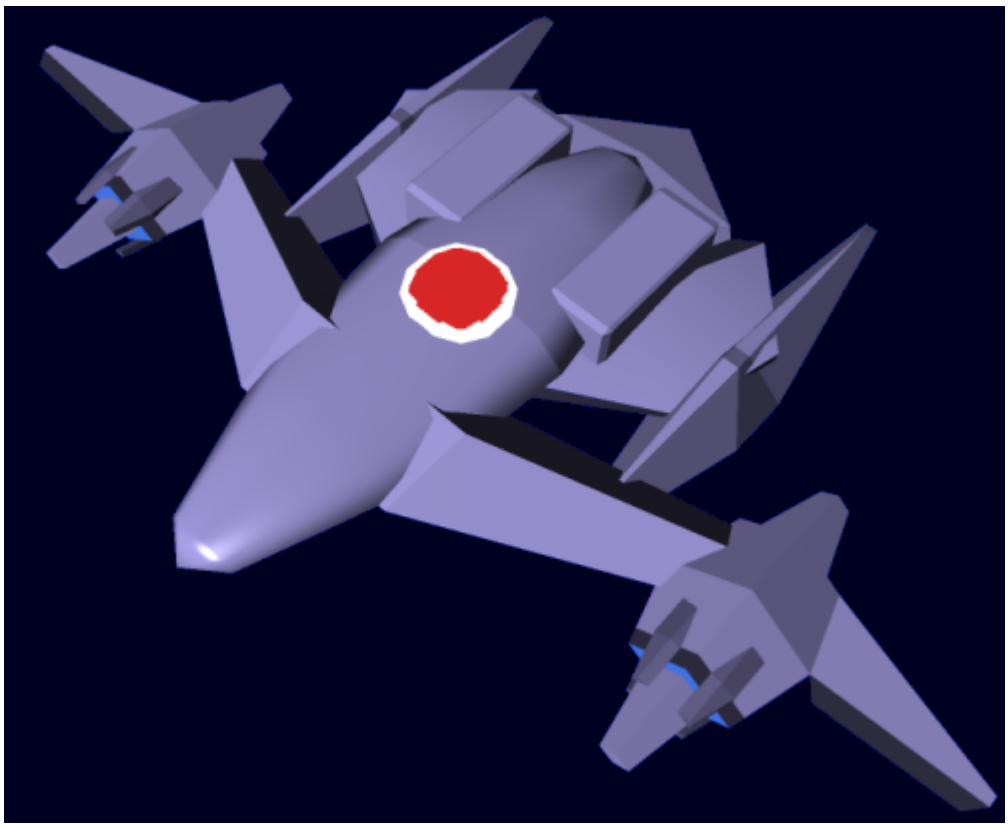
Yuuko-class Gunboat

The Yuuko-class Gunboat was a small combat spacecraft used by the Star Army of Yamatai from YE 29 until YE 34.



About the Ship

Modern strategy was shifting away from large fleet engagements and towards isolated yet vital skirmishes using small and efficient vessels. With this in mind, SARA set about designing a warship that would be compact yet deadly – even if this meant sacrificing viability in protracted engagements.

Using performance data gathered from the Himiko-class Light Escort project's flagship vessel, the Yuuko was built around a design philosophy that strove for incredible power for its size but only for a very limited time. Essentially, it would become a ship that could strike quickly with the aim of annihilating its target using overwhelming firepower before rapidly retreating.

In this, stealth was deemed a necessary survival trait and – ideally – a Yuuko would operate in pairs or trios to provide mutual support. With this "wolf pack" mentality, it was hoped that a squadron of Yuukos could strike and eliminate lone, isolated vessels many times their own size well before the enemy would have chance to retaliate.

History and Background

With the war dragging on, and the need for new vessels to fill roles that were never considered previously, a little known design project went underway: the Himiko Light-escort vessel, and its prototype the *YSS Miharu* were proving fruitful. However, the Himiko's eventual role - as the Pathfinder - was primarily a ship for after the war. A war which needed to be won.

The strategic brief and combat principles so integral to the Himiko's successful operation, were taken and focused to their logical extreme: the Yuuko's design brief would have it fill the role of hunter-killer, the ultimate ambush predator and its systems would incorporate many of the Star Army's most recent innovations including an offensive ECM/stealth package.

Early in the design phase, some bright spark put forward the decision to make the entire ship as compact as possible. This would not be the vessel that the Star Army put on posters. This would not be the vessel that crew would beg to serve on and from the get go, an all Nekovalkyrja crew was factored in. For the first time, in a long time, the Star Army would put function over form and, to be blunt, the ship is cramped, uncomfortable and not particularly pretty. But that was alright; it was powerful and very small – at roughly a third the size of a Nozomi, the Yuuko was designed with a quality economy mindset.

Perhaps with time, changes will see the Yuuko become a more standard vessel with creature comforts and a more polished look but now - in this desperate time of war - it is nothing more than a killing machine. A basic design, almost rushed, but filled with tried and tested technology. Only time will see if it stands the test.

In YE 34, all of the remaining Yuuko gunboats were retired and replaced with the Hayai-Class Gunboat design.

Statistics and Performance

Organizations Using This Vessel:

- Ketsurui Fleet Yards
- Star Army of Yamatai
- Yamatai Star Empire

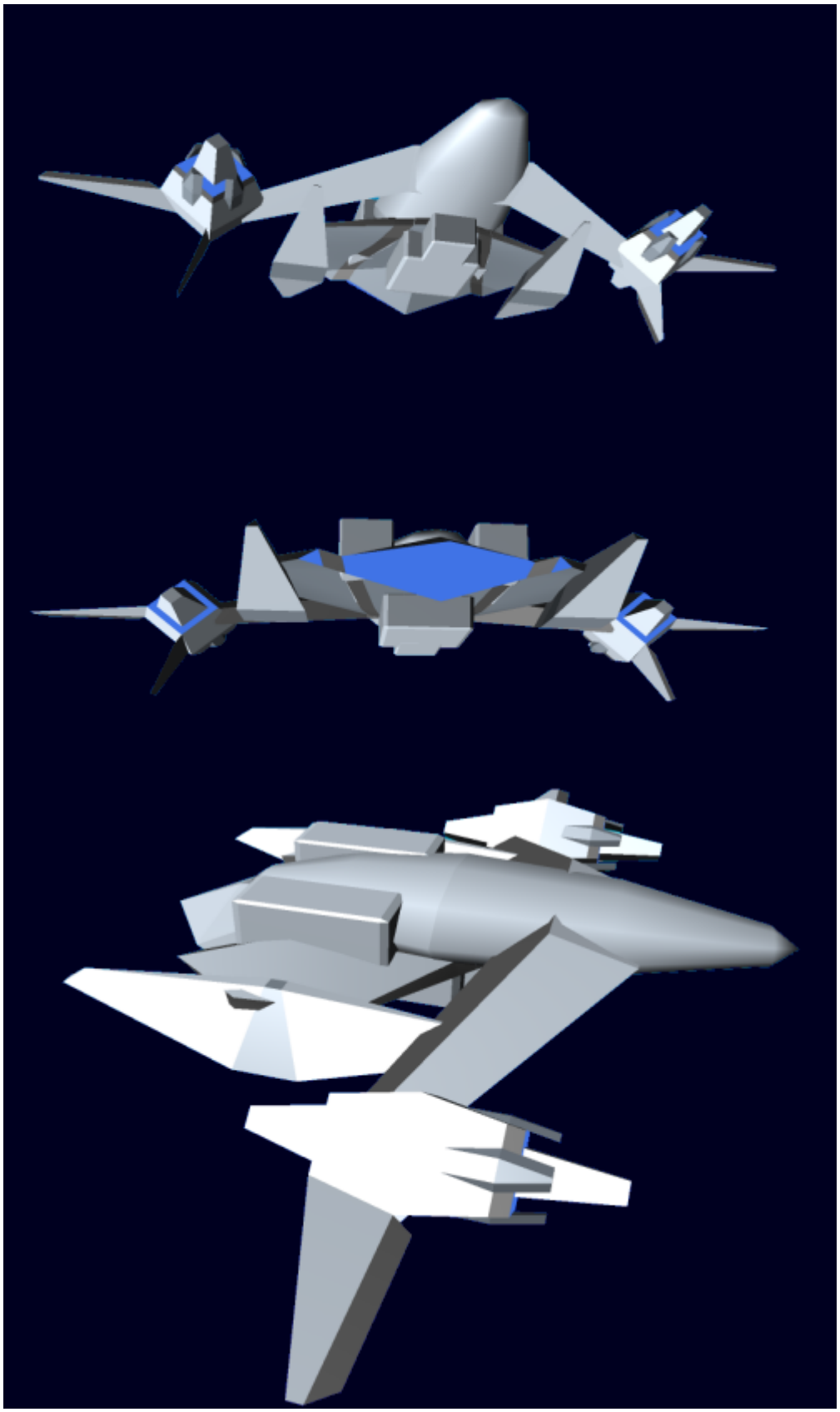
Type: Light Nekovalkyrja Gunboat Class: Ke-S4-1a Yuuko

Designer: Star Army Research Administration Manufacturer: Ketsurui Fleet Yards

Production: A trial run of 6 ships per fleet to gather data and prepare for increased production

Crew: A minimum of one operator, Standard is 7 (two shifts of three, and a captain) Pilots: 5 Maximum Capacity: 40 Nekovalkyrja

Appearance:



Dimensions

- Length: 45m
- Width: 40m (45m “wingspan”)
- Height: 9 metres
- Decks: 3 (3 metres each)
- Mass: about 95,000kg

Performance

Category	Starship Type	Class	Sublight Engines	Distortion Field	Hyperspace Drive
3	Scouts and Fast Escorts	Yuuko	.375c (~112,422 kilometers per second)	19,723.5c (2.25 ly/h)	447,066c (0.85 ly/m)

- Range: Practically, life support should be replenished every 4 months.
- Lifespan: Expected to last for 20 years of constant use.

Refit Cycle:

- Minor updates via the PANTHEON network.
- Refit every 5 years for maximum efficiency.

Damage Capacity

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

- Hull: 10 (Light Escort)
- Shields: 10 (Threshold 1)

Inside the Yuuko Gunboat

Deck Layout

The Yuuko-class Gunboat has three decks: the main, middle deck which contains the majority of the ship’s systems; the top-deck where the bridge, Captain’s quarters and QPC emitters are located; and finally the sub-deck where, not only are the ship’s corridors located but also the medical facility, cargo, armouries and armour bay.

Compartment Layouts

Armories

Location: Sub-deck; adjacent to the armor bay.

The Yuuko's two armories are Zesuaium-armored, cooled and static free these vaults contain the weapons and ammunition for both the crew and the attached power armors. There is no nodal system available in either armoury, and both are considered restricted areas that can only be accessed by those with permission from the Captain.

Contents

- Type 28C Nekovalkyrja Service Pistols - about 2 for every member of the crew
    - additional BR-28A battery magazines - 2 for every pistol
- Type 28 Nekovalkyrja Submachineguns - about 1 for every member of the crew
    - additional BR-SMG battery magazines - 4 for every SMG
- Nekovalkyrja Burst Automatic Rifles – about 1 for every member of the crew
    - additional BR-100 battery magazines – 1 for every rifle
- Ke-M4-2901 Light Armour Service Rifles, with 6 additional magazines of ammunition for each.
- Ke-M2-2901 Aether Saber Rifles with BR-M20 magazines and attachment cables (2 extra for each)
- Grenade Launchers
- 100 chargers each for BR-28 and BR-SMG
- 10 chargers for BR-M20 (for Mindy W2701)
- 10 chargers each for BR-27, BR-29, and BR-P50 battery magazines (for personal sidearms).
- 7mm ammunition for the Ke-M4-2701 Light Armor Service Rifle
- 50mm rounds (and magazines) for Kylie M3's W2708 shoulder cannon
- All missiles for Mindy M2 and Kylie M3 power armors
    - Missiles: Ke-M2-W2703-SDMM, Ke-M2-W2703-MFMA, Ke-M2-W2703-ARMA
- All Nodal Support Bits for Mindy Power armors
- Type 28 Star Army Environmental Suit, Type 28 (AMES)s (many more are located on the ship)
- Portable Repair Kits
- Weapon maintenance supplies, cleaning kits, and spare parts
- Explosives, grenades, other weapons, and body armor as needed and/or available

Bridge

Location: Top-deck

With space at a premium, the Yuuko's bridge goes beyond utilitarian; instead being downright spartan. The room is cramped – its only amenity being a transparent Zesuaium window at the fore of the room. Besides the window, there are four armored compartments; each compartment comfortably seating one neko securely and providing a direct soldier-ship SPINE interface. There are no manual controls on board the Yuuko nor are there any sensory interfaces. Information is fed directly to the crew's mind, and the

operation of the ship is handled mentally. Because this operation is purely mental and works through a direct computer mind to artificially intelligent machine interface, the operation of the Yuuko is consequently far more efficient than ships using contemporary bridges. The visual manifestation of this operation usually displays itself as a “virtual bridge” that completely immerses the crew (to aide in processing the inordinate amount of information available at any one time).

Three of the compartments are arranged in a semi-circular formation at the front of the room. The fourth (the Captain’s) is stationed at the rear. A hatch to one of the Yuuko’s two escape pods is situated in left wall, and access to the Yuuko’s CIES is available here (and only here) through an access covering on the floor.

Captain's Suite

Location: Top-deck; ahead of the bridge

It is regretful, but the cramped conditions on board the Yuuko preclude a full-sized Captain’s Suite. However, despite this, the designers saw fit to include a single standard Officer’s cabin to serve as a (admittedly smaller and less elegant) Captain’s suite in the stead of a full room.

The standard Star Army officers’ cabin is cozy with the essentials for living. Designed for a single occupant, it is contains a soft and comfortable bed (wide enough to sleep two if desired) and a work desk with a control panel linked to the ship’s computer. The bed has white sheets and crimson blankets, and five pillows. (two cotton/feather, three foam).

The cabin is arranged as follows: two compartments make up the room, one is the main and one is the bathroom. The main compartment has the entrance door and the window (and walking space) in to the far right, with the bed and part of the storage lockers on the left. On the far left, the storage lockers continue into the bathroom compartment.

The desk is set in front of the window and comes with a padded rolling chair with armrests. Overhead lightning is provided for all of the room, as well as a desk lamp. Floors are carpeted in the standard Star Army crimson.

Cargo Storage Areas

Location: Sub-deck; flanking either side of the launch bay

On board the small Yuuko, the cargo areas that flank the launch bay are small, single deck affairs usually packed to the brim with mission essential equipment and supplies vital to the operation of the vessel and Captain’s rightly avoid making plans to utilize what little precious space they have for extraneous purposes. It should be noted that there is a direct link from here to the nodal fabrication bays via the sub-deck.

Crew Hygiene Facilities

Location: Main-deck, aft of the crew quarters

The Yuuko provides toilets and showers in separate blocks for its crew. There are enough to accommodate half the crew at one time (perfect for a two-shift vessel). There are no baths onboard the Yuuko.

Crew Quarters

Location: Main-deck; aft-left of the Yuuko

Beyond the Captain's room, there are three rooms for the remainder of the crew. Upon entering it becomes apparent that every ounce of space that could be used has been used. Depressed into the walls of these "cozy" rooms are personal storage compartments for four people. Two fold-out desks with flexible lamps are built into the remaining wall space.

The actual sleeping accommodations in each room consist of two Nekovalkyrja nests built into the floor. These nests are oval-shaped, semi-spherical pits lined with foam and filled with pillows and blankets. Each nest is designed for two occupants.

Crew Recreation

Because the Yuuko is a departure from recent Star Army design many of the more extraneous features present in a larger warship had to be excluded. Unfortunately, one of those features was the standard crew recreational accommodations. To be blunt, beyond the wardroom and social interaction between the crew, the Yuuko-class Gunboat offers nothing to physically distract its crew from the pressures of duty.

However, because of this, Captains that serve on board Yuuko's are advised to encourage and utilize the computer network for recreational purposes. Virtual reality and simulation were deemed acceptable compensation for a lack of true leisure facilities.

Engineering

Location: Main-deck; center

Taking up the middle of the entire main-deck, Engineering is undeniably the heart of any vessel. Here, the central aether generator and capacitors work to power this mighty warship. The air buzzes with activity and the very floor seems hum in the presence of a well run, well maintained ship. The Hyperspace unit is located aft and the CFS station located fore. Every inch of this room is used – some stations requiring an engineer to float up to operate them properly.

Kitchen Facilities

Location: Main-deck; aft of the wardroom

The kitchen, scullery and attached pantry (for all food not stored in the cargo-hold) branch off from the wardroom. Usually staffed by a sprite or two, these comfortably compact facilities offer all one needs to make a good meal. Here, this standard Star Army galley contains two ovens, two convection ovens, two microwave ovens, a rapid-warming electronic stove, two walk-in refrigerators, three walk-in freezers, a toaster, blender, waffle irons, mixers, meat slicers, and more. All surfaces are stainless steel. There is a small room between the kitchen and the dining area where silverware and china are stored.

Launch Bay

Location: Sub and Main deck; stern of the vessel Located on two the Yuuko's very few decks, the Launch bay is the largest room on the ship and also doubles as the warship's shuttle bay for the temporary docking of small craft and similar situations. The floor is a glossy, polished black and the walls are made of typical grey panelling. From the door one can look out directly into space through the force field in the rectangular openings on either side of the ship. Gravity in this area is 1G. If the bays are going to be used for some recreational purpose, the ship has netting that can be attached to rings that line the interior about a foot inside from the forcefield; these nets prevent people and objects from accidentally being pushed, thrown, or stumbling into the vacuum.

Maintenance Conduits

Location: Everywhere

Like all ships, the Yuuko has an extensive network of maintenance tunnels crisscross the ship and not only allow access to its more sensitive areas but also act as alternate passageways in case the main ones are somehow compromised. Additionally, all the maintenance tunnels are kept in zero-gravity at all times.

Medical Bay

Location: Sub-deck; fore of the armour bay

The Yuuko utilizes a variation on the Sakura-type medical bay called the Yuuko-compact. It is essentially identical albeit more cramped. Designed for a very small crew and with the Yuuko's designation as a gunboat in mind, two of the usual three containment cells have been stripped – as has one of the hemosynthetic tanks (bringing the total down to two). Finally, the capacity of the Yuuko-compact to perform experimentation and analysis has been almost completely neutered; it acts as a medbay and only a medbay.

Nodal Fabrication Bay

Location: Main-deck, centrally mounted at the fore of the ship

The Yuuko possess a single nodal fabrication bay. While it is are capable of general production, this one is specially adapted to quickly produce ammunition for the Yuuko's torpedo rack. The bay is fully designed to open into space for both large construction projects and because the torpedo rack require manual reloading. Generally, this room is automated and kept sealed from the rest of the vessel as the fementomachines can be hazardous to the crew's health.

- *Ke-M2-1F "Mindy"*

Production Time: 24 hours Assembly: Main Deck (1 of 2 rooms)

- *Ke-M2-2A "Mindy II"*

Production Time: 30 hours Assembly: Main Deck (1 of 2 rooms)

- *Ke-M4-2A "Sylph II"*

Production Time: 12 hours Assembly: Main Deck (1 of 2 rooms)

- *Ke-M5-1A "Harpy"*

Production Time: 12 hours Assembly: Main Deck (1 of 2 rooms)

- *Ke-M6-1B "Daisy"*

Production Time: 16 hours Assembly: Main Deck (1 of 2 rooms)

- *Ke-T4-1a "Fox" Aeroshuttle*

Production Time: 6 hours Assembly: Main Deck (2 rooms), piecemeal: require 2 crew for final assembly

- *Ke-V2-1B "Uriko"*

Production Time: 18 hours Assembly: Main Deck (2 rooms), piecemeal: require 4 crew for final assembly

- *Ke-C3-W2903 Variable Weapon Pods*

Production Time: 1 hour Assembly: Rollbar Launchers (36, store 1 each)

- *AS-5 series torpedo*

Production Time: 30 minutes Assembly: Rollbar Ammunition Bay siderooms (1 of 2)

- *AS-7 series torpedo*

Production Time: 45 minutes Assembly: Rollbar Ammunition Bay siderooms (1 of 2)

- *Chibi-Megami Probe*

Production Time: 4 hours Assembly: Rollbar Ammunition Bay siderooms (1 of 2)

Passageways

Location: Primarily sub-deck

The Yuuko makes use of the Standard Star Army Zero-Gravity Passageways…just smaller. The layout of these corridors remains the same, but the diameter has been reduced to just 1.5 meters. Let it be said, the Yuuko is not a ship for the claustrophobic and even most neko would find it more comfortable to fly horizontally through these than try to walk upright.

On the Yuuko, the vast majority of these passageways are located on the sub-deck with access to the decks above provided by openings cut into the side of the passage way that allow crew to fly up and step out from the walls into other rooms.

Power Armour Storage

Location: Sub-deck; fore of the launch bay

Bordering the launch bay, the armor storage facility is essentially an extension of that room. The floor is a glossy, polished black and the walls are made of typical grey panelling. Specially designed racks and a mass of red straps and black buckles hang on the walls and ceiling where power armor would be if the ship is fully manned.

With the armories flanking either side of the storage it’s possible to rapidly outfit or change the load-outs of any suit docked here; with full reloads possible in under ten seconds and a complete module change in under thirty.

Torpedo Facilities

Location: Main-deck, fore of the ship

Compromising the vast majority off the ship’s fore section, the torpedo facilities consist of both a single use, multi-launch torpedo rack and its accompanying nodal fabrication bay. This is a vital area and one that is kept rigorously maintained for the good of the ship – without these torpedo facilities the Yuuko lacks the majority its offensive capability.

Wardroom

Location: Main-deck; aft of the centre

Onboard the Yuuko, the Wardroom is one of the few places that isn't devoted to absolute military efficiency. Space was set aside early in the project to allow the crew at least one spacious, relaxing area on an otherwise crowded vessel. Used by all members off the crew and open at all times, the room is edged by comfortable chairs and sofas. Two tables enough – for the entire crew to dine at once – are in the centre of this room. The floor is kept immaculately clean and its polished surface was almost designed to reflect the art-deco friezes engraved into the walls.

Ship Systems

Armored Hull and Hull Integrated Systems

Armored Hull

Unlike most modern Star Army ships, the Yuuko's internal structure and armor plating are made out of far lighter materials than the normal standard. Built around a Yamataium frame and armored using a Yamataium-Andrium alloy, the Yuuko sacrifices pure stability for cheaper, self repairing materials that not only make the ship easier to manufacturer, but also decrease its need for maintenance even after extended service.

Hull Integrated Systems

Graviton Beam Projector (1)

A single beam projector is mounted on the Yuuko's nose and is used to project a stream of gravitons towards any object that requires fine manipulation (as much as a starship can finely manipulate something at any rate). it works by projecting a stream of gravitons and is ineffective against gravitic shielding.

Graviton Field Projector (1)

This device creates a field of gravitons which can be used to tow other spacecraft or shuttles. The Yuuko's sole projector is located to the rear of the launch bay and is primarily used for retrieving power armours and the like. The projector is ineffective against ships using gravitic shielding.

Computers and Electronics

CIES

The Yuuko boasts a top of the line Kessaku Compact Integrated Electronics System (CIES)

Joint Stealth System

The JSS serves to provide the small lightly armed Yuuko-class Gunboat with the means to mask its location either passively through a silent running mode (by modifying the CFS) or actively through a sophisticated multi-band jamming system designed to both blind and mute the enemy (known as the Moua Active Jammer).

Silent Running

While it is well known that the CFS' shielding capabilities can effectively seal a vessel in an alternate dimension to preclude all forms of detection the drawbacks associated with that action are not ideal. With that in mind, a new variation on the CFS was required – hence, silent running.

When switched into silent running mode, the Yuuko is unable to utilise its CFS for shielding and its top speed is cut drastically. However, in compensation the CFS is used to bend practically all forms of radiation around and away from the ship. In a sense, the Yuuko becomes completely invisible on a visual level and is undetectable to nearly all forms of sensors – emissions like light or radar appearing as if they'd passed through empty space – while still retaining its ability to accurately preserve its surroundings.

It should be noted that this is not a separate system or a modification of the actual CFS – merely a programme that uses that system. The Yuuko's silent running mode will be inoperable should the CFS be sufficiently damaged or destroyed.

Ke-S4-E3000 Moua Active Jammer

See: Ke-S4-E3000 Moua Active Jammer

Emergency Systems

The Yuuko includes all Star Army Standard Starship Emergency Systems

Escape Pod (2)

There are two KFY Type Ke-XS-2600es escape pods one the Yuuko. The first is accessed via hatch on the

left of the bridge, and the second is accessed via a hatch on the floor of the wardroom.

Self-Destruct

Lacking a dedicated self-destruct feature (primarily for space efficiency reasons), the Yuuko can be destroyed either from the bridge or engineering by deliberately overloading the aether generator and capacitor system. The process only takes a few seconds and results in an explosion powerful enough to totally destroy the ship (and everything else within 1500km).

Life Support Systems

Conformal PSC Device

See: Psionic Signal Controller

Hemosynthetic Conduit System

See: Hemosynthetic Conduit System

Nodal System

See: Nodal System

Propulsion and Shielding

Auxiliary Propulsion

The Yuuko possess highly efficient gravimetric drives for propelling the gunboat at STL speeds and manoeuvring in planetary atmosphere. They can also serve as an emergency engine system in case the CFS is damaged or destroyed.

Combined Field System

The Yuuko’s primary propulsion and shielding systems come from its Combined Field System.

Interdiction Field

The ship is capable of projecting a powerful artificial gravitic field that disrupts the operations of FTL drives of all types in a specific area of effect (minimal effective AOE is a 1,000 meter cubic area; maximum AOE is 1 AU cubic area). This is useful in preventing enemy vessels from escaping from battle. The interdiction field also has a secondary mode that can defeat the interdiction efforts of enemy forces in a localized area roughly half the size of its normal operation.

See: Anti-FTL Field

Propulsion

The ship propels itself at speeds many times the speed of light by generating continuum distortions in the CFS and nesting them to create asymmetric peristaltic fields. The normal CDD speeds are augmented by working with the forward deflector (located on the underside of the ship). This allows the ship to travel thousands of times the speed of light. This gives Star Army ships the advantage of attacking at FTL speeds. The Takumi uses a combined distortion drive capable of generating small wormholes, navigating the quantum slipstream, creating hyperspace fold points, and acting as sublight propulsion. Distortion-based systems allow the ship to stop or move nearly instantly because the ship has not “moved.”

Primary Defence

The shields are automatically modulated and phased by the ships computer system. While all frequencies, planes, and dimensions are theoretically covered by the shield, the modulation enables extra power to be routed to the bands, planes, and frequencies in which enemy weapons operate, decreasing the possibility of a shield overload and rendering enemy weapons largely useless. The CFS also protects the ship from collisions during high-speed space flight and can be used to facilitate ramming other vessels.

Continuing to refine the capacitor technology seeing use elsewhere in the Star Army, a large amount of the Yuuko's stored power goes into providing it with a shielding class equal in strength to an escort many times its size. This is only made possible thanks to the Yuuko's lack of large-scale energy weaponry, but the end result creates a deceptively resilient strike craft.

Outer Defense

The shield system is bordered (at a several kilometers out from the ship) with an intense scalar field which serves to dud electronics of incoming missiles and mecha, as well as detonating explosives, ablative armor, and overloading the nervous systems of pilots. This feature is disabled during normal operations, and (usually) enabled in combat.

Stealth

The ship can also be rendered invisible to scalar radar, aetheric-energy sensors, other forms of detection by using the shield bubble to keep the ship in its own alternate plane of existence. It can also use its scalar fields to simulate photons and other sensory forms that pass through the “empty space” and thus its presence is hidden. When the ship is fully it its bubble plane, it may only use its RDD sensor to monitor normal space.

Hyperspace Fold Drive

The Yuuko’s principle form of long distance FTL travel, the Fold Drive pushes the vessel into a dimension adjacent to our own where distances are far smaller.

Weapons Systems

Type-30 Torpedo Rack

Integrated either side of the fabrication bay, the Yuuko possesses two holding bays that house a single torpedo each. Unlike a larger vessel, the Yuuko lacks the space to hold a dedicated torpedo launcher. Instead, it simply fires them under their own power without aide from the ship. Completely self contained and covered when not in use, these simple things lack the ability to even self reload; needing to be manually restocked after combat by taking torpedoes directly from the fabrication bay and inserting them into the launch tubes from the outside of the ship.

See: Ke-Z1 Series Anti-Starship Torpedoes

Ke-S4-W3000 Light Subspace-Encased Particle Cannons (2)

See: Subspace-Encased Positron Tunneling Cannons

KFY Type-30 Variable Pods (20)

See: Star Army Weapons Pods

Vehicle Complement

Armors

- Mindy M2-2A Space Combat Armor (5)
- Additional armors to be stored or created on a case by case basis

OOC Notes

Star Army Logistics	
Supply Classification	Class A - STARSHIPS
First Used	YE 29
Last Review	YE 34
Year Retired	YE 34

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