

TATC

About the TATC-0001

The TATC-0001 is a fine example of a space vessel with minimal “lights and buzzers” the sole purpose of the TATC (Trans atmospheric Transport Craft) is to be used to haul materials and people and serve as a workhorse.

History and Background

The TATC uses similar technology to the lost TAEC-0005 Star Seeker, but holds several improvements to allow for hauling of materials and individuals in bulk. The main use of the TATC, at least by the Lorath, is to move equipment and labor for settlement of the desert moon that holds one of their very first attempts at off world expansion.

Dimensions and Crew Compliment

Organizations Using This Vessel: Lorath Space Exploration Division – Psionics House. Type: Short Range Cargo Vessel Class: TATC-0001 Designer: Lorath Psychic House Aerospace Division in cooperation with Shaman House test teams.

Manufacturer: Lorath Shipyards – Shaman House Settlement Division. Production: Units are produced as needed or when previous units are found to have exceeded their operational life time Crew: two pilots, two engineers, ten “cargo engineers” Maximum Capacity: Five hundred fifty humanoids Appearance: The vessel does not appear to be highly stream lined. The fuselage of the vessel is approximately ten meters tall, the width of the fuselage is twenty five meters, the width including the engine structures and wing structures would be forty meters. The length is fifty meters. The external color is mainly shades of grey, excluding the underbelly designed for atmospheric re-entry, thus is a deep black.

Length: 50 meters Width: 30 meters Height: 10 meters Decks: 5 Mass: 213,000 pounds (96,615 kilograms) with bare payload

Performance Statistics

Speed (STL): .425 Speed (Aerial): Mach .99 (761 mph) (1,224 Kph) (Sustained flight) Speed (Atmosphere Escape): 30,000mph (48,280 kph)

Range (Distance): 1 Light Year Range (Support): One Month active crew, four years in stasis. Lifespan: Currently in service for two years, minimal rate of failures. Refit Cycle: Upon the time of new technology

being available and when vessel is landed.

Hull Structural Points: 10 Shield Points: 8

Inside the TATC-0001

Bridge: The bridge layout is that of a simple cockpit designed for the presence of two pilots in most cases. When required the cockpit allows for two more pilots if needed.

Engineering: Engineering is located in the aft section of the TATC-0001; the area is a 20ftx20ft square with a height of ten feet. Located in the far back of engineering is the fusion generator access panel allowing for maintenance upon the fusion generator core. Control panels and display monitors are located on the side walls of the engineering section.

Quarters and living area: the crew quarters and living area is located in the upper middle section of the TATC-0001 between the engineering and cockpit sections. Located in the living quarters are fourteen bunk style beds that can be converted to basic stasis pods if required, a refrigeration unit, a cooking heating coil, a microwave like device, and a private computer access allowing for communications and entertainment.

Main Cargo Section: The main cargo section is a series of three decks of bare rooms that are forty meters in length, and twenty five meters in width, the height of the rooms are one and a half meters per deck, on the far end of each room is one waste disposal tube, and one liquid supplement supply tube. Built into the bulkheads of each cargo containment room are several electro-magnetic rails that are used to brace loads in place, and also can double as focused EM rods, to be used to "cook" organic "cargo".

Secondary Cargo Section: The secondary cargo section of the vessel is located above the living quarters. The secondary cargo section is a forty meter in length room, twenty meter in width, and one and a half meters in height. The secondary cargo section is intended to be used to carry more... important... cargo.

Ship Systems

Primary Propulsion: The primary method of propulsion for the TATC-0001 is a fusion reaction power plant intended for sub light speed travel. **Secondary Propulsion:** The secondary method of propulsion for the TATC-0001 is a combined system of Scram jets and basic jet engine propulsion intended for in atmosphere and trans-atmosphere operations.

Hull: The TATC-0001 is mostly comprised of a hard carbon material that is nearly identical to diamond. On the belly of the TATC-0001 is a dense ceramic type outer coating designed for atmospheric entry. Also overlaid over the inner and outer hull are several layers of carbon polymer armor.

Airlock System: Three airlock systems have been installed upon the TATC-0001, one hatch style airlock located on the upper hull of the vessel that includes an extendable docking tunnel. The second airlock is located on the port side of the vessel and is constructed as a simple hatch meant for boarding and disembarking on land. The third is a ramp like hatch that is located on the bottom aft section and is

intended to be used as a means of loading and unloading cargo.

Escape Pods: The living area has been designed to double as an emergency escape pod that will only allow for three days of normal life support or five years of stasis. The launching of the escape pod is done by uncoupling twelve sets of docking clamps located adjacent to the cockpit, engineering, and cargo sections.

Environmental Systems: the TATC-0001 is equipped with temperature control, air pressure regulator, air recycling, water recycling, organic matter recomposition and recovery, stasis condition activation device (Ship wide freezer).

Air Recycling System: the air recycling system is reliant upon a series of genetically engineered bacteria that are placed in air filtration pods located in the lower cargo section, living section, cockpit section, and engineering section.

Cargo Safeguards: The TATC-0001 Often transports cargo that tends to be... "difficult" to handle, thus safeguards have been put into at all hatchways that lead to the cargo room, including automated "Devil's Fountain" turrets, and a gaseous matter injection system that is able to release heating, cooling, and neural agents into the cargo area to prevent any unexpected events.

Defensive Equipment: The TATC-0001 has a complement of ten [Devil's Fountain Gatling Weapon](#) located in secure lockers in the engineering section, cockpit section, upper cargo section, and living section.

Interchangeable Systems: The TATC-0001 has been designed around the principle of any and all systems on the vessel being able to be changed out and exchanged with another system within a short amount of time or even entirely new systems to be installed. Systems such as the computers, engineering devices, drive systems, navigational devices, crew living area, cargo area, and even hull sections.

Ice Cream Dispenser: Chocolate, Vanilla, strawberry. Located in the living quarters built into the refrigeration device.

Computer System: Data storage of the TATC-0001 is accomplished by use of a brain like "neuro-gel" pack system. These devices are designed to work like a living creature's protein based memory and thought process. The gel packs are used to store a bulk of the vessel's data and conduct the operation processes of most of the ship's functions. Interaction with the computer is done by telepathic communication with the ship's systems through the Neural Interface System, voice commands, or tactile controls when time is not an issue. Back up devices are advanced magnetic hard drive systems.

Sensors: Sensor systems on the TATC include infrared scanning, UV scanning, microwave radar, thermal imaging, laser sweep scanning, electro magnetic scanning, psionic wave detection, and light pulse based sonar.

Weapons

None at this current time.

OOO Notes

Approved by [Wes](#) on November 14, 2005

<https://stararmy.com/roleplay-forum/index.php?threads/lorath-tech-cargo-vessel.12518/#post-180647>

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