So-T1-1a Waka class Shuttle

The Waka is a large, cargo and passenger carrying shuttle, in use by the Astral Vanguard.

About the Ship

The Waka class transport shuttle is large for a shuttle, almost large enough to be considered a corvette by itself. The main purpose of this craft is to ferry people and supplies using its large size. The Waka also has ventral and dorsal frame docking hooks, to ferry powered frames when a larger transport is not available.

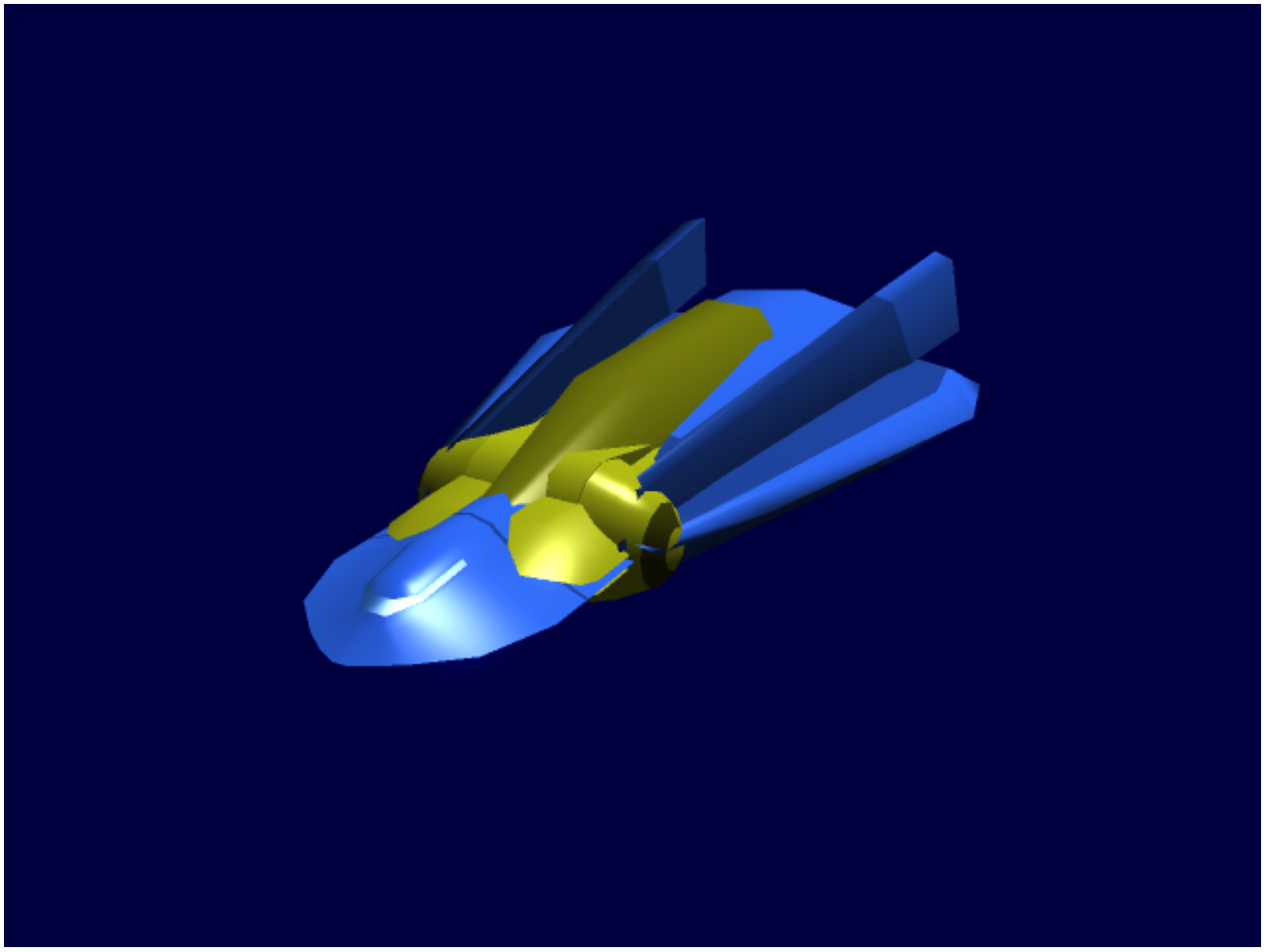
Key Features

- Inexpensive
- Frame docking hooks
- High Speed
- Large passenger bay.

Mission Specialization

The Waka is a specialized personnel transport shuttle.

Appearance



History and Background

Designed in AR 820, the Waka class passenger shuttle was Solan Starwork's answer to the Astral Vanguard's call for a new transport shuttle to replace the aging previous generation of shuttles. With no other design proposals the choose from, the Waka was picked as the new shuttle, and entered mass production within the year.

Statistics and Performance

General

Class: So-T1-1A Type: Shuttle Designers: Solan Starworks Manufacturer: Solan Starworks Production: Mass Production Fielded by: Astral Vanguard

Passengers

Crew: Only one is required. Maximum Capacity: The Waka is a passenger shuttle, meant to carry 20 passengers, plus its crew of one. In an emergency, 40 people can fit on the shuttle, but it would be cramped.

Dimensions

Length: 20 meters Width: 14 meters Height: 5.8 meters Decks: 1

Propulsion and Range

Atmospheric Flight: Mach 5 Zero Atmosphere: .3c FTL: 500c Range: effectively unlimited, but useful range is only 1-2 days of travel at maximum velocity. Lifespan: 10-20 years Refit Cycle: as needed.

Damage Capacity

See Damage Rating (Version 3) for an explanation of the damage system.

- Hull: 12 SP (Armor & mecha Scale)
- Shields: 10 (Threshold 1)

Inside the Ship

Compartment Layouts

Cockpit

The Waka's cockpit is small, and is merely a small space with two chairs, and an open port for the window. The chairs contain link points which allow an Iromakuanhe to directly link to the shuttle via their entry ports, and control their assigned function. There is a set of rudimentary backup controls for each station, but as it is little used it has become mostly vestigial and can be a bother to operate.

Engineering

The Waka lacks a dedicated engineering section, having rather a closet full of tools for the mechanically minded to peruse and use as needed.

Passenger Bay

The Waka's passenger bay takes up most of the shuttle's space, and, when needed, serves as a cargo bay. The front of the bay leads to the cockpit, while the rear lowers into the shuttle's exit ramp. Narrow passageways lead to frame docking clamp on the shuttle's dorsal surface.

Ship Systems

Hull and Hull Integrated Systems

Hull and Chassis

Aerudirn Armor Colonies Aerudirn consists of living colonies that grow out into thick, smooth sheets of a high durability, that are have been bred to be resistant to damages from radiation and can charge themselves with an electrostatic field to enforce their surface tension, thereby inhibiting penetration by weaker solid-ammunition weapons. Should the shell be damaged, the colonies underneath, which are dense enough on their own to survive exposure to vacuum can quickly have other sections stretch to accommodate tears, and regenerate completely with enough time.

Armor Type: Light Structural Points: SP 4

Organoid-type Substructure Highly resilient organoid tissues form the remainder of the fuselage, including an endoskeleton, muscles and primitive organs that perform various functions related to keeping the unit and passengers alive. The tissues have exceptional toughness compared to those of normal species, and can even survive in vacuum conditions should the entirety of the upper armor layer be destroyed.

Armor Type: None Structural Points: SP 8

Life Support

The Waka's life support functions are tied in directly with the Organoid's natural bioelectrics and life functions, meaning that should power failure occur, these systems will continue to function until the components expire.

Organoid Integrated Life Support Functions

So-T1-R07820 KORD System The KORD (Kinetic Force Diffuser) is an essential system that protects the pilot and passengers from the tremendous G-Forces and shocks the Shuttle experiences during both before and after FTL travel and during highly perilous combat maneuvers. It also protects from weapons that kill through kinetic force, in a manner similar to maces against armored troops in ancient times.

Shields

So-T1-S1820 Shuttle-type Vector Shroud Vector Shrouds are sophisticated vector field systems that envelop the craft in a conformal shell of compressed space, allowing one to become relatively invisible to electromagnetic and particle based sensors, and shrinking the frame's profile to other systems. As a shield, it is reliable and particularly effective versus energy weapons.

Locations: Integral Shield Points: SP 12 (1) Runtime: Limited by Power Source Only

Power

Primary Power

So-T1-G1820 Zaiflar Supercapacitor x6 Zaiflar Supercapacitors are over-sized versions of the power storage units employed by Solan Starworks in their small arms designs.

Electronics and Propulsion

Control Systems

(2): So-T1-E0820 Shuttle-type Immersion Control Pod w/ Socket for Civiltech ANIOS or SCANIOS

Due to their natural interface abilities, designing a responsive and intuitive control system for an Iromakuanhe was relatively easy. This system, know as the Immersion Control Pod, allows easy and natural control of most vehicles, including large units such as powered frames and starships. The Control Pod is the seat component of the cockpit, and is comprised of a rounded chair in which the pilot is most comfortable in a reclining position, and multiple entry port plugs. The chair itself is lined in a soft, organic material lined in a highly flexible rubbery skin that is smooth to the touch and has a light golden reflective sheen. It will naturally conform to the user's body, and can even form cushioned indentations for the tips of horns.

Use

To connect with the machine, one must connect the plugs to their entry ports, which can be done manually, or automatically by the organoid. The pilot's senses and ability to move will then quickly begin to fade as they are rerouted to those of the Shuttle, which they will be able to control as extensions of their own bodies. Weapons systems and certain functions may have to be practiced.

Note

Transfer of pain cannot occur because organoids lack developed tactile senses in most cases, however, the have been uncomfortable sensations reported by pilots when their units took heavy damage, similar to a sort of strong pressure. On very rare occasions, the sensory redirection effect caused by the control

module lasts after disconnection from the craft, which will require immediate medical attention.

STL/FTL Propulsion

So-T1-P1820 Lite MASC Drive

Mobility Information		
Function	**Speed/Distance**	**Detectability**
Atmospheric Flight	Mach 5	Low
Zero Atmosphere	.3c	Low
FTL	500c	Medium

Communications Systems

So-T1-E1820 Shuttle-type Communications Package

Location: Fuselage

Includes:

- Laser
- Radio
- MASC-Assisted Laser
- MASC-Assisted Radio

Sensors

So-S1-E0820 Shuttle-type Sensors Package

Location: Nose

Includes:

- LADAR
- RADAR

So-T1-E4820 Listening Deveice The Listening Device is a system employed to passively intercept and sample data being transmitted through unsecured methods. It is also a critical component in many important electronic warfare devices, and allows Astral Vanguard starships and vehicles to track the communications of hostile forces. As the unit approaches the source of the transmissions, it becomes increasingly easier to track, until a positive match can be made at a certain threshold.

Location: Nose Can Intercept:

- Radio

- Microwave

Specifications		
Medium	**Maximum Interception/Detection Range**	**Tracking Range**
Radio	1 200 000 KM	30 000 KM
Microwave	600 000 KM	15 000 KM
Subspace	15 000 KM of Receiver or Sender	5000 KM

Countermeasures

(2): So-T1-E6820 Regenerative Beacon Flares

Location: Nose Purpose: Anti-Missile, Anti-Targeting Lock Secondary: Misdirection Salvo Size: 1, 2 or 3 Damage: MDR 1

Range: 25KM in Atmosphere, 15 000 KM in Space Rate of Fire: 1 salvo every 2 Seconds Area of Effect: 500M in Atmosphere, 2500 KM in Space Muzzle Velocity: Mach 6 in Atmosphere, .2c in Space Ammunition 24 Missiles Ammo Replenish: Can refill capacity in hospitable conditions in about 1 hour outside of combat. Any further attempts to refill will require an external source of biomass.

Vehicle Complement

Frames

The Waka can support up a single frame, through the use of its docking hooks, which allow the pilot to board and disembark their frame, as well as helping to refuel. There is a single docking hook, on the Waka's dorsal surface. The hook works by latching onto the chest of the frame, and creating an airtight seal, allowing the pilot to enter and exit through a small tunnel.

OOC Notes

Approved here.