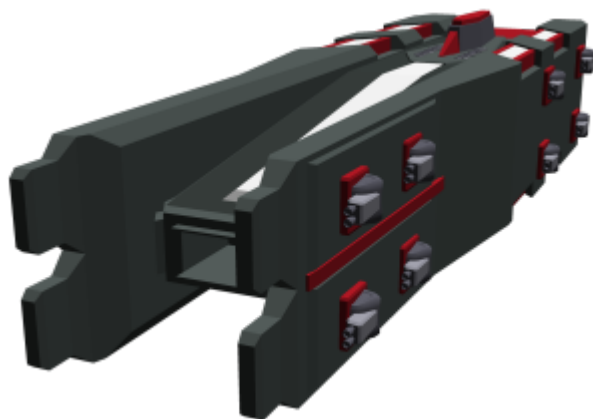


Mogami Class Cruiser

Developed by [Ryu Heavy Industries](#), the RHI-C1 Mogami Cruiser entered service for in [YE 44](#) and commercial sales in [YE 46](#).



1)

History

With the expansion of [Ryu Keiretsu's \(RyuK\) Takeda Minerals and Mining](#) mining operations and desire to expand into the frontier, RyuK's President [Ryu-Mizumitsu Masashi](#) decided that Black Crane Securities was going to need a fleet. After considering existing classes of ships to purchase, it was decided each of them lacked the punch needed to operate away from [Star Army of Yamatai](#) normal areas of operation.

The ship originally was designed to be a pirate hunting destroyer. But as shipwrights from [Yugumo Corporation](#) gave more and more feedback (given access due to the "[Taihō](#)" [Scalable Mass Driver](#)), the ship gradually evolved into a light cruiser and then its final cruiser form.

Description

The Mogami Class Cruiser, developed by Ryu Keiretsu's Ryu Heavy Industries and introduced in YE 44, is a formidable and versatile light cruiser. Initially conceptualized as a pirate hunting destroyer, the design evolved into a more robust cruiser form with significant input from Yugumo Corporation, particularly in its armament. The Mogami's distinctive design features an H-hull, where the main ship forms the spine with towering side mission hulls, giving it a formidable presence.

It combines elements of traditional Nepleslian design with advanced technology, reflecting its multifunctional nature and combat readiness. The cruiser stands out for its adaptability, capable of being equipped with various weapon configurations to suit different mission requirements. This flexibility makes the Mogami a valuable asset for organizations seeking a powerful, multipurpose vessel capable of operating independently in various scenarios, including frontier expansion and high-threat environments.

Mission Specialization

The Mogami Class Cruiser is designed with a focus on versatility, making it suitable for a range of missions:

- **Pirate Interdiction:** With its formidable weaponry and advanced sensors, the Mogami is well-equipped to engage in anti-piracy operations. Its ability to carry a range of weapons, including scalable mass drivers and turrets, makes it a significant threat to pirate vessels.
- **Destroyer Leader:** As a leader of destroyer flotillas, the Mogami can coordinate fleet actions in combat scenarios. Its advanced communication systems and tactical capabilities make it ideal for this role, guiding destroyers in strategic maneuvers and engagements.
- **Line Ship:** The Mogami can serve as a line ship in fleet formations, bringing its considerable firepower and defensive capabilities to bear in large-scale naval battles. Its robust hull, combined with advanced shielding, ensures it can withstand intense combat scenarios while contributing significantly to fleet offensive and defensive operations.
- **Frontier Defense and Expansion:** Designed for operations away from standard areas of control, the Mogami is well-suited for frontier defense and expansion efforts. Its range, endurance, and self-sufficiency make it an excellent choice for extended deployments in remote or newly colonized areas, providing security and support for ongoing development activities.
- **Multi-Role Combat Operations:** The Mogami's design allows for quick reconfiguration to adapt to various combat roles, from direct engagement to support and defense. Its adaptability makes it a valuable asset in dynamic combat situations where mission requirements can shift rapidly.

Appearance

For most of the ship, the Mogami has what the Ryu Keiretsu terms as an H-hull. The main ship forms the spine of the of the Frigate, while the side mission hulls tower it (giving the H shape). The rear of the ship has a more blocky appearance common with Nepleslian designs.



Statistics and Performance

General notes about ship stats and performance

General Statistics for the Mogami Cruiser	
Year Introduced	YE 44
Class/Nomenclature	RHI-C1
Designers	Ryu Heavy Industries
Manufacturer	Ryu Heavy Industries
Fielded By	Black Crane Securities, Nepleslian Reds, independents
Range	Unlimited with Matter Collector, 3 months otherwise
Maintenance Cycle	Refits every 5 years is recommended
Lifespan	30 years with regular maintenance and refits
Pricing	1,500,000 KS

Passengers

Crew: 235 enlisted and 15 officers

Maximum Capacity: There are accommodations for 300 people. About 500 people can fit aboard in an emergency, but the ship would be extremely cramped.

Dimensions

- Length: 450 meters

- Width: 118 meters
- Height: 85 meters
- Decks: 16 (5 meters each per standard deck, with 1.5 meter of mechanical space)

Propulsion and Range

- RHI CDD: 5,000c
- RHI Hyperspace Fold Drive: 0.5LY/min
 - Max Fold Distance: 25 ly
 - Charge Cycle:
 - 10 LY or less - 30 seconds
 - More than 10 LY up to 25 LY - 60 seconds
 - 7 minute cool down between folds
- [Hoshi II Series Turbo Plasma Drives](#): 0.3c max speed

Damage Capacity

See [Damage Rating \(Version 3\)](#) for a guide to damage ratings to include.

DRv3 Tier: Heavy Starship (12)

Inside the Ship

The main hull of the Mogami Cruiser is located down the middle of the ship. Most of the main and secondary weapons are located in the side secondary “Mission” hulls of the ship.

Deck Layout

The Deck layout can be found below.

Deck	Bow	Amidship	Stern	Notes
Deck 1			Sensor s	
Deck 2			Sensor s	
Deck 3	Sensor s	Weapon Spaces, Wardroom, Gallery	Bridge, Escape Pods	
Deck 4	Sensor s	Crew Cabins, Officer Cabins, Crew Support Facilities, C.O.B. Suite	Captain's Suite	
Deck 5		Crew Cabins, Armory, XO Suite, Science Laboratory, Multipurpose Room	Storage, Engineering, Fabrication Chamber (1)	
Deck 6		Upper Level of Cargo Hold 1	Medical Bay, Storage, Engineering	
Deck 7	Shuttle Bay	Lower Level of Cargo Hold 1	Storage, Engineering	

Deck	Bow	Amidship	Stern	Notes
Deck 8	Level 1 of Shuttle Bay	Maintenance Hanger, Medical Bay	Storage, Engineering, Fabrication Chamber (1)	
Deck 9	Level 2 of Shuttle Bay	Maintenance Hanger, Medical Bay	Storage, Engineering, Fabrication Chamber (1)	
Deck 10	Shuttle Bay	Upper Level of Cargo Hold 2	Storage, Engineering	
Deck 11		Lower Level of Cargo Hold 2	Medical Bay, Storage, Engineering	
Deck 12		Armory, Embarkment Chief Suite	Storage, Engineering, Fabrication Chamber (1)	
Deck 13	Sensor	Crew Cabins, Officer Cabins, Crew Support Facilities		
Deck 14	Sensor s	Level 1 of Fighter/Frame Hanger, Weapon Spaces, Wardroom, Gallery		
Deck 15		Escape Pods, Level 2 of Fighter/Frame Hanger, Fabrication Chambers (4)		
Deck 16		Fighter/Frame Launch Level, Sensor Systems		

Non-Crew Related Compartments

Armory

Located on Deck 5 and 12, the armories on the Mogami are designed to store weapons for defense of the ship. The walls are 2 meters of [Nerimium](#) protecting a static-free environment. There are spaces for the storage of 10 power armor next to the entrance of the armory, along with a storage room for the maintenance of any power armor stored.

Bridge

Located on Deck 3, the Mogami Class Cruiser makes use of a Small Ryu-Mizumitsu Starship Bridge. Besides the CO and XO seats in the middle, there are stations for the ship's helm, operations chief, sensors/comms specialist, 2 weapons specialists (1 of them also EW). The bridge is semi-cramped with computer systems taking up much of the available space in the front and back.

Cargo Holds

Located behind and above/below the ship's shuttle bay, the Mogami has two large cargo Holds located on Decks Decks 6/7 and 10/11. Often general items are stored within the upper Cargo Hold 1, while arms, ammunition, and equipment for the shuttle/fighter maintenance is stored within Cargo Hold 2 due to being closer to the associated areas.

Engineering

Consisting of the ship's compression fusion reactors, turbo plasma drive, and other systems required to operate the cruiser, it makes up 8 decks from Decks 6 to 12. The main workstations are located on Decks 6 and 11 with numerous secondary stations in between.

Fighter/Frame Hanger

Located on Decks 15 and 14, the Mogami possesses the ability to carry 12 fighters or frames. Two elevators in the rear attach the hanger to the ship's cargo holds and 2 to the front to the lower launch and recovery level.

Maintenance Hanger

Located behind the main shuttle bay on Decks 8 and 9, the maintenance hanger can accommodate 4 shuttles for permanent storage and repair.

Sensor s

Located in the mast making up Decks 1 and 2 as well as Decks 3,4,13,14, and 16. Each are accessible from maintenance corridors.

Fabrication Chambers (8)

Taking a cue from past technicians' and logistics specialists' praise for the Plumeria's ability to manufacture its own ammunition, Ryu Heavy Industries made use of their multistruct license, nanomachines, and third-party products. A [Zero-Gravity Kiosk Console, Type 39](#) controls the subsystems.

The Chamber consists of the following items:

- Zero-G Nanomachine Chamber (Used to create fine products like electronics and organic materials (food/medicine) if supplied with the proteins made in the Medical Lab)
- Project Thought Synthesis Reactor Module, Civilian (Used to synthesize anything short of Yamataian prohibited alloys)
- Multistruct Printing Chamber (Creates the finished product with material and components generated from the two subsystems. Also deconstructs and sorts the plasma into storage tanks with the use of a mini fusion torch.)

Science Laboratory

Located on Deck 5, the Mogami has a basic science laboratory specialized for astrophysics, stellar

cartography, and planetary cartography.

MedBay (3)

Main medical facilities on the Mogami. They provide urgent care with one being double decked to accommodate a small operations room to carry out surgeries. They are built in a similar fashion to the medical laboratory found on [Nuwa Class Multipurpose Frigate](#).

Each are about the size of a [Sakura-type Medical Laboratory](#).

Shuttle Bay

Located in the forward mid hull of the Mogami on Decks 8 and 9, the ship's shuttle bay measures at 95 meters long, 25 meters wide, and 10 meters high. The large size allows for a wide range of shuttles and small craft to land within the Mogami.

Storage

Located forward of the engineering levels on Decks 6-12, storage spaces act as a buffer for the rest of the ship. They are often used to store personal effects and supplies ready for use.

Weapon Spaces

Located on Decks 3 and 14, 8 weapon spaces (on each side of the ship) for the ship's main weapons can be found. While the turrets are not designed to be pop-up, each turrets support equipment are easily accessible for maintenance. There are gunner stations located in each space for local control.

Crew Related Compartments

Requiring maximum security, all rooms have at least 45cm of bulkhead in place for walls and some can be sealed by [Nerimium](#) Blast Shutters. Damage control stations can be located no more than 2 meters away from every door in a corridor and sound-powered phones are located in every room. Key compartments are wired directly to the bridge, while other rooms are wired to the security room and Med Bays (flipping a switch).

Chief of the Boat Suite

Located on Deck 4, the quarters of the Chief of the Boat (or the Senior Enlisted Advisor in SAoY speak) consist of only a bed for the COB. The remainder of the space is dedicated to entertainment purposes. The suite measures at 5 meters long x 5 meters wide x 3 meter high.

CO and XO Suites

Each a tad bigger than the standard cabins seen on the ship (7m x 5m x 3m), these suites are dedicated to the senior leadership of the Mogami Class ships. The Captain's suite is located on Deck 4, while the XO's is located on Deck 5.

Crew Cabin (20)

Measuring at 5 meters long x 5 meters wide x 3 meter high., the Crew Cabins are designed to house the crew of the ship. They lack major entertainment systems besides small personal volumetric displays in each of the 5 bunks present in the cabin.

2 single bunks are built into the thick walls to the left and right sides. A fifth single bunk is located on the rear wall, berthing a senior-rated crew member (usually the team leader). If crew members want privacy, they simply close the blinds and engage noise canceling to make sure their cabin mates can't hear what they are doing. The bunks are also high enough for two individuals and very sturdy to not shake to disturb others.

Each far corner of the cabin contains storage dedicated to housing the personal effects (namely clothing). In the near corners to the cabin's entrance, two 2m x 2m wet bathrooms are located for the crew's hygienic needs. The shower unit and toilet occupy the same space.

Crew Cabins are found on Decks 4, 5, 13.

Crew Support Facilities (2)

Located on Decks 4 and 13, Crew Support Facilities (CSF) are a combination of laundry, ship stores, and communal baths. The “front” consists of a store where cleaning supplies and other items the crew would like to have for morale can be found. To the opposite is a laundry facility for those wishing not to bathe or those that had changed clothing after bathing. A door leading to the changing room can be seen in the hallway created by the first two sub-rooms. Beyond the changing room are two small pools used for communal or gender-separated (with an addition of a wall) bathing.

Gallery

Located on Decks 3 and 14 off their respective Wardroom, the Galley has a built-in Scullery. This has been necessitated to help with the increased crew complement and the enlarged Wardroom. It is also better stocked with spices and other such options to cater to a wider palette, including any VIPs being transported. It also includes a multi-layer hydroponics system used to grow spinach, tomatoes, basil, and other herbs and vegetables. This helps the ship maintain a supply of quality ingredients when away from ports.

Multipurpose Room

Located on Deck 5, the multipurpose room is a volumetric room that can be configured to generate a wide assortment of environments for crew morale. It is often used a dojo and gym to maintain the fitness of the crew. It is also used as an auditorium for movie nights.

Officer Cabin (2)

Measuring 5 meters long x 5 meters wide x 3 meter high, the crew cabins are designed to house 2 officers. Along the side of the left and right walls, a 2.5 meters long and 1.5 meters wide bed is located with overhead storage compartments. The rear wall has an entertainment suite and seating. In addition, each occupant is provided with a 2 meters x 2 meters private toilet/shower unit located in front of their beds.

Officer Cabins are located on Decks 4, 13.


Wardroom

Connected to the galleries on Decks 3 and 14, the wardroom is used as the dining hall for Mogami ships. When the gallery is closed, a portion of the wardroom is used as a ship's store to sell snacks and food to the crew.

Ship Systems

Below are the various systems and structures that allow the Mogami to function.

Armored Hull and Hull Integrated Systems

The Mogami Class utilizes [Osmiridium](#),[ADNR \(Aggregated Diamond Nanorods\)](#), and  [titanium](#). What little windows and view ports there are utilize [Transparent Durandium](#), which have [Nerimium](#) blast shields during combat. All corridors and rooms are lined with [Xirang Gel](#).

Mogami-class Hull and Frame Assembly	
Primary SpaceFrame	ADNR (Aggregated Diamond Nanorods) reinforced Osmiridium Major Truss
Secondary SpaceFrame	Osmiridium Secondary Truss and Rod Assembly
Outer Plates	Osmiridium /Titanium Nanocomposite Laminate Plating
Lining	Xirang Gel

Computers and Electronics

The Mogami Cruiser makes use of the new Gate [KAIMON](#) to control the ship. In addition to the main computer core, [Savtech JANE](#) hardware is also located within the bridge of Mogami Class Cruisers and throughout the ship. While not as powerful as the main core, the JANE hardware is capable of acting as a backup and assistant to the main AI.

Emergency Systems

As a warship, the Mogami Cruiser makes use of a number of systems to both ensure the safety of its crew and to keep the ship in fighting condition.

- Automatic Fire Suppression Systems
- Gel-like Hull Sealant
- [Nerimium](#)-based [Forcefield-Nested Isolation Doors](#) to maintain internal pressure and repel hostile forces. For less important locations, [Osmiridium](#) is used to cut down weight.
- Containment Force Fields (and simple rubber seals)
- Emergency Atmosphere Stations (respirator masks and [RHI Type 43 "Megumi" Environmental Skinsuit](#))
- Emergency Shelters

There are enough [Ikigai Escape Pods](#) to cover the max number of individuals supported by the life support system. The pods are placed into RHI Type 44 Escape Pod Adapters, 6 to an adapter. The pods can be further dispersed if it increases their occupants' chances of survival.

Life Support Systems

The Mogami makes use of a newly designed RHI Type 44 Life Support System. Using the [Yugumo Standard Life Support Systems](#) as a basic component, they expanded on it to create more of an ecosystem aboard the Mogami. Like the Type 43 Yu, the RHI Type 44 makes use of environmental nanites produced by [Advancer Enterprises](#) and programmable matter.

Atmospheric Systems

Key to any Neplesian-like environment, the Mizumoto extracts oxygen from three sources when there is a deficiency: water (electrolysis), living plants from the agricultural decks, and elemental oxides.

Some of the oxygen of the Mizumoto is generated from electrolysis. Generally water extracted from industrial usage is used for this process as separating the elements without oxygen binding to it is easier. The remainder of it is generated from oxides of less valuable or very common elements such as silicon.

The ship's atmosphere is regularly filtered with nanite enhanced scrubbers and filters. Excess CO₂ is regularly extracted and deposited in elemental form where it is transported to the agricultural and industrial decks for various uses.

Nanites also extract excess water from the air generated from various sources (sapient, cooking, etc) to

maintain a constant level of humidity. The extracted water is added to the ship's wastewater system to ensure it is filtered properly. Other harmful chemicals and elements are captured and broken down by waste disposal for reuse.

Water

The objective of the Type 44's water systems is to retain as much of the initial charge of water as possible. To accomplish this goal, waste water goes through multiple nanite filtration filters that extract the most harmful chemicals before they reach a small water treatment plants located around the vessel. At the water treatment plants, nanites extract excess water from the sludge of organic material that isn't needed for material's recycling process.

When there is deficient levels of water, stored hydrogen is burned in chambers containing oxygen to generate water. Water from water tankers or ice miners is also another method of adding water to the Mizumoto. All undergo filtration and/or desalination before being added to the ecosystem.

Artificial Gravity

Built into the floors of most floors of the Mizumoto, graviton generators are distributed evenly to allow artificial gravity on the ship. The generators are variable, allowing for different levels of gravity. One room for [Shukaren Daur \(Sub-Species\)](#) can be at the high gravity of their homeworld, while another species can have low gravity. When main power is disrupted, the generators enter a low power mode and draw from their own batteries to generate 0.1 Gs.

The artificial gravity system also does a good job of dampening the inertia of the ship.

Organic Recycling

Biowaste is recycled by gene-engineered microfauna and nanites that recycle nutrients for use in aeroponics systems.


Waste Disposal

Non-organic material is sorted and put into several fusion torches in the fabrication room of the ship. Converted into elemental plasma, it is then sorted and reused.

==== Power, Propulsion, and Shield Systems ==== Built around the Ryu-Mizumitsu Clan's preference for hyperspace travel, the Mogami Cruiser makes use of a RHI designed Hyperspace Fold Drive. For quick inter-system travel, a RHI CD Drive with [Mizu II Series Continuum Distortion Drives](#) components (RHI-C1-P4401) has its coils located within the center rear of the vessel.

For sub-light propulsion, a single [Hoshi III Series Multi-Stage Turbo Plasma Drive](#) was chosen to propel the ship. The drive assembly is designed to be detached and replaceable in a refit. This allows for different

drive technologies to be installed in a Mogami in the future.

For power, the Mogami Cruiser makes use of 4 [compression fusion reactors](#) coupled to the Hoshi III Turbo Plasma Drive . 2 [Class 3 Aether Fuel Generators](#) are also used as a supplement during peak power usage and to replenish the ship's fuel reserves. A [Navitium](#)  [Superconducting Magnetic Energy Storage \(SMES\)](#) load balancing systems are located throughout the ship, storing excess energy indefinitely when in low demand situations and discharges when the power system cannot handle demand.

The Mogami Cruiser has two Umi II [Mizu II Series Continuum Distortion Drives](#) coil assemblies integrated within the structure of the ship that generate a [Combined Field System](#) for defensive shielding. Electrostatic/Gravimetric shielding act as a back up, but it is no where near as powerful (Tier 10) as the main CFS.

Weapons Systems

Designed to be multi-functional, the Mogami Cruiser posses 16 weapon hard-points (4 at the top and bottom sides of the side hulls). The ship's power grid is capable of handling the following configurations with "[Taihō](#)" [Scalable Mass Driver](#) or "[Yakaze](#)" [Series Anti-Starship Turrets Type 43](#) turrets:

- 16 Tier 11 (standard configuration)
- 8 Tier 12
- 4 Tier 12, 8 Tier 11
- 4 Tier 12, 12 Tier 10
- 2 Tier 13, 4 Tier 12
- 2 Tier 13, 8 Tier 11
- 2 Tier 13, 14 Tier 10

Other weapon systems can be installed, due to the modular nature of the the side "Mission" hulls.

For point defense, the Mogami has the following:

- 128 (32 top, bottom, and each side) "[Tachikaze](#)" [Point Defense Cannons Type 43](#)
- 128 (32 top, bottom, and each side) [Magathiel Mini-Missile Cell](#)

Per agreement with the [Yugumo Corporation](#), ships are not shipped with Taihou, Yakaze, and tachikaze when sold to non-Yamataian clients.

Vehicle Complement

Shuttles

- 4 [Xuanwu Class Trans-atmospheric Shuttle](#) in shuttle bay
- 6 [Xuanwu Class Trans-atmospheric Shuttle](#) in storage

Fighters/Frames

The Mogami's Fighter and Frame (FF) Hanger has room for 12 fighters or Frames the size of the [Ke-V8 "Kawarime" Fighter](#) or the [Super Spartan Upgrade Package](#)

Drone Bay

The Mogami possesses a Drone Bay with room for 50 drones the size of the [Variable Configuration Mission Adaptive Drone - Space](#)

OOC Notes

[Demibear](#) created this article on 2021/10/30 02:21.

Approval Thread: <https://starmy.com/roleplay-forum/threads/mogami-class-light-cruiser.71430/>

Products & Items Database	
Product Categories	starships
Product Name	Mogami Class Cruiser
Nomenclature	RHI-C1-1A
Manufacturer	Ryu Heavy Industries
Year Released	YE 46
Price (KS)	1,500,000.00 KS

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Mogami in Tier 10 configuration, artwork by [Alex Hart](#)

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