

TATC 0002 Transport

About the TATC-0002

The TATC-0002 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-0002 has been designed to utilize the original framework of the TATC-0001, thus allowing for the old TATC-0001 models to be refitted to the new standard of Lorath technology. This choice was made due to the fact of the TATC-0001 being of a suitable design to continue to serve as a primary transport craft for many years to come, with a minimal number of upgrades which would bring it up-to-speed with the new standard of technology.

Dimensions and Crew Compliment

Organizations Using This Vessel: Lorath Matriarchy Type: Long-Range Cargo Vessel Class: TATC-0002
Designer: Lorath Matriarchy

Manufacturer: Lorath Matriarchy Shipyards. Production: Mass Production Crew: two pilots, two engineers, five cargo engineers Intended Capacity: Two Hundred humanoids. 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 thirty 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 gray, excluding the underbelly designed for atmospheric re-entry, thus is a deep black.

Length: 50 meters Width: 40 meters Height: 10 meters Decks: 5 Mass: 215,000 pounds (96,615 kilograms) with bare payload

Performance Statistics

Speed (STL): .400 Speed (FTL): 9500c Speed (Aerial): Mach .99 (761 mph) (1,224 Kph) (Sustained flight)
Speed (Atmosphere Escape): 30,000mph (48,280 kph)

Range (Distance): Indefinite Range (Support): Three months supplies for active crew, indefinite stasis.
Lifespan: Old TATC-0001 frames are to be recycled, thus their service has continued and is now at five years. Expected life-span for the new design is twenty-five years. Refit Cycle: Upon the time of new

technology being available and when vessel is landed.

Inside the TATC-0002

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-0002; 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.

In the refitted TATC-0002, an additional hatch has been included which allows access to the new energy-to-matter conversion system and antimatter storage and handling systems.

Quarters and living area: the crew quarters and living area is located in the upper middle section of the TATC-0002 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 TATC-0002's interior has been re-worked to fit the new standard in Lorath shipping and people-moving policy. The cargo section can have three decks installed into it to allow for three habitable sections to be made. Each insertable deck can be configured to a number of layouts for cargo or people moving, and can be reconfigured to specific needs.

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 valuables. There is an option available to freighter captains to have shielding and sensor jamming equipment installed into this section to allow for the covert carrying of cargo.

Ship Systems

Propulsion

The TATC-0002 utilizes [plasma thrusters and enhanced subspace drive functions](#). The TATC-0002 can also hover utilizing anti-gravity functions.

Hull

The hull plates of the TATC-0002 have been upgraded from the old carbon material to the new standard

in Lorath hull plate design. The hull of the TATC-0002 is comprised of a layer of durandium material with an overlay of structural mesh to allow for increased maneuverability and survivability. However, due to the plates being installed on the old frame, the durability is slightly reduced.

Damage Rating

SP 10

EM Shielding

The TATC-0002 includes [electromagnetic shields](#)

Damage Rating

SP 8

Airlock System

Three airlock systems have been installed upon the TATC-0002, 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.

In the update to the TATC-0002 configuration, the airlocks have been updated to be compatible with UOC and LSDF standards, and now include a nanomachine showering system which is designed to remove contaminants and harmful materials.

Emergency Supplies

Crew Escape Pod

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.

Passenger Escape Pods

In the TATC-0002, a series of coffin-like pods have been added to the port and starboard sides of the

cargo section and are intended to house one individual in each pod. These pods will induce a stasis state and protect the occupant from vacuum, heavy explosions, and various other hazards. Each pod has been constructed from high strength durandium to ensure stability.

Medical Supplies

The TATC-0002 includes [two portable first aid kits](#), and a [first aid cabinet](#).

Environmental Suits

There are [M37/38 Environmental Battledress Uniform](#) placed on each deck of the TATC-0002 stored in vacuum sealed bags to allow for enough suits to be stored to provide for three hundred individuals.

Environmental Systems

The TATC-0002 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.

Intrusion Prevention Safeguards

The TATC-0002 has been designed with the concept of carrying valuable cargo in mind, thus safeguards have been put into effect to protect the cargo. At all hatchways that lead to the cargo room, automated plasma-arc strips have been installed, and a gaseous matter injection system that is able to release heating, cooling, and neural agents into the cargo area and corridors leading to the cargo area and command areas to prevent any unexpected events.

Defensive Equipment

The TATC-0002 has a complement of two [Devil's Fountain Gatling Weapon](#) and five [LSDF "Hik'id" Plasma Assault Rifle](#) located in secure lockers in the engineering section, cockpit section, upper cargo section, and living section.

Interchangeable Systems

The TATC-0002 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. This feature has made the conversion to the 0002 configuration easily executed.

Ice Cream Dispenser

Chocolate, Vanilla, strawberry. Located in the living quarters built into the refrigeration device.

Galley

Due to the TATC-0002 being intended for long-range travel, a galley has been installed. This galley includes a 'Kitchen-Pal' [emfratec cooker](#), a small refrigeration unit, and an [organic tissue culture vat](#). There is also an ice cream maker and [Coffee](#) maker.

Computer System

The TATC-0002 includes [common Lorath computing technology](#) including the neural gel system and neural interface system.

Communication Systems

The TATC-0002 includes [common communication devices and subspace laser communications](#).

Sensor Systems

The TATC-0002 includes [common Lorath sensors](#).

Power Systems

The TATC-0002 utilizes [energy-to-matter fueled antimatter systems, fusion, plasma, and bacterial power systems](#).

Plasma Gathering System

The TATC-0002 includes [standard plasma gathering and containment systems](#).

New Addition

When possible, TATC-0002 units are enhanced with the installation of a [QNC](#) power cell.

Optional Passenger Housing Solution

When transporting passengers, the three optional decks of the cargo section can be inserted which include passenger housing chambers. These chambers are designed for the passenger to lay inside of the chamber horizontally. Each chamber has a computer access terminal, a small storage compartment, environmental controls, and an adjustable bed surface.

Each passenger deck includes six self cleaning restrooms, which also include showers.

Gravity Field Controls

Installed aboard the TATC-0002 is an external gravitational field controller which allows the TATC-0002 to hover or control landing speeds. This field also provides protection against scalar attacks.

Internal Gravity

Each deck of the TATC-0002 includes a series of gravitational plates within the ceilings and decks which provides a gravitational field equivalent to standard gravity found aboard most UOC and LSDF ships. These same gravity controls can reduce gravity within the ship to aid in cargo loading and unloading.

Psionic Protection

The TATC-0002 includes a [Psionics Scrambler Device](#)

Defensive Weapons

Plasma-Arc Disruptor Strips

The TATC-0002 includes six [Plasma Arc Vent Strips](#) which are placed to provide 360 coverage and are

intended to prevent missile impacts or power armor assaults.

Optional External Turrets

The TATC-0002 has external ports which allow for up to four twin-mounted [Compressed Packet Rifle](#) turrets to be externally mounted and controlled from the pilot module of the TATC-0002.

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