperial citizen to choose between the uncertain rebellion and the stagnant, defunct Imperial regime. Thus, while from a Higaaran perspective the Homeworld War ended at Landfall, to the rest of the Galaxy it was merely the dawn of an age of disaster.

The bonds of common trade, language, travel, and interest that unite the Council species, weakened by thousands of years of increasingly stifling Imperial rule, were irrevocably fractured. Many predicted the inevitable end of the Empire would usher in a bold new era of innovation and prosperity. The historical truth is, however, that the vast military apparatus of the Empire patrolled thousands of systems and regularly suppressed pirates and privateers as well as the free flow of information.

The constant presence of the Imperial military, while deeply repressive, also served as the vehicle for the vast Empire to organize itself in species-wide endeavours without relying on the Council. At the height of its power, the Empire's fleets constantly moved from system to system, carrying messages and materials quickly and efficiently across the unimaginable vastness of its territory. They were instrumental in the Empire's many mega-projects⁴, including the fortification of the Higaara system.

4 315 BHL WAS THE CLOSEST THE EMPIRE EVER CAME TO OPEN WAR AGAINST THE AGGREGATE AND IN AGGREGATE HISTORY IS THE PEAK OF THEIR CONSTANT PARANOIA. DOZENS OF FLEETS WERE MOVED FROM IMPERIAL CORE SYSTEMS TO THE SHARED BORDER, AND MANY OF THEIR 'TRAINING EXERCISES' TOOK PLACE IN FRERRN

These Imperial fleets were all but consumed in the Civil War – while the Council famously declared the War for Homeworld over as Riesstiu's throneship burned, they had in fact signaled the beginning of six decades of constant struggle. The eventual resolution of the disparate Imperialist factions into uneasy system-states only opened a new front for the Taiidani people. Where the Imperialists had once been united fighting the inexorable rise of the Republic, they could now fight amongst themselves as well as the opportunistic Frerrn in the galactic east.

By AHL 50, the once mighty imperial navy had been reduced to a shadow of its former glory. Endless strife had ground down the tens of thousands of ships – while new construction could replace losses, the damage had been done. Trade and development of new territories which had flourished under the Empire had been reversed, with huge swathes of territory being abandoned to whoever would dare travel it. Galactic-scale trade and communication had been disrupted permanently.

In the end, much of the efforts by all the Council species for the last century – colloquially termed 'the Lost Century' – has been a slow slog back to the productivity of the final days of the Empire: The Kushan struggle to expand their industry and manage more of their territory without assistance from the Republic. Imperial and later Confederate rogues continually harass Higaara. The Republic has spent the last hundred years in the unenviable task of simultaneously assembling a contiguous nation out of whole cloth and fending off their conservative brethren and the Aggregate.

As desperate as the rebels were in the final days of the Empire, it is a testament to their zeal and military skill that they were able to hold such a large fraction of Imperial territory together. In more modern times their situation has become much less precarious – indeed, the inner systems of the Republic have not been touched by war for more than two generations.

It should not be a surprise then that after nearly a hundred years of widespread low-level conflict, catastrophic disruption of trade, colossal loss of life, and a breakdown of all second-tier communications channels that the galaxy has not advanced vastly further than its state at the twilight of the Empire. The breakneck speed at which the Exiles were able to achieve starflight was halted and the slow stagnation of the Empire ended in economic freefall when the civil war broke out.

While strife during the civil war was widespread, support for military infrastructure – which was largely in the form of Imperial controlled and escorted convoys – dried up. State-run research projects often disappeared – or worse, as the scientists involved were assassinated by either faction to prevent the other from gaining any advantage in the desperate struggle. Largely due to the colossal economic and societal disruption of the Civil War, there have been no paradigm shifts due to technological breakthrough in the last hundred years. Galactic militaries of 100 AHL follow essentially the same doctrine of design and organization as they did a century prior.

The decay of the Galaxy was not permanent, however. While fighting between Imperial and Republic factions never officially ceased, for the last forty years it has been confined to small border skirmishes. The emergence of the Confederation under Empress Corrstei led to formal diplomatic relations between the two and has allowed the Galaxy to make substantial progress towards rebuilding. By all economic benchmarks, the 100 AHL Galaxy has finally recovered. It is still a dangerous place – peripheral elements of the Confederation are little different from the Imperialist warlords that once raided Higaara, and the Frerrn Aggregate's opportunistic annexation of many former Imperial territories has led to extremely cool relations between the Aggregate and both Taiidani states.

THE HIGAARAN CROSSROADS

Prior to the Homeworld War, Higaara had served as the nexus of Imperial power and the Imperial economy. For obvious reasons this was no longer possible when its population of billions of loyal Taiidani was displaced by a scant million Kushan⁵, but the determination of the Kushan people to protect their

TERRITORY. AT THE END OF THE YEAR, THE EMPIRE BEGAN CONSTRUCTING A SERIES OF SUPER-HEAVY BATTLESHIPS NEARLY THREE KM IN LENGTH. THESE SUPER-WEAPONS WERE INTENDED TO PLOW THROUGH THE FRERRN MINEFIELDS AND DESTROY THEIR FORTRESSES IN DIRECT ENGAGEMENTS, AND WERE THE INTENDED PLATFORM FOR THE EMPIRE'S 'PROJECT X': THEIR FIRST ION BEAM WEAPON. THEIR SIZE AND THE NEW WEAPONS TOGETHER WOULD HAVE LIKELY SUCCEEDED. HAD CONSTRUCTION NOT BEEN DELAYED BY LOGISTICAL DIFFICULTIES AND DISCOVERED BY THE AGGREGATE, THE FRERRN MAY HAVE BEEN ANNIHILATED LIKE THE PEOPLE OF KHARAK.

5 THE DISPLACEMENT OF THE IMPERIAL POPULATION OF HIGAARA WAS A GRUELING PROCESS THAT LASTED UNTIL

homeland, and their strong partnership with the now-prosperous Republic has led to the growth of new trade routes that cross Higaaran space.

Situated strategically near the center of the Galaxy, Higaara serves as a literal hub for travel to any part of the old Empire and is roughly equidistant from all Council territories. Additionally it is inside the tenuous border between the Republic and the Confederation. As such, the Republic and the Daiamid Council of Higaara have long maintained a mutual defense treaty. The Republic stations a full fleet inside the Higaaran system, as well as provides and maintains a massive shipyard complex in the outer system that both serves as the infrastructure that sources the majority of the Higaaran Navy's shipbuilding and the support base for the grid of Imperial-era Hyperspace Inhibitors surrounding the system.

This has made economic independence and self-sufficiency the first priority for the Daiamid council and the Kushan people as a whole. It is no mean feat – it took the combined output of many of the inner Imperial systems to support the hundreds of two kilometer long Inhibitor sections and while wealthy the Higaara system alone is not enough to support all our defense and industrial needs.

Furthermore, only a handful of stars near Higaara are migrants or newborn from enriched material. Most of these stars are old, red or orange stars of low mass that formed from gas clouds that were depleted of heavy elements. These stars have few terrestrial planets, and a significantly reduced asteroid belt. There is also significant radiation flux the closer one ventures into the Galactic bulge towards the nucleus. These stars tend to be heavily fortified defensive and sensor bases, with a handful of large naval bases and shipyards in the richer systems. The turmoil of the Imperial Civil War caused most civilians living in those systems to flee into the disc, leaving Higaara and her colonies somewhat isolated and thus a safe and relaxing port-of-call in that otherwise dangerous and contested space.

The formal treaty between the Daiamid Council and the Republic soon grew into a symbiosis⁶ that both nations relied upon: a well-armed and secure Higaara provided a powerful buffer to further Imperialist aggression along that axis, and the promise of Republic fleets reinforcing the stalwart Higaaran Navy deterred most such attacks on Higaara itself. Such a relationship was not without its hitches, however⁷. Recent years have seen a recovery in Republic-Higaaran relations.

SIX AHL. THE TAIIDANI CIVIL WAR THAT WAS STILL SPREADING AT THAT TIME QUICKLY TOOK ALL REBEL-CONTROLLED SHIPS OUT OF THE EFFORT, LEAVING IT UP TO THE REST OF THE COUNCIL RACES. EVEN WITH THE OMINOUS THREAT OF COUNCIL MILITARY REPRISALS, IMPERIAL-LOYAL CITIZENS RESISTED THE EFFORTS TO DISPLACE THEM. OVER TEN THOUSAND SHIPS WERE PARTICIPATING IN THE DISPLACEMENT AT ITS PEAK, AND MILLIONS OF SOLDIERS FROM REBEL UNITS AS WELL AS THE OTHER COUNCIL RACES WERE DRAWN INTO THE CONFLICT. WHILE THE EXILES' LANDING PLACES WERE WELL-PROTECTED (AND LOCATED ON CENTERS OF REBEL SYMPATHY), NEARLY HALF OF HIGAARA'S STRUCTURES WERE DESTROYED IN THE PROCESS.

6 CA AHL 67, REPUBLIC CITIZENS EMPLOYED PRIMARILY IN TECHNICAL ROLES HAD BEGUN EMIGRATING EN MASSE TO THE HIGAARAN NATION. SEEKING REPRESENTATION ON THE DAIMIID COUNCIL AND ACCEPTANCE FROM THE KUSHAN PEOPLE, THEY FORMED KIITH NEISEN. FEARING THAT TAIIDANI SEATS ON THE DAIAMID COUNCIL AND INCREASING IMMIGRATION WOULD LEAD TO ANNEXATION OF HIGAARA INTO THE REPUBLIC, A COALITION OF CONSERVATIVE KIITH CALLED FOR KIITH NEISEN TO BE BROKEN INTO INDIVIDUAL FAMILY UNITS AND ITS MEMBERS TO BE SPREAD AMONGST ALL KIITH. FEARING THAT ANY HICCUP IN REPUBLIC FINANCIAL AND TECHNICAL AID COULD JEOPARDIZE HIGAARA'S VERY SURVIVAL, THE DAIAMID MET IN EXTENDED EMERGENCY SESSIONS IN AN ATTEMPT TO MEDIATE THE BREWING WAR BUT THEY WERE TOO LATE.

7 KIITH NEISEN HAD SIGNIFICANT ECONOMIC POWER AND ITS OWN DEFENSE FORCES THAT HAD ENGAGED IN BATTLE WITH SHIPS FROM KIITH HRAAL IN THE HIGAARAN ASTEROID BELT. FEARING FOR THE LIVES OF ITS FORMER CITIZENS, THE REPUBLIC FLEET STATIONED IN HIGAARA MOVED TO PROTECT KIITH NEISEN – WHICH GAVE CREDENCE TO THE CLAIMS OF CONSERVATIVES THAT THE REPUBLIC WAS USING KIITH NEISEN AS A FRONT FOR ANNEXATION. UNH FORCES WERE SCRAMBLED TO THE AREA, PACIFYING BOTH KIITH HRAAL AND NEISEN, ONLY TO COME FACE TO FACE WITH THE REPUBLIC TASK FORCE. IN A TENSE MOMENT, SHOTS WERE FIRED AND A REPUBLIC CRUISER WAS DESTROYED WITH ALL HANDS. WITH AN ALL-OUT WAR THEY COULD NOT HOPE TO WIN THREATENING, THE DAIAMID WAS DESPERATE FOR ANY END TO THE CONFLICT. KIITH S'JET, PREVIOUSLY NEUTRAL, OFFERED TO MAKE KIITH NEISEN A VASSAL. AS DAIAMID REPRESENTATIVES ARE DRAWN FROM THE KIITH-SA, THIS WOULD GUARANTEE ETHNIC TAIIDANI REPRESENTATION BUT NOT WITHOUT A MEDIATING KUSHAN VOICE. WHILE CONFLICT WAS AVERTED, A RECENT RISE IN TAIIDANI IMMIGRATION TO KIITH NEISEN IS A FREQUENT COMPLAINT OF CONSERVATIVE ELEMENTS OF THE DAIAMID.

PART 2: GUIDE TO THE GALAXY

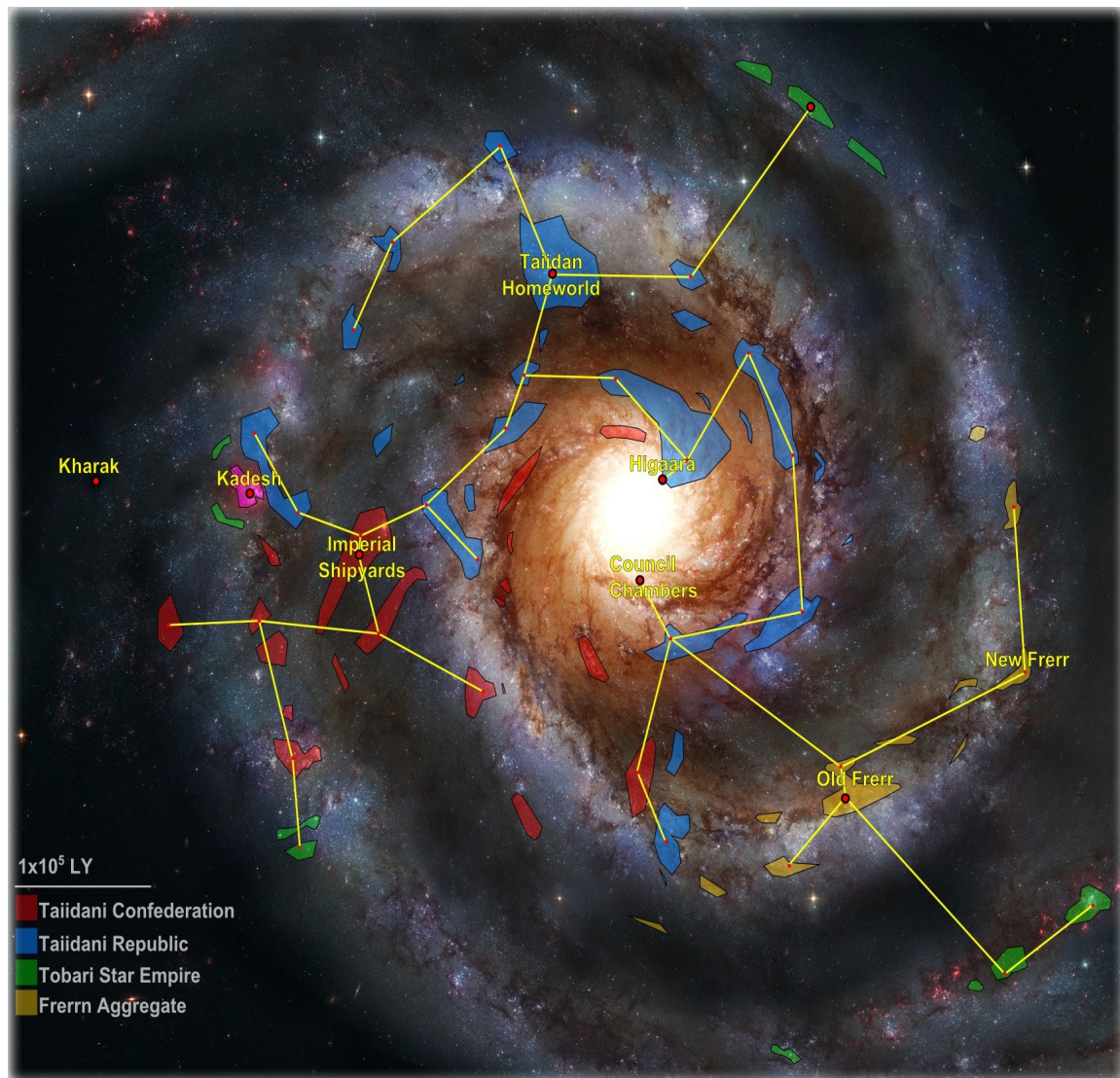


FIG: MAJOR COUNCIL POWERS MAP – AHL 100 EDITION

PHYSICAL OVERVIEW OF THE GALAXY

Our galaxy is approximately 160 billion times the mass of Higaara's sun. There are three major components to the galaxy: the central Bulge, which is ~1 kpc⁸ across and houses the nucleus and central black hole; the Disc which is both spiral arms extending out to the edge of the visible portion of

⁸ KPC - KILOPARSEC, OR THOUSAND PARSECS. A PARSEC (PARALLAX SECOND) IS 3.26 TIMES THE LENGTH OF THE MORE INTUITIVE UNIT, LIGHT-YEARS. IT CORRESPONDS TO THE DISTANCE AN ASTRONOMICAL OBJECT MUST BE FROM THE OBSERVER FOR ONE HIGAARAN ORBITAL RADIUS OF LATERAL MOTION TO COVER ONE ARCSECOND – 1/60TH OF AN ARCMINUTE, WHICH IN TURN IS 1/60TH OF A DEGREE. THE SYSTEM IS IN USE BY MOST OF THE GALAXY AND IS CALIBRATED ON THE IMPERIAL STANDARD, EXPLAINING ONCE MORE HIGAARA'S USE AS A STANDARD UNIT.

the galaxy, and the Halo, which begins with our satellite galaxy and extends far above and beyond the rim of our galaxy, housing many star clusters.

The central black hole of our galaxy is named Karos and serves as the origin of the galactic coordinate system. Our satellite galaxy crossed the disc plane approximately 500-600 million years ago at a distance from Karos of approximately 20 kpc, inducing the particularly dramatic shape of the galaxy's spiral arms and the re-enrichment of the gas reserves of the entire galaxy. This galvanized a new era of star formation, both in the core region and in the many "knots" of high density throughout the arms. The pre-existing Galactic disc was highly disrupted and many stars migrated due to the tidal interaction between the two galaxies - most notably Higaara became lodged in a large cloud of neutral gas several kiloparsecs closer to the core from its birthplace. 50-100 million years ago the satellite galaxy began crossing our disc again, and its current location in the plane of the galaxy and interacting with the northern arm is responsible for the high rate of star formation there.

While Higaara affords a good view of several circumnuclear dust and gas rings, our star and its peculiar neighborhood have no relationship to these objects. There is, however, massive ultraviolet and x-ray radiation flux from the central parsec of our galaxy, in which paradoxically there are very many young and massive stars. Periodic density increases in the Karos accretion disk will cause low-level star formation to occur. Interestingly enough, Karos has two circumnuclear dust rings - one nearly perpendicular to the plane of the galaxy and another offset from both the disc and the first ring. It is not known what causes these odd orientations.

Our galaxy's Disc possesses two large spiral arms, making it one of the less tightly bound galaxies of this type in the universe. Both of these arms are undergoing higher than average star formation due to the gravitational interactions with our satellite galaxy compressing the ambient gas sufficiently. The northern arm currently connected to the satellite is experiencing the greatest amount of star formation. Due to the recent epochs of star formation, the interstellar medium of our galaxy is also quite enriched with heavy elements, though preferentially towards the inner disc region and the galactic north and east. The galactic west has a thinner interstellar medium and less presence of dust and gas. It is theorized that this is due to recent and heavy supernova activity on the first pass through by the satellite galaxy. The Galactic Disc extends from two and a half kpc from the core to fifteen kpc distant. The Disc has two major subregions - the denser portion extends up to one kpc above and below the plane of the galaxy which contains the younger stars, while the less dense portion extends from one to five kpc above and below the plane which contains the older stars and many star clusters.

Our galaxy's halo is dominated by the presence of our satellite galaxy which has swept most of the nearest star clusters up. The halo is roughly spherical, and consists of a corona of hot gas, unobservable dark matter, and some old and highly irregular stars with inclined or retrograde orbits. There are also many globular star clusters in the galactic halo which orbit at large radii - up to 40 kpc.

NATURAL RESOURCES

As the majority of galactic politics concerns the disposition and allocation of natural resources, it is prudent to discuss the nature and origin of these resources. The vast majority of the mass of the galaxy is composed of a thin but omnipresent cloud of non-interacting, unobservable matter. The fraction of our galaxy that we are more familiar with (stars, planets, and starships) is composed of baryonic matter and is mostly hydrogen and helium: the makeup of stars.

All baryonic matter that is not hydrogen or helium is produced during nuclear fusion reactions inside stars and made accessible to our civilizations by being scattered during a supernova. It is only when these supernova debris give rise to a new generation of stars that rocky and metallic objects can form, and civilizations can make war or politics for control of them. Therefore, the study of resources involves the study of the origin of stars and their planetary systems.

There are two main populations of planetary systems - those formed in high-mass star forming regions like the Garden of Kadesh and the Kadiir Nebula, and those that formed in low-mass star forming regions more similar to the Shining Hinterlands and Great Wastelands. The significance of this

distinction is that it will influence the temperature of the protoplanetary disk⁹ and change the fraction of water to rock in the planetesimals that will make up its asteroid belts and planets. Stars from high-mass regions will have had their protoplanetary disks heated by the UV-dominated radiation fields from massive hot O and B-type stars and contaminated with ²⁶Al from the supernovae of these same O-type stars. ²⁶Al has a half-life of 700,000 years as it decays to ²⁶Mg. The decay process releases a large amount of heat, which will raise the temperature of the contaminated protoplanetary disk above the freezing temperature of water. The transition point between rocky bodies and icy bodies is called the "snow line".

Planets formed inside the protoplanetary disk's snow line will be similar to Higaara or Kharak with a rocky surface and relatively thin atmosphere with small amounts of water – a density of 4 – 6 g/cm³ corresponding to a water content of ~1% or so. Planets formed from material outside the snow line will be similar to carbonaceous chondrite asteroids, with a density of 1.8-2.5 g/cm³ corresponding to a composition that is approximately 50% silicate or carbonate and 50% water. Higaara and Kharak are examples of systems that must have formed in a high-mass region. Higaara's asteroid belt switches from rocky asteroids to icy asteroids at a distance of approximately 2.7 AU, which is where we believe the snow line was when Higaara was forming its companions. Simple simulations of our protoplanetary disk without any external influence from Higaara's stellar siblings indicates that normally the snow line would have been at 0.75 AU, which would have made water-rich material dominate the accretion process for our homeworld and given it eight hundred times as much water. These planets would have oceans hundreds of times deeper than Higaara's, 2-300 kilometers of liquid water and 2-300 kilometers of pressure-frozen ice. While systems like these that are water-rich are useful for refueling and restocking volatiles, from an economic point of view it is stars that originated in these dense regions that are most significant as they will have far more easily accessed reserves of metals. It is difficult to completely evacuate a star system of volatiles so these systems are preferentially settled by Galactic powers.

Even in the most metal-rich star systems there must exist processes to concentrate metals. While protoplanetary disks are not perfectly mixed by the time macroscopic bodies begin accreting, they do not include ready veins of high-grade ore. There are two main processes that concentrate metals. Massive bodies like large asteroids and planets are differentially sorted by mass – lighter materials are at the surface while heavier materials are at the core. Metallic asteroids are formed when these massive objects are disrupted during the formation of the star system. Though they are rare, they are extremely valuable as they can be cheaply processed and moved compared to planetary deposits. On large planets, most of the metal reserves are essentially unreachable in the planetary core. Hydrological processes on planetary surfaces create ore veins that can be extracted more expensively due to the cost of lifting raw materials out of a planet's gravity well. Higaara's Angel Moon is an anomalously metal-rich object. It appears to be the metal-rich core of a larger body that has lost most of its rocky mantle. In these rare cases the vast content of heavy elements normally unreachable under thousands of kilometers of molten rock is relatively easily accessed, and thus these Metal Worlds are often regional hubs of industry.

Strategically, these metal-rich systems are the focus of industrial expansion for all Council species. Since star systems do not maintain their relative positions as they orbit the center of the Galaxy, it is extremely difficult to predict the richness of a system without exploring it with telescopes or with ships. Young star systems in nebulae are the only places that are certain to have dense resources, but they are inhospitable places with high radiation fields and accessing their resources is not always easy. It takes millions of years for the tiny particles in a protoplanetary disk to form into asteroids that can be efficiently harvested.

This in turn drives the process by which Council races claim borders – they will stake large regions with many thousands or tens of thousands of stars, and then work on exploring them further. Development is not uniform in these regions, there are often manufacturing hubs built in these rich systems with smaller colonies radiating away. Attacking and defending these hubs is the focus of most military operations, as they are vital links in the supply chain powering any government's war machine.

9 PROTO-PLANETARY DISC – COMMON TERM FOR THE LATE-STAGE OF PRE MAIN-SEQUENCE STELLAR EVOLUTION. SINCE THE PROTOSTELLAR CLOUD CONSERVES ROTATIONAL MOMENTUM, IT WILL CONTRACT AND FLATTEN TO A DISC OF GAS AND DUST IN WHICH WHATEVER PLANETARY SYSTEM IT WILL HAVE, IF ANY, WILL FORM OVER A PERIOD OF SEVERAL TENS OF MILLIONS OF YEARS.

DEMOGRAPHIC OVERVIEW OF THE GALAXY

There are three types of star systems from a demographic point of view. *'Core'* systems are like Higaara, the most developed and populous due to their immense stockpiles of heavy elements. Core systems have typically been inhabited for hundreds to thousands of years. These Core systems are huge population centers with extensive service industries supported by the lower tiers of colonies. Typical population in a Core system would be in the billions, with nearly a hundred billion people living in the new Confederate throne system.

'Hub' systems are the next tier out. Typically not more than a single short-ranged jump from a Core system, these Hub systems can develop large populations over long periods of time but tend to be chosen as strategic positions to aggregate resources from migratory mining fleets. Hub systems typically have significant military and industrial complexes – partly so that in wartime population centers are not among the systems that are needed to be destroyed to achieve military supremacy. Fleet bases in these Hub systems will also gather up convoys from more remote colonies and escort them in large fleets to the Core systems. Hub systems tend to have three to five hundred million inhabitants on average, with a billion in the largest. These will tend to be resource-rich systems, but since their industrial capacity tends to outstrip their local resource harvesting capacity they will receive most of the raw materials from other locations.

'Fringe' colonies are the lowest level of permanently inhabited space. Typically one to three short jumps from a Hub system, Fringe systems tend to be either newly settled, or of little military value due to their position or mineral wealth. Economic activity in Fringe systems revolves around harvesting volatiles and fuel to resupply migratory harvesting fleets. They will often have a small military presence in the form of patrols putting in for refueling and restocking consumables. Population will rarely be more than a hundred million. Any Fringe system that has the mineral wealth to grow much more rapidly will naturally develop into a Hub system as it becomes more fortified and sends out its own Fringe colonies. Typically hyperspace courier services will maintain a station in these Fringe systems.

'Uninhabited' systems tend to be either unsurveyed or of such low density of heavy elements that there is little point in setting up permanent extraction facilities. The key difference is typically a lack of planets with hydrological processes to concentrate ore into veins of high richness. Most high-density resource sources will be asteroids, and so fleets of starships are a more efficient harvesting method. Obviously there will be no permanent population, but typically sensor satellites and navigational buoys will be deployed.

The Inner Council species do not necessarily conform to this 'standard' hierarchy, however. We have no precise figures on their population, but we estimate they each have one to ten billion people at most.

The Republic controls hundreds of heavily industrialized, populated core systems and thousands of hub and fringe systems, and a large transient population in its mining fleets. Current population is in the region of five trillion total, with more than five thousand two hundred systems formally inhabited. There are thousands of privately-owned harvesting fleets in the Republic that trawl through the millions of systems under its jurisdiction.

The Confederate Systems have one hundred sixty core systems and eight hundred eighty hub systems, with two thousand nine hundred fringe systems. Confederate core systems tend to be more densely populated than their Republic equivalents. Current population of the Confederate Systems is forecast to cross four trillion in the next decade. There is enough friction between Confederate States to make free merchant fleets somewhat less profitable than in the Republic, so there is a proportionally smaller number of migrant Confederates.

The Frerrn Aggregate has sixty core systems and four hundred forty hub systems, with eight hundred fringe systems. Their current population is extremely dense, at two trillion one hundred billion. Many of their hub systems are ex-Imperial that were annexed during the Taiidani civil war, giving them a significant Taiidani minority.

The Tobari Star Empire is reported by the Tobari delegation to have twenty trillion subjects, but that is

widely believed to be propaganda. The Council's best estimates put them in control of fifteen core systems and one hundred ninety Hub systems. They've existed for so long that their population has spread fairly evenly through most of their territory, so their colonial systems tend to be a bit too dense to resemble our Fringe systems. They are thought to have between one hundred ninety five and two hundred billion inhabitants.

The Higaaran Daiamiid administers the Higaara system, a Core system, with a population approaching one hundred million. We also have two colony systems in our 10 parsec control zone. We have tenuous links with an unknown number of Protectors of Kadesh in the garden, and the Daiamiid maintains a small memorial station in orbit of Kharak.

POLITICAL ORGANIZATION

Since the dawn of Hyperspace travel, the common belief in the need for formalized diplomacy and trade has caused almost every organized nation to be a part of the Galactic Council to some degree. Though their jurisdiction technically covers the entire galaxy, much of the rim remains uncharted. The Council's mission is to expand peace, protect and incentivize trade and communications, and provide a common forum for solving international conflicts.

The council maintains no official war fleet and has disavowed itself of any formal mandate to interfere in member affairs, but does keep many thousands of hyperspace-capable secure courier vessels that form the backbone of all faster-than-light trade and communications. Its impartiality and neutrality makes the Council the de facto choice for carrying messages, and in its extremely lengthy history the Council communications network has never been nationalized or militarized to one faction or another.

Even Emperor Riesstiu realized that interfering with registered Council shipping was inviting disaster. His pogroms targeted specific species and never the aegis of the united Council.

While the Council facilitates and supports trade and communication with the hope of supporting and incentivizing peaceful conduct between members, information on the Council itself is remarkably sparse. The council's origin is shrouded in mystery, though several inferences can be made about it based on the oldest Council policies on the books. None of the more open societies have histories that go back to before it existed, indicating it is at least ten thousand years old based on the information of the Tobari Empire. The Council also formally operates many starship graveyards and has designated several small regions of the galaxy off-limits to trade and travel. Many conspiracy theorists believed that unspeakable riches – thinking planets, ascended beings, or the secret of immortality – lay in these proscribed zones. Based on the experience of the Exiles in two formally proscribed regions – the Garden of Kadesh and the Sea of Lost Souls – it is now accepted that these are merely extraordinarily dangerous regions due to piracy or ancient weapons of war.

The Council's origins are thought to lie in a conflict or a series of large-scale conflicts that both brought the Inner Council members together to oppose some outside threat and involved extremely destructive weaponry and tactics. Rebel forces in the final days of the Empire often took to hiding from Riesstiu's Imperial Guard in Council-proscribed regions, and those that survived their harrowing journeys and the bloody battles of the Rebellion often spoke of endless stretches of derelict starships, dating nearly twenty thousand years old. They also spoke of many extremely powerful remote weapons platforms defending particular regions – some even equipped with Imperial-issue proximity sensor satellites. It would appear that some of the dues the Councils collect take the form of materiel donations to help patrol and protect these proscribed areas, though no Rebel expedition ever reported finding anything of particular value among the derelicts. Again, inferring from the experience of the Exiles with the Sea of Lost Souls, and the Bentusi remarks they reported about their particular vulnerability to the influence of the ancient starship there, these proscribed areas may be more of a threat to the older species than to the more populous young races.

THE INNER GALACTIC COUNCIL

The oldest recorded members of the Galactic Council, these five species represent the oldest space-faring civilizations known. Inner Council species have the unique right to call an extraordinary session of the Council, and it is understood that they provide the majority of financing for the infrastructure of the

Council itself. Responsible for arbitrating disputes and wars between the younger races, these cultures only occasionally participate in the day-to-day affairs of the Galaxy and serve an advisory and mediating role to the younger cultures.

The Inner Council was likely formed from a particularly destructive conflict that they do not speak of nor mention in their publicly available histories beyond the term “First War”. This period of intense conflict must have been unprecedented in its ferocity and, judging from the extreme emphasis Council law places on preventing and punishing genocide, unthinkable in its devastation. These laws and guidelines are what motivated the Council's intervention in the Homeworld War, and state that Council members will not intentionally wage a war of extermination on other Council races, nor may they elicit support from the Council in the effort to wage a war of extermination on a non-Council race.

The five member races of the Inner Council are the Bentusi, the Czalkir, the Desad, the Phalanti, and the Shinaa. Together they lay claim to very small parts of the galaxy, but are active participants in commerce and industry. In particular their domains encompass many starship graveyards and derelicts from the First War, proscribed by council edict.

Though they are equally enigmatic, the five Inner Council species do not appear wholly unified and indeed have many differences. There are no strong allegiances inside the Inner Council. They tend to act as their own unified voting bloc, and their power aggregate voting strength is normalized to the population of the whole Outer Council. Unlike the Outer Council, the Inner Council members each get one fifth of the vote.

The Inner Council votes most actively on matters of historical import, controlling access to ancient warzones and often taking possession of artefacts from that time. They also take tariffs from the major communications backbones to finance their courier fleet and maintain all Council facilities. Based on our own intelligence from the Homeworld War and intelligence from the Republic in later years, these tariffs also include donations of military hardware – typically sensors, remote weapons systems, and mines that are thought to be used in protecting Starship Graveyards.

Inner Council members are also extremely active when it comes to trade and research treaties, both supporting communication and exchange, as well as regularly pushing for greater regulation and oversight of strategic arms trades. This latter case is one of the few in which all five Inner Council members show unity: one of their unstated goals appears to be maintaining peace by maintaining the balance of power between Outer Council members. It has been our observation that whenever the balance of power is threatened, the Inner Council will employ diplomatic and economic pressure in order to contain and minimize conflict.

Demographically or economically there are only partial details. Operating on the assumption that the Inner Council species are logical and operating at full employment of their resources and population, they possess a modest population. Over all of them it is likely that there are fewer than the equivalent of ten billion of our people across the Inner Council. Inner Council technology - and thus presumably their industrial processes - are demonstrably superior to Outer Council equivalents. They do not trade in their most advanced technologies, consuming large amounts of raw materials in exchange for high-quality machined goods that are usually difficult for us to produce ourselves.

Inner Council membership seems to depend as much on political stability as it does on advancement. Most Inner Council efforts appear to be directed towards putting out the brushfires caused by more dynamic cultures, and relatively static monocultures would make appealing partners in that endeavor, which fits our observations of all five Inner Council member species¹⁰.

The fact with greatest implications is that ion beam weapons appear to be derived from Inner Council designs¹¹. Records from the Battle of Tannhauser Gate in the Homeworld War demonstrated that

10 A QUESTION WHICH MAY NEVER BE ANSWERED IS 'WHAT BECAME OF THE DYNAMIC CULTURES THAT WERE CONTEMPORARY WITH THE FIVE INNER COUNCIL SPECIES?' A HOTLY DEBATED TOPIC AMONGST THE MORE PARANOID PEOPLE OF THE GALAXY IS THE THOUGHT THAT ANCIENT AND POWERFUL EXPANSIONIST SPECIES ARE BEING HELD IN QUARANTINE IN THE PROSCRIBED REGIONS OF SPACE. OTHERS THEORIZE THAT THESE ANCIENT DYNAMIC CULTURES WERE SO DISRUPTIVE THEY WERE PUT DOWN BY THE INNER COUNCIL.

11 THANKS TO TREATIES WITH THE REPUBLIC, WHICH WAS FOUNDED IN LARGE PART BY THE VERY AGENCIES THAT PERPETRATED IT, IT IS NOW EVIDENT THAT THE EMPIRE'S "WEAPON X" PROJECT WAS A MASSIVE ESPIONAGE EFFORT AIMED AT ACQUIRING INNER COUNCIL BEAM WEAPONS IN AN ATTEMPT TO UPSET THE BALANCE OF POWER.

Bentusi Exchange ships were possessed of energy generation technology an order of magnitude ahead of ours. It is not known if this greater capacity or an improved design allows the Bentusi warships to continually fire their beam weapons, but it is known that Bentusi ships have phased out all other weapons in favor of particle beam weapons that can acquire tiny high speed targets. There are few opportunities to observe their dedicated military ships as Inner Council species usually contract out escort on their convoys to others.

We know less about the technological capabilities of the other Inner Council species but it is commonly assumed they are similar. The Shinaa and Czalkir seem to be slightly less advanced than the Bentusi, as they do not uniformly implement the reactionless thrusters that the Bentusi use, though there have been fewer instances of organized attack on ships from those species and thus less insight.

There is literally no way to know just how much of Inner Council-proscribed space is inhabited by these five species or what strategic goals beyond those they pursue politically, and assets they may have to support those goals. The Inner Council nominally has jurisdiction over hundreds of thousands of star systems, but many of those are in the galactic heart and are well observed by the other species. Thus it's possible there could be trillions of their people in many thousands of developed systems, but based on the volume of trade and the things they trade for we view this as highly unlikely. The only anomalies are the occasional shipments of rare earth elements – indicative of mining exploitation.

The **Bentusi** are our closest allies in the Inner Council. Almost all interactions between them seem to take the form of a transaction - the acts of giving and receiving hold great significance to them. Even their revelation of our origins after we rescued them at the Battle of Tannhauser Gate was treated as a formal gift of specific data. Many view them as moral and spiritual guides, and it is their constant evaluation of the universe in terms of value that is thought to give rise to their moral grounding. They do not seem to be consumed with greed – indeed, in hindsight all of the wondrous technology that they gave us during the Homeworld War amounted to charity. Some draw parallels between the ancient greeting rituals amongst Kiith that involved ceremonial exchanges and the Bentusi trading formalism.

The **Czalkir** appear to be highly reclusive, even by Inner Council standards. The few insights into their culture the galaxy at large has received suggest highly philosophical interests, and rare comments from other Inner Council members suggest a deeply introspective people. They do not address the Junior council directly at meetings, and typically speak through other council members serving as proxies. As such we have very little direct information about their society, leading to endless speculation.

In spite of their reclusive nature the Czalkir are known for interventions in matters that the Inner Council has not reached a decision on. More than one civilization owes its existence to unexpected timely interventions by Czalkir forces, in both humanitarian and military roles. Some of these interventions have later been sanctioned by council edict, but not all, and the Czalkir do not offer comment in either case. The recipients of Czalkir aid have never been called on to repay them in any way that history has been able to record, forcing analysts to conclude that the most plausible explanation for them is altruism. How the Czalkir decide who is and isn't deserving of their aid is a mystery, and for many civilizations that have fallen victim to tragedy this has become a source of resentment.

Technologically, the Czalkir are at least as baffling as their peers. In military interventions they've been seen primarily using destroyer-sized ships mounting energy weapons that soundly out-range anything lower council races can field. When it comes to the inner council our engineers are used to being outclassed, but with the Czalkir their ships are built in such bizarre shapes that even after millennia of speculation, no plausible engineering considerations have been proposed that would lead to them. The prevailing theories suggest Czalkir engineers are guided either by a bizarre sense of aesthetics or a deliberate attempt to confuse observers. If it's the latter, it has definitely succeeded.

Since the first contact between the galactic council and its future junior members speculation has run rampant about the true nature of the Czalkir. The oldest records available come from the Tobari, who clashed repeatedly with the Council during their empire's growth period, and at times made aggressive efforts to uncover Council secrets and discredit the Inner Council members.

WEAPON X FOREVER ALTERED THE GALACTIC BALANCE OF POWER – NOT LONG AFTER THE FIRST IMPERIAL WARSHIPS WERE DEPLOYED WITH ION BEAM WEAPONS, THE TECHNOLOGY QUICKLY SPREAD TO ALL OTHER MAJOR POWERS, AND FROM THEM TO THE MINOR FACTIONS... WITHIN A HUNDRED YEARS, COMMON TURANIC PIRATES FIELDIED ION WEAPONS, WHERE BEFORE ONLY THE ARCAINE INNER COUNCIL STARSHIPS POSSESSED THEM.

The Tobari recovered their first Czalkir wreck in BHL 11046; a light capital ship, roughly the equivalent of a modern frigate. Reportedly extensive damage prevented any significant technological insight to be salvaged, though some historians contend that Tobari material science progressed unusually fast in the decades following the recovery. More substantially, remains of the crew were recovered along with the wreck. According to Tobari documentation several species were identified, of a similar genetic background but too distinct to be merely subspecies of a single class. Interpretations of this evidence are diverse, some hypothesize a single dominant species with servants, pets, or food animals aboard, others contend that these could all be different expressions of one root genome, or perhaps extensive genetic modification of a common ancestor, while yet another camp suggests many species coming together and then modifying themselves to be more similar. Speculation and debate bloomed about from the subtle clues found in the remains, though it was hampered by the destruction of the remains in an overwhelming show of Council force the same year. This raid was successful, but fueled the Tobari fire for 'unmasking' the Inner Council.

Recoveries in 9622 and 9223 supported the initial find and provided a growing picture of this strange conglomerate. Confusion was reignited in 8830 when a Czalkir fighter was recovered with no traces of organic matter inside. The fighter instead appeared to be entirely computer controlled, though engineers were and have continued to be unable to extract any definite logic or data from the presumed hardware. Though the matter was hotly debated, analysts of the day concluded that it was most likely either a hoax to discredit existing theories or an experimental technology under testing.

Another dent in the conglomerate theory developed in BHL 8762 when a ship was recovered without any animal matter or evident computers of sufficient size to explain complete control of the ship. Instead the ship was run entirely through by a genetically homogenous network of plant matter. Due to an inability to identify any brain matter equivalent this was also deemed a hoax. Proponents of the hoax idea pointed to the relative recentness of the robot ship, suggesting a campaign of disinformation had begun. If this is the case, it has been a long running one. Instances of the robotic ships were recovered in 6233, 5296, 2511 and 736 BHL, while hulks containing evidence of plant matter were recovered in 2022 and 151.

Over the centuries other novel discoveries have been made as well, but these have either not been substantiated by further discoveries or debunked as hoaxes. It should be noted that at times even claims that have been since clearly shown to be hoaxes were struck by Council forces. Though intellectual debate has in most cases been exhausted by the lack of any recent new data, no consensus has ever been reached on the true nature of the Czalkir. It is clear though that they take their privacy very seriously. In every known recovery incident the Czalkir have pursued the return or destruction of the remains with equal vigor. There is a standing order to all UNH personnel to avoid any derelict or distressed Czalkir ships unless assistance is explicitly requested by Czalkir directly.

Due to their interventionist record and inscrutable nature, the Czalkir are the Inner council race that Intelligence believes we are most likely to come into conflict with. During any armed conflict, we believe there is a small but real chance of the Czalkir stepping in on behalf of our opponents. In such an event, standard doctrine is to withdraw from the fight. If withdrawal is impossible or overruled due to strategic concerns then battle must be conducted very carefully. Czalkir warships have advantages in range, speed, and firepower, but typically do not bring overwhelming tonnage to battlefields.

Assaulting their capital ships with strike craft is considered the most viable method of attack. Assisting such an assault with hyperspace ferry might be required to engage them before their range allows them to wreak havoc on nearby capital ships, but should be undertaken with an understanding that the ferries are very likely to be lost even if the attack is successful. If hyperspace assault is possible then a commander may also consider using super-capital ships, but should be aware that destroyer-class Czalkir ships grossly outmatch even our cruisers in terms of firepower, and narrowly surpass them in durability as well.

If hyperspace assault is not possible, the only hope our capital ships have of engaging Czalkir in direct battle is carefully managed pincer attacks. The amount of time our ships would spend under the Czalkir guns in this scenario before being able to return fire makes it an option to be considered only in the most extreme of circumstances.

The **Phalanti** reputation as the muscle of the Inner Council is exemplified by their infamous intervention in the skies of Higaara with dozens of mothership-class vessels. While they are an ancient species and

culture, they are still a very major political player. Their many communes are quick to volunteer their fleets when the Council decides on action. Their ships were instrumental in removing the Imperial population from Higaara before landfall, especially as the civil war rapidly drew all Imperial ships to one side or another.

Based on their arrival to enforce our claim on Higaara, the Phalanti have been counted among our list of friends and calculated to be allies of the Bentusi. We have a formal Treaty of Friendship establishing our species as their trading and diplomatic partners above and beyond our special membership in the Galactic Council. Phalanti ships arrive in the Higaara system every few months to do business. Efforts by the Daiamiid to sign treaties of mutual defense or technological sharing have been mixed: the Phalanti have stated that they are committed to the preservation of Higaara but have never publicly declared their intention to devote military assets to its defense if war is declared against the Daiamiid. They also take a rather dim view of the warrior Kiith, often comparing them to the Confederation - desperate for power and resources, and feeling just as backed into a corner as the various Confederate states do by the Republic.

Politically, Phalanti are one of the most vocal and active members of the Inner Council, noted for their stalwart opposition of all aggression whatever the cause. Their rhetoric is so constant that few people have ever been able to predict what issues they will actually vote for action on, a fact that seems lost on them. The only sure sign of impending Phalanti intervention is if they ever deviate from their rhetoric, the last instance of which was their movement against the Imperial government on Higaara at the end of the Homeworld War where the Phalanti had recalled their representatives from the Empire and from the Council, ostensibly in protest of the destruction of Kharak once that event was made public knowledge.

When the Council does take action on an issue, Phalanti tend to form the bulk of the forces they deploy. They have at their disposal an uncountably large number of mothership class warships, uncountable not simply due to their large numbers, but also due to each ship physically being in flux over time, constantly changing their appearance in subtle ways making tracking their numbers a frustrating task for analysts for as long as inner and junior council races have interacted. They are definitely industrially strong and militarized, but their actions do not seem to indicate that they are almighty.

The upshot is that Higaara does maintain a good level of regular contact with the Phalanti, and we have very useful data about their biology and culture. The Phalanti are large hexapods, with four limbs for locomotion and two limbs for grasping with a broad, spade-shaped head. Like most Inner Council species, their long years of living in and traveling through space has led them to be well adapted to life in microgravity, unlike our terrestrial nature. They appear to operate in communes when adults, but exist as energetic and jovial individuals during their youth and adolescence. Young Phalanti enjoy exploration, travel, and communication - but they always return to their homes to serve. Many young Phalanti chartered explorations into the Great Nebula and appear to have died in that region, to our regret. None have ever emigrated to join another nation according to the information we have acquired, and they will make strong efforts to recover their own if captured for ransom. The wanderlust the Phalanti feel in youth appears to wane rapidly when they rejoin their communes, but they will assiduously maintain contact with friends formed during their youth phase.

The most notable feature of Phalanti starships is their unique appearance. The outer layer of each ship has a thin but significant layer of minerals. These rock and gem layers are actively sculpted over time by the crew. They are diverse, and none of them have any primary purpose as defensive hardware - they are often sculpted to reflect an individual's contribution to their home commune, as well as updated by the group when a member achieves adulthood. The Phalanti themselves say this tradition is a throwback to their spacefaring history. It took the Phalanti over a thousand Higaaran years to develop faster than light travel. During this period there were extensive conflicts between their terrestrial cultures and asteroid-dwelling cultures, which swung over time in favor of the asteroid-dwelling cultures which eventually rose to dominate their species. Modern Phalanti owe this artistic and cultural tradition to their many generations of nomadic ancestors that multiplied and exploited the asteroids and comets of their home star system. The literal translation of this practice is "home turf". Phalanti shipmakers indicate they are just as perplexed about our own traditions of painting the exterior of our vessels with Kiith colors and insignia, and bringing relics of our families and religion inside our ships. It should be noted that while they are emphatic about the personal significance of the "home turf", its location outside the hull makes it ultimately expendable. In deadly circumstances the Phalanti protect lives, not

mementos.

They are big consumers of our own cultural products, however, viewing them as eccentric and quaint, and often like to display Kiith insignia they find pleasing as good luck charms in their personal space. According to the Phalanti, this has caused several confusing encounters with other species.

Technologically, the Phalanti possess advanced propulsion systems comparable to that of the Bentusi in realspace, but more comparable to our own in Hyperspace. Their materials science is quite advanced as well. Underneath the decorative exterior of each Phalanti ship is extraordinarily thick and dense armor that is as tough as the most durable Frern heavy plating. Without the vulnerability of a reaction engine, and with very efficient power systems, Phalanti ships are very much bruisers. Their primary armament is an oddly familiar continuous-fire high-power ion beam weapon with a compact generator showing similarities to systems utilized by the Protectors of Kadesh in their frigates and the Bentusi in their Exchanges. Both the Protectors and the Bentusi had superior combat batteries, though the Phalanti are far more durable and can deploy their reduced payload for far longer before losing a ship. In addition to their beam weapons, Phalanti capital ships often deploy smaller frigate-sized vessels off the bottom of their motherships, which tend to be armed with very potent batteries of missile weapons. These bear none of the decorative geology, and instead are a worrisomely efficient merger of reactionless engines and fusion warheads.

The communes explicitly share representation on the council - they state tallies of Phalanti communes voting for and against each option put to the Phalanti council representative, though as noted previously they are an extremely reliable voter base. We estimate that there are 25,000 communes, averaging four million members per. This would populate a handful of Core Systems quite sufficiently, but we do not think that is the case. The Phalanti instead prefer a more even population across their territory, with the median population being two hundred communes to a system. They seem to inhabit and leave systems fairly regularly, with a knot of several that are thought to include their own homeworlds.

A few communes are rogues that take up piracy, and can take entire battlegroups to bring down when they evade the grasp of their peers. These have terrorized the galactic core in the past but it has been almost a hundred Higaaran years since their latest eruption.

If Phalanti vessels are encountered during combat operations they will most likely remain neutral at worst and assist us at best. In the unlikely event of an encounter with hostile or rogue Phalanti, use anti-missile vessels to defeat the armament of their small craft, and use massed heavy weaponry against their heavy ships to pierce their armor. Rogue Phalanti are historically uncommunicative and prefer to pulverize their opponents to sift through their wreckage. Dumping cargo or setting traps with resource-collecting units is most likely to draw the attention of their heavy units, which can be worn down through minefields and flank attacks with fast capital ships and frigates. Strike craft are not recommended due to the power of the Phalanti missile-armed frigate parasites.

As Phalanti ships usually arrive at their destinations without being seen en-route it is commonly speculated that they have hidden bases scattered throughout the galaxy. The Council areas declared off-limits in the interest of public safety candidates for the locations of these bases. The Phalanti council representatives neither confirm nor deny the existence of these bases.

The **Desadi** are [to be completed]

The **Shinaa** are the most alien of the Inner Council species. Described as clerical and individually distant, their biology informs much of their culture. Many individual Shinaa bodies are required to give rise to a single Shinaa consciousness — their 'individuals' are swarming masses of smaller bodies with group persona. They enjoy an intriguing form of immortality as their unit bodies die of old age and are replaced with offspring. With a neurophysiology that is trained at handling hundreds to thousands of channels of input simultaneously, individual Shinaa have incredible ability to multitask. Their traditions and social structure are totally different from ours, granting them unique perspective on the galaxy, and unique difficulties when it comes to diplomacy.

They are a highly legalistic and structured culture, with what appears to be an extremely rigid caste system with a specific Shinaa serving as Council representative and diplomat to the galaxy at large, with other specific and less-capable members serving as an extremely tight-lipped trade or pilot caste. Politically the Shinaa are active, participating in the galactic economy and continuously advocating for demilitarization and reduction of the galactic military-industrial complex. The Shinaa are nominally

friendly with all nations, but they are supportive of the Republic – Daiamid power bloc. The Shinaa are most active in constructing and maintaining the various diplomatic installations that form the bedrock of the Council.

THE OUTER GALACTIC COUNCIL

Outer Council, or Junior members, represent the most active species. Movers and shakers, these energetic powers are expanding, skirmishing, and forming alliances. To the majority of citizens of the Galaxy, these species are the only important ones. Though the Inner Council has many special privileges, the Outer Council species are all numerous enough to swing any vote based on popular representation.

The major Outer Council powers are the Confederation, the Republic, the Frern Aggregate, and the Tobari Star Empire. A special mention goes to the Higaaran Diamiid Council, granted provisional membership in the Council by joint sponsorship from the Republic and the Bentusi. Of the big four, the Tobari have refused their seat for centuries, sending representatives. Tobari territorial claims include most of the galaxy, and are insulted by the Council recognizing younger races' claims on those regions.

THE CONFEDERATE SYSTEMS: A RENAISSANCE OF POWER

Prior to its origin, the only political structures in Imperialist space were either independent systems, or nomadic fleets operating out of Imperial-era bases. These fleets were numerous but all owed loyalty to the dictators who controlled the fortress systems that served as hubs for the various Imperial Military Districts. As these hubs had been deliberately placed away from resource-rich areas with large civilian populace, they required a large support network. Their carrier groups and shipyards could produce harvesting fleets, and those that did were able to supplement some of their needs but rapidly became vulnerable targets with obvious supply lines. All of these fortress systems required tribute to survive, and earned it in a variety of ways that were functionally piracy. Many of them opened their doors to civilians seeking refuge from the constant brushfire wars between the independent systems, most of them took to raiding every Imperial supply depot and cache they could find regardless of which nation it was in. And all of them had only one rule: they supported each other in the face of the Republic, no matter what any of their subjects or victims would say.

Founded in AHL 76 officially in the system of Nirgal by their current leader Empress Corrstei, the Confederate Systems are a first-rate galactic power and a neighboring power to Higaara. It is also the youngest and most tempestuous. It is unclear to UNH Intelligence exactly how the Confederate Systems was founded. If Empress Corrstei herself indeed fashioned the Confederate Systems, she did so under the noses of the leaders of the various renegade Imperial Fleets that continued the Taiidani Civil War. These leaders were either aging despite copying the many methods Riesstiu IV used to prolong his life, or were picked for their positions by their predecessors. Corrstei may have managed to appeal to a majority of the ship captains and junior flag officers under these various Marshals of the Imperial Fleet and from that performed a coup d'etat. Another possibility is that she herself inherited control of one of these Military Districts and gained the upper hand in some shadowy political war far on the deep Imperial frontier. The official story is that Corrstei rose to power after being orphaned in a regular Republic suppression strike into raider territory – from her fiery hate she built a reputation as a daring and effective commander and through honest effort in destroying enemies of the Taiidani was elected to the position of Empress.

The official story evokes many of the dynastic ascensions in eras past deliberately, though like all things Confederate it is only to a controlled degree.

Corrstei's Confederate Systems is clearly crafted as an appealing, civilized alternative to the Republic that is true to the old ways of the Taiidani. She projects a strong individualistic style of leadership that is always focused on protecting Taiidani people and nothing else. She presents an agreeable face to a common cause uniting the historically fragmented ex-Imperial territories that resisted the Republic. She also has taken no steps to institute any of the other Imperial apparatus that were famously corrupt in the waning days of the Empire – she has not awarded any positions to family members, indeed she has

no known legitimate family members. She has not implemented any landed titles, nor has her government assumed vast administrative powers over all the Confederate territories.

The Confederate Systems, thus, are perhaps thought of as the void where an Empire might someday be. The official governmental mandate is to secure and protect lines of communication, travel, and trade between all member states and systems and to provide a unified military force for defense and security. The Nirgal courts are also presented as a neutral ground for member states to air grievances and solve disputes. It is not explicitly against the Systems Charter for member states to engage in conflict with one another, although they must declare all warships publically owned by their governments and they are not allowed to divert Confederate Systems' resources to these conflicts. Other than that there is little to no taxation and little to no interference in the day-to-day governance.

The unwritten word of law, however, is a little different. Corrstei does not allow any ship with a hyperdrive to be used in warfare between member states and has publicly used her significant personal fleets to intervene in a number of skirmishes between battlegroups. In the cases where Confederate military units were unable to intervene, ships used by the victor in whatever conflict displeased the Empress were found to be in contravention of the law that all publicly owned or supplied hyperspace vessels must be declared and seized. The message, then, is clear – member states are allowed free reign as long as it does not disrupt any other member states.

In the long history of attempts by various figures to unite the warring fragments of the non-Republic Taiidani, this hands-off approach is the only one that has been successful for any length of time and on a galactic scale. It is thought that this is due to the degree to which those very services the Confederate Systems defends had broken down. By the year of Corrstei's ascension, one in five families amongst the trillions living in that region had lost a member either to communications breakdown or strife. The promise and swift delivery of an end to that, and no other disruptions, must have been the overwhelming force behind the rise of the Confederate Systems.

Corrstei's foreign policy has been much less simple. In AHL 78 she finally received formal recognition as head-of-state for a legitimate government from the Council and was awarded legal standing in the eyes of the Galaxy, in no small part due to the tremendous effort the soldiers and ships under her command exerted to reduce internecine strife and over-the-border raids into Higaara and the Republic. She also pursued a policy of stout defiance against Frerrn advance and won several swift campaigns to restore a border. She also offered and delivered amnesty to countless billions of transient refugees, swelling the population of her capital system of Nirgal to the most densely populated system in the galaxy.

The goodwill tour by Outer and Inner Council delegates through the bustling system in AHL 85 was widely disseminated throughout the Galaxy and was viewed as the birthing of a new people. The Confederates, for good or ill, are a very real and functional nation capable of standing out amongst its peers even in its early years.

Diplomatically, Corrstei recognizes the government of the Republic on the condition that the Republic ceases their operations within Confederate territory and reciprocates recognition of the Confederate Systems as a legitimate body. Perhaps hastily the Republic accepted¹², and has maintained an embassy in Nirgal for the last two decades.

12 CORRSTEI'S RISE TO POWER OCCURRED AT A REMARKABLE TIME. FOR THE FIRST TIME SINCE ITS INCEPTION, THE REPUBLIC WAS IN OPEN CONFLICT WITH THE AGGREGATE AND THE OUTCOME WAS UNCERTAIN – ESCALATION TO LARGE-SCALE WARFARE WAS A POSSIBILITY CONSIDERED AT THE HIGHEST LEVELS OF REPUBLIC LEADERSHIP AND UNH UNITS HAD DEPLOYED TO THE FRONT LINES AWAITING ACTION. WHILE IN AN ALL OUT WAR BETWEEN THE TWO TAIIDANI NATIONS THE REPUBLIC HAD TELLING ADVANTAGES, IT COULD NOT AFFORD TO APPEAR DISTRACTED OR WEAK TO THE AGGREGATE AND FIND ITSELF WITH TWO HEAVILY-ENGAGED FRONTS. THUS, RAPPROCHEMENT WITH THE CONFEDERATES WAS A STRATEGIC DECISION MEANT TO DE-ESCALATE TENSIONS WITH THE FRERRN. WHILE SUCCESSFUL, IT PLAYED DIRECTLY INTO CORRSTEI'S HANDS. IF THEIR MOST HATED ENEMY, THE REPUBLIC, RECOGNIZED HER – WHAT WAS TO STOP THE COUNCIL?

Militarily, Corrstei's forces consist of two groups. The Nirgal Deep-space Fleet is the official name for all units stationed out of the Confederate core systems and directly under the command of Corrstei, and technically their crew are citizens of Nirgal, just as their ships are property of Nirgal. These units are often 'loaned' to Corrstei by member states, but rarely are returned. The NDF's mandate is to protect and secure the sovereignty of all member worlds, and maintain all strategic facilities within Confederate space. The Confederate Border Patrol is the umbrella term for all other organized space militaries that are part of the Confederation. They are not officially allowed to engage forces of other nations, instead their mandate is to protect and secure all trade and civilian activities belonging to their member state. They are expected to operate within an area designated by the NDF, and critically their bases are operated by the NDF so they have little ability to resist the central government militarily without widespread cooperation from whatever forces area based there.

The NDF itself has many subdivisions that are loosely reconstituted fleets from the post-Civil War era. These fleets are nominally assigned 'theaters' that they are responsible for defending and securing, but this is mainly so that functional command structures were not unduly disrupted. Over time, as the Civil War era crews retired and were replaced with Confederate-loyal crews, these Theaters have been merged into four Fronts: Core Fleet, Republic Theater Fleet, Aggregate Theater Fleet, and Frontier Theater Fleet. All four have seen major action, mostly with the Frern and with Turanic Clans that did not accept the 'protection' of the Empress. Republic-Confederate actions have been inconclusive and reports indicate that the Confederates are operating under orders to withdraw if defeat seems possible and avoid escalation.

The Confederate Systems have opened up massive new trade routes, and with them comes a flood of espionage activity centered around military and industrial advances. Few have been successful, and limited sales of armaments by Republic companies to the NDF have been authorized in an attempt to reduce the scale of the Republic-Confederate shadow war whilst allowing both sides to profit, which has been enthusiastically endorsed by both the Council and Corrstei herself.

Corrstei has no heirs and no family at all. She is the most powerful orphan in the Galaxy, and it is unclear who if anyone will succeed her. She has publicly stated that she will ordain a series of nationwide conferences of the ruling bodies of all member systems and states and accept whatever they feel is appropriate, and has in a rare personal interview admitted some fondness for adoption without transmitting her title to her adopted child. She is clearly using anti-aging technology and has similar modifications to our Fleet Commanders. She appears to hold to a relatively modernist set of values, wishing not to intervene in 'small' issues. Publicly she values loyalty, duty, and honor above all else. Privately, she seems to be dedicated to the security of her people by any means necessary that does not involve inflicting undue harm on the innocent.

Most notably she has never formally recognized the Daiamid and has made little effort to curtail political movements centered around reclaiming Higaara for the billions of Taiidani who once lived there, but has cracked down on large fleets that regularly attacked our space. It is thought that she will not seek war with us unless it serves to advance her own goal of maintaining power and unity. As rapprochement continues with the Republic, she may soon need a new bogeyman.

THE TAIIDANI REPUBLIC

In the thousands of years of its history, the Taiidani Empire was never as static as it liked to portray itself. Its vast power was matched only by its ambition as it sought to expand and overcome whatever challenges the galaxy put to it. Civil war, the stress of expansion and cultural drift, and strife with alien cultures all were crises that ended Dynasties. Each time the current Empire faltered a new regime would soon rise to replace it. Each iteration of the concept had to use the same Hyperdrive technology to attempt to manage more and more territory, and the only method that preserved central control was more and more descent into an authoritarian police state. Civil wars were frequent in the Empire's history, with the border regions fissioning off and needing to be coerced back into the fold. The conflict that birthed the Republic was in some ways a continuation of that tradition, but had its roots in another matter.

The Riesstiu Dynasty was desperate in its attempts to assert its cultural relevance across its far-flung holdings and consciously adopted the traditions and stylings of the earlier Hathak Dynasty that had conquered Higaara and founded the First Empire – a regime whose cruelty towards the Higaarans was infamous throughout the Galaxy. Riesstiu's Empire sought to emulate that tradition above all else, continually increasing the draconian punishment for disloyalty. Riesstiu I established a massive internal security force built from the most loyal units to serve as enforcers of the central authority.

Over centuries, this internal security force quickly assimilated the entire regular military, subsuming the massive military might entirely. Riesstiu IV's reign saw the ironic need for another military to check the growth of the security forces, and so Riesstiu IV instituted the Elite Guard¹³. The Elite Guard grew deeply split – one faction was fanatically loyal to the Emperor, while another was deeply concerned with the survival of the Taaidani civilization in the face of the increasingly destructive leadership of Riesstiu IV.

The destruction of Kharak was orchestrated by Riesstiu and his advisors as a method to reinforce the fraying Imperial authority by resurrecting the fallen Higaaran threat and symbolically vanquishing it for good. As it backfired dramatically, it awakened a latent movement across thousands of star systems that had grown to feel more revulsion than respect towards the ancient ways. Drawing on their superior communications equipment and organization compared to the conventional Imperial forces, the rebels within the Elite Guard quickly moved to enact a modified version of the Elite Guard plan to defend Higaara from a mutiny by the conventional security forces. The rebels were initially highly successful, paralyzing much of the communications infrastructure that allowed the Home Fleet to muster on short notice from all the imperial holdings. Unfortunately, loyal Elite Guard units were able to recognize the pattern of disruptions as the work of their own and nearly decapitated the rebellion before it began. <not quite done with this section yet either, obviously>

- Captain Elson gained immense fame for being the rebel closest to the emperor when he was killed. This in turn basically shoed him in as the first prime minister of the newly formed and deeply unstable Republic. He did his best, but he was a ship commander first and a political scientist as a distant second – and so his tenure was a patchwork of successes and failures diplomatically and militarily. Eventually in AHL 9 he stepped down voluntarily citing stress coming from the difficulty of working with the other ministers from the many systems the Republic had inherited. He was succeeded after a controversial election by his son, who capitalized on his father's legacy. His son was a political animal through and through, making every decision in order to maximize his popularity and influence in the still turbulent Republic. He was eventually imprisoned after a lengthy trial following the catastrophic losses the Republic incurred at Naval Base 17 during the events of the Beast cataclysm – most notably including an incredibly expensive 'secret weapon', a powerful series of warships known as Project Nomad. His mistakes, and his father's mistakes that have come to light in recent history have caused this era to be derisively dubbed the Elson Dynasty, comparing them to the regime that Captain Elson helped depose alongside the Exiles.
- Current political leader is Norien Elson, a distant relative of these two. He has campaigned in part on the redemption of the name of the Republic's greatest hero, and in part on greater engagement with the rest of the galaxy. Some of his relatives are part of Kiith Neisen, making him extremely popular with the admirals who view Higaara as an indispensable strategic asset in the Republic's war chest.

THE FRERRN AGGREGATE

Once a minor power, the Frerrn Aggregate is now of nearly equal strength to the Confederate Systems.

13 OFFICIALLY THE IMPERIAL MILITARY WAS REFERRED TO AS STATE SECURITY. ATTEMPTING TO CHALLENGE THE TAIIDANI EMPIRE CONVENTIONALLY WAS FUTILE, SO MOST OF ITS ARMED CONFLICTS WERE SHADOW WARS, WITH WARSHIPS SKIRMISHING OR FIGHTING IN PROXY WARS. THE STATE SECURITY FORCES REQUIRED AN ENORMOUS SPECTRUM OF OPERATORS FOR VARIOUS TASKS, AND THE ELITE GUARD WERE DRAWN FROM THE MOST LOYAL AND GRANTED THE HIGHEST QUALITY TRAINING AND EQUIPMENT. THEIR DIRECTIVE WAS PURELY MILITARY: THE DEFENSE OF HIGAARA.

The Frerrn species achieved faster-than-light travel in 996 BHL as the power of the Empire was still expanding out from the core of the Galaxy. Though their hyperdrive technology was primitive and short-ranged, the Frerrn were quite technically skilled, with an incredible emphasis on efficiency. Many of their earliest starship designs were built with such flexibility that they have been able to be improved to modern standards over nearly a millennium of service. Their population and dominion flourished from the early 10th century BHL to the 7th century. Through these years the Frerrn came into contact with several dozen emerging species and cultures that existed on the extreme periphery of the Council. Not even informal members, these states had made infrequent contact with Inner Council ships cataloguing ancient relics. As the Frerrn came into awareness of a greater Galactic community just beyond their reach corewards, they believed an enlightened era was about to come to pass.

By 500 BHL the Empire had reached the limit to which it could expand its territory through diplomatic means and was bordered on all sides by the watchful eyes of the Council. In the following decade the chiefs of staff of the Empire prepared a plan by which they would expand Imperial dominion by colonizing the very periphery of the Council and annexing the species that lived there. The plan was predicated on the idea that the size of the Empire could intimidate most species into giving up without a fight, and they would expand from the weakest and smallest of these periphery powers to the largest, steadily increasing their strength in lockstep with the size of their prey and maintaining that overwhelming advantage.

In 446 BHL an Imperial scout force passed through Frerrn territory without incident, recording their size, population, and departed undetected. The Empire assessed the Frerrn people as the strongest of their potential opponents – they had the largest industrial base, and an evident talent for engineering. Over the next hundred years, the Empire took great pains to remain unknown to the Frerrn and the cluster of yet smaller species in the Frerrn's political orbit. On the other side of the galaxy the Empire managed to quickly assimilate dozens of nations without significant military action, swelling its strength impressively. During this period, the Empire managed to render the Council irrelevant simply by repeatedly demonstrating that it was able to conquer and expand faster than the Council could police them.

In 380 BHL the Frerrn made formal contact with the Council at large¹⁴, their own deep-space scout ships locating a Council communications courier, who was able to inform a larger Council base of the discovery of the Frerrn and organize contact teams. While the Frerrn soon learned of the Empire, they still perceived the Taiidani as a distant threat they could afford to ignore. They were wrong.

The Empire had not planned for the Frerrn to make contact with the Council before they were conquered. The Emperor quickly brought his tremendous political power to bear on delaying the application and induction process of the Frerrn and their satellite states while his military prepared for a now-routine overwhelming first strike. As technically the Frerrn did not speak for all of their allied powers, the Empire argued, formal contact with hyperspace-using members of each of their allies was required before they could all be inducted. And so the seeds of the Aggregate were sewn, but the worst was yet to come.

In 353 BHL, the Empire believed it was ready to strike. Popular distrust of the Frerrn as an unqualified unknown uncomfortably close to the Empire, support for military action in the name of security was high. In order to minimize the chance of detection, their surveillance campaign had been halted.

Citing unlawful trespass into Imperial space, carrier battlegroups hyperspaced throughout the territory of the outlying Frerrn allies while heavy fleets started constructing forward bases in the most resource-

14 CONTACT WITH THE COUNCIL WAS A TRANSFORMATIVE MOMENT FOR THE FRERRN. USED TO THINKING OF THEMSELVES AS THE DOMINANT POWER IN THEIR REGION, WITNESSING THE LARGE AND EXTREMELY ADVANCED STARSHIPS OF THE CZALKIR CAUSED A GREAT DEAL OF UNEASE TO THE FRERRN. THEY COMMISSIONED A POWERFUL WARSHIP TO ADDRESS POPULAR FEARS OF LESS BENIGN BUT SIMILARLY POWERFUL ALIENS. NAMED AFTER A MIGHTY DEMON OF FRERRN LEGEND, THE 'SOULBREAKER'-CLASS DREADNOUGHT WAS marginally effective at reducing the tension level of the Frerrn populace. While the Soulbreaker was primitive compared to advanced Czalkir designs, it proved to be the salvation of the Frerrn when they went to war with the Empire.

rich systems the Frerrn used. Within days, six species allied to the Frerrn had been conquered, their minimal defensive forces totally unprepared for a planned attack by dozens hyperspace-capable warships. With a hostage populace below the Imperial carriers on the conquered homeworlds, the Frerrn had little hope of rescuing their allies. But they could prevent it happening further, as the Frerrn had been unexpectedly blessed by many years to build large starships inspired by their contact with the Council away from the prying eyes of the Taiidani.

Though their crews were far better trained and their weapons more refined and battle-tested, in 353 BHL it was the Frerrn who had superior technology, their innate skill at efficient design giving them mass drivers with a higher potential shot energy and thus projectile range and speed. They also had constructed a series of a dozen formidable dreadnoughts comparable in size to modern Motherships – vessels to which the Empire had no answer. Despite inflicting colossal losses on the smaller Frerrn ships, the Imperial fleets had to retreat their carriers and abandon their forward positions or risk being crushed by the implacable dreadnoughts. The Taiidani chose to retreat to the captured Frerrn periphery and build bases on the surface of their captive populations, hoping to use the threat of their destruction to stave off orbital bombardment.

The Frerrn too retreated. With essentially no experience in space warfare outside of training scenarios and wargames, they were soundly outmatched by the Taiidani crews and tacticians, suffering from almost total losses amongst their lighter units and heavy damage on their dreadnoughts. In particular their strike craft were wildly inadequate for the task of defending against the Taiidani carrier-heavy battle strategy; the carriers were ideal units for suppressing a less advanced foe as their strike craft could be in many places at once, unlike the guns of a cruiser. Thus underpowered and undergunned Frerrn fighter craft were outnumbered by *'Fiirkan'*-type fighters, known even today for their excellent mobility.

In this curious lull in the waning days of 353 BHL, both sides were ruled by panic. The Taiidani had viewed the zeal with which the Frerrn had thrown themselves at their guns as a sign that they had foreseen this assault and prepared a massive military, and they were unnerved by the surprising power of Frerrn capital ship weaponry. Taiidani admirals were also demoralized by the tremendous Frerrn Dreadnoughts that had been able to sweep through cruiser walls like they were not there. The Frerrn people had been enjoying an unprecedented level of public awareness of space travel, and so news of the devastating battle and the conquest of six of their neighbors traveled far and wide, leading to wide-scale riots and public panic. What was left of the Frerrn military had to assert martial law, and even rapid deployment of all available ground forces across the homeworld and its colonies could not make the fear of the Taiidani abate.

The Frerrn sent their industries onto total war footing and instituted heavy patrols throughout its systems. Asteroid habitats in orbit of the Frerrn homeworld began being fitted with dreadnought-class railguns and launch bays to serve as last-ditch orbital fortresses, while their shipyards desperately tried to analyze what few Taiidani wrecks they had captured relatively intact to try and produce a counter to the Taiidani supremacy in light units.

Outside the undeclared warzone, the Empire tried to prevent all traffic – but their own stalling tactics had caused more interest to be shown towards the Frerrn satellite states and the Council noticed several of their envoys were overdue. Soon it was discovered that open fighting had begun, and without consulting the council the Emperor committed the vast power of his Home Fleet to the fight.

Both sides continued to reinforce until the early days of 352, where the order to assault the Frerrn homeworld came from the Emperor himself along with a large number of cruisers.¹⁵ Taking heart that the Home Fleet would be arriving soon, the Taiidani aggressively opened the offensive. Probing attacks revealed that the Frerrn had withdrawn their dreadnoughts to stand with the orbital fortresses at the most populated worlds, leaving their capital ships and strike craft to defend their colonies and orbital

15 THE EXACT TEXT OF THIS ORDER HAS BEEN PRESERVED FOR POSTERITY: 'COUNCIL OBSERVERS TO OPERATION AREA ENROUTE. CRUSH FRERRN RESISTANCE BEFORE THEY ARRIVE. IF SUCCESS IS NOT POSSIBLE, INFLICT ALL POSSIBLE ECONOMIC DAMAGE TO CRIPPLE FRERRN ABILITY TO PRESENT A LONG-TERM THREAT. BEGIN ASSAULT IMMEDIATELY. HOME FLEET ENROUTE TO REINFORCE.'

habitats elsewhere. The Taiidani used their superior hyperspace mobility to ambush and destroy a number of outer system patrols, and bypassed the habitats entirely to engage the defenses. In the orbit of Frerr, a desperate battle raged inconclusively even as the thousands of ships of the Imperial Home Fleet crossed the galaxy helmed by the Emperor himself.

In the middle of 352 BHL as the Home Fleet drew near, it was clear to the admirals in charge of the invasion that even with their strengthened force they could not break the Frerrn defensive line. Efforts to strike the planet with massive kinetic projectiles had been thwarted once and Frerrn reinforcements from the unengaged settlements were continuously threatening the Taiidani carrier force. With halfhearted efforts to reduce civilian casualties, and knowing the Home Fleet would arrive soon, the Taiidani finally broke almost 60 days of constant combat in the orbit of Frerr to bombard orbital industry and remote mining colonies and withdraw.¹⁶ Grimly determined to repel the invader, the Frerrn pressed forwards into the dispersed Taiidani and drove them out of the system, not understanding their sudden willingness to relent.

Phalanti and Bentusi ships had taken note of the departure of the Home Fleet for the disputed area and intercepted the Emperor two jumps from his goal. There they challenged the Emperor to explain his actions, and upon hearing his promises to neutralize the Frerrn threat to his Empire, invoked the Council laws disallowing genocide. Unwilling to repeat his forebear's handling of the war with the Kushan, the Emperor instead changed his mission to reinforcing the 'Taiidani Colonies' in the region and the Home Fleet diverted to the conquered systems.

Advancing Frerrn ships were overjoyed to learn from the Council that the Taiidani bid to control their homeworld had ended, but their joy turned to shock when they learned that the price for this cease-fire had been the Council acknowledging the Taiidani control of six systems and the species within. All attempts to restart the initiative to get the Frerrn instated as Council members foundered in the wake of the incredible upheaval caused by the Taiidani assault and the mass destruction it successfully inflicted on Frerrn industry. As such they were still not members when the shooting broke out again.

Nevertheless, popular support for liberating their subjugated allies was such that late in 352, as many Home Fleet units were recalled to their standard police duties, the Frerrn government authorized a pair of dreadnoughts to do a recon in force near one of the conquered worlds. The Frerrn's dreadnoughts advance was turned back by orbital fortresses patterned after their own redoubts, and risking destruction they hyperspaced away. Indignant at the attack on a Taiidani installation and flush with confidence that the juggernauts were not unbeatable, the Emperor announced before the gathered council that, in light of their illegal assault on a fellow council race, he was mobilizing the full force of his Empire and formally declaring war against the Frerrn with the aim of destroying all hyperspace capability¹⁷ The Frerrn in turn returned the declaration of war and further announced that all of its surviving allies were banding together in a pact of mutual defense and would fight to the death against Taiidani aggression.

The Empire indeed resumed hostilities through the remainder of 352 and 351, avoiding the Frerrn

16 THE FRERRN ARE NORMALLY AN EMOTIONALLY RESILIENT PEOPLE THAT ARE COMFORTABLE WITH MINIMAL ACCCOMODATION IN AN INDUSTRIAL SETTING. LARGE NUMBERS OF CIVILIANS WERE LIVING IN ALL OF THEIR DEEP SPACE INDUSTRIAL FACILITIES. FEARING TAIIDANI DEEP-SPACE MILITARY SUPREMACY THEY HAD REMAINED IN THEIR HOMES, HOPING TO BE IGNORED. THOUGH TAIIDANI INTELLIGENCE HAD DETECTED THEM, THE ADMIRALS ASSUMED INCORRECTLY THAT ALL CIVILIANS WOULD HAVE RETREATED OUT OF THE WARZONE. THUS, FOLLOWING IMPERIAL DIRECTIVES TO MAXIMIZE DAMAGE, HEAVY ORDNANCE WAS USED TO OBLITERATE HUNDREDS OF ASTEROID MINES AND DOZENS OF LARGER ASTEROID SHIPYARDS. AFTER THE CAMPAIGN, THE ADMIRAL RESIGNED AFTER LEARNING SHE HAD KILLED THREE MILLION FRERRN NONCOMBATANTS AND IN 342 BHL COMMITTED SUICIDE .

17 OFFICIAL IMPERIAL DOCTRINE WAS THAT ALL WARS HAD THIS AS THE ULTIMATE STRATEGIC GOAL. AS THEY WERE STILL PUBLICLY DISTRUSTED FOR THEIR ATTEMPTS TO ANNIHILATE THE KUSHAN, THE EMPIRE NOW FRAMED ALL OF ITS WARS IN THIS FASHION TO REDUCE THE STIGMA. FUNCTIONALLY SIMILAR, AS BOTH DEAD PEOPLE AND PEOPLE WITHOUT HYPERDRIVE WERE DENIED THE STARS.

dreadnoughts and continuing its campaign of striking at economic facilities while resupplying from depots hundreds of light years away, well out of easy reach of the primitive Frern hyperdrive. As they slowly were forced by the military vastness of the Empire to give ground, the Frern quietly instituted a policy halting the taking of Taiidani prisoners. The Taiidani grimly reciprocated, and as the campaign inexorably went their way they began killing many thousands of captured Frern crew and pilots.

But the Empire was vast, and even though it was on a war footing it took many months for production to ramp up and the new runs of warships to come off the production lines and reach the warzone.

In 351 condemnation of the barbarism of this war and fear of what the Taiidani might do when they conquered an inhabited planet grew to such a pitch in the Council that the Inner Council unanimously voted to intervene. Dozens of ships from all five Inner Council races arrived in the warzone and demanded an immediate and permanent armistice. The terms were clear – a neutral zone would be established between the two powers to prevent 'border incidents' from flaring into war again. All Taiidani installations would be destroyed remotely by the Inner Council and no Frern would be able to salvage remains, preserving Taiidani technological secrets while removing their bases on the Frerns' doorstep.

For the Frern it was a bitter victory. Their population had been crushed by the tremendous damage inflicted upon them by the war occurring in their territory and the Emperor's campaign of economic damage had broken their logistical limits. So too had their bitterness with the Council grown as they continued to appease the Empire and stand by while they and their allies had been occupied. The Aggregate was formed in 350 BHL, with all other unaligned species in the region rallying under Frern military protection as they had been the only minor species to even partially resist the Taiidani. The Aggregate then was not much more than a mutual defense and defense development treaty, but as the peace turned bloody¹⁸ the Aggregate evolved into its modern form.

STARSHIP GRAVEYARDS

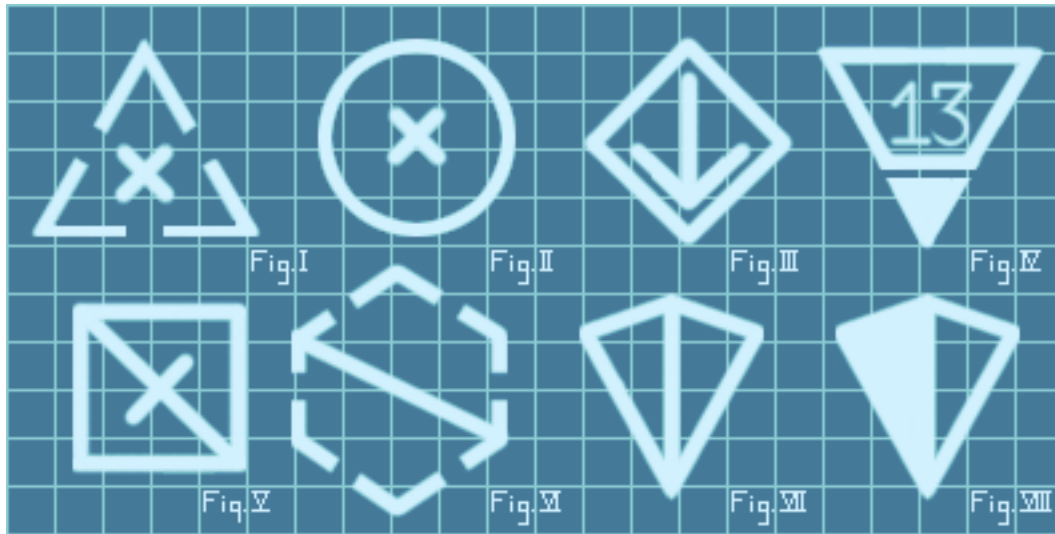
The galaxy's most famous example of these structures is the Karos Starship Graveyard, formally under the protection of the Galactic Council and strictly off-limits to all military and commercial shipping by Council member races.

There are many smaller ones, however. Like the Karos graveyard, many are constructed deliberately. Several small graveyards are located in the Higaara system proper, composed of Imperial-era derelicts and support craft that were deemed too costly to repurpose and difficult to recycle. There are several large graveyards and salvage fields in Taiidani and Frern space, where mothballed wrecks are stored.

The most common incidence of starship graveyards is a byproduct of warfare. Several uncharted and chaotic graveyards stretch along Confederate state borders, and particularly along the Republic-Confederate control lines. These areas are often extraordinarily dangerous. Frequently these regions are not fully charted and can contain both un-surveyed wrecks and unexploded ordnance and munitions. Many crippled and damaged vessels are unstable and prone to fuel explosions.

The common standard for starship graveyards is visual tags on large pieces of debris. Simply by virtue of its extensive use, the Taiidani method is most widely used and is reprinted here with permission from the Republic navy:

18 BOTH THE EMPIRE AND THE AGGREGATE DEPLOYED BASES SEVERAL LIGHT YEARS INTO THE NEUTRAL ZONE ON OORT CLOUD BODIES TECHNICALLY PART OF SYSTEMS ON THEIR RESPECTIVE SIDE OF THE BORDER. RESOURCE FLEETS WITH CURIOUSLY LARGE ESCORTS ALSO REGULARLY ROAMED THE NEUTRAL ZONE, AND REGULAR SKIRMISHES BECAME THE STATUS QUO. THEY WAXED AND WANED WITH FREQUENCY AS TENSION HEIGHTENED AND FELL, BUT THERE WAS NEVER A YEAR WITHOUT COMBAT.



Sample Graveyard Derelict Markings

Fig 1: Derelict is to be recycled at a naval shipbreaker, all reclaimable metals, composites, and munitions to be reused as raw materials.

Fig 2: Preserve salvageable components here as best as possible. Used for mothballed vessels.

Fig 3: Preserve here for repair or upgrade to working order. Only on the rare relatively-undamaged wrecks, this is most commonly used on lifepods or other small, durable craft that do not require expensive modernization.

Fig 4: Wreck is to be moved. There is space on this marking for a designated destination facility, often a shipbreaking or manufacturing facility. Frequently used in conjunction with marking no. 1.

Fig 5: Wreck is to be left where it currently is and further tampering is to be avoided. Commonly used on larger relics that are too dangerous or are unknown.

Fig 6: Wreck is to be disposed with no disassembly. Often these wrecks are used as targets, or are precision demolished or de-orbited.

Fig 7: Dismantle and recover all weapons systems, disregard the remaining wreck.

Fig 8: Dismantle the entire derelict as best as possible and return all components.

Citation: Imperial Naval Code, redaction IX, page 2350, section LVXII, 'Graveyards'. With permission from the Republic Navy, Bureau of Records.

PART 3: CLAN HISTORIES

MODERN HIGAARAN SOCIAL SYSTEM

- Similar. Many more Kiith are emerging.

KIITH ATTI

On old Kharak, war and disaster time and again threatened to drag civilization under the sand. One of the few forces that managed to maintain or even advance science and technology was the special place enjoyed by Kiith Sjet. To be Sjet meant to dedicate yourself to higher learning, and the fruits of this learning were open to all the people of Kharak. Sjet only allowed themselves one political goal; any Kiith that tried to restrict or harm a Sjet in the pursuit or spread of knowledge was shunned. Beyond this there was no Sjet agenda, and this fact allowed agricultural and conservation methods to spread freely even as the Heresy Wars and Kharak's worsening environment threatened to otherwise destroy the livable portions of the planet.

The Homeworld War thrust Sjet into the heart of leadership, and though there was talk of it shortly after landfall they never truly stepped back from this position. Passions were high, and the matters at hand so important, that none with a voice in the New Daiamid could resist using it. While Karan Sjet avoided politics for most of her life, the Kiith was given voice at the council by a series of

representatives, starting with Daciir Sjet, the acting Sa during the Mothership's journey, and ending with Norem Sjet following his marriage to Karan. The political activity of the Kiith caused notable discomfort in many of the awoken Sjet sleepers who had not had their mindset reformed in the fire of the war, but the vast majority recognized the importance of all voices being heard in this pivotal time.

Yet as the years and then decades passed without any sign of Sjet returning to its roots the discontent grew, and concentrated. Large parts of Sjet were now far removed from academics, and those families saw nothing wrong with that. They had grown up with that, and though they knew the tales of the old Sjet, to them they were only tales of a bygone era. There were still many pure academics, however, who saw endless opportunity for new learning with the whole galaxy now in their reach, but felt not without cause that their leadership was distracted by their ever increasing entanglements.

This situation came to a head in the 70s when Sjet took Kiith Neisen as a vassal. While the disgruntled scientists did not outright oppose aiding the Neisen and defusing the tensions surrounding them, this meant that the holdings of Sjet now included even more industrial and martial concerns, not to mention foreign political entanglements. The academics found a spokesperson in the person of Kaetu Atti, a botanist who had been an outspoken critic of the modern Sjet leadership. With this latest development he made the radical move of renouncing his allegiance to Sjet.

Critics of Kaetu Atti, both of his time and since, have suggested that his frustrations were due to him being a mediocre scientist rather than truly poor leadership, and that his break may have been fueled by a strong anti-Taiidani sentiment that can be found in some of his writings. True or not he found sympathetic scientists flocking to him, offering him their allegiance and support in the wake of his act of defiance.

The Sjet-sa, Lekhii Sjet, was rumored to have panicked when he first heard the news. Sjet's taking on of Neisen had been a political gamble with results still unknown at the time, and the sudden flight of many of the planet's brightest minds threatened to tip the whole affair into oblivion. Talks with Atti were quickly arranged. Sjet's initial offer, making Atti an immediate vassal Kiith that would benefit from Sjet's resources and allow the sciences a unified position in Kiith decisions, was rejected. Talks eventually produced an alternate arrangement. Citing the Soban creation of Kiith Ekeras as a precedent, Atti and his followers would form a new Kiith whose Daamid recognition would be sponsored by Sjet, and both would agree to a long term alliance.

The alliance was largely symbolic, allowing Sjet to retain a portion of the prestige of sponsoring the sciences, but has been successful. If an Atti scientist travels off Higaara, they typically do it on a Sjet ship. Members of Atti and Sjet often intermingle, or even pass from one Kiith to another if their aims in life shift. Despite this cozy alliance, and the accusations of political motivation in Atti's anger, they have kept their pledge of abandoning politics. Atti scientists will provide information to any Kiith, and the Atti seat at the Daamid has abstained from nearly every vote, speaking only on matters of fact.

The colors of Kiith Atti are sky blue with sand-brown stripe.

KIITH EKERAS

The population boom following Landfall has been given several explanations by historians. A sense emerged, mostly unspoken but occasionally voiced, that it was everyone's duty to repopulate. Our brush with extinction brought with it terror at our precarious nature, both as a civilization and for individual kiiths. Every clan and family tradition, themselves only the smallest sliver compared to what was lost, was in peril and needed someone to carry it on. Biologists spoke publicly about the need for every lineage to be carried on for the good of the gene pool. Contributing to this was the fact that every member of the Mothership crew was fertile and of breeding age due to the admissions restrictions, owing to contingency planners anticipating the possibility of a one-way trip. While some vocal figures objected to this perceived obligation to repopulate, it had little effect. There is a historical trend of population booms following shared hardships, and the cultural factors amplified this tendency.

Few were prepared for the impact of this wave of infants. A relatively small fraction of the reawakened population had experience as parents, and the elders they would have gone to for advice had been left on Kharak. In years to come much would be made of the strangeness of this new generation growing up with no older children to look up to, a generation wide gulf in our population whose ripples are still

felt in demographics today. But no kiith was as unprepared for this event as Kiith Soban. It was Sobani tradition that none were born into the warrior kiith, taking the red banner of Soban was a choice made by an adult. A Sobani parent had the choice of either giving up their child, or leaving the Kiith for another. This was normally not a problem, with as many new recruits joining the Kiith as families leaving it, but as the boom began to surge it became clear that Soban was at a crossroads.

The burning had made Soban one of the largest and most prestigious Kiith, their adventurous and unencumbered lifestyle made them well represented in both the fleet and the cryotrays. But now they faced several unpleasant futures. If they stuck to tradition, they would become our leading source of orphans and single parents seeking refuge in other Kiith, losing both numbers and prestige. On Kharak the trickle of Soban cast-offs was manageable for the other Kiith, but in those early days on Higaara resources were tight and any Kiith prepared to raise children were likely already struggling with their own creches. The only other path that seemed open was to abandon the traditions and let children be raised by Sobani families, but while many advocated this, just as many decried it as the death of Soban in all but name.

Before the second year on Higaara had finished, the Soban-sa could not ignore the trends. He called together many of the families caught in this crisis to try to find a third way, and after long deliberation they decided the traditions could be bent without being broken. A new Kiith Ekeras was formed, closely tied to Soban, headed by a collection of elder members who had joined, or in some cases rejoined, Soban after raising children of their own. Kiith Ekeras provided a support network for former Soban families, funded by a portion of Soban's income, and their close alliance allowed for many instances where one parent remained in Soban while another joined Ekeras.

From this start, Ekeras has grown into something more. By focusing as much child-rearing and education expertise in one place as they could, Soban inadvertently created the solution to problems most of Higaara didn't know they had yet. In the coming decades Kiith Ekeras would be at the forefront for education and childcare, instrumental in both setting up schools and handling the inevitable orphans created when the saturated family situation met the uncertainties of early post-landfall life. Today, Ekeras contains many people who never were and never will be part of Kiith Soban, and the Kiith partially funds itself through various education and childcare services rather than relying entirely on financial support from the Soban-sa, but the two still enjoy their special relationship.

Ekeras's colors are pastel blue with white.

KIITH GAALSIEN

- Very nasty xenophobes.

KIITH KAALEL

- Very strong anti-Taiidani sentiments, both Republic and Confederate.

KIITH KADESH

Colors are orange and pink

* Originally granted its title in abstentia by the Daiamid as pretext for a return contact mission. Cultural exchanges infrequent. Most years the Kadeshi seats in the Daiamid go unfilled. The representatives of Kiith Kadesh on the Daiamid are the only formal diplomatic contact between the Protectors of Kadesh and the rest of the galaxy. This is actually a bit of a big deal because it means only the Daiamid and Higaara has access to the advanced technology of the Protectors, which has been theorized to not be native to the Garden. It's a popular pastime of conspiracy theorists to point to the regular advances Higaaran battle drone technology makes ahead of the galaxy as evidence for technological exchange from the secluded nebula, but there is no concrete evidence. One rather quiet but diplomatically significant incident was the formal return of all captured Protector ships that survived the Homeworld war to the Garden in 14 AHL. Almost a dozen Frigates of remarkable efficiency and

with unusual weapons were escorted by a powerful Daiamid fleet all the way to the Garden, where they were never seen again.

KIITH LIIRHRA

- * Colors are yellow-green and blue.
- * Largest manufacturing Kiith. Very conservative.

KIITH MANAAN

- * Colors are dark green and bright green.
- * Largest contributor to the United Navy of Higaara.

KIITH NABAAL

- * Colors are copper and dark brown.
- Lessened in importance after the Cataclysm, shares supremacy with Kiith Sjet and Kiith Paktu

KIITH NEISEN

Now forty years old, Kiith Neisen is a modestly populous but prosperous and influential Kiith. Unique amongst the Daiamid, Kiith Neisen is predominantly made up of Taiidani immigrants from the Republic. Kiith Neisen originated less than a year after Landfall. These predecessors were rebel officers of the Cor and Jesah squadrons and were assigned to help inventory and secure all Imperial installations in the Higaara system. With constant and fierce attacks by Imperial battlegroups the rebel presence amassed to a small armada, mostly carriers and heavy cargo ships. The evicted Imperial forces had been sure to sabotage nearly every military installation they could in the limited time they had, often to the point of endangering their own citizens being deported. Reconstruction and restoration of shipyards and factories soon turned from a project predicted to take years into a decades long endeavor. These rebels, now part of the Republic military, soon brought or began raising families. While ersatz schools and homes could be made out amongst the many gutted cities and orbital palaces, the Higaarans these people were working alongside had dedicated schools and housing. While Republic citizens could use them, they had no say in the content of these schools or in the administration of their towns and soon, small cities.

Cultural blending in this context was inevitable. The second and third generation immigrants had grown up increasingly exposed to the Higaaran culture and social system and wanted both to preserve their own identity and participate in government. For many years these people had never left the Higaara system, and while they were surveyed and looked after by regular Republic officials, they had less and less connection to their old home. They were not treated as Higaarans, however – they were not treated as constituents of any Kiith and had no representation whatsoever on the Daiamid council. Furthermore they were treated as a singular foreign entity by each clan. The most influential Taiidani immigrant family, the Neisen, soon became the interface between the 'real' Kiith and the in-between Taiidani. Already patterned after a Kiith, the vast extended Neisen family took a census of the other immigrants and hatched a bold plan: they would formally unite and press the Daiamid to accept them as a new Kiith.

It was a tragic consequence of their nature that the Neisen and the other Taiidani were shielded from the most vitriolic prejudice: Higaarans who did not care about their origins would actively seek them out, and so the Neisen came to believe that the Higaarans were more ready to accept them as equals and kin than they actually were. Despite posting official notice of their desire to attend the 67th Grand Daiamid Assembly, the Neisen matriarchs and patriarchs received no response. Undaunted and

optimistic, they appeared anyway and gained entry to the Assembly Chambers – where pandemonium quickly ensued. Conservative elements of every Kiith spoke at length of their outraged indignation at the trespass, with particularly racist and fiery diatribe coming from the traditionalist Kiith Kaalel.

With the Assembly now hopelessly derailed, the Neisen withdrew in bewilderment.

- pursued by angry Kushan, bring up scouring of Kharak. Flight to orbital habitats and arming of militia plus contacts of conservative Neisen with Republic military get them some surplus ground and space weapons.
- Skirmishes w/ Kaalel and Soban mercenaries. Climactic scene w/ Hraal, with intervention of UNH just as a Republic task force arrives. Escalation, threat of war between Republic and Daiamid.
- Resolution as a dependent vassal Kiith under Sjet, but growth of displeasure by the next generation of Neisen. Strong and persistent ties emerge between Neisen and Republic, and Neisen becomes a rival to Nabaal for weapons development and combat ship manufacture.
- Neisen leads hybrid ship project in part to use up their stocks of surplus Republic components. Commands a lot of power behind the scenes politically due to their economic importance and are considering once again pushing for equality. Have their own satellite Kiith forming, some conservative Taiidani-focused groups, others hoping to integrate seamlessly into the Higaaran culture.

KIITH PAKTU

* Colors are white and dark red.

* Not particularly militarily powerful, but has a good mixture of political skill, scientific ability, and economic power.

KIITH SJET

- Colors are red and blue
- Has taken a more diverse role following the political ascendancy of Karan Sjet – political, military, and manufacturing. Serves as Nabaal's foil in this respect.

KIITH SOBAN

- Colors are blood red and pink.
- Has taken a more diverse role following the political ascendancy of Karan Sjet – political, military, and manufacturing. Serves as Nabaal's foil in this respect.

KIITH SOMTAAW

- Colors are white and blue.
- Wanders the galaxy with the explicit patronage of the Inner Council. Now work as technology traders and ascetics instead of miners..
-

PART 4: TECHNICAL BRIEFING

KUSHAN SHIPS

(FTI) Valiant Interceptor

Valiant-class Interceptors are the orphaned flagship of an ambitious 70s-era project to completely hybridize the light units of the Taiidani Republic and the various Kiith. The project was the result of a number of disastrous joint operations between the 3rd UNH battle fleet and two Republic carrier forces near the bandit kingdoms. Massive damage to the UNH mothership's flight decks and docking sleeves forced the 3rd Fleet mothership to attempt to dock its strike wing to the Republic carriers. The Taiidani carriers, however, had unfortunately incompatible internal structure, forcing almost a hundred and fifty UNH strike craft to be ditched and destroyed on the scene.

The Valiant was going to use off-the-shelf engine modules and weapons systems, and was contemporary to the Republic's carrier upgrades. Finally finished in 82 after passing the deadline three times and exceeding the budget by an order of magnitude, the remaining planned ships from the hybridized lines were reluctantly shelved and the Valiant went into testing cycles, and surpassed all expectations both positive and negative.

Firepower is given by two Taiidani-style single-barrel heavy railgun mated to next generation power supplies. The projectiles fired by the Interceptor mass about 7.5 kilograms, similar to the mass of the burster of old Kharakid light artillery guns. These rounds are comprised of a 3 cm x 12 cm high-density penetrator that masses 1.63 kilos; the remaining mass is a lightweight protective foamed material with a light nose charge to absorb micrometeoroid impacts and help defeat whipple plating and ablative armor. Three cubic meters of storage provides each weapon with a magazine of 630 rounds. The effects of these weapons on anything smaller than a cruiser are immediate and extensive making the Valiant an excellent choice against any target in the modern battlespace. Energy cannon equipped bombers still have superior performance against large targets, but a mass of Valiant-class Interceptors can furnish excessive firepower.

Test pilots almost immediately complained about the largest change in the Valiant over previous generation models. In order to minimize space demands for life support and other electronics, designers of the Valiant line scaled down the cockpit dramatically and removed the electronics officer's position entirely. ECM and EVW duties are handled by the pilot with assistance from onboard expert-systems. Almost all tests were deluged by complaints about the new cockpit architecture, though none faulted the increased power of the craft. Maintenance technicians grumbled about the hideously complicated control feeds and the touchiness of the maneuvering thrusters, but in spite of this all production was authorized after the prototype shredded several drone-piloted Bandit fighters in a single long salvo.

On the Higaaran side, Valiant production took six years to step up to full, and in that time it was the subject of massive controversy. Many line pilots lost control of the overpowered fighter, and shortages of the new ammunition and components caused remote carrier groups to switch back to the previous generation of fighters. The Republic fleet replaced approximately a fifth of its main-line fighters with the Valiant, and assigned those squadrons to the battlegroups operating near the Higaaran zone of control. The next generation of Higaaran pilots have acclimated entirely to the Valiant's hull, and it has escaped its checkered past to become known as one of the most deadly light craft in the galaxy, heavily sought after by bandit warlords who seek to use its powerful cannon to disable larger craft.

Max Velocity: 267 m/sec

Armor: 150

Firepower: 26 (game reports 48 erroneously due to gun slaving)

Coverage: 6%

Maneuverability: High

Mass: 60 tons

RU Cost: 55 build time 18s

(FTS) Somtaaw Shepherd Recon

While the UNH funds and controls the largest portion of Kushan military research and development, it does not have a monopoly. All major kiith have rights to maintain their own militaries, including developing their own ships. Foremost among the kiith in this regard is Kiith Somtaaw, their enduring privileges to travel the galaxy at large and handle any signs of Beast resurgence leading both to a strong need for an up-to-date fleet, and a unique perspective. Add regular exposure to diverse technology, and the result is a fleet of relatively exotic ships with purchased designs a rarity.

Traditionally Kiith Somtaaw offers design licenses only to the UNH, and at reasonable rates. Several UNH Command officers have adopted the 'Shepherd' class recon in place of a more conventional scout. Doctrinally the differences are negligible, but Somtaaw sensor packages are considered superior in adverse conditions. The primary drawback of such craft is fewer shared components with contemporary fighter fleets, leading to increased maintenance difficulties.

Max Velocity: 300 m/sec

Armor: 30

Firepower: 24

Coverage: 6%

Maneuverability: Very High

Mass: 30 tons

RU Cost: 35 build time 12s

(CTS) Spirit Standard Corvette

The Spirit-class Corvette is the main heavy strike craft of the fleet. The Spirit is based heavily on the previous generations of heavy strike craft, although it fills a much broader role than either the Hammer or the Cavalier. The Spirit, a Kiith Paktu design, retains the swiftness and maneuverability of the most advanced first generation corvettes alongside a significantly enhanced armament. The earlier cockpits provided a full 180 degree view of the space ahead; the Spirit instead substitutes ubiquitous sensor arrays to give the same information density to the pilot whilst allowing the pilot cocoons to be buried deeper within the hull. The sleek lines of the Spirit do not betray its thick armor and robust power systems supplying two medium railguns.

Most notable are the Spirit's large aerobraking surfaces analogous to the wings of an aerofighter. These surfaces can be used to rapidly shed speed in an atmosphere, and also serve as excellent locations for powerful attitude thrusters contributing to the unparalleled maneuverability of the Spirit.

Additionally these versatile craft are often converted to serve special roles, and these large surfaces can be used to mount various equipment, such as long range scanning probes, additional fuel tanks, or even orbit-to-surface munitions in certain situations.

The Spirit is widely used amongst the vast majority of the Kiith, and is a common sight amongst the Kushan fleets. While a wing of Spirits can be a pricey investment, they are superb escort and harassment craft, and are often tasked to some of the most dangerous missions in combat: escorting the bomber wings. Many of the finest pilots in the Kushan fleets swear by the Spirit as the ultimate synthesis of speed, firepower, and durability; the craft can outpace all other Corvette-class vessels and keep pace with heavy bombers, giving them immense strategic flexibility. Like all Corvettes, the Spirit is large enough to suffer greatly from capital ship weapon turrets, but its speed gives it an edge against other, slower, heavier designs.

Max Velocity: 210 m/sec

Armor: 1300

Firepower: 24

Coverage: 95%

Maneuverability: Medium

Mass: 750 tons

RU Cost: 190 build time 20s

(CTH) Stalwart Heavy Corvette

When the situation calls for reactive anti-strikecraft operations, doctrine calls for Spirit standard corvettes. However in many cases the speed is wasted, namely, outrunning the carrier battlegroup you are defending is of limited utility. Many commanders prefer to leave interception to interceptors. Thus the existence of the Stalwart class heavy corvette.

While it shares many components with it's lighter contemporary, the Stalwart was drafted in the mold of the classical corvette. With four turrets and heavier armor, wargames have proven the worth of these craft. In 101 A.L the first run of 20 prototypes entered into mock combat with mixed Soban Fleet strike craft simulating a raid on civilian mining operations. Immediately after the trial, the Soban Sa signed orders to purchase the design license for his carriers.

Adoption has not been universal, as some combat doctrines call for maximum flexibility. Maintenance crews and gunnery crews both loath the craft as it suffer from the same foibles as its ancestors. In particular they are crammed so full of armor, weapons, ammunition, fuel, targeting sensors and turret drives, there is little room for either pilots or mechanics. The pilot's sole consolations are the gratitude of the crews they protect, and its frequent expression in carrier bars.

Max Velocity: 152 m/sec

Armor: 1700

Firepower: 33

Coverage: 75%

Maneuverability: Medium

Mass: 1100 tons

RU Cost: 240 build time 25s

(FFA) Reconciliation Assault Frigate

The modern assault frigate owes much to the Taiidan. When the original Vengeance class was built in 1 B.L. from technology copied wholesale from captured imperial Kudaark frigates wrapped in a distinctively Kushan hull, it became the foundation of the fleet. While some smaller Kiith could not afford it and made due with their own substitutes, all that could license the designs from the Daiamid made heavy use of the ship, including the unified Navy of Higaara when it took form. In the decades to come the design was repeatedly pushed to, and occasionally past, its limits with extensive updates and refits. Finally in 79 A.L. the retirement of the Vengeance was announced, with a phasing out slated to complete in 88 A.L., to be replaced by the newly commissioned Reconciliation, named to commemorate the ties between Higaara and the Taiidan Republic.

Indeed, the Reconciliation was designed with aid from Republic engineers, renewing the ties to Taiidan technology. Like its predecessor, the Reconciliation became the foundation of a new generation of frigates in the coming years. The vessel fills much the same role as the assault frigates of old, multiple turrets handling strike craft threats, particularly corvette wings that would otherwise make short work of fighters or support craft alike.

The old plasma bombs were removed to make room for two additional turrets, bringing the total up to 6 standard mass drivers, but the framework was left in place for possible increased armament in future refits. This has proven wise with the newly developed cheek-mounted point-pulsar emplacements added to the Mk.4 revision, slated to be brought into combat trials with the launch of the 15th Fleet in 102 A.L. While some argue that the lack of heavier fixed-forward weaponry diminishes the frigate's ability to aid in anti-capital engagements, it can still bring all six primary turrets to bear on a forward target, creating a withering hail of fire when deployed in groups. Still no substitute for ion cannons or larger capital ships, the Reconciliation class is far from useless once strike craft threats are eliminated, and any commander would be a fool to discount them as such.

Max Velocity: 115 m/sec

Armor: 20000

Firepower: 96

Coverage: 75%

Maneuverability: Low

Mass: 15000 tons

RU Cost: 575 build time 60s

(FFI) Blaze Ion Frigate

When the Reconciliation was unveiled, speculation immediately began on the replacement for the aging Firelance III Frigate. The Daiamid finally decided to take control of several Kiith-level enhancement programs and place it under the purview of the UNH. The admiralty of the UNH immediately became embroiled in its most divisive project to date, with several hundred contributing design officers and

many thousands of scientists all attempting to steer the project their own way. Kiith nationalists also often tried to manipulate the design to make use of their particular Kiith's specialties, whether it was Kiith Nabaal's lightened compression ion weapon, or Kiith Paktu's ducted exhaust maneuvering system.

After one year the product was being castigated by outside critics as well as the frustrated designers. The proposed single-beam layout was lambasted for a lack of vision and hide-bound traditionalism. Those proponents of multiple-weapon designs, including a Kadeshi-inspired triple fixed beam and a variant of the Reconciliation with light ion turrets replacing the kinetic turrets were criticized for unrealistic expectations of nascent technology. Cooler heads began to prevail, and in the end the single, fixed, mothership-class beam wrapped in strategically placed armor and engines proved to be the most effective and cheapest option. Extensive field testing showed that this proposal, dubbed "Blaze", could use off-the-shelf technology in a new configuration to save enormous costs in implementation. Shared technology with both the existing Reconciliation frigate and Tempest destroyer allowed production of the Blaze class to begin almost immediately after the design was finalized, enabling a complete replacement of the Firelance III within only a few years time.

The current Blaze is a single heavy energy artillery emplacement with numerous redundant vents and cooling systems installed. These systems can barely keep pace with the massive cannon bulging out of the interior of the frigate; the heat sinks will actually glow cherry-red on firing. Armoring has been reduced for the sake of slightly increased maneuverability and significantly increased firepower and range; this weapon system is capable of devastating larger ships, living up to it's heritage as a giant killer. It has also been criticized in some circles as being a glass cannon, dangerously vulnerable to return fire and strike craft assaults. Standard doctrine includes corvette escort to protect against enemy bombers and larger capital ships drawing opposing ion fire to capitalize on the huge range of the main gun.

Max Velocity: 100 m/sec

Armor: 16000

Firepower: 228

Coverage: 3%

Maneuverability: Low

Mass: 12000 tons

RU Cost: 650 build time 60s

(DDS) Tempest Standard Destroyer

If frigates are the backbone of any fleet, destroyers are the arms. The Tempest-class Destroyer mounts an engine practically the volume of a full frigate, providing it with the greatest speed of any Higaaran ship larger than a Corvette, and a system of thrust vectoring combines with extensive thruster arrays to let the Destroyer kill velocity just as well, and twist and tumble to face any threat.

The Tempest's development cycle was one of the most remarkably smooth projects in the history of inter-Kiith efforts; especially considering the dramatically different design methodologies of the Kiith involved. Initially Kiith Soban proposed phasing out the destroyer-class ship entirely in favor of a heavily expanded frigate hull that would replace both the old Revelation and Firelance lines of Destroyers and Frigates respectively. This was however emphatically opposed by both Kiith Nabaal and Mana'an who maintained that a class of ships smaller than cruisers but capable of mounting more complex systems than frigates was necessary. In what may be a first since landfall, Kiith Soban conceded the point immediately and proposed a radical compromise. The Tempest design program was tasked with creating a rapid-response unit that would mount enough firepower and armor to serve as a front-line

combatant if necessary, and would have the drive endurance and facilities to conduct commerce raiding, rapid attack, and deep strikes. Only recently put into mass production, the five year old Tempest has already won outstanding acclaim and uniform praise from all ship captains and task force commanders alike.

With an array of three large dorsal energy cannon turrets and a pair of light ion beam turrets, the Tempest brings significant firepower to the table, and has the tremendous thrust necessary to bring that firepower to bear on distant targets quickly. With fighter or corvette escort, a squadron of destroyers makes a highly effective assault force that can outmaneuver the larger cruisers and mothership-class vessels with ease. It is best to utilize these powerful ships against the vulnerable rear and side aspects of target ships, although the excellent coverage of its weapons array gives it utility in the midst of a capital ship brawl as well.

Some older admirals mistake the Tempest as a direct successor to the Revelation-class and use it only in a frontal assault role. While indeed effective in such a role, the secret of the Tempest is its phenomenal engine power to mass ratio allowing it twice the maximum speed of a cruiser. Current Higaaran tactical doctrine is to leave slugging matches to wings of frigates screening cruiser squadrons, employing destroyer groups as reserve units to respond to line failures and exploit vulnerable angles of attack. With its ion armament capable of firing directly backwards, the ship is equally at home running away from an opponent as it is charging towards and the best of the UNH admiralty are renowned for their constant maneuvering of these versatile units.

Max Velocity: 145 m/sec

Armor: 38000

Firepower: 451

Coverage: 80%

Maneuverability: Low

Mass: 75000 tons

RU Cost: 1500 build time 150s

(CAC) Emperor carrier

As the journey to the homeworld passed the outer rim and into the empire proper, the Mothership's engineers were faced with new opportunities and new challenges. The military minds of the fleet hungered for an answer to the imperial carriers, something that could ease the logistical burdens on the Mothership, or even conduct fully independent operations. Designs for super-capital scale ships had been on drawing boards since the mothership's primary construction bay had been designed, but matching the example set by the imperial and turanic carriers involved in the attack on Kharak initially seemed out of reach, even after studying the available data on those ships.

The limiting factors were reactor and hyperspace core size. To act as an effective carrier required a long range hyperdrive, and while the Mothership's hyperdrive had range to spare, it was also titanic and power hungry. Captured and dismantled hyperdrives, along with the debris of destroyed ones, brought both information about modern hyperdrive design and the materials needed to experiment. A firmer understanding of the realities of hyperdrive war also led the design teams to cut down the requirements, now knowing that the mothership's long stride was typically wasted by early interruptions or nearby destinations. Along with much improved large-scale fusion reactor designs and novel construction techniques purchased from the Bentusi, by the time the fleet emerged from the Kadesh nebula they were ready to attempt the carrier idea at last.

Even with all the advancements, the first generation of Emperor carriers were cramped. Many pilots joked that they had more room in their cockpits than their quarters, squeezed out by the construction and resource-processing bays. But the ship proved it's worth. The hangar bays were far more battle-ready than the motherships's bottle-necked layout, with more ships being able to dock or launch from it simultaneously without fear of collision, a fact that saved lives and battles more than once. As a resource extraction shepherd it was as effective as the mothership at a fraction of the size, though it lacked the full construction capability of its parent.

The Emperor left its mark on history. Three carriers were deployed during the Homeworld War, and their commanding officers went on to be prominent leaders in the post-landfall days. When the mothership was converted into shipyard after the war, the Emperor was the ship it produced the most of, seeds of fleets for any Kiith that could afford them. The Daiimid's direct approval was, and still is, required for such a construction project, both due to the amount of the shipyard's capacity it occupies, and due to the implications of carrier ownership. No amount of software safeguards can keep an operational carrier construction system from turning a so-inclined owner into a strategic player.

On it's inception the United Navy was granted full rights to use and modify the Emperor design at will, and we have continuously modernized the ship. Modern Emperors are the hearts of any operation that doesn't call for a full Mothership intervention, and much more comfortable places to live than their ancestors. Around the galaxy the Emperor is an instantly recognized symbol of Kushan power, be that welcomed or not.

Commanders must however always keep in mind the fragility of a carrier. A livable base for pilots on top of all it's other functions leaves little room for defensive weaponry or armor, making it an extremely appealing target for attack, especially if the enemy has access to hyperspace inhibition technology to keep the carrier trapped and reinforcements from responding quickly. For this reason, doctrine recommends that carriers be accompanied by heavy escort whenever outside of well-controlled zones such as Higaara itself.

Max Velocity: 75 m/sec

Armor: 80000

Firepower: 4

Coverage: 60%

Maneuverability: Very Low

Mass: 150000 tons

RU Cost: 200 build time 280s

(CAS) Zeal Heavy Cruiser

The Zeal-class Cruiser was the inception of modern UNH capital ship designs, heavily leveraging modular components and launched an entire generation of heavy starships. Utilizing lessons learned from nearly four decades of war, the Zeal-class began design as early as AHL 36 and the program continued off and on until production of the prototype in AHL 54.

As a fighting vessel the Zeal was an unqualified success that bolstered Higaaran confidence and power in a time of stress and uncertainty. Tested repeatedly by several Warlord fleets, the new ship provided a more devastating offensive punch than the Avatar, and possessed a substantial defensive suite that allowed it to serve as heavy support for any conceivable task force and in limited cases operate independently or in pairs.

As technology has advanced the Zeal has been continually updated. The current version, significantly

different from the original built almost half a century ago, has cutting-edge electronics, weaponry, and armor. Its light coilgun turrets and missile batteries do not provide the level of protection against small craft it once had. The class's chassis was engineered brilliantly in the '50s but its limits are being reached and its age is showing. While it maintains the armor that can let it go toe to toe with a battleship, the sheer mass of its thick armor and heavy weapons slow the ship to a crawl. It is expected that within the next ten or twenty years the Zeal spaceframe will be redesigned once more with greater engine power, or the venerable design will finally be retired.

Equipped with a large cargo bay and a small shuttle hangar the Zeal can both quickly be resupplied and in a pinch resupply attending vessels. Auxiliary engines and a robust array of redundant command and sensor facilities give the ship hitherto unheard of endurance. The current variant, Zeal Epsilon, was launched in AHL 94. Its four double-barreled energy cannon turrets are cutting-edge, and all four ion cannon were upgraded to modern standard. Each of the two missile batteries can now fire a volley of four two-stage, extended-range heavy missiles for stand-off power. Fire control is updated for maximum accuracy on the four point-defense turrets.

Max Velocity: 80 m/sec

Armor: 90000

Firepower: 1333

Coverage: 100%

Maneuverability: Very Low

Mass: 400000 tons

RU Cost: 3700 build time 420s

(NCH) Diligence Resource Collector

The Diligence-class military tug frame often licensed to civilian contractors and in high demand throughout the Higaaran Control Zone and adjacent territory. It mates cutting-edge high performance fusion thrusters to thruster turrets giving it excellent hauling and cargo maneuvering characteristics.

Diligences have a more heavily armored phased-disassembler array than more primitive resource collectors; housed inside the center of the ship and connecting directly to the payload. The ship runs its fusion torches at three times the intensity of the Providence from a hundred years ago; it much more rapidly breaks down asteroids into their component elements and shaves precious time off resourcing runs.

Unfortunately, while the Diligence has admirable versatility and adaptability, it is still unarmed so it can be marketed in the civilian market. Design planners have also been lectured repeatedly that mass spent on guns and ammunition is mass that cannot be spent on improved carriage.

Notable characteristics include massive external coolant vents; the payload tank is usually filled with cool water refined from cometary ice by the carrier. This water is cycled through the fusion torch systems as coolant, then vented through armored hoses to the lower fins as superheated steam. In this fashion the tank doubles as coolant storage allowing the high-intensity fusion torch to run at higher speeds and eliminating the need for dedicated (and costly) cryogenic tanks. Recent resourcing activity is often given away by the clouds of ice crystals left by this process.

The line of after-market upgrades and modules adapted for the Diligence is extraordinary and sees constant expansion today, twenty years after the ship's introduction.

Max Velocity: 105 m/sec

Armor: 10800

Firepower: -

Coverage: -

Maneuverability: Medium

Mass: 6000 tons empty, 20000 tons fully loaded

RU Cost: 650 RUs, build time 60s

KUSHAN TECHNOLOGY

Energy Cannons

Most heavily popularized by their portrayal in the 'Cataclysm' saga of entertainment products, the heavy plasma cannon is a refinement of the older exile-era plasma bomb launcher technology. While the weapon system remains specialized, the development of Kushan energy cannon by Kiith Nabaal was popularized heavily as a universal replacement for coilgun. The media created a number of decidedly dramatized stories where this was so although live-fire tests showed that edge-of-field effects on shot accuracy and the significant time it took to aggregate enough fusing plasma for a second shot dramatically reduced the Energy Cannon's effectiveness against light craft. Nevertheless, the weapons system offers a deadly armor-penetrating pulse, handily defeating both high density and whipple plating. The heaviest specimens, mounted on cruiser and mothership chasses, strain modern containment field technology and leave a crater almost a dozen meters wide and deep in the heaviest armor.

While the basic technology is over eight decades old, the innovations it represents are subtle and quite dramatic. The original plasma bomb launchers were all spinal weapons systems only slightly less bulky and massive than an ion-beam weapon and relied on bulky ammunition to contain the blast. By contrast modern energy cannon use a smaller containment mechanism that can be mounted in large turrets. Unfortunately they still are only built in anti-capital roles, featured on heavy bomber craft and as secondary armament for capital ships. All but the most unrealistic commanders agree that the Kiith fleets must continue to maintain a supply of craft armed with coilguns for their versatility and decent performance against both large and small ships.

Allows production of: Attack Bomber, Cloaked Bomber, Destroyer, Cloaked Destroyer, Heavy Cruiser, Dreadnought

Ion Cannon

Formally acquired by the Daiamid during the Homeworld War in exchange for a few hundred cubic meters of refined asteroidal material, this weapon is the standard anti-ship armament. The largest and most powerful versions are the spinal weapons of Ion Frigates, which are adapted to turret form for the Goddess-class Mothership.

Light Advanced Ion Beams

Common name for a technology based on Kadesh Protector Multibeam Frigate weaponry. Smaller, more compact, capable of generating far longer beams, and more scalable than the Galactic 'standard' ion beam weapons. Many of the modern breakthroughs in timing electronics, superconductors, and plasma physics came from analyzing captured Multibeam frigates and later technological exchanges with Kiith Kadesh. As part of our strategic arsenal, the very name is meant to downplay its significance. This is a qualitative improvement, across the board, in weaponry. We dare not deploy it because our

potential competitors have much greater industrial bases than we do, and thus should they gain access to it they would be able to rapidly field it to gain significant advantages over us. Right now our advanced ion cannons are limited to strategic heavy strike craft – the Ion Corvette – and several Daiamid Guard-specific designs. In time we hope to deploy more ambitious incarnations of this technology, but for now, like the Protectors themselves, this technology remains secluded from the rest of the Galaxy.

Elements of these weapons have been used to enhance more subtle aspects of all of our ships, allowing us to tune our engines and power plants to run at higher levels safely giving our starships an edge in terms of speed and maneuverability over most of their counterparts. The UNH Strategic Command hopes to formally deploy a perfected Advanced Ion Cannon, with all the range of traditional beam weapons, within several decades.

Allows production of: Ion Corvette

VAYGR SHIPS

(CTL) Javelin-class Light Gunship

A light craft spotted first by our Republic allies to the far galactic south. The Republic pilots that faced the craft dubbed it Javelin-class after its long and narrow central hull and sharp features. The Javelin is one of the first craft fielded by a previously unknown species calling itself the Vaygr and typifies their design philosophy.

An unconventional craft, the Javelin is smaller and faster than any known Corvette-class vessel while significantly outmassing any known Fighter. Like a Fighter it has heavy spinal electromagnetic cannon, configured like the turreted cannon on the Spirit to propel heavy slugs accurately. These twin spinal guns are quite lethal against any fighter in its path, and can deliver considerable damage to other corvettes or capital ships. These heavy, but primitive guns are supplemented by a trio of turreted vulcan cannon.

The vulcan turrets on the Javelin are inaccurate and short-ranged, but quite deadly to small craft. Two are positioned on either side of the main weapons array and one guards the rear of the craft from pursuers. It is suspected that the Vaygr must have a large number of craft with such short ranged armaments if they consider one of these rear turrets to be adequate defense, and cautions pilots to maintain maximum effective range in combat against all Vaygr ships. Javelins are highly vulnerable to rear attacks by large squadrons of interceptors, and standard Corvettes are quite effective against them.

Max Velocity: 230 m/sec

Armor: 900

Firepower: 38

Coverage: 67%

Maneuverability: High

Mass: 400 tons

RU Cost: 170 build time 17s

(CTH) Crossbow-class Heavy Gunship

A substantial improvement in durability and technical skill is evident when comparing the Crossbow to

its predecessor. Nearly matching the durability of our own heavy Corvettes while maintaining excellent speed and firepower, the Crossbow is a serious threat to strike craft.

The Crossbow deepens the Javelin's hull dramatically and includes three radially-mounted engine modules. Two coilgun turrets are amidships sporting improved armor and elements clearly inspired by Galactic strike craft. The belly coilguns remain, but have increased to an array of three cannon that are pulled away from the command area slightly. Articulated winglets give the Crossbow a very distinctive signature that has earned respect, blending firepower, durability, and defensive capability with its three turrets.

It appears the Crossbow is a transitional craft, merging elements of Vaygr salvage shuttles with the numerous Javelin hulls. It is expected further developments on this design will emerge as the Vaygr tribes are exposed to more diverse technologies.

Max Velocity: 185 m/sec

Armor: 1550

Firepower: 112

Coverage: 90%

Maneuverability: Medium

Mass: 740 tons

RU Cost: 250 build time 32s

(CTF) Arbalest- class Flare Gunship

Very little information is available on this craft. Speed and armor is quite high for a ship of its size indicating a continual improvement of Vaygr technology towards galactic standards. Armament is an extraordinarily powerful but highly inaccurate long range projectile weapon. These projectiles, called 'flares', undergo several nuclear reactions on contact with the target to produce a concentrated and coherent burst of high energy radiation.

Only extremely well-trained and prepared repair crews should attempt to field-repair damage caused by these weapons, as their secondary radiation bypasses the radiation shielding of most hulls thinner than a Heavy Corvette's. Where the Vaygr could have acquired this technology is unknown, though intelligence estimates rate it as extremely unlikely that it is a native invention based on the apparent level of stagnation their culture had reached at the beginning of their invasion.

Max Velocity: 220 m/sec

Armor: 1400

Firepower: 258

Coverage: 67%

Maneuverability: High

Mass: 700 tons

RU Cost: 250 build time 32s

(FFA) Warhammer-class Assault Frigate

A light capital ship spotted first by independent traders in the far galactic south. So named for its distinctive profile, the Warhammer is a deadly if primitive picket and raiding vessel.

Obviously designed for long-term deep-space deployment, the Warhammer has admirably thick armor plating, highly variable geometry to improve maneuverability and heat dissipation characteristics, and a rotating centrifuge to ease comfort for crew far from friendly stations. Considerably more massive than Galactic counterpart frigates, it likely is more expensive to deploy.

It is also obviously designed for an aggressive frontal assault. Its five spindly turrets mount moderately effective medium range chemical cannon with a good rate of fire and decent accuracy. Each barrel is built to a 17 cm standard and fires an excellent armor-piercing round capable of damaging even modern armor, though the primitive ammo feed and shallow magazines on the Warhammer limit the rate of fire.

The massive blunt nose of the craft hides an enormous 28 cm rotary cannon tuned to well over a thousand rounds per minute. It is not clear exactly what tradition this monstrous mega-artillery piece might have come from, but the result is a weapon that at point-blank range is capable of blistering salvos. The cryogenically cooled weapon will melt if fired for more than three seconds continuously and the recessed, armored barrels travel half the length of the ship. The Warhammer wrecks investigated by Republic forces only carry enough rounds to operate the weapon for three minutes; however it is expected that in groups this would present a serious chance of destroying a Carrier.

Typical Vaygr employment of this vessel is as an aggressively employed hammer to the Glaive destroyer's anvil. The ships have similar drive speed, though the Warhammer has excellent maneuverability and good coverage on its turrets allowing it to slip to the flanks and start firing sabot rounds. While the ship cannot expect to reasonably dogfight, allied strike craft are advised against traveling between a Warhammer operating its spinal gun and its target for fear of being caught in the hail of penetrators.

Max Velocity: 115 m/sec

Armor: 23000

Firepower: 104

Coverage: 90%

Maneuverability: Medium

Mass: 22000 tons

RU Cost: 700 build time 60s

(FFI) Maul-class Ion Array Frigate

Upgraded with a heavily modified Turanic-pattern Ion Array cannon, the Maul is a substantial firepower upgrade over the Warhammer. Not quite as durable and maneuverable with the bulk of the accelerator shroud as its precursor, the Maul is still quite dangerous with its rapid firing beam. It is particularly surprising how quickly the Vaygr have been able to adapt Turanic systems to their own design – opting for a more static shroud as opposed to the articulated panels the Turanic favor. The main beam generator was mounted where the Warhammer's spinal vulcan cannon normally lays; the original chassis being particularly adaptable to heavy spinal ion weapons.

Nearly twice as massive as the Blaze-class, these heavy frigates are not to be trifled with. Much of the mass is lost in the rotating living quarters arrangement, and thus it is an inherently inefficient war machine, but perhaps the most intimidating feature of the Maul is how well it showcases the Vaygr adaptability.

The Maul must close to medium range to utilize its ion cannon effectively, but it can operate in consort with the Warhammer for support. Combined the two units fare surprisingly well against larger capital ships, enjoying a high enough degree of durability through sheer size and mass to withstand firepower that would cripple another vessel.

Max Velocity: 100 m/sec

Armor: 18000

Firepower: 141

Coverage: 3%

Maneuverability: Medium

Mass: 23250 tons

RU Cost: 775 build time 60s

(DDS) Glaive-class Destroyer

A medium capital ship first sighted by Republic listening posts in the far galactic south. Designated 'Glaive' after its thin, bladelike chassis, this starship embodies a far different culture and combat philosophy than is standard to the various Galactic nations.

The Glaive is larger and more massive than most Destroyer-class vessels by a healthy margin, and has a power-to-mass ratio only slightly better than a Cruiser. It sacrifices drive power and maneuvering capability for thick armor, two heavy turrets, and six light point defense turrets. Like the Javelin before it the Glaive heavily emphasizes frontal assault; its primary weapon system appears to be a pair of Turanic-pattern Ion Array cannon giving it a powerful direct-fire punch. The heavy turrets are unbelievably a pair of hypervelocity chemical cannon. The grandness of their scale lets them compete with modern coilgun range and muzzle velocity, but they have only marginal accuracy and penetrative characteristics. They are quite capable of wearing down frigate armor given time and will defeat strike craft in several direct hits, however.

The lighter weapons present evidence of an interesting philosophy. A considerable amount of the chassis has been dedicated to housing these in broadside banks of three; they are mounted in well armored turrets with rapid traverse and cavernous ammo storage. Each turret has a dedicated radar, fire control system, and magazine. Each turret mounts a pair of high speed revolver cannon firing smart explosive fragmentary rounds. Within an envelope of 1500m they provide an unavoidable curtain of fire, lending incredible anti-fighter protection against strafing runs, close passes, and other short range fire.

This weapons layout implies that this is currently the heaviest combat starship in the Vaygr arsenal. It is too unwieldy to maneuver against lighter targets or to disengage from combat once committed and its small forward profile and fixed beam cannon lend strength to a frontal charge. Its secondary weapons are well suited to engage anything smaller than it at close range. Given what we know of Vaygr strike craft, their short range weaponry and minimal armor would quite rapidly fail within the range of the Glaive's hull defense turrets. This ship is clearly meant as a final word; once committed its Vaygr builders clearly expect the action to be quickly resolved.

Galactic strike craft employ light energy cannon and fixed coilgun, both of which significantly outrange

these turrets. Operational guidelines for engaging these ships are currently being disseminated to both Republic carrier groups and Higaaran fighter wings; head-on attacks and high-traversal strafing runs currently favored as capital attack maneuvers would be all but suicidal against this foe. Instead, going into a Sphere formation at maximum range would render this formidable starship impotent as even our Interceptors outrange its defensive turrets. When pitted against our other currently known Vaygr combat units, the Glaive would be almost unstoppable. When pitted against modern technology this unit becomes jack of all trades, master of none and woefully vulnerable to bigger fish.

Of particular note is an engagement that led to Republic CA-0108 *Blood of Fire* being isolated and encountering three Glaive-type units. *Blood of Fire's* captain quickly deduced the limitations of these craft, poured on the engine power, and charged past their fixed ion array cannons. While the Glaives struggled to bring their weapons to bear, *Blood of Fire's* nose turrets and heavy energy cannon made a mockery of their antiquated armor. By the time two had turned, the third was hulled. Within one hundred forty seconds of contact, Glaive Two had suffered catastrophic reactor failure and the third attempted to withdraw. *Blood of Fire* scored direct hits with all four beams in the vulnerable exhaust manifold and split the Vaygr ship like a log, marking the first time in space warfare when a cruiser engaged three lighter capital ships in a maneuvering battle and emerged victorious.

A final note: Vaygr doctrine often leaves these vessels all but unescorted due to their tremendous anti-strikecraft firepower, freeing up the Vaygr light units to perform raids and flanking maneuvers. As a pocket fleet Glaives are excellent, but they are easy prey for starships with turreted beam weaponry and ion beam frigates.

Max Velocity: 115 m/sec

Armor: 41000

Firepower: 718

Coverage: 80%

Maneuverability: Very Low

Mass: 95000 tons

RU Cost: 1250 RUs, build time 100s

(CAB) Morning Star-class Battlecruiser

Classified by Allied Threat Evaluation

Attention: UNH Fleet Intelligence

Allied intelligence efforts have acquired confirmation that the Vaygr cruiser-chassis combat craft is operational. Efforts to delay development and deployment were partially successful, but it is expected to enter production within a month.

Captured Vaygr R&D elements have led us to dub the project "Morning Star". Morning Star is a unique take on the combat cruiser: eight fixed heavy ion beams based on Turanic, Taiidani, and homegrown Vaygr technology. While it possesses good armor, the overall ship is armored only to a spare level: all focus is on engines and a devastating first strike. Representing Battleship-class firepower on a cruiser chassis, the Morning Star is aptly dubbed a "battlecruiser".

Most worrisome are the large number of departures from canonical Vaygr engineering. It would appear Makaan's forces have managed to capture or salvage at least one Inner Council vessel; marked influence is present in the power supply and chassis layout. Instead of the standard closely integrated weapons systems, Morning Star uses highly modular and distributed weaponry. Defensive turrets are

based on existing Warhammer turrets but have been upgraded to be coilguns; highly similar to Confederate corvette and frigate-class weaponry.

Morning Star is highly efficient when operating in a formation with frigates or destroyers. The ship is highly vulnerable when isolated; capital ships are directed to close to point blank range and flank to avoid its spinal weaponry. While vulnerable to the same high-pressure tactics as the Glaive, Morning Star is more maneuverable and will destroy frigates with ease before they can get close.

It is expected that Morning Star, when perfected, will represent a significant threat to any Carrier. When deployed via hyperspace to immediately fire on the target, paired Morning Stars can and will disable or destroy any high value target smaller than Battleships.

The strategic implications of this tactic are immense. All allied commands should maintain a higher-than-average strike and fleet bomber complement on active patrol around vulnerable targets to ward against this eventuality. Suppressing strikes to force Morning Stars to commit to battle away from vulnerable friendly units are also imperative. Early simulations indicate that Morning Star is quite efficient against Blaze-class ion frigate squadrons, therefore we advise using them with care and only if the Morning Star is occupied with a larger, more durable target.

Max Velocity: 140 m/sec

Armor: 76000

Firepower: 1616

Coverage: 90%

Maneuverability: Low

Mass: 250000 tons

RU Cost: 3300 build time 280s

(NCL) Nomad-class Light Harvester

The Vaygr fleet employs a staggering number of these vessels in a dizzying array of roles. Tens of thousands of them are scattered about hauling all sorts of cargo in their modular cargo units. This military variant is adapted to resource acquisition in contested territory – it has been modestly armored and fittings for medium-length voyages have been installed, along with a high-efficiency fusion torch for speedy extractions. The torch feeds into a three paired globular cargo pods. The assemblies can be quickly offloaded and replaced under fire, and can be jettisoned in emergencies. Each container assembly mounts radiators, while the ship is propelled by a cluster of Javelin-class Gunship engine modules.

The fusion torch on the Nomad is so weak that it cannot fully dissociate the targeted resources – instead, they are broken down and the chaff is blasted away as best as the onboard systems can manage. There is a high proportion of slag in the cargo modules Nomads transfer, requiring onboard refineries take an additional step to reduce the material to usable grade.

Nomads exist primarily as light haulers and mining vessels for the Vaygr “civilian sector” such as it is. Unarmored or lightly armored ships that have higher efficiency but lower speed cutting or drilling equipment are common for exploiting planetesimals in their home cluster, though armed pirate and police cutters, shuttles, and small flying towns are all common variants. Sensor-equipped survey vessels maintain long orbits and range far and wide. Nomads preceded the bulk of the Vaygr fleets in large numbers, often haggling with systems that would soon fall under threat of armed Vaygr attack.

Max Velocity: 135 m/sec

Armor: 5800

Firepower: -

Coverage: -

Maneuverability: Medium

Mass: 2000 tons empty, 8000 tons fully loaded (max load 325 RU)

RU Cost: 300 RUs, build time 40s

(NCH) Crawler-class Heavy Harvester

While a modest-seeming expansion of the tried and true Nomad, the Crawler has significant improvements throughout. A stronger Warhammer Frigate-class engine boosts the cutting torch to a higher power, increasing the throughput and eliminating the slag that would escape the weaker Nomad torch. A longer cargo spine and twice the number of modules combines to give the Crawler nearly four times the capacity of its less advanced brother. Strictly a military variant of the Nomad design, some variants have been spotted, though intelligence suspects they are more likely independent efforts by Vaygr tribesfolk at improving the base Nomad design and not copies of the heavy military harvester.

Thicker armor and redundant systems are propagated throughout the ship as best as Vaygr engineering could manage, though it is still a vulnerable target it is comparable in durability to a light frigate. It is unfortunately quite sluggish, so it must be escorted – or deployed in regions where the Vaygr have a strong presence. This gives the Vaygr a layer of strategic flexibility when it comes to their resourcing operations, the Crawler can be deployed in secure areas to quickly extract large amounts of resources with a minimum of downtime returning to base, while the Nomad is often quick enough to avoid trouble and can range further with its naturally speedy engines.

Allied units are advised to attempt breakthroughs wherever possible to strike at these vulnerable units. Their systems are expensive, and if caught on the return trip represent a true fortune in lost materiel.

Max Velocity: 90 m/sec

Armor: 15200

Firepower: -

Coverage: -

Maneuverability: Medium

Mass: 7500 tons empty, 30000 tons fully loaded (max load 1300 RU)

RU Cost: 900 RUs, build time 60s

TURANIC SHIPS

(FTI) Bandit Interceptor

Turanic mercenaries will work for any side that pays, and take what they need when nobody is paying. If

they are pirates, privateers, raiders or mercenaries depends on the politics of the moment. Pariahs for a time after the fall of the Empire, attempts to root out supposed central infrastructures proved ineffective. Even so, standardization of their forces continues to this day.

Military engineers predict the 'Bandit' interceptor is due for replacement by a new design within the decade. Astute observers of military history would point out in response that such predictions have been around as long as anyone remembers, and captured or destroyed Bandits continually show incremental advancements without radical redesigns. The firing coils on a modern Bandit give it firepower to compete with contemporaries in organized navies, and their clever compartmentalization and armor composition make them one of the most durable ships in their weight class. Furthermore, the impressive internal modularity gives them immense future-proofing so long as basic module architecture and power systems doesn't undergo a fundamental shift in the near future. Many minor powers and bandit empires have taken to popularizing the Bandit as a symbol of freedom - Turanics are known to sell the fighters to anyone and frequently they've been found in the hands of fringe groups, terrorist and splinter organizations, freedom fighters, mercenary groups, and corporate militias. It is archaic, effective, dependable, rugged, incredibly adaptable, has a cavernous fuel capacity, and is dirt cheap. Millions have been destroyed in conflicts over the decades, and tens of millions more in a wide family of variants and copies have been produced from thousands of factories.

Bandits are well known for their ability to survive long enough to cut and run if it appears they won't be able to collect their pay if they stay.

Be advised that while Kushan space is unwelcoming to Turanic ships, some Republic shipping companies routinely employ Turanic mercenary escorts when operating near lawless areas. Pilots should always check with superior officers before engaging Bandits in combat, particularly when on joint operations.

Max Velocity: 243 m/sec

Armor: 225

Firepower: 12

Coverage: 5%

Maneuverability: High

Mass: 60 tons

RU Cost: 50 RUs build time 12s

IMPERIAL TAIIDAN SHIPS

(FFA) Kudaark-class Assault Frigate

Similar to it's more glamorous 'Sajuuk Cor' brother, thousands of the Mark VIII assault frigates were in use by the imperial navy in the last years of imperial rule. Those that ended up in the hands of the Republic have since been recycled, mothballed, or stripped of classified technology and sold out to third parties as export models.

It is not uncommon to see poorer Kiith use surplus republic technology, but the Kudaark enjoys a unique place in our history. It was the first model of imperial warship encountered by the Mothership, it's was employed to attack our helpless cryogenically stored population. This image has stayed with our culture and kept potential buyers away, with the notable exception of kiith Neisen who purchased several shortly after the normalization of their status and our relations with the Republic.

The broader galaxy has no such compunctions however. Their generalist weapons makes them useful in any number of scenarios, and as many exist in remote confederate patrol fleets as do in outright bandit forces. In both cases they are often accompanied by frigate-supported strike craft wings to protect them from bomber attacks. Such a force can also overcome small frigate-scale threats by outmaneuvering them, something that the less flexible ion frigates aren't capable of.

The ideal response to conflict with these target is a super-capital strike. Any force still fielding a design this old is unlikely to have an effective answer to such a deployment. Alternatively, unescorted assault frigates can be overwhelmed by fighter strikes, though corvettes should be held back from such engagements if possible. The guns of these older craft are even less suited to tracking fast moving targets than modern assault frigates.

Any novel variants should be captured for study, but in all other cases policy is to have them dismantled and recycled to reduce the number in circulation.

Max Velocity: 105 m/sec

Armor: 16000

Firepower: 99

Coverage: 65%

Maneuverability: Low

Mass: 15000 tons

RU Cost: 560 RUs, build time 60s

(FFI) Sajuuk Cor-class Ion Frigate

Introduced a few decades after the last days of the wars of aggression against the Frern, the ion cannon frigate quickly established itself as a symbol of imperial might that has endured ever since. The initial ion cannons were massive weapons suitable only for mounting on battleship scale vessels, but miniaturization and a desire for more flexible application of the firepower it provided led to its mounting on the frigate chassis. For a time the ion cannon helped define the scale of warships across the galaxy; a frigate was a ship big enough to mount a useful ion cannon, a carrier a ship big enough to produce an ion cannon frigate.

The incandescent beam has notable psychological effect on it's targets. Such was it's impact that after first sighting it in combat, the intelligence division of Mothership dubbed it 'Sajuuk Cor', roughly meaning 'God's Wrath'. While experts on military morale have called the wisdom of that naming into question, it aptly conveyed the effect the ship's spinal beam weapon had on targets of the day.

The ion cannon frigate became one of the fleet's poster children for propaganda, and historians believe that by the end of the empire this had become so pervasive that it negatively affected the decisions of the emperor himself. The elite guard units charged with protecting Higaara were ludicrously overburdened with ion cannon frigates rather than being outfitted with proper combined arms.

The Sajuuk Cor was the 8th major revision of the imperial ion cannon frigates, and like it's seven predecessors it is now obsolete. Imperial successor states have either moved to significant upgrades of the design, or invested in entirely new alternatives, with superior range and firepower. There are even scattered reports of Turanic clans beginning to field Ion Array platforms that outclass the venerable design.

However, a ship does not survive eight design cycles over 300 years and then vanish overnight. It may be outclassed in range and have reduced performance against modern armor types, but an old ion

cannon frigate is far more dangerous than no ion cannon frigate, and in the hands of raiders or pirates it still serves perfectly well to terrorize and intimidate. If encountered, commanders are advised to destroy them at range with modern ion cannons, or to overwhelm them with strike craft. Even the most daring pirate engineers would have trouble fitting useful levels of point defense on a chassis with so little spare volume.

Max Velocity: 105 m/sec

Armor: 16000

Firepower: 158

Coverage: 6%

Maneuverability: Low

RU Cost: 575 RUs, build time 60s

TAIDAN REPUBLIC SHIPS

(FTS) VTs.III/d "Jiilaak" Scout

In AHL 82 the republic put the republic put out a call for a new light fighter design for a fresh wave of modernization. In response the Neldataal design bureau, as one of the imperial development organs that survived the transitional era the most painlessly, was able to reach into its archives and update a design that had been in service prior to the introduction of the Landfall era 'Fiirkan' scout. While other competing designs were proposed, the Neldataal design was selected and entered service in AHL 86, dubbed Jiilaak by UNH intelligence.

The new design filled a number of objectives, both military and political. The Jiilaak's sensor packages can be quickly replaced to convert it between military reconnaissance and civilian shipping inspection roles, a feature that comes with a small price in mass efficiency but is made up for by advances in weapon optimization. This flexibility allowed it to be aggressively deployed in commerce policing roles, putting a brand new weapon system that harkened back to classic imperial fighters, replacing the far less traditional 'Reetno' fighter that had been in service 43 years, as the face of the republic military as trading relations with the then-young confederation improved. At the same time, it put thousands of brand new fighters on that border that could be war ready in a matter of days, if not hours. It was meant to impress the Confederate citizens with the cultural and technological strength of the republic.

According to intelligence, they didn't notice. Never the less, the Jiilaak is a perfectly serviceable scout fighter that remains popular with pilots to this day. Republic doctrine for use in a combat environment is either in small groups for reconnaissance staying out of range of enemy guns, or in massed swarms to make it difficult for enemy gunners to pick out specific targets. The presence of guided missiles or corvette-class turreted weapons drastically shortens survival times, platforms mounting these should be targeted preferential if you are supporting a Jiilaak heavy force.

The Jiilaak's codename is taken from a bird found in marshes in the southern hemisphere of Higaara, an animal known for peering past the water's surface to prey on unaware fish. While kushan culture is fascinated to this day by the wildlife of the homeworld, Taiidani pilots seem to take some umbrage to this particular association, preferring to stick to phoneticizations of the ship's VTs.III armory code.

Max Velocity: 300 m/sec

Armor: 30

Firepower: 21

Coverage: 6%

Maneuverability: High

Mass: 40 tons

RU Cost: 35 RUs, build time 6s

Taiidan Confederate Systems Ships

(FFA) vK.IX/a.AS Assault Frigate

This unit is a remarkable piece of engineering. Commissioned in the Confederate core systems approximately thirty years ago, intelligence from the Republic points to this vessel as the bastard child of an Imperial-era Kudaark frigate upgrade project that foundered in the post-Empire chaos. Confederate engineers have since entered the usual Imperial-style centralized design cycle that issues regular incremental updates to a chassis to maintain parity with foreign powers.

The vK.IX/a.AS is noteworthy for its admirable performance under the circumstances; with a more fragile economy and volatile political situation at home, the Confederation shipyards produced a dependable and powerful starship by modern standards. Modern plasma cannon that run the length of the hull have excellent striking range and appreciable power, while medium coilgun turrets give protection to allied vessels from all threats. Rounding out the threat suite are a recently added pair of super-light coilgun point defense cannon on the flanks.

These additions have similar functionality to the point pulsar emplacements on the Reconciliation-class UNH Assault Frigate. Additionally, Confederate engineers have aggressively pursued an engine modernization program that has brought their power plants up to the standards of the Republic Bal-Kudaark frigate and Higaaran Reconciliation. It is this modern power supply that is used to fuel the vessel's extensive weaponry.

The ship is not without flaws, however. It has a worse power to mass ratio than any of its equivalents and thinner armor overall, and the accuracy on its light coilgun is quite low. Furthermore it struggles with large swarms of fighters that the extra cannon on Reconciliation-type units would be able to manage. This ship is thus commonly deployed in wings of five to ensure adequate firepower can be brought to bear on any target. Though it is slow, its weapons pack commendable punch for an aging design built largely with last-generation equipment. Aggressively engaging with destroyers, beam armed frigates, or flanking heavy strike craft and assault frigates will leave the /a.AS unable to adequately withdraw and its weaker armor will quickly spell its doom.

Max Velocity: 105 m/sec

Armor: 18000

Firepower: 123

Coverage: 65%

Maneuverability: Medium

Mass: 14000 tons

RU Cost: 575 RUs build time 60s

(FFI) vK.IX/a.IC Ion Frigate

Entered into mass production twenty five years ago, this unit is rapidly showing age when compared to Blaze frigates. Constructed in an era of smaller and simpler weapons systems, the /a.IC mounts a medium-sized beam weapon based on the Sajuuk-Cor system and taking advantage of the excellent design of the Mark IX frigate chassis. It compared quite favorably to the old Sajuuk-cor, sporting improved armor, light point defense, better redundant secondary systems, and improved mobility.

Unfortunately the Sajuuk-Cor is a design that is significantly over a century old. Modern heavy ion artillery units are not frigate chassis wrapped around a single beam cannon, but instead a frigate chassis cut down until all extraneous systems are removed save an oversized mothership-class superheavy beam. The Blaze beam system has significantly longer range and higher intensity at almost exactly the same rate of fire, allowing UNH ion frigate squadrons to deliver withering fire from behind their main battle line whilst /a.IC must enter cruiser beam cannon range to retaliate. Where the introduction of the point defense guns complements the medium coilgun turret on the assault frigate variant, here the point defense guns consume precious internal space, crew, and power for frequently little real effect on the battle. Often strikecraft breakthroughs involve whole attack bomber wings punching through an escort screen to volley heavy energy cannon fire on single targets. Against that kind of rapid attack the light point defense guns offer little response, and in a capital ship slugging match they are worthless. It is expected that an answer to the Blaze beam frigate will reach mass production soon addressing these shortfalls as best as possible by scaling up the beam cannon and targeting sensors until the Confederate fleets have an answer to the UNH's modern, superior design.

Though its beam is antiquated, this model has a good service record for its limited lifespan and at closer range is quite deadly. The ship is best engaged like any other ion frigate - at point blank range with turreted frigates, at standoff range with large craft, and with wings of bombers and interceptors.

Max Velocity: 105 m/sec

Armor: 18000

Firepower: 182

Coverage: 5%

Maneuverability: Medium

Mass: 14000 tons

RU Cost: 575 RUs build time 60s

FRERRN AGGREGATE SHIPS

The Frerrn Aggregate's overarching strategic goal has always been survival in the face of an overwhelming Imperial assault. To that end their planning has been that battlegroups will need to assemble on the fly in response to whatever enemy attack manifests and thus their ships are intended to have as much independent ability engineered in as possible. Frerrn make extremely heavy use of static defenses and minefields coupled with gravwell generators to create a defensive curtain.

Frerrn ships are durable, but their capital ships are quite slow in sublight speeds – of course, anticipating a fight to the death on their own territory this is only to be expected. On the offensive, Frerrn use extremely heavy Super-Capital class carriers as the core of their formations in conjunction with conventional assault tactics. They have almost no plasma weaponry in their war chest, preferring

to use railguns or coilguns, or missiles wherever possible. In order to handle more maneuverable foes, Aggregate battlegroups tend to stay in one massive formation when in defensive posture, and hyperspacing sub-formations into position to surround and destroy their enemies. They will use gravity well generators to prevent enemy withdrawal by hyperspace and large strike craft groups to isolate and destroy particularly fast or durable foes.

Their greatest tactical weakness is guided weaponry that can strike over very large ranges and accurately attack both mines and their strike craft. The Aggregate Navy is obviously aware of this and will prioritize targets with missile weapons. UNH tactical doctrine is to form a single counter-formation based heavily on Missile Destroyers with heavy Support Frigate and Corvette escorts if the formation is able to maneuver. When surrounded or unable to maintain the range, UNH assault frigates and cruisers are good matches for their Aggregate counterparts, but the decisive factor in a close-range engagement will be good targeting discipline. While generalization is the Aggregate Navy's central doctrine and their strength, our planning and exercises indicate that a disciplined commander can defeat them in detail. By only employing our strike craft on the flanks of their formations where only a few of their ships can deploy their point-defense guns will minimize our losses. By striking at the heart of their formation with heavy anti-ship weapons will render all their light and medium caliber kinetic weapons inefficient and ensure a favorable exchange rate.

(FTI) Project 0673A19 / Hellhound A19 Heavy Interceptor

Originally produced as an emergency reaction to the Taiidani Empire's initial run of Triikor-class fighters, the Hellhound proved to be a success it's designers would improve upon for generations to come. Today, as confederate expansion and modernization threatens to replace the Triikor for good, it appears the Hellhound will outlive it's rival by a comfortable margin. The venerability of the design causes the uninformed to scoff and favor more exotic and exciting fighters, but in truth practically every component of the design has been upgraded or redesigned within the last generation of fighter design, and it is a match for any contemporary design.

Occasional experiments with other options aside, the Hellhound has since it's inception carried twin 8-cm automatic cannons. Over the course of the fighter's history, it's designers have pushed for ever increasing magazine capacity in a bid for combat endurance, with each expansion coming at the price of perennial jamming issues. The modern variation has expanded to 1128 shells per weapon, though many experienced Frerrn combat pilots have voiced a preference for the older and more reliable 1008 round variant.

Max Velocity: 267 m/sec

Armor: 150

Firepower: 26 (game reports 48 erroneously due to gun slaving)

Coverage: 6%

Maneuverability: High

Mass: 60 tons

RU Cost: 55 build time 18s

(FFI) Project 0788A3 / Ripper A3 Ion Cannon Frigate

The Ripper Ion Cannon frigate does not follow the standard for frigate designs for the Galactic nations. It was not an adaptation of an extant Assault frigate design, but a standalone design developed in late 63 AHL as a replacement to the 200 year old Project 0627A11 "Conqueror" class ion cannon frigate, built as part of a sweeping upgrade program to modernize the Aggregate's aging anti-capital ship fleet with tougher armor, more advanced EW systems, and most importantly improved power plants.

The 'Ripper' was overwhelmingly successful in trials, outperforming the benchmarks set by the venerable Sajuuk Cor-type Taiidani ion frigate and boasting impressive durability. Frerrn military planning decided to expand their modernization efforts to their entire range of frigate-class vessels, implementing a long-term plan of rolling retirements and refits on a class-by-class basis, replacing their frigates first due to their large numbers and their integral role as the first line of defense for the Aggregate. That upgrade program is still working to this day, though as the first ship most of the Aggregate's ion frigates are now Rippers.

This frigate does not differ much from its modern counterparts in the Republic Navy or the UNH in terms of primary weaponry. It's equipped with one super-capital class ion cannon with heavy influence from captured Taiidani weaponry and technology. The Ripper also has a light twin-barrelled anti-fighter coilgun turret on the dorsal superstructure. Their accuracy is insufficient, but large squads of this frigates must be engaged in the blind zones, especially from below to minimize attrition damage.

Max Velocity: 105 m/sec

Armor: 18000

Firepower: 182

Coverage: 5%

Maneuverability: Medium

Mass: 14000 tons

RU Cost: 575 RUs build time 60s

(FFA) Project 0790A3 / Reaver A3 Assault Frigate

The Reaver-class assault frigate was the first part of the Aggregate's expanded rolling modernization program, built out of a heavy hull on the Ripper-class ship's power plants, structure, and control systems. The first prototype was designed in less than a year as a response to advanced Taiidani assault frigates, but full implementation of the Reaver-class remains far in the future. The Aggregate always preferred large numbers of generalist ships, and so fielded a truly staggering number of assault frigates that require upgrade to the Reaver standard. The most experienced Aggregate battlegroups have all been issued top-of-the-line equipment – Reaver A3s included. Many more primitive ships serve in the backwaters as training vessels or have been mothballed in the case of emergency.

The Reaver has as its primary armament two large quad-barreled rapid-fire railgun turrets, one dorsal and one ventral providing an excellent field of heavy fire. It has two guided conventional bomb launchers mounted along the keel for engaging more hardened targets. These projectiles are large, slow, and have limited maneuverability making them all but useless against strike craft, but they provide good damage on larger targets. From its parent, the Reaver inherits a dorsal dual coilgun turret for

discouraging fighter attacks. In general it has a smaller blind zone than most frigates, so it must be engaged with caution.

Following the Frern shipbuilding traditions, the ship has heavier than average armor and lower than average speed. The UNH has not yet captured any ships of the Reaver spaceframe, but given the Aggregate's propensity to numerous incremental refits constantly ongoing it can likely be quickly updated with small-scale improvements.

Max Velocity: 105 m/sec

Armor: 22000

Firepower: 131

Coverage: 75%

Maneuverability: Medium

Mass: 14000 tons

RU Cost: 575 RUs build time 60s

(FFS) Project 0793A4 / Chirurgon A4 Support Frigate

This modification of the Reaver hull offers modest firepower with a dorsal heavy turret and defensive gun. The ship's bow has been lengthened and structural elements expanded to make room for a spacious internal hangar. A spartan and functional ship by any stretch of the imagination, the Chirurgon is known for its exceptional durability, with extremely thick armor providing maximum possible protection for the pilots and their fragile ships.

Internal repair and refit is taken care of in a series of cradles nestled above the docking area, where heavy waldos allow the crew to strip down and rearm strike craft at good speed. The Chirurgon offers no external docking capability whatsoever and is thought to be somewhat more limited than other fleet support vessels in its capacity, nevertheless it is a functional pocket carrier.

A notable problem the Aggregate fleets have encountered is that despite its heavy armor the Chirurgon's weapons cannot repel another capital ship and its engines cannot reliably keep it away from the fighting. Thus an Aggregate formation in poor order can often be teased apart and defeated in detail, leaving these vessels the most vulnerable.

Max Velocity: 105 m/sec

Armor: 22000

Firepower: 54

Coverage: 30%

Maneuverability: Medium

Mass: 16000 tons

RU Cost: 500 RUs build time 55s

(FFD) Project 0796A2 / Bombardier A2 Drone Frigate

The Aggregate's remote weapons program appears to have taken off rapidly after the fall of the Empire. While the average Aggregate citizen is no stranger to war and would not admit to fear of death in battle, it nevertheless is likely that the fewer Frerrn deaths in a conflict, the better for civilian morale and the less support for conflict will erode over time – serving the Aggregate's expansionist interests well. It is our estimation that the Bombardier-type remote weapons control frigate was designed to provide a defensive screen to a formation of hyperspace-capable ships without risking vulnerable fighters and their precious pilots.

The Bombardier A2 is a new weapons system in the arsenal of the Aggregate. It has a heavily built up and armored superstructure on top of the Ripper-type hull, likely make room for the shielded tight-beam control pods for its formation of eight drones. The Bombardier also features a ventral hangar bay for quick servicing of its large drones. The drones themselves appear to be the product of an independent Project from the Bombardier, one that has not matured as rapidly as the frigate itself. The drones have limited combat endurance and little ability to independently operate far from their control ship, operating more as a set of escort fire platforms. They also are significantly larger than our own drones, featuring a level of armor and firepower somewhere between a fighter and a corvette, sporting a pair of light coilgun turrets on either side of the drone's hull. We can expect the standard Frerrn approach of constant incremental upgrades to eventually expand the Bombardier's drone's capabilities to include multiple mission types like our own drones.

Regular Aggregate forces do not appear to have common access to this technology. The Bombardier-type vessel is not publicly displayed and is not listed in any commonly available Frerrn news or information databases. It is only through recent Intelligence breakthroughs that the existence of this ship is indicated. Therefore, UNH Intelligence cautions that available information on the Bombardier's capabilities may be incomplete or erroneous at this time.

Bombardier	Drones (8x)
Max Velocity: 105 m/sec	Max Velocity: 335 m/sec
Armor: 17500	Armor: 200
Firepower: –	Firepower: 25
Coverage: –	Coverage: 80%
Maneuverability: Medium	Maneuverability: Very High
Mass: 14500 tons	Mass: 160 tons
RU Cost: 800 RUs build time 60s	

(FFC) Project 0803X7 / Moonshadow X7 Cloaking Frigate

A fleet the Frerrn cannot outrun they may be able to evade.

Project Moonshadow is known to be one of the most unsuccessful Aggregate military engineering

endeavours to date. Project Ripper introduced a generalized chassis that was believed to be easily adapted to any role including that of traditionally purpose-built chassis. Most nations use frigate-class power plants in totally new hulls for generating defensive space-warping gravity wells or cloaking fields in large part due to the complexity of the machinery and their frequent needs for specialized hull geometry. Moonshadow is just the latest name for an ongoing Aggregate attempt to mount their indigenous cloaking technology, the Project O522A13 cloak generator, on a combat frigate chassis. But even after nearly 200 years of development and two generations of frigate platforms coming and going, the cloaking generator is still much bigger and heavier than similar Taiidan or Kushan designs and much more unstable.

The Aggregate armed forces tend to prefer that they have a number of starship 'templates' that they can refit for whatever threats the nation faces, and thus it has been a standing directive that fleet design prepare modular cloak and gravity well generating technology that can be applied quickly to any spaceframe of any size in the field. It is currently the assessment of UNH Intelligence that the aforementioned power and hull geometry requirements for these specialized functions will render that goal ultimately futile, but it must be admitted that for its many flaws the Moonshadow is a promising step in that direction.

The Project O522A13 cloak generator itself is extremely hazardous and volatile, famously exploding when the central cloaking core is disturbed in the slightest. Our analysis of several specimens reveals that a likely cause is insufficient shielding. Even minor vibrations tend to make the heat sinks come into contact with the core, and over the family of 13 revisions to the generator it's never managed to break its habit of exploding both as soon as its armoring fails and when the crew least expects it. At least the modern variant is safer — not that the crews seem to be that reassured, as the Moonshadows are widely believed to be extremely unlucky, with at least one famous Aggregate fleet-wide rumor that during a disagreement under cloak, a single physical blow between the command crew destabilized a Moonshadow's generator core and caused the ship to explode.

The Moonshadow X7 modification is publicly stated to have a completely stable situation for its cloaking device, and can project a cloaking field in a small radius to hide several other vessels. While it possesses the strong armor of other Ripper-family vessels, the threshold of damage that needs to be inflicted before the cloak generator's instability becomes a factor is low. Republic border patrol forces have noted a significant number of Moonshadows detected on exercises, indicating that at long last this part of the long-running Aggregate dream of on-demand cloaking will be leaving the "prototype" stage and entering mass-production. Compared to our own cloaking generators it is likely less efficient but more resilient, with better speed and acceleration. It also has no defensive weaponry of its own, relying on its battlegroup to provide support.

Max Velocity: 105 m/sec

Armor: 15500

Firepower: --

Coverage: --

Maneuverability: Medium

Mass: 13750 tons

RU Cost: 875 RUs build time 80s

(FFC) Project 0791 A9 / Stalker A9 Minelayer Frigate

No factions has loved static defensive minefields to quite the same extent as the Frerrn Aggregate, which deploys them in large numbers during every major action they undertake. The infamous and consistently successful Frerrn trap consists of a feigned retreat ploy, dropping mines as they go around tempting injured capital ships. Often foes will find that as the Frerrn rejoin battle, they have strategically rearranged to better fight their now-weakened pursuers. The most popular and widely used minelaying platform in the Aggregate's fleet is the Stalker-class, so named for its frequent use offensively as well as defensively, deploying its heavy anti-capital ship mines to entrap foes and prevent retreat.

A modified Ripper hull at its core, the Stalker carries a supply of high-performance heavy fusion mines designed to quickly close with a capital ship and penetrate weaker flank armor. Often these mines are keyed to home on heat sources to preferentially penetrate and damage enemy engines, allowing the Frerrn to regain the advantage of maneuverability. With no other defensive weapons, the ship is practically un-Frerrn in its single-minded focus on deploying mines.

The obvious applications of combining the Moonshadow cloaking frigate and the Stalker minelaying frigate is not lost upon Frerrn commanders who will use them to stealthily pre-position minelayers in strategic locations. Conventional Frerrn units will offer battle, forcing the opponent to either allow the Stalkers time to place their mines or split his forces. Given their threat, Stalker crews are known to regularly request rotation away from what is thought of as a high-risk job. On the other hand, few other frigate crewmen can boast of crippling a cruiser without any support from other fleet units, so gloryhounds and hotshots continually replace vacancies among their crews.

Units equipped with antiprojectile weapons are highly recommended to be deployed against any Frerrn force suspected of incorporating these heavy minelayers.

Max Velocity: 105 m/sec

Armor: 18000

Firepower: --

Coverage: --

Maneuverability: Medium

Mass: 15000 tons

RU Cost: 750 RUs build time 80s

(CAH) Project 0486A8 / Tyrant A8 Heavy Cruiser

The Tyrant A8 is the most commonly fielded cruiser-class vessel in the Aggregate. Mass produced even today in a run that has swelled to over four hundred hulls despite the emergence of a more modern A9 variant, this vessel is a powerful warship and serves in dual roles as a battlegroup flag vessel and a heavy assault and defense unit.

The Tyrant class is one of the old breed of Aggregate warships stretching back to before the beginning of their centuries-long struggle with the Taiidani. Of the original Tyrant (reclassified A1), one vessel still remains in service currently under the command of a Templar Frerrn named Reski. Like its commanding officer and the Aggregate as whole, this lone surviving vessel of nearly half a millennium of

interstellar warfare has acquired a reputation for survival no matter the circumstances. One functional and one decommissioned Tyrant A2 exist in naval museums, while several A3 and A4 Tyrants are trainers. Dozens of A6 and A7 Tyrants are in mothballs deep behind the front lines under heavy guard along with many other older Frerrn units as a last-ditch strategic reserve in the event that all other ships are engaged and the Frerrn populations are threatened.

Like all Frerrn vessels, the Tyrant was conceived in an era where technology was rapidly changing around the development of hyperdrive and contact with other species. The Frerrn engineering talent tends towards practicality and future-proofing, and like in all their warships they applied both heavily to the Tyrant. Its interior spaces and structural members are highly modular and their computer systems and sensor packages were overengineered at their creation with an eye towards accommodating more advanced and complicated equipment. Armor plating had a fascinating interlocking design that allowed entire layers to be replaced quickly and simply, and the ship's power and control systems were distributed with an eye towards accommodating active defenses.

There have thusly been few differences between improved earlier Tyrant variants and modern Tyrant variants. The A8 variant has as its primary armament three fixed-forward heavy ion beam weapons clustered on the nose. To strike at more maneuverable targets or targets attacking from unexpected vectors, it features two forward-mounted long range torpedo tubes and six quad rapid-fire railgun turrets. For individual defense it has four point-defense turrets aimed at destroying attack bombers that venture too close, and extraordinarily heavy armor above and beyond most other Heavy Cruisers. It also features the ability to recover a small number of fighter-class strike craft. The Aggregate regularly deploys its Tyrants in pairs, both with their bays half-full so that in the event that one cruiser is lost the other can still recover its escort and depart.

While it is a formidable foe to assault and a powerful warship in formation, it is vulnerable to weapons that outrange it as all the weapons and armor slow down even the robust Frerrn power plants tremendously. The fixed ions also render it vulnerable to close-quarters attack by ships with turreted beam weapons like Destroyers or Cruisers. It is less vulnerable to a bomber strike unsupported, but Tyrants that stray from their escorts. A calm and organized strike is required to exploit its weaknesses — guided missiles or strike craft to neutralize its escorts and suppress its defensive turrets so that bombers may approach, and capital ships to draw fire from its turreted railguns.

Max Velocity: 60 m/sec

Armor: 120000

Firepower: 1013

Coverage: 100%

Maneuverability: Very Low

Mass: 550000 tons

RU Cost: 4000 RUs build time 500s

TOBARI STAR EMPIRE SHIPS

For millennia the Tobari Star Empire has controlled a number of isolated fiefdoms along the rim of the galaxy, ancient bastions of their former glory. Each of these territories in turn may have one or several ruling bodies all anarchically claiming to be part of the long-defunct Tobari Star Empire. At their peak, the Tobari were on the cusp of achieving galactic supremacy, with their technology advancing rapidly and a limitless fleet of ships knitting the stars together into a cohesive whole. The decay of that empire was an interminable series of small conflicts slowly grinding down Tobari central authority, slowly destroying or retiring their vast fleets. Over time their territory became less and less contiguous, and

their culture turned inwards, with a greater emphasis on controlling security and information and less emphasis on strategy and expansion.

Tobari are defined by contradiction. They claim omnipotence in the council, but are fractious and divided. Their ships bear the sleek streamlining of an opulent and wealthy race, but their industry and technical skill has been on the decline. Instead of a uniform military, their fleets are much closer to the bandit hordes that stalk the spaceways. Some Tobari ships are technological marvels from their glory days – advanced warships with powerful, Bentusi-style gravitational drives and powerful miniaturized ion weapons. The long, flimsy-looking barrels belie the advanced composite armor and compact power sources that lend Tobari ships striking power all out of proportion to their size. The signature Tobari weapons system is a hyper-velocity coilgun of extreme power and accuracy.

Even the more advanced ancient Tobari ships are not invincible, however, and their numbers force them into limited deployments and in engagements they can quickly retreat from.

(FFA) Mk.T / Piranha- class Assault Frigate



PART 5: FINAL MOD INFORMATION

KNOWN BUGS

Needless to say any help with these would be awesome.

Pew Pew : Certain units will fire their weapons "in excitement" as it were when given attack orders, even though no target is in the line of fire. Particularly guilty of this is the Vaygr Destroyer which will fire its ion beams frequently at empty space.

Sideways Bullet : Certain units will, right before pulling away from line of fire on the target, start generating their bullet FX at illogical and crazy angles. A good example is on the UNH Interceptor.

Annoying Sounds: Vaygr Ion Beams occasionally but not always have an irritating loud chirp at the end of their sound effect. Any insight into this would be awesome.

Took until 2013, but we may have this one licked. Let us know if you hear it.

Descending to a horizontal: Vaygr destroyer and several other fixed-beam ships will attempt to descend to a horizontal plane before firing even though they are in range.

The light, it burns us: Vaygr Flare gunship weaponry will, on some computers and for seemingly no reason, have hit impacts that expand to fill the level.

As of HWRM this seems gone, but let us know if it recurs.

What Strike Craft?: The build menus do not accurately display your fighter or corvette counts or caps. No idea why, and we've sought outside help on it.

CREDITS

Last updated: 12/23/2015

Current Active Development

Avatar II: Concepts, textures, scripting, effects, writing, sounds, art direction, motivation, voice acting, teensy weensy bits of .hod-ing, testing.

Dark Sentinel: Modeling, animating, texturing, voice acting, heresy, terror.

Doc: Extensive modeling & texturing, inspiration, limitless enthusiasm.

Siber/EatThePath: Modeling, voice acting, .hod-ing, background generation, level design, lua scripting, writing, testing, infinite patience

Voice Acting

Cerino: Misc

Dark Sentinel: Wave announcer.

Dee Hawking @ Aralonia: Intel officer Ara Fadel Soban.

Florian Zanger: Renegade Taiidani captain.

Icefox: 15th Fleet Command.

Melanie Mercado-Conner: Lihal-Adaar Carrier Command

Siber/EatThePath: Misc

Comprehensive Developer Listing

Avatar II: Concepts, textures, scripting, effects, writing, sounds, art direction, motivation, voice acting, teensy weensy bits of .hod-ing, testing.

Alice: Graphic Design

Adhira: Animation, modeling UNH_DRStandard

Dark Sentinel: Modeling, animating, texturing, voice acting, heresy, terror.

Dee Hawking @ Aralonia: Testing, voice acting, inspiration, enthusiasm, neon green, purple

Doc: Extensive modeling & texturing, inspiration, limitless enthusiasm.

ericrajuin: Modeling & texturing UNH_CASTandard's energy cannon turrets.

Hades: Modeling VAY_DDStandard

Icefox: .Lua scripting, voice acting, mission scripting, infrastructure.

Kaelis: Technical help, VAY_CTGun model and textures.

MachinesInMotion: Modeling VAY_DDStandard

MRecon: Background generation

Schwartz: Modeling VAY_DDStandard

Siber/EatThePath: Modeling, voice acting, .hod-ing, background generation, level design, lua scripting, writing, testing, infinite patience

We Couldn't Have Done Anything Without

4E534B: Making a boatload of useful tools

ArtilleryWhore: Some pretty nice tweaked attack styles

DKesserich: For excellent work on the HWR Blender Toolkit

Beelzebuddy: Drone code example

Bobboau: Freespace 2 upgrade project beams provided key inspiration for new ion beam VFX

CnlPepper/B5TC mod team: Awesome tools, tutorials, and shaders

EvilChaotic: Teaching Dark Sentinel how to mod Homeworld 2, basic Frern carrier model.

Le Sun Tzu: For answering a whole bunch of questions on modding

MatthCoFreak: For past lowfi release versions

Mikael: Numerous scripting examples and modules, such as the starting fleet management and map production framework

Relic: For making a great game in 1999 and a decent mod platform in 2003

Sastrei: Help with the transition to Remaster, particularly rebuilding

Gearbox: For finally expanding the engine's capabilities in 2015 and renewing the fanbase.

Testing Thank You's

Alice, Beast, Dee Hawking @ Aralonia

Content Used

Denny Schneidmesser / Danman87: Battle music "Entering the Stronghold" and many hours of excellent listening to his other tracks.
<http://dennyschneidmesser.com/>

DetonationFilms: Fireburst01 FX from their free package. Free independent professional-quality FX for films and television. <http://www.detonationfilms.com/>

FatKidWitAJetPak: Ambient music "Ruby Moon", "Dead Snow", "Breathe With Me" <http://fatkidwitajetpak.newgrounds.com/>

John-Gaden: Menu music "Ennui". <http://john-gaden.newgrounds.com/>

Nutritious: HW1 remixes "Ancient Enemy", "Fallen", "Deep Space"
<http://sites.google.com/site/nutritiousmultimedia/nutritiousmusic>

Sekhem: Ambient music "Cavorite Exterior". <http://sekhem.newgrounds.com/>

teh_strelak: Vaygr destroyer point defense sound effect. Amazing resource, incredibly professional FX. <http://www.fpsbanana.com/members/597879>

Waterflame Battle music "Dark Dreams" "Control: Crowd", and "Afterburners". <http://waterflame.newgrounds.com/>

Gravey music "-Orchestral Theme 1-" "-Orchestral Theme 2-", and "-Orchestral Theme 3-". <http://gravey.newgrounds.com/>

CONTACT INFORMATION

Relic News thread: <http://forums.relicnews.com/showthread.php?t=198445>