

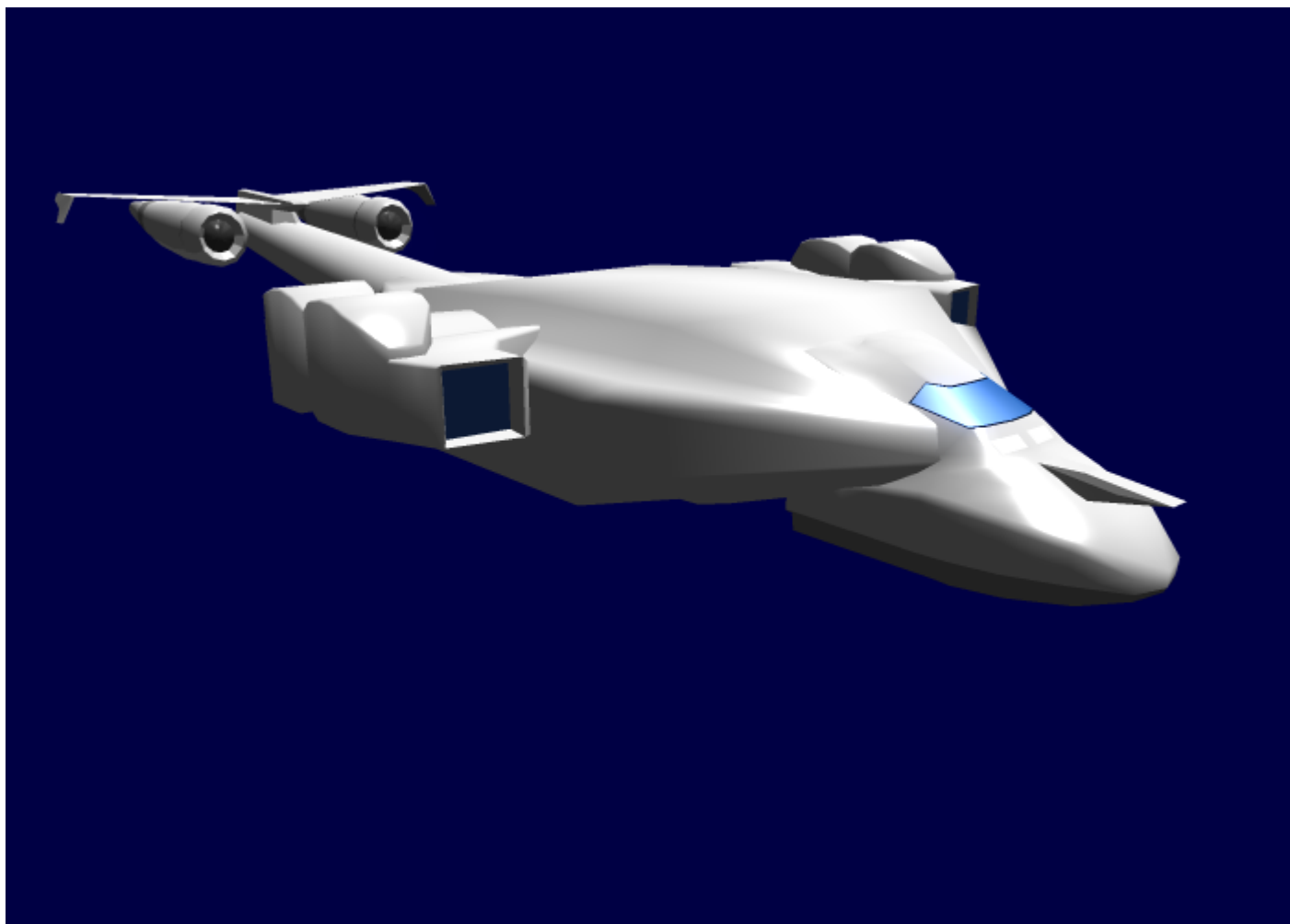
TATC 0003 "Longboat"

TATC-0003 is a troop-transport type variation of the TATC series of cargo transport developed by the Lorath Matriarchy and put into use in YE 31

About the TATC-0003

The TATC-0003 is the military incarnation of the overall TATC design, it has been re-worked to allow for maximum survivability for its size, and to allow for troop, and armored infantry deployment.





History and Background

The TATC-0003 has been designed to utilize the original framework of its predecessors the TATC-0001, and TATC-0002 thus allowing for the old TATC-0001 and TATC-0002 models to be refitted to the new standard of Lorath technology. This choice was made due to the fact of the TATC-0001 and TATC-0002 were unsuitable for combat deployment, but the overall design was still structurally sound enough to be re-used and improved upon for this purpose.

Dimensions and Crew Compliment

Organizations Using This Vessel: Lorath Matriarchy Type: Long-Range Troop-Transport Vessel Class: TATC-0003 Manufacture Year: YE 30 Designer: [Shichou Yuriko](#), [ARIA Ship Control System](#) "Rose"

Manufacturer: Lorath Matriarchy Shipyards, United Manufacturing Cooperative. Production: Mass Production Crew: Two pilots, Two engineers, Five cargo engineers Intended Capacity: eight hundred

individuals with combat gear Maximum Capacity: One Thousand individuals with combat gear
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. In addition to the new design are two long armored cylindrical tubes slung under the wings. In the TATC-0003 variant, the wingspan has been increased slightly to improve in-atmosphere performance and allow for increased space for module attachment.

Length: 175 meters Width: 75 meters Height: 30 meters, 35 meters including exterior transport module
Decks: 5 Mass: 215,000 pounds (96,615 kilograms) with bare payload

Performance Statistics

Speed (STL): .375 Speed (FTL): 9500c Speed (Aerial): Mach 5 with structural mesh active

Range (Distance): Indefinite Range (Support): Three months supplies for active crew, indefinite stasis.
Lifespan: Old TATC-0001 & TATC-0002 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-0003

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. In the TATC-0003, an additional sliding panel has been built into the floor which covers an interface and storage area for an ARIA unit.

Engineering: Engineering is located in the aft section of the TATC-0003; 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-0003, 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-0003 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-0003's interior has been re-worked from the TATC-0002 standard configuration, to a military operations configuration. The belly section of the TATC-0003 which borders the cargo section has been retooled to include a series of hatches to allow for passage between the interior of the craft, to an exterior module added onto the TATC-0003's framework. The interior of the

TATC-0003 when being used for combat deployments consists of a single deck separator which makes the cargo section into two separate decks. However, the cargo section can be made to have three decks, or just one large compartment depending on mission demands. When being used for troop transport, each deck can be complimented with bulkhead and floor mounted seats which allows for the seating of up to 1000 troops in a dual-deck configuration, or 500 in a single deck configuration.

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 mission related equipment. There is an option available to transport captains to have shielding and sensor jamming equipment installed into this section to allow for the covert carrying of cargo. In the TATC-0003 configuration, a lift has been included which can be utilized to move equipment from the secondary cargo section to the primary cargo section.

Transport Module: An external module can be attached to the TATC-0003 which fits upon the belly of the transport. This module can house 40 Harbinger pods, 200 [AMX-101 WINTER](#) (In transport configuration), or 4 [Whirlwind](#) which can be individually ejected from the module. This module has been designed to form air-tight seals with the belly hatches of the TATC-0003 to allow troops to move between the interior of the TATC-0003 and the module. A series of hatches have been built into the module which allows for the dropping of the payload contained in the module. The transport module also includes a mounting point for a weapons turret.

Tail Module: As an afterthought in the design of the TATC-0003, an extension has been added to the design of the original framework of the TATC, this tail extension is used for the mounting of additional load-bearing cargo storage systems, exterior weapon systems, as well as housing an additional propulsion power plant. This module, while long, is entirely retractable and allows for being able to easily store the TATC-0003 at a length of sixty meters.

Note: The transport module has been designed to connect to the TATC-0003's power system and plasma systems, thus providing power for the transport module's weapons turret. Transport modules can also be fitted with additional mission specific equipment.

Ship Systems

Propulsion

The TATC-0003 utilizes [plasma thrusters and enhanced subspace drive functions](#). The TATC-0003 can also hover utilizing anti-gravity functions.

Hull Plating and Frame

Frame

The frame of the TATC-0003 has been redesigned to include the latest in Lorath Metallurgical developments the main frame of the TATC-0003 is constructed of Structol A with [Duremium Alloy](#) secondary supports and along critical areas in more denser portions to ensure an overall well built, and sturdy frame work.

Armor System

Duremium Alloy Primary Hull Plate

The primary hull structure of the TATC-0003 which the fuselage, wings, and other primary exterior components comprise is composed of [Duremium Alloy](#). This layer serves as the primary structure and support layer, along with providing a robust defense against weapons fire. The structural mesh layer is designed to be attached onto the duremium layer through the use of a series of hooks which fix onto the structural mesh and hold it in place flush against the hull.

Structural Mesh Layer

The TATC-0003 utilizes the [Structural Layering System](#) to allow for the repulsion of solid and energy attacks and improve aerodynamic capabilities. There are two variants which are the External, and Internal Mesh Layers. The External being the primary outer hull armor, and the Internal being the inner hull, and mount for ship systems.

SP: 20

Full Spectrum Barrier System

The TATC-0003 uses [Lorath Shielding Systems](#).

- Electromagnetic Shielding
- Plasma Shielding
- Gravitational Shielding

SP: 16

In addition the Combined Shield System was utilized in the TATC-0003's shielding systems as an added layer of defense.

Damage Rating: SP 20 For Ten Minutes, every hour.

Airlock System

Three airlock systems have been installed upon the TATC-0003, 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-0003 configuration, the airlocks have been updated to be compatible with [United Outer Colonies](#) and [Lorath Self Defense Force](#), standards, and now include a nanomachine showering system which is designed to remove contaminants and harmful materials.

Hatches

Located on the belly of the TATC-0003 are 32 small hatches which allow for the moving of individuals and equipment between the interior of the TATC-0003's cargo section, and the optional external transport module. When not in use, these hatches are covered by Duremium shutters.

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-0003, 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-0003 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-0003 stored in vacuum sealed bags to allow for enough suits to be stored to provide for three hundred individuals.

Environmental Systems

The TATC-0003 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-0003 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-0003 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-0003 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-0003 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-0003 includes as the main computational system a [ARIA Ship Control System](#) is used with [common Lorath computing technology](#) including the neural gel pack systems and neural interface system as secondaries to supplement the main system.

Communication Systems

The TATC-0003 has a full set of [Lorath Communication Systems](#)

Sensor Systems

The TATC-0003 includes a full set of [Lorath Sensor Packages](#).

Power Systems

The TATC-0003 utilizes [energy-to-matter fueled antimatter systems](#), [fusion](#), [plasma](#), [bacterial power systems](#), and [QNC](#) power cell technology.

Plasma Gathering System

The TATC-0003 includes [standard plasma gathering and containment systems](#).

Standard Transport Equipment

To allow for the optimal transporting of equipment, the TATC-0003 has been outfitted with improved gear

to allow for the swift loading and unloading of cargo and the accommodation of cargo and troops.

Troop Transport Configuration

When in the troop transport configuration, the interior of the TATC-0003's cargo section can have a deck separator insert placed in the section to allow for the cargo section to be split into two or three separate areas. Each deck would be outfitted with seats lined up along the bulkheads, and two rows of seats which are placed along the middle of the interior section. The seats are capable of folding into the bulkheads, or into the decks. Each deck separator includes a gravity regulator and a bodily waste extraction system located at the forward section of the deck.

Equipment Transport Configuration

When being utilized as a cargo transport, the TATC-0003 can have its decks separated like in the troop transport configuration, or remain as a single compartment. When being utilized as a cargo transport, the interior of the cargo hold is outfitted with retractable rollers in the deck plates, retractable loops to allow for the attachment of cargo securing straps, and an antigravity system which allows for easier loading and unloading. The gravity system can also be used to 'launch' payloads out of the rear hatch of the TATC-0003

Hybrid Configuration

Due to the capability of the TATC-0003 being able to have its cargo section 'split', the cargo section can be split to allow for one deck to be utilized for troop transport, while the other deck houses equipment. Each deck would be individually configured for its given task.

Exterior Transport Containers

The TATC-0003 has been designed to include the capability of attaching exterior modules to increase the vessel's payload carrying capability.

Wing Pylon Carrying Modules

The TATC-0003 can be fitted with a pair of durementium 'cylinders' which can be fitted beneath the wings of the TATC-0003. Each cylinder is capable of carrying a payload of one of the following: two [Whirlwind](#), two hundred [AMX-101 WINTER](#) in transport configuration, 40 Harbinger pods, or four [Hawk Fighter Bomber^{1\)}](#). Each carrying module can have an airlock 'bridge' attached to it which connects the TATC-0003 and the module thus allowing for individuals to move between the transport and the module.

Additional Option



Wing pylon carrying modules can be outfitted with propulsion systems which would allow for the module to be launched from the TATC-0003. This allows for optimal capability in delivering a given payload to a target location.

Belly Mountable Transport Module

An external module can be attached to the TATC-0003 which fits upon the belly of the transport. This module can house 40 Harbinger pods, 200 [AMX-101 WINTER](#) (In transport configuration), or 4 [Whirlwind](#) which can be individually ejected from the module. This module has been designed to form air-tight seals with the belly hatches of the TATC-0003 to allow troops to move between the interior of the TATC-0003 and the module. A series of hatches have been built into the module which allows for the dropping of the payload contained in the module. The transport module also includes a mounting point for a weapons turret.

Note: The transport module has been designed to connect to the TATC-0003's power system and plasma systems, thus providing power for the transport module's weapons turret. Transport modules can also be fitted with additional mission specific equipment.

Optional Passenger Housing Solution

 Not standard for TATC-0003 configuration, but can be used when needed 

When transporting VIP 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-0003 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-0003 includes a series of gravitational plates within the ceilings and decks which provides a gravitational field equivalent to standard gravity found aboard most [United Outer Colonies](#) and

[Lorath Self-Defense Forces](#) ships. These same gravity controls can reduce gravity within the ship to aid in cargo loading and unloading.

Psionic Protection

The TATC-0003 includes a [Psionics Scrambler Device](#)

Defensive Weapons

Plasma-Arc Disruptor Strips

The TATC-0003 includes six [Plasma Arc Vent Strips](#) which are placed to provide 360 coverage and are intended to prevent missile impacts or power armor assaults.

SDR: 2

External Turrets

The TATC-0003 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-0003.

SDR: Plasma: 1 , Antimatter 2

External Countermeasure Launchers

The TATC-0003 includes four [Mi-Size](#) missile launcher systems, these missile launchers are designed to carry thirty missiles of various configuration, often though, these launchers are loaded with countermeasure-type missiles.

1)

Wings must be folded

From:
<https://wiki.stararmy.com/> - **STAR ARMY**

Permanent link:
https://wiki.stararmy.com/doku.php?id=faction:lorath:starship:tatc:tatc-0003_longboat

Last update: **2023/12/21 05:25**

