Chiaki-class (1A) Escort Destroyer

The *Chiaki-class* Escort Destroyer is a small destroyer first manufactured in YE 32 by Ketsurui Fleet Yards in service for the Star Army of Yamatai.



About the Chiaki

The *Chiaki* started as part of the Star Army's informal project to phase out old vessels, specifically the *Arashi-class Escort*, which was first fielded in YE 25. It is designed to be a tough, but easily serviced vessel, with at least 60 percent of its make-up using parts from the *Plumeria-class light gunship* and the main gun borrowed from the *updated Yui-class scout destroyer*. The ship is meant to keep up with slower, larger vessels, especially those built on the *Henry Chen-class Training Vessel's frame*, as they lack direct anti-starship weapons. It also is designed for planetary defense.

In YE 37, this ship completed its five-year review and was reauthorized for construction and use until at least YE 42.

Key Features

- Four 300 mm, variable-speed guns capable of firing either positron shells or solenoid projectiles.
- A single main aether gun.
- Shields and armor more durable than most vessels in its class.

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- Easy to repair and maintain due to comparatively simple construction and systems.
- Low cost thanks to commonality of parts with other Star Army vessels.

Mission Specialization

- Capital ship defense. The *Chiaki* is small, quick and carries large damage potential. It is rated as a medium-range vessel, but in design it is pegged to stay attached to capital ship groups or planets and use its high speed to intercept threats. It generally operates in a defensive wolf pack or as an interceptor-destroyer.
- Planetary support/defense. The *Chiaki* has can use its Mass Driver Guns as flying artillery in order to bombard enemy positions. It can also be fitted with different types of turrets to assist with anti-aerofighter/mecha situations.

Appearance

The ship draws elements from the *Plumeria* while looking like an enlarged *Ketsueki-class Escort*. It features a sharp, pointy bow, but no blade; it has pylons and nacelles similar to the *Plumeria* with its armored shields on the outside. Its vital systems are stored in the center of the vessel, with crew cabins and the tiny hangar in the half-hexagon-like shape attached to the back of the ship.



SAINT Livery

Star Army Intelligence uses a black-hulled version:



Statistics and Performance

General

- Class: Ke-D7-1A
- Type: Escort Destroyer
- Designer and manufacturer: Ketsurui Fleet Yards
- Production: Initial run of 24 units
- Fielded by: First and Second Expeditionary Fleets

Passengers

- Crew: 6 operators are recommended, 2 are required (pilot/gunner and damage control/sensors/engineering).
- Maximum Capacity: There are accommodations for 10 beings. About 80 people can fit aboard in an emergency, but the ship would suffer reduced combat effectiveness.

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Dimensions

- Length: 121.5 meters (398.62 feet)
- Width: 89.6 meters (293.96 feet)
- Height: 24 meters (78.74 feet)
- Decks: 2 (4 meters each in height)

Propulsion and Range

- Continuum Distortion Drive: 18,750 c
- Hyperspace Fold Drive: None
- Sublight Engines: 0.30 c
- Range: Though the range is technically indefinite ...
 - *Effective* range is about 10 lightyears based on its ability without assistance, to respond quickly to events.
 - *Practical* range depends upon supplies on hand. These can be bolstered by a larger sister ship (tying the *Chiaki's* range to said vessel) or devoting more space in its small cargo area.
- Lifespan: About 30 years.
- Refit Cycle: About once every other year.



Damage Capacity

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

- Hull: 16
- Shields: 20 (Threshold 2)

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

• Tier: 11, (Light Starship)

Inside the Ship

Deck Layout

Deck	Compartments
	Bathroom/showers, bridge, crew cabins, escape pods, laundry room, maintenance conduits, magazines, medical center, wardroom, weapons lockers
	Airlock, cargo hold, CIES room, engineering/fabrication/power generation, maintenance conduits, main gun assembly, magazines, weapons lockers

Compartment Layouts

All listed areas have firefighting stations.

Airlock

The *Chiaki's* airlock is standard, but with a couple twists. The chamber itself is the Deck 2 half of the main passageway at the center of the ship. Blast shutters at the two entryways to the main passageway will shut, the passageway will depressurize, then the door will open to space. To maintain uniform armor thickness, the ship has no umbilicals. The storage locker is found on the bow side of the passageway on Deck 2, horizontal, above the entryway.

Bathroom/Shower

Just forward of the escape pod on Deck 1, the shower room doubles as a head. The three commodes are sectioned off by doors on the starboard side, and the shower room is communal. The two sinks are found on the aft starboard wall, next to the door. A doublewide mirror is in front of them.

Bridge

Matching the *Miharu*, the *Chiaki* uses a Basic Small Starship Bridge (Miharu type). It is found on Deck 1, between the two white running lights at the fore of the ship.

Cargo Storage Area/Shuttle Bay

The *Chiaki*'s hold, located on Deck 2 below the crew cabins, is about 25 meters wide and about 20 meters long, with a loading gate about 8 meters wide. It is only 4 meters tall. Its front is shaped like half of a hexagon; the back half is a rectangle for the stacking of Medium Starship Cargo Containers. It normally holds two or three of them, usually full of foodstuffs and medical supplies.

The cargo hold has white padded walls and a metal floor with plenty of tie-down points. Some parts of the floor have strips of rollers so that crates can be moved easily up and down the length of the bay.

Each end of the cargo hold has a large robotic arm that extends from the ceiling area, used to reposition crates of cargo within the bay. It can be manually operated via volumetric control console, or (by placing the console on automatic mode) operated by the ship's computer via voice command. The bay has interior light sets in white and in red.

The cargo hold has power hookups, so that nuclear-powered or other generators, built into cargo containers, can be slaved to the ship's power distribution system and used in place of the main aether generator.

Crew Cabins

Five cabins line the back of Deck 1, behind the Star Army Hinomaru logo.

Each outer wall doubles as a volumetric window.

Escape Pods

Beneath the Star Army Hinomaru are two escape pods.

Engineering

Engineering takes up the front half of Deck 2, save for the CIES room. It combines several functions by having several sections cordoned off with Transparent Durandium, including nodal fabrication (inside one deck) and the hyperspace unit. Power generation, at the center, is not sectioned. These sections have transparent durandium bases, too, so they appear to "float" over the machinery and cables along the "floor" and celling. It also has access to several larger Standard Star Army Maintenance Conduits.

The nodal fabrication times are the same as *Yuuko*, but without the capability to build weapon pods, torpedoes, shuttles and fighters.

Laundry room

The laundry room is on the port side, where the cabins are, but is squeezed into a closet space, and features a stackable washer/dryer unit.

Maintenance Conduits

The Chiaki has Standard Star Army Maintenance Conduits.

Main Gun Assembly

The "blade" of the ship, with a single maintenance conduit running through it.

Magazines

Spanning both decks on both sides of the ship, the magazines take up the bulky, angular portions atop and below each pylon. They carry a massive amount of ammunition compared to other Star Army vessels, and have complex power systems and robotic units inside of them. The robotic arms also operate with much higher efficiency than other Star Army vessels, as they supply the ship's main source of offensive firepower.

Each magazine carries 1,000 solenoid rounds to share between two Mass Driver Guns, and 100 positron rounds. They are the most heavily armored portions of the ship.

Autoloading system

The autoloading system involves a series of robotic arms, similar to those in the cargo area, constantly feeding rounds into simple cages with rollers on the bottom. The weight of the rounds The cages each contain 50 rounds that sends the rounds rolling downward toward the Mass Driver Gun's breech. The ceiling-based arms, if needing to switch the gun over to positron rounds, will move that cage aside and roll the positron cage into it.

The cages lock to the breech of the gun.

Main Passageway

The main passageway, in the center of the ship, is a Standard Star Army Zero-Gravity Passageways.

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Medical Center

The *Chiaki's* medical center is much smaller than most other Star Army vessels; it is located on Deck 1 behind the bridge. It is autonomous, but has no assisting nurse beyond other crew. It also has only one treatment unit, one surgical unit, one hemosynth tube and one Type 30 Mental Transfer and Backup Unit. Supplies are kept inside a small cabinet inside the center.

Passageways

The passageways are all standard. Each "quarter" of the ship also has a Standard Damage Control Station.

Wardroom

The *Chiaki's* wardroom is just beyond the bathroom on Deck 1.

Weapon lockers

Weapons lockers, each 1 meter wide by 1.5 meters tall, are found on both decks, two to a deck (one bowside, one aft-side). They're locked behind blast shutter-like doors unless the commander authorizes access to them. Their equipment is dependent on the choices of the commander, but one can expect to find:

- Type 28C Nekovalkyrja Service Pistols 2 for every member of the crew
 4 additional BR-28A battery magazines
- Type 28 Submachineguns 1 for every other member of the crew
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- Nekovalkyrja BARs 1 for every other member of the crew
 8 additional BR-SMG battery magazines
- 5 chargers each for BR-28 and BR-SMG
- 4 boxes of various grenades
- 2 Type 28 Multi-species Environmental Suits
- 1 Portable Repair Kit
- Weapon maintenance supplies, cleaning kits, and spare parts
- Body armor as needed and/or available

In the cargo area, power-armor-grade weapons are kept in a medium container on racks.

- 5 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 a Ke-M6-W3000 50mm Gauss Bazooka
- All missiles for Daisy M6 power armors

Missiles: Ke-M2-W2703-SDMM, Ke-M2-W2703-MFMA, Ke-M2-W2703-ARMA

- Tactical drones for Daisy M6
- 6 Ke-M4-2901 Light Armor Service Rifles, with 6 additional magazines of ammunition for each.
- 3 Ke-M2-2901 Aether Saber Rifles with BR-M20 magazines and attachment cables (2 extra for each)
- Grenade Launchers
- 1 50 mm gauss bazooka

Ship Systems

Armored Hull and Hull Integrated Systems

Armored Hull

The primary substance used on the meter-thick hull is Yama-Dura. It is used to armor the fuselage of the ship; since it is weaker than Yamataium, it was made thicker than the typical 0.5-meter hull found on the *Plumeria*-class. The magazines and the wing shields, however, are made of Yamataium. The ship's frame is also made of Yama-Dura. All interior passageways and rooms are surrounded by Yarvex sheeting and protected from scalar fields by the internal gravity systems.

The Chiaki has no windows.

See Damage Rating (Version 3) for more information on damage ratings.

Hull Integrated Systems

Graviton Beam Projector (2)

Two beam projectors are mounted on the *Chiaki's* nose and aft; they're used to project a stream of gravitons towards any object that requires fine manipulation. They are ineffective against gravitic shielding.

Combined Field System

The Chiaki has a dual-unit Combined Field System, with an anti-FTL range of about 1 AU.

Computers and Electronics

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CIES

The Chiaki uses a Compact Integrated Electronics System.

Joint Stealth System

Chiakis feature the Yuuko-class gunboat's Joint Stealth System and Moua Active Jammer system.

Emergency Systems

The *Chiaki* has a Psionic Signal Controller, a standard Hemosynthetic Conduit System, and a limited Nodal System. It has no Soul Savior Pod. Damage control stations are found in engineering, in the cargo bay, on the Deck 2 portion of each magazine and on either side of the armory.

Blast Shutters

Shutters are located:

- At the four entryways to Decks 1 and 2 from the Main Passageway.
- At the Bridge entrance.
- At the CIES entrance.
- On both sides of the passageway, just before the cabins.
- At the entrance to engineering.
- At the entrance to the wardroom.
- At the entrance to the cargo bay.

Life Support Systems

Atmospheric systems are divided into exight separate habitat zones: The first six are general areas divided by the upper and power part of the ship (Decks 1 and 2) and the main passageway and cargo lift. The remaining two are the bridge and the armory, which are equipped with their own atmospheric recycling systems. The air recycling system (which is highly monitored for security reasons) can support up to 100 Yamataian or NH-29 Series Nekovalkyrja personnel up to five years and is designed to prevent the spread of contaminents and insects. After the start of the Second Mishhuvurthyar War, gunships were equipped with various anti-infestation countermeasures such as ultra-sonic beam emitters inside the ventilation tubes. Waste is broken into its atomic components; useful elements are stored for later use in the fabrication area. Water can be recycled for twenty years and is stored in fairly large quantities for use in firefighting.

Propulsion

The Chiaki has a Combined Field System and four Turbo Aether Plasma Drive engines, located on nacelles. The engines can push the ship to 0.3 c. The CFS reaches a maximum speed of 18,750 c.

Shield Systems

The *Chiaki* has only its Combined Field System available for shielding.

Weapons Systems

- 1 Tier 12/Tiers 14 (Light Anti-Capital Ship) Aether Shock Cannon. This cannon is more compact than the Yui 7's weapon, and has a reduced firing rate of 6 shots per minute.
- 4 typically Tier 11/Tier 9, Heavy Anti-Mecha or 4 (Medium Anti-Starship) Mass Driver Gunss
- 5 Tier 5/Tier 8 (Medium Anti-Armor) Type 32 Medium Anti-Armor Turrets a.k.a. Heavy Dual Anti-Starship Gun Turrets



- M6-1B Daisy Power Armor 6
- Can fit a *Kuma* shuttle.

Additional photos

A gallery can be found here.

History and Background

The Chiaki originates from several designs, including the Plumeria, Ketsueki, Yui and Yuuko-class gunboat. Star Army planners long had wanted less maintenance-intensive ship that could be put on the front or rear lines with equal effectiveness and could deal damage on an increasingly losing battlefield.

The Yuuko was designed to be that vessel, but the reliance on torpedoes, along with its small size, led to

it being ineffective against heavily armored, heavily armed NMX vessels and the vicious new class of battlepods. It also couldn't support planetary operations, which the war effort required.

Reaching those two goals — front-to-back versatility and ground combat capability — meant a new vessel. Planners wanted something simple and cheap, as the *Yuuko* was, but also robust and potent, as the *Yuuko* was meant to be.

Designers first ditched torpedoes, but planners wanted solid-projectile weapons for ground use. The idea to convert back and forth came from the design of a years-old rifle experiment. Designers came up with cannons that could use solenoid rounds or positron shells, depending on mission profile.

The design team next tossed the fold drive, a complex component of any vessel that requires careful support. They then eliminated repair and weapon pods, as the complicated generators needed infrastructure for which there was no room. Designers instead used sturdy Yamataium armor and crafted smaller anti-armor/fighter turrets.

Last, but most important, the team kept out the range of delicate but bulky sensors found on most Star Army ships to make room for more ammunition.

The Chiaki is named after one of Yui's daughters.

Regarding other vessels

Star Army war planners and Ketsurui Fleet Yards designers closely examined the *Chiaki*'s contemporaries before, during and after the vessel rolled out.

Hayai-class Gunboat

Along with the *Chiaki*, planners and KFY developed the *Hayai-class gunboat* as a replacement for the illfated *Yuuko*. The classes are small and inexpensive — the *Chiaki* less than the *Hayai* — but have limited mission profiles that only occasionally cross.

The classifications tell the tale: one offensive, one defensive.

Each vessel is an effective capital ship destroyer, with high S/FTL acceleration and powerful weapons. However, while Star Army commanders agree the *Chiaki* is desirable because of its jamming systems, the *Hayai's* torpedoes bring superior firepower to bear against larger ships and easily are fielded in great numbers. Commanders usually make *Hayais* active ship killers in packs, ganging up on a single target.

Chiakis are spread around a larger Star Army vessel as passive destroyers and are able to engage multiple targets in quick succession.

Commanders also prefer the *Hayai*'s anti-FTL systems and higher S/FTL speed for an offensive interceptor, but prefer the *Chiaki*'s Moua active sensor jammer and overall durability for a defensive interceptor.

Overlap occurs during stealth/silent missions, where each vessel has desirable traits.

The low cost of each vessel allowed planners to select both designs without the two competing.

Yui 7-class Scout Destroyer

The *Chiaki* exists because of the *Yui* and its legacy. That includes the *Yui's* monetary and material costs, which the *Chiaki* is meant to off-set. The *Yui* matches or outperforms the *Chiaki* by almost any metric, even with planners discounting the value of torpedoes. Instead, the *Chiaki* exists to free up *Yui* squadrons from escort duty of ships and installations, allowing them to take on more important missions.

Midori-class Scout

The *Chiaki* and *Midori-class Scout* fill separate roles, but nonetheless sometimes cross over in sorties. The *Midori* has slightly better armor and is much faster, but designers did not intend for it to engage in long-term and/or fleet combat. For example, its sensor vanes are exposed if its shields fail during combat, and it also carries just 16 torpedoes and has no beam weapon — the same as the smaller and less-expensive *Hayai* without the valuable anti-FTL system.

Designers respectively compared the *Midori* and *Chiaki* as a sniper/marksman behind enemy lines to a machine gunner amidst riflemen.

NMX Escort/Destroyer

The *Chiaki* and *NMX Escort/Destroyer* have some similar mission profiles with different tactics. The NMX vessel is faster, tougher and more powerful, bleeding into the role of pocket battleship. However, it lacks the maneuverability and other defensive systems that make the *Chiaki* an effective interceptor.

The NMX vessel provides better anti-starfighter cover with its many turrets and battlepod bay. It also can create a more complete defensive screen for capital vessels, soaking fire from incoming enemy vessels into its broadsides as it replies with turreted weapons.

Yamataian strategy advises *Chiaki* commanders not wait for enemy vessels to reach their protectorates, instead using speed and overwhelming firepower to obliterate incoming targets. The *Chiaki* can target starfighter-sized craft with its aether beam cannon or with focused turret fire, but Yamataian strategy instead puts starfighter defense in the hands of power armor and friendly starfighters.

Origin vessels

The *Jinkan*- and *Kouken-class* escorts are attempts by Origin to give Yamatai a low-cost defensive vessel.

The *Jinkan* is a civilian-minded ship with strong but limited weapons, and has just half the defensive value as a *Chiaki*. Origin readily points out the *Jinkan* is not a focused vessel such as the *Chiaki*.

The *Kouken* is a closer match, but with weaker shields and a dual mission of interception and starfighter carrier. It also must balance power to its weapon complement

Its Nepleslian derivative is a near match.

Both vessels are more utilitarian than their KFY-designed peers.

Atlas-class Destroyer

Nepleslia's *Atlas-class destroyer* almost is three times the size of the *Chiaki*, with a large array of weapons, much tougher armor and shields, incredible speed and with a very large fighter complement. Yamataian planners would call it a small escort carrier. It outclasses the *Chiaki* in every respect except perhaps maneuverability, mostly owing to Yamataian ship design and pilot training.

OOC Notes

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Chiaki was upgraded to Tier 11 by Wes on 2018/06/21 19:40 in this thread.

Star Army Logistics				
Supply Classificatio	n Class A - STARSHIPS			
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Last Review	YE 37			
Products & Items Database				
Product Categories	starships			
Product Name	hiaki-class Escort Destroyer			
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