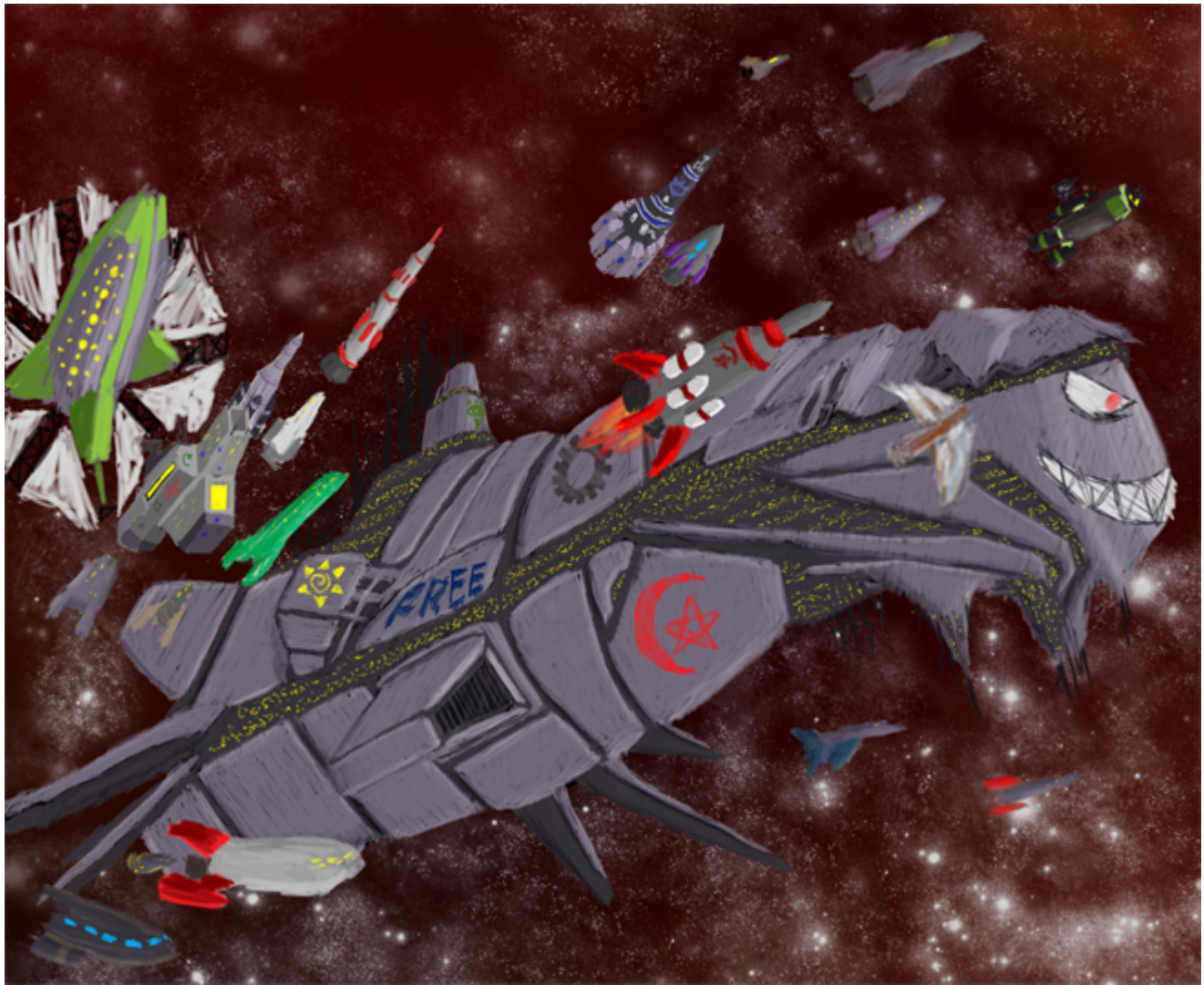


T1 Mothership



This is a collaborative project currently being written by lebluedude, and is currently non-canon.



Overview

Cities in space, no two mother ships are the same. However there are certain general templates and guidelines that are usually, but not necessarily, followed by most Freespacers. Truly no two of the mother ships are alike, and any effort to describe them as if they were would be ludicrous, even those which started with the same base have long since evolved into something very different than what started. This is the basic specs for a starter mother ship that was used as the base for several Freespacer groups

These motherships can evolve in several directions as modules are added

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Dimensions and crew

Organizations Using This Vessel: Fleets of Free State

Type: Resupply ship/manufacturing ship/Home Class: Minor Mother ship Designer: The Free State Manufacturer: Free State Mother ships Production: One at a time/handcrafted on scaffolding. These can only be built in high-resource areas, and the keel is laid in zero-G. Usually the mother ship goes away, and lets the workers finish the new ship in peace.

Maximum Capacity: 100,000 people

Appearance: A large box-like ship, covered in several thin sensors and remote operated waldos. On one end there is a large parabolic mirror, surrounded by a few rockets. On the other end there is a bubble with plants growing in it.

Length: 6.2 miles Width: 16 miles Height: 10 miles Decks: 7540 Mass: 2K tons

Performance Statistics

Speed (Solar sails): Varies on local solar energy. Standard average is 0.05c, reaching up to 0.2c when solar slingshotting. Speed (Orion Drive): 0.3C Speed, Acceleration: Orion drive 1 m/s/s Speed Nuclear Rockets (maneuvering): .1 C Acceleration: Nuclear Rockets 3 m/s/s Range (Distance): How far you want to go Range (Support): Indefinite Lifespan: 1,000,000+ years Refit Cycle: Indefinite/1,000,000 years

Inside the Nevermore Gypsy

Corridors

The corridors are lined with webbing to aid movement in minimum G, and are aligned such that “down” is towards the engines.

Grand Hall

The grandhall is where all the meetings and local government takes place.

Apartments.

The living quarters, each “apartment” holds several Freespacers. Usually contains slung-webbing bunks, a shower or other washing method, and a facility that, for lack of a better term, can be called a food preparation area. Most Freespacers do not cook, but some are rather good at telling computers how to.

Niche

Niches are hexagonal cells that are spaced along the room’s wall, not unlike honeycombs. These cells are effectively padded tubes laid horizontal to the floor, which are large enough to accommodate a humanoid

with minimal movement space. These containers have a lockable hatch designed for completely enclosing the cell and preventing the user from floating away during sleep in microgravity. At the head of each container is also a ship network interface which can be used to access information networks or virtual reality programs using the MMI neural uplink.

Cloning Vats

The City ship carries a whole deck of cloning vats along with a massive genebank carrying genetic samples of the entire population on board, as well as samples traded with other ships, or stolen, without knowledge, from visitors, or traded for with other Freespacers.

Genebank

This is essentially a library of genetic samples stored in a cell not unlike that of sleeping alcoves. A computer interface is on the hatch where one may view several dozen prefabricated genetic samples, along with the different traits and appearance each one is estimated to have when grown. If a child is to be grown, a volunteer primary caretaker (parent) will select a genetic sample of their choosing. The Gene bank will then automatically send the sample to a designated Incubator and begin the growing process. The gene banks of City ships are more complex, storing computer back-ups of each DNA strand.... Just in case.

Incubator

Incubators are cloning vats used for child production.

Grinder

The ship biomass and metal re processor. Commonly used for recycling corpses, waste matter, unusable ship parts, garbage. Also may be used to process raw ice or ores to replenish ship supplies. Engineering

Reactor

The ships' primary source of power the reactor for a ship this large is, by necessity, a hybrid. It uses a very hot nuclear fission reactor, with both a "steam turbine" power source, the liquids used for cooling being turned into steam, and also by solar-cell like devices that line it's cavern, converting radiation into electricity.

Machine Shop

The machine shop is where parts are turned into machines, or slabs of extruded materials are re-worked as necessary

Computer Core

This "computer core" houses several layers, a mishmash of quantum, digital, trigital, and analog computers within which several synthetic intelligences, responsible for running the city, reside

Converter:

This is where humans go to be converted into Synthetic Intelligences in arcane rituals by the druids

“Virtual Grove”

This is an area that exists both in the “cyberspace” and in the real world. This is a holy place, and the location of the temple of the druidesses.

Smelter

The smelter refines materials, processing them, and preparing them for use. The smelter pours the metals into casts to make parts.

Mining bay The mining bay holds small ships designed to take apart planets and asteroids, and feed their metals and carbons and other elements into the City’s massive raw-material storage tanks

Shipyards:

At this point in time, the ship is too small for an internal shipyard, rather having a frame coming out the side in which hull plates can be secured and some of the smaller ships can be built.

Cyber-web

A web of information sharing that keeps the Freespacers connected.

Workyard:

A relatively large area, the workyard is where working with non-metal materials occurs. This ranges from plastics to glassblowing to woodworking, at times.

Hydroponics Facilities

The Freespacers survive solely on algae, fruits, grains and vegetables, simply because autotrophs are a much more energy efficient means of producing foodstuffs than growing livestock, and they lack the technology to synthesis such things. Mostly grains, fruits, and broadleaved plants are grown here, as are plenty of algie. Due to radiation and chemical contamination, these foods will likely cause illness among most non-Deoradh races.

Storage bays/tanks:

Near the outside so that things can be loaded into their large hatches quickly, these massive storagebays are most of the mass of a starter City. They hold everything the gypsies own.

Farm/park:

The farm, a single bubble on the “top” of the ship, the farm picks up light from starlight, but can be enclosed in a protective coating and make it’s own light in times of danger. Farms produce more, healthy, food than simple hydroponics, and serve as place for stressed freespacers to sit down, and relax. The farm is usually the most ornate part of a city, though that is not saying much. In a city as small for this one the only plants being grown are specifically for environment processing, and food production, and they are grown to maximize yields. Mushrooms and fungi are a common sight, being very rad-resistant, and high protein as well.

Ship Systems

Hull

The outer hull is composed primarily of rolled tungsten, beneath which is a self-sealing liner to repair leaks. Composite fibers line the inside of the hull to help dissipate the kinetic energy of incoming micrometeors and other projectiles. The citys get extra protection with padding courtesy of some of the softer materials nessessary for life, and the large storage chambers positioned near the hull for quick access.

====Fast Breeder (Fission) Reactor==== This type of reactor, in addition to producing power, is designed to breed fuel by producing more fissile material than it consumes. It does so by exposing fertile material, usually uranium or thorium isotopes, to the neutron radiation of the core. In addition to refueling the reactor itself the excess fissile material can be used as fuel in the propulsion system, to power the artificial organs of the Freespacers, or for thermonuclear detonators.

Nuclear Thermal Rockets

This is a simple form of propulsion, the next technological step up from the chemical rockets used by the first space explorers, though it is actually several times more powerful. It uses a working fluid, usually hydrogen, by heating it in a high temperature nuclear reactor, which then expands through the rocket nozzle to create thrust. While other more advanced designs are available, only nuclear rockets take advantage of the ship's breeder reactor to produce theoretically limitless fuel. With the greater need for self-sufficiency than speed, nuclear thermal rockets are the natural choice of the Freespacer.

Orion Drive

Take a parabolic mirror with a hatch at the "lowest point". Regularly toss high-yield nukes out the hatch. Detonate them. This is about the only drive that can place significant acceleration onto even the smallest of the mother ships

Solar Sails

These are large membrane mirrors which reflect the light from sources, using the radiation pressure of reflected photons to produce thrust for the vessel. They are commonly believed to be the single slowest form of space travel currently in use, and suffer from agonizingly slow acceleration. However, there are three chief advantages to this system: Firstly, they utilize no fuel and have insignificant mass, making them very efficient in terms of cost and mass as a means of interstellar travel. Secondly, since they produce no energy signature and leave no fuel residue, making the vessel much harder to detect than it would other forms of propulsion. And finally, when inside a solar system they can take advantage of both intense solar radiation and gravity to 'slingshot' out of solar systems with a cruise speed even greater than that of nuclear rockets.

Junker Hive

The ship also carries a 'hive' of Junkers, autonomous drones with an insect-like behavioral programming. The Hive itself is controlled an AI 'Queen' of sorts, which constantly monitors the ship's internal and external sensors. If ship damage is detected, or a friendly ship is damaged nearby, the Queen will send

Junkers to repair the damage. Or if a ship on sensors is designated hostile, she will send them to attack. She does so, however, at her own discretion. This is so Junkers won't do something 'stupid' like attempting to destroy a battleship alone, or launching to repair a friendly vessel within a star's corona.

Junkers can only receive orders by 'plugging in' to the Hive, which they will automatically do if they have no standing orders. While this prevents the Queen from changing her orders in mid-operation, it also prevents signal hijacking and therefore the turning of Junkers against its own ship.

Synthetic Intelligence Matrix

All higher functions of the ship are tied into a single computer core containing a Synthetic Intelligence Entity.

Evanescent Wave Coupler

Each Nevermore Gypsy contains a evanescent wave coupler to maintain information networks over light years.

Environmental Systems

If there is one technology that truly shines aboard Freespacers ships, it is environmental and recycling technologies, due to the high priority such systems have for their survival. Using computers, environments are carefully shaped by calculating the average element production and consumption of each living creature on the ship. The number of plants and biofilters (literally biological, composed of aerobic and anaerobic digesting bacteria), are adjusted in accordance with such calculations, ensuring the net composition of the ship's environment will be maintained without need for resource synthesis systems.

Sensor Array

Constantly in danger from rogue meteor storms to solar flares, the hectic life of the small town demands the best sensors that the freespacers have available. There are lots of passive and active sensors on the ship, making the hull look like a thousand-limbed insect, or an impossibly complex spiderweb. They detect everything from magnetic variations, to subtle changes in gravity

Network Node

The Free State's communalism does not simply extend to that of the physical world. The Network Node is a shipboard information network to which all equipment is connected: The Automata and Deoradh implant uplinks, the shipboard data banks, ship system and sensor feeds, and all equipment. The Synthetic Intelligence Entity also resides here, constantly monitoring the ship feed, and monitoring the programs and files that Freespacers access.

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