

Rikei-Class Science Vessel

The Rikei-Class Science Vessel is a deep-space science vessel that first became available in [YE 32](#). It proved to be a very reliable class of ship and was updated upon review in [YE 44](#) with plans to have all in-service vessels brought up to the new 2A design by end of [YE 45](#).

History and Background



The Rikei-Class Science Vessel was designed in [YE 32](#) using the same spaceframe as the [Tansaku-class Science Vessel](#) designed for the [Scientific Studies Service \(SSS\)](#). The primary design was conceived by [Takumi](#), an officer in the [Second Expeditionary Fleet](#), which was then submitted to [Ketsurui Fleet Yards](#) and [Geshrinari Shipyards](#) and then was put into production.

From [YE 32](#) until [YE 44](#), the Rikei-Class served and proved itself to be a reliable design for the [Star Army of Yamatai](#). Upon review in [YE 44](#), it would receive a technology overhaul and the 2A version would be approved for continued production and service. Plans to update existing 1A/1B ships were planned to be carried out prior to the end of [YE 45](#).

The first group of ships to be updated will be the [Nashoba Science Group](#) of the [Fifth Expeditionary Fleet](#).

Description

The Rikei-Class Science vessel specializes in deep-space exploration.

2A in [YE 44](#):

- Includes multiple of the [Star Army Combined Sciences Laboratories](#) and can deploy multiple [Star Army Field Laboratory Type 43](#) to a planet.
- Carries swarms of [Multi-Role Science Drone Type 43](#) to extend the ship's capabilities.

1A/1B from [YE 32](#) to [YE 44](#):

- The is intended for deep space exploration for military purposes; including detecting enemy installations, investigating facilities, and disabled ships.

- There is a stealth (1b) variant available in limited quantity for operating behind enemy lines.

Mission Specialization

The Rikei-Class Science vessel specializes in deep-space exploration. It is primarily deployed in the [Star Army of Yamatai](#)'s Expeditionary Fleets; such as the [First Expeditionary Fleet](#), [Second Expeditionary Fleet](#) and [Fifth Expeditionary Fleet](#).

When traveling in fleet configurations the Rikei generally is docked with larger ships such as the [Izanagi-Class Dreadnought](#), [Yamato-Class Flagship](#), or [Takumi-Class Expeditionary Command Cruiser](#).

Appearance

Rikei-Class science vessels are in traditional [Star Army of Yamatai](#) blue with the [Star Army Hinomaru](#) and registration on top. They have two nacelles that house the [Turbo Aether Plasma Drive](#) and the [Continuum Distortion Drives](#). The two [Heavy Dual Anti-Starship Gun Turrets](#) on the forward section are always visible. The other turrets are only visible during combat.




The 2A version received upgrades to the [Multi-Stage Aether Drive](#) and the [Integrated CFS Array](#). The nacelles however give room for the [Umikagami Subsurface Operations Suite](#) which allows the vessel to operate under the water. The [Sorakagami Aerospace Operations Suite](#) has also been included for atmospheric operations.

Statistics and Performance

The Statistics and Performance information for the Rikei-Class Science Vessel.

General Statistics

General Statistics for the Rikei-Class Science Vessel	
	
Year Introduced	1A/1B YE 32, 2A YE 44
Class/Nomenclature	Ke-Y3-1A, Ke-Y3-1B, Ke-Y3-2A
Designers	Takumi, Second Expeditionary Fleet, Ketsurui Fleet Yards
Manufacturer	Ketsurui Fleet Yards and Geshrinari Shipyards
Fielded By	Star Army of Yamatai
Range	Unlimited Range
Maintenance Cycle	Five year PANTHEON updates, 10 year review by the Star Army of Yamatai with refits as needed.
Damage Rating (Version 3)	Tier 10
Lifespan	This vessel is designed for fifty years of continual use.
Pricing	180,000,000 KS

Passengers and Crew

The personnel on board the ship. It can vary from mission to mission.



Standard Occupancy 2A	
QTY	Description
70	Star Army of Yamatai personnel ¹⁾
Emergency	
Up to 240 individuals.	
Standard Occupancy 1A/1B	
72	Star Army of Yamatai personnel - 44 Regular Personnel and 28 Troops
Emergency	
Up to 250 individuals.	

Dimensions

The Dimensions of the Rikei-Class Science Vessel are as follows.

1A/B and 2A:

- Length: 184 meters (620.08 feet)
- Width: 92 meters (310.04 feet)
- Height: 25 meters (82.02 feet)
- Decks: 6 (4 meters each)

Propulsion Statistics

2A as of [YE 44](#):

- [Integrated CFS Array](#): 0.1 to 19,000c
- [Yumeoibito Hyperspace Fold Drive](#): 0.75ly/m
- [multi-stage_aether_drive](#): 0.35c
- Ground Speed (Hovering): 600km/h
- Max. Atmospheric Speed
 - Unshielded: 🚀 [Mach 1.7](#)
 - Shielded: 🚀 [Mach 2.7](#)
 - Aerodyne-optimized Shielded²⁾: 🚀 [Mach 3.1](#)
 - [Supercavitating shields](#)³⁾: 🚀 [Mach 5](#)
- Max. Aquatic Speed⁴⁾
 - 🚀 [Pump Jet](#)
 - Unshielded: 75kt (Surface), 24kt (Submerged)
 - Shielded: 80kt (Surface), 52kt (Submerged)
 - [Supercavitating shields](#): 225kt (Submerged)
 - 🚀 [MHD](#):
 - Unshielded: 88kt (Surface), 48kt (Submerged)
 - Shielded: 100kt (Surface), 64kt (Submerged)
 - [Supercavitating shields](#): 320kt (Submerged)
- Depth Rating⁵⁾:
 - Design Depth: 330m

- Test Depth: 480m
- Maximum Operating Depth⁶⁾: 2400m
- Crush Depth: 16,000m

1A/1B from [YE 32](#) to [YE 44](#):

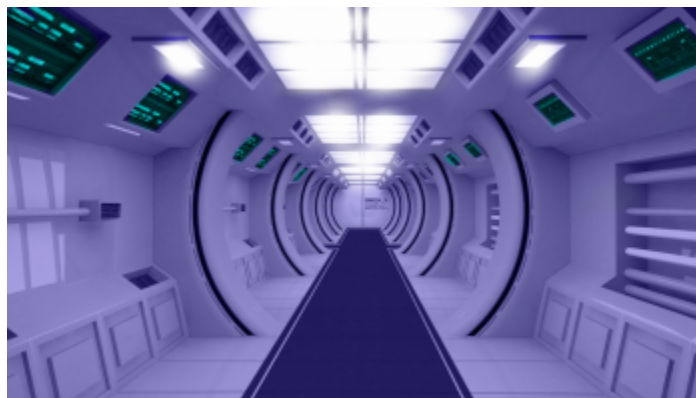
- Atmospheric: Mach 5
- Water: 200kph
- Sublight Engines: .375c (~112,422 kilometers per second) (~69,856 miles per second)
- [Combined Field System/Continuum Distortion Drive](#):
 - Minimum: Resting motionless
 - Cruising Speed: 12,500c (~1.43 ly/h)
 - Maximum Speed: 19,723.5c (2.25 ly/h)
- Hyperspace Drive: 447,066c (0.85 ly/m)

Inside the Ship

The inside of the long-serving and reliable Rikei-Class Science Vessel.

Getting Around Inside the Ship

The ship has [Standard Passageways](#), [Zero-Gravity Passageways](#) and [Standard Lifts](#) that provide access to most of the ship. Some system bays and engineering areas are only accessible by the network of [Maintenance Conduits](#) that run through the entire ship.



Layout 2A

Forward Zone	
Deck	Description
1	Bridge, Armory, Computer Room
2	Crew Accommodations and Services
3	Crew Accommodations and Services

Forward Zone	
Deck	Description
1	Bridge, Armory, Computer Room
4	Crew Accommodations and Services, Science Labs
5	Science Labs, Medical Lab
6	Science Labs, Engineering
Aft Zone	
Cargo and Launch Zone	
A	Cargo and Asset Storage
B	Combined Launch Facilities

Bridge

The Rikei-Class uses the [Small Starship Bridge](#). The [Standard Star Army Armory](#) can be accessed via the port access corridor to the bridge, and the [Standard Computer Room](#) is located off the starboard side. The bridge complex is located on Deck One of the ship.

Standard Crew Accommodations and Services

These are the standard accommodations and amenities⁷⁾.

Accommodations		
Deck	Accommodations Type	Description
2	Command Suites	One Suite for the Star Army Starship Captain and one for the Star Army First Officer
2	Officer's Cabins	Accommodations for crew ranked Shoi Kohosei or higher.
3 and 4	Crew Cabins	Large crew cabins accommodate the majority of the ship's company.

The Rikei-Class is rather light on amenities, it generally is a child ship when traveling with a fleet so the crew relies on the amenities offered on the larger ships.

Standard Amenities		
Deck	Amenities Type	Description
2	Star Army Onsen	A traditional social bath house.
3 and 4	Standard Star Army Crew Shower	The ship has both private shower rooms and communal ones.
3 and 4	Standard Star Army Crew Lounge	A comfortable place for the crew to gather off-duty.
3 and 4	Standard Star Army Galley	Star Army Cooks are always cooking up some grub here.
3 and 4	Standard Star Army Dining Hall	The dining hall is a place for the crew to eat and socialize.
2	Standard Star Army Wardroom ⁸⁾	A private dining room for officers.
3 and 4	Standard Star Army Laundry Room	The laundry rooms are a great place to clean dirty linens.

Combined Sciences Laboratories



The Rikei has seven [Star Army Combined Sciences Laboratory](#) facilities.⁹⁾ These multipurpose science laboratories can be quickly arranged in various configurations depending on the mission type. These laboratories are generally occupied by [Star Army Science Officer](#) personnel. Design in [YE 43](#) these facilities were purposely intended for the next class of science vessel so they promise long-term use by the [Star Army of Yamatai](#).

All Combined Sciences Laboratories are stocked with various glassware other required materials that can be ordered through [Star Army Logistics](#).

Interfaces are all fully compatible with the [Star Army Science Pad and Kit Type 43](#).

Medical Lab

This Science Vessel contains a [Sakura-type Medical Laboratory](#) for the treatment and maintenance of good crew health. Medical is located on Deck Five.

Engineering

The Rikei-Class deploys the modular and versatile [Standard Star Army Engineering Bay](#). It serves as a HUB for all the ship's subsystems and mechanical guts. Engineering is located on Deck Six.

Cargo Area



The Rikei-Class has a rather large [Standard Star Army Cargo Area](#) located in the forward half of the Aft Zone of the ship. It is accessible through the second set of airlock doors from the Combined Launch Facilities which are located aft of it.

Theoretical Volume: If the Cargo Area was packed absolutely full it could accommodate ten [SSCC-Xtra Large](#) with five stacked side-by-side and two tall.

Sciences Cargo Payload :

- (4) [Star Army Field Laboratory Type 43](#)
- (50) [Multi-Role Science Drone Type 43](#)
- (100) [Star Army Science Pad and Kit Type 43](#)

Combined Launch Facilities

The combined launch facilities serve as a [Standard Star Army Power Armor Bay](#) and [Standard Star Army Shuttle Bay](#) combined. The facility also accommodates the loading of cargo into the Cargo Area located forward of it in the Aft Zone of the ship, using adjustable tracks and robotic arms to transit [Standard Starship Cargo Containers](#) from one section to the other.

A set of [Powr Armor Storage Racks](#) is located on the port side of the bay, with accommodations for up to 30 [Ke-M2 "Mindy" Series of Power Armor](#).

Subsystems

The sub-systems and inner workings of the Rikei-Class Science Vessel.

Armor and Integrated Armor Systems

The hull is composed of [Yamataium](#), [Zesuaium](#), [Xiulurium](#)-coated [Zesuaium](#) and [Yamataium](#). The windows are made of transparent [Zesuaium](#). All interior passageways and rooms are surrounded by [Yarvex](#) sheeting.

The 1B had a no longer available cloaking system based on the one used on the [Elysian Nariel Assault Battlecruiser](#) which rendered it invisible to aetheric-energy sensors and mass detectors.

Integrated Armor Systems

The integrated hull systems are as follows:

- [Integrated CFS Array](#), which provides propulsion in CDD, defense, and stealth operation.
- [Nodal Liquid Conduit System](#), a system which uses the femtomechanical nature of [Hemosynthetics](#). Assists with damage control and other functions. When the shuttle is landed, it can be hooked into the system of its host vessel or space station for greater efficiency for this system.
 - Advanced Damage Control - [Ketsurui Fleet Yards](#) brought in [Hemosynthologist, Shinichiro Tomoko](#) onto the design team to testbed a new capillary system for the interlocking [Yamataium](#) hull. Standardly [Star Army of Yamatai](#) ships have capillaries which deliver [hemosynth](#) to interlocking [Yamataium](#) plating which boosts the annealing properties of [Yamataium](#). The system has a tweak where the femtomachinery components are

programmed to respond to osmotic conditions. A breach or damage to the armor creates a concentration gradient, which the fetomachinery is triggered to increase replication and flow along the gradient towards the damaged areas. This was first deployed in the [Ke-T10 "Fukuro" Multi-Role Shuttle](#).

- The Matter Collection System - The MCS allows the ship to collect hydrogen molecules as it travels through space, which can be used to provide fuel or converted into higher elements for use in the [Nodal Liquid Conduit System](#). The MCS units can be shielded in combat with cover plates.

Power Systems

The ship is powered by decentralized [Aether](#) generators spread throughout the ship, the highest number of which are located in and around the engineering compartments. Due to the development of the ship during a time when there was a perceived threat from enemy development of systems that interfered with [Aether](#), the ship has several secondary [Quantum Foam Generators](#).

Electronics Suite

The Rikei is equipped with the powerful [Warship Integrated Electronics System \(WIES\)](#), and all of its integrated sensors and a [Star Army Standard Communications Array](#).

Life Support and Emergency Systems

This Science Vessel is equipped with the latest [Life Support Systems](#), which included the update in [YE 43](#) which included integration with the new [Nodal Liquid Conduit System](#).

The ship is also loaded with all [Star Army Standard Starship Emergency Systems](#) including [Star Army Escape Pod, Type 35 "Seizonsha"](#) and [Star Army Escape Pod, Type 41 "Kodate"](#) (If [NH-33M \(Miniature\)](#) are standardly part of the crew).

Propulsion Systems

The Rikei 2A is equipped with an [Multi-Stage Aether Drive](#) for sublight applications, and it uses the [Integrated CFS Array](#) for [Continuum Distortion Drive](#) propulsion. The [Yugumo Corporation](#) contributed the [Yumeoibito Hyperspace Fold Drive](#). It has Maneuvering Thrusters ([ion thrusters](#)) that are used primarily for altitude adjustment, docking, and station keeping.

The nacelles which housed the [CDD Coils](#) for the 1A/1B, now hold the components of the [Umikagami Subsurface Operations Suite](#) which allows the vessel to operate under the water. The [Sorakagami Aerospace Operations Suite](#) has also been included for atmospheric operations.

Weapons Systems

The Rikei has the following modest combat systems.

2A in [YE 44](#):

- 1 x Single Port Torpedo Launcher (Forward), Type 43 ([Ke-Z1 Series Anti-Starship Torpedoes](#)). Also capable of launching [Multi-Role Science Drone Type 43](#).
- 2 x "[Yakaze Series](#)" Anti-Starship Turrets. (Tier 10, Light Anti-Starship Turrets)
- 8 x [Heavy Quad Anti-Mecha Cannons](#) (Tier 9, Heavy Anti-Mecha Cannons)
- 8 x "[Tachikaze](#)" Point Defense Cannons Type 43 (Tier 6, Heavy Anti-Armor Cannons)

It also utilizes a [Scalable Graviton Beam Projector Array](#) mounted on the ventral-aft section of the ship.

1A/B from [YE 32](#) to [YE 44](#) ¹⁰⁾:

- 2 [Ke-Z1 Series Anti-Starship Torpedoes](#)
- 2 [Heavy Dual Anti-Starship Gun Turrets](#) (Tier 11, Medium Anti-Starship)
- 8 [Heavy Quad Anti-Mecha Cannons](#)
- 1 [KFY Graviton Beam Projector](#) on the ship's ventral stern.

Vehicle Complement

The 2A Series of the Rikei-Class Science Vessel has the standard vehicle loadout as follows.

- 5 [Ke-T10 "Fukuro" Multi-Role Shuttle](#) available in all configurations.
- 50 [Multi-Role Science Drone Type 43](#).
- Up to 30 [Ke-M2 "Mindy" Series of Power Armor](#).

1A/B Series

The 1A/1B series had the following standard loadout.

Small Craft:

- [Ke-T7 "Raccoon" Transport Shuttle](#)
- [Ke-V6-1D "Hayabusa" Starfighter](#) or [Ke-V8 "Kawarime" Fighter](#)
- [K2 Enclosed Surface Terrain Vehicle](#)

Drones:

- [Variable Configuration Mission Adaptive Drones](#)
- [Star Army FTL Sensor Drone](#)

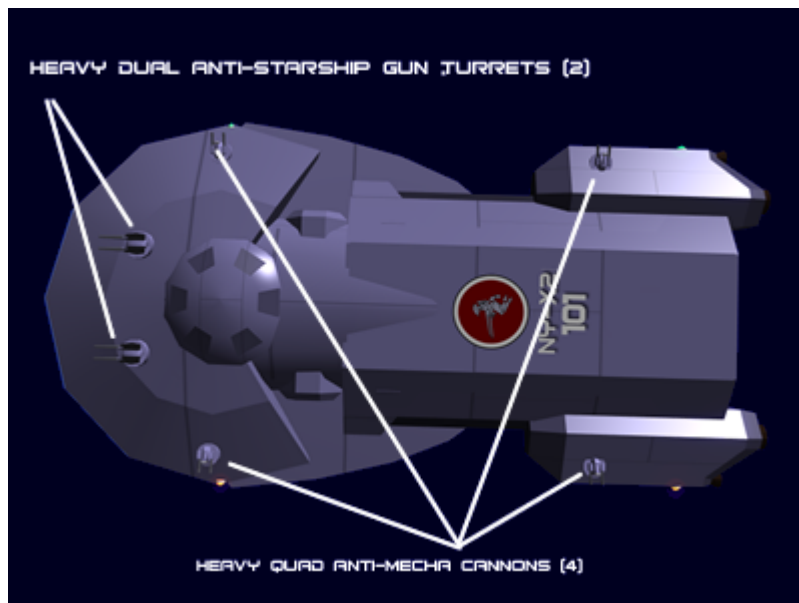
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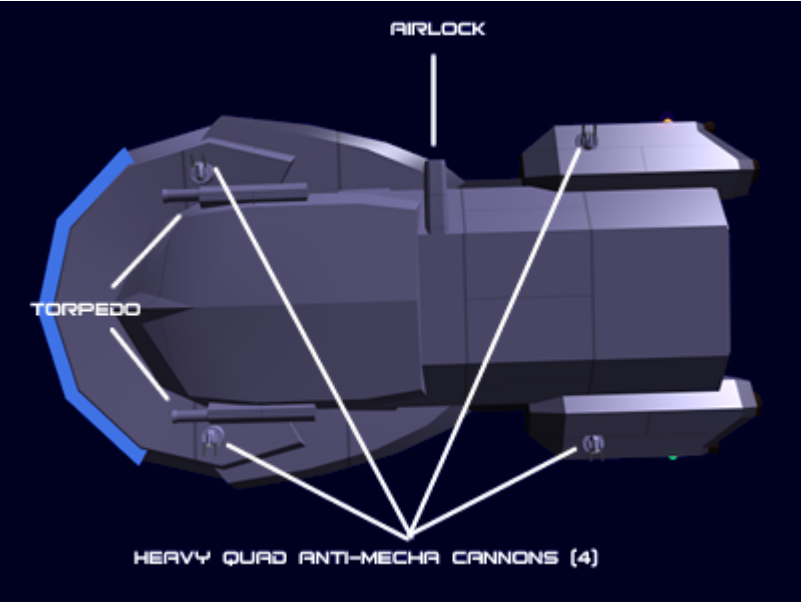
Authored by [Nashoba](#) and approved by [Wes](#)¹¹⁾ on Mar 16, 2010. [Andrew](#) updated this article on 2022/11/15 11:07.

- DOGA art is by [Nashoba](#).
- Combined Sciences Laboratory is by [Wes](#) using Midjourney Bot.
- Deep Space Beyond the Kikyo Sector is by [Andrew](#) using Midjourney Bot.
- [Jalen Sune](#) Art - [Chibi Art Gallery for the Type 32 Coat](#).
- Update was approved by [Wes](#) on 2022/11/21.¹²⁾

Additional Nashoba Rikei-Class Gallery

Check out some other Rikei-Class images made by our Legacy Admiral [Nashoba](#).





Star Army Logistics	
Supply Classification	Class A - STARSHIPS
First Used	YE 32
Last Review	YE 44
Products & Items Database	
Product Categories	starships
Product Name	Rikei-Class Science Vessel
Nomenclature	Ke-Y3
Manufacturer	Ketsurui Fleet Yards
Year Released	YE 32
Price (KS)	180,000,000.00 KS
DR v3 max	Tier 10

- 1)
majority will be [Star Army Science Officer](#) personnel.
- 2)
With [Sorakagami Aerospace Operations Suite](#)
- 3) , 4) 5)
With [Umikagami Subsurface Operations Suite](#)
- 6)
“Never Exceed”
- 7)
Plot ships and notable ships are encouraged to add custom areas
- 8)
The Command Wardroom has a notable large transparent [Zesuaium](#) viewport.
- 9)
There is one on Deck 4, Four on Deck 5, and Two on Deck 6.
- 10)
Please keep in mind this vessel was designed before [Weapon Limitations](#)
- 11)
<https://stararmy.com/roleplay-forum/threads/saoy-rikei-class-science-vessel.5011/>
- 12)
<https://stararmy.com/roleplay-forum/threads/ship-update-keeping-the-legends-in-service-rikei-class-scien>

ce-vessel.69615/#post-431665

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