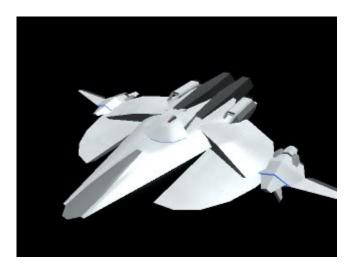
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Amaterasu-Class Cruiser

This ship is no longer produced. All technology and support is done by the Yugumo Corporation.

To put it simply, the Amaterasu is meant to be a vessel of war. It can act as both a front line warship, or a resupply, and repair carrier effectively on the battlefield. The ship also includes extensive medical facilities for treating wounded from battle, or for on coming wounded from any form of disaster. This multi-role reliability was used to make this ship as effective as possible in a number of roles, but the main one is still that of war.

Appearance



History and Background

The Amaterasu-Class Cruiser began being designed in late YE 29 by Yuriko Towa. The design was originally intended to be used to help combat the advancing Mishhuvurthyar threat. However, with their disappearance in YE 30, the need for the new class of ship seemed to no longer be needed. But, Yuriko Towa's design was commissioned by the new Taisho of the Fifth Expeditionary Fleet. As of right now one prototype is having its design finalized, and construction will take place shortly there after to test its performance, and viability.

With the recall of all Fifth Expeditionary Fleet assets, the United Outer Colonies lacked a dedicated cruiser class vessel so it was re-classified to fill that role. At the time the Amaterasu was undergoing final design revisions when Shichou Yuriko and High Priest Velor Tomoe Tur'lista formed a friendship, and respect for one another. The Lorath generously offered to aid in the construction process, and lent some of their technology to be utilized within the Amaterasu design. This design helps to idealize the unity, and harmony between the Lorath, and United Outer Colonies.

Statistical Data

General Statistics		
Organizations Using this Vessel	United Manufacturing Cooperative United Outer Colonies Peacekeeping Forces	
	United Outer Colonies	
Designer and Manufacturer	Shichou Yuriko, United Manufacturing Cooperative, Kakutama Heavy Industries	
Role Classification	Battlecruiser	
Class Designation	My-C2-1a	
Standard Personnel Compliment 500		
Maximum Capacity	650	
Prototype Production Models	30	

Vessel Dimensions		
Length	800m	
Width	750m	
Height	500m (50 Decks	

Performance Statistics		
CDD (Max)	11,500c	
STL (Max)	0.375c	
Hyperspace Fold (Max)	0.5 LY/min	

Damage Capacity

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

• Hull: 40 SP

Shields: 40 SP (Threshold 4)

Inside the Ship

Armory

Three major Armories are located throughout the Amaterasu on seperate decks. These armories hold a wide range of weaponry, and defensive equipment. The rooms are static free, and are protected by Forcefield-Nested Isolation Doors. The rooms are also temperature controlled. Throughout the rest of the ship smaller armories for rapid response can be found holding basic handheld pistols or melee weaponry.

Bridge

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• MFY Type 30 Chikara Bridge Module changes within the bridge include MIKO hookups and links over the IES system.

MFY Type 30 Auxiliary Control

Security Control

Internal ship security is paramount, and the Amaterasu boasts a wide range of internal security features, from using the computer system's internal sensors, to Forcefield-Nested Isolation Doors, armories, and a small on board compliment of Custodian War Androids. Two are usually within security alcoves outside of the bridge to ensure it remains secure, with the remainder in storage if more are brought aboard beyond the standard three. A centralized station is embedded within the Amaterasu, which is staffed at all times, and has a security alcove with a Custodian War Android manning it outside. The security control is protected by Forcefield-Nested Isolation Doors. When Custodian War Androids are not on board, a compliment of NovaCorp Weapon Drones are which can suppliment internal security forces. They've had their anti-matter payloads removed as a security and safety measure for the ship and her crew's well being.

Habitat

- MFY Type 30 Standard Officer's Cabin
- MFY Type 30 Standard Enlisted Bunkroom
- MFY Type 30 Standard Enlisted Bath House
- MFY Type 30 Standard Enlisted Dining Hall
- MFY Type 30 Standard Wardroom and kitchen equipped with a Emfratec "Galley Master"
- MFY Type 30 Standard Laundry Facility

Engineering

MFY Type 30 Warship Engineering

Infirmaries

Located close to the Armor Bays and nearest to the lifts on the port and starboard sides of the ship, the infirmary is strategically located. The Infirmary is utilized for examinations and minor medical procedures. Overhead lights and scanning equipment provide doctors a window into the bodies of their patients. The Infirmaries also include Treatment and Examination Beds, MedicaGel dispensers, as well as Osmotic Patch Medical Treatments and the ever handy, Peacekeeper Field First Aid Kits

Surgery Bay

For more serious conditions the Surgery Bay provides more advanced surgical equipment for internal medicine practices. The room also contains a hemosynthetic tank; while most hemosynthetic systems

were downgraded significantly after the split from the Yamatai Star Empire the tanks are still common for more advanced healing procedures. It did not take long for Jiyuuian scientists to create their own hemosynthetics science; after all it being in their blood. The Surgery Bay has been expanded to include Surgery Grade Medical Beds giving the doctors on board greater chances of saving a poor soul's life, as well as to be better able to treat larger numbers of people.

Ship Systems

Amaterasu Space Frame and Hull Integrated Systems

The Amaterasu's frame boasts a robust, and sturdy design, allowing it to take substantial punishment. The frame of the Amaterasu is all curves, allowing for few blind spots as far as on board weaponry goes. The frame itself is contructed primarily of Yamataium Truss frames interlocked together. In addition, around the 'wedge' section of the Amaterasu, the sides of the wedge frame pieces are constructed of Reinforced-Yamataium to ensure it is not a weakness in the overall design. This also serves a secondary function by adding a layer of shielding between weapon discharges and the ship itself.

These major trusses are arranged in higher concentration around the sections of the vessel that are most likely to become stressed like around the CDD nacelles, auxiliary engines and to provide additional strength to areas such as armor bays, the main bridge and around major weapon mounts. Smaller Yamataium trusses that form the interior frame of the vessel provide internal support for decks and interior sections.

Force field generators are arranged at major truss junctions to provide additional strength, and protect these junctions from anti-matter hits in the event the major space frame becomes exposed or compromised in a battle. Of course the force field generators are small and can only absorb a limited amount of energy before becoming useless but this serves effort to provide strength to the space frame. Force Field generators are slightly stronger at the joints where more stresses are expected to form.

In addition, a layer of nodal based energy absorbing/dispersing gel has been added along the primary truss junctions to supplement the forcefields should they fail. The gel acts to help disperse, or absorb incoming energy that would otherwise strike the truss junctions, and damage them while this is not fullproof protection, it does lessen the damage. This gel also helps in dispersing kinetic energy acting as a buffer of sorts. This gel does not interfere with the regenerative properties of Yamataium, but in fact helps to encourage Yamataium's regenerative qualities aiding in regeneration.

Secondary Space Frame

Secondary framework is nested within the primary space frame to provide additional support and provide support for ships systems. The secondary frame is composed primarily of small Yamataium trusses and rods lined with Yarvex meshing to provide shielding to interior structures. In addition, the same gel used on the primary frame's major truss junctions has a thin layer within the secondary frame. Should a breach occur, the nodal based gel will harden, and act as a seal.

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Hull Armor

The primary substrate of the 2.5m thick armor plates are made of Zanarium-coated Yamataium.

MIKO Electronics Systems

MIKO Electronics Suite

MIKO is a Modular Quantum Computer System, or MQCS; It starts with rather simple quantum computer core that can be expanded by the addition of other modules. The core and its modules all run the SHRINE operating system (SHRINE-OS).

Non-Sentient Artificial Intelligence

Al Name: Takes on the name of the ship.

Although capable of designing a sentient system, the reminders of the incident on Taile no lori where a KAMI system went on a killing rampage, purposefully lead the Satori Ascendant Electronics designers to select a non-sentient AI. Although non-sentient, the SHRINE-OS, based roughly on data from the digital mind functions of the NH-22C Yamataian does a good job at emulating it. The AI can manifest itself as a volumetric image anywhere on the base, vessel, or other application it is applied to. Its personality matrix can be altered to cater to the needs of the application as well.

MIKO Components(Sensor and Communications Included)

- (2) MIKO Core
- (1) Tactical Module
- SQUID Interface

Fabrication Facility

The Amaterasu uses a variation of the lonoche Automated Fabrication Facility to suit its needs.

Power Systems

Quantum Foam Generator (10)

Kaminari Quantum Foam Generators

This generator is the most advanced power source NovaCorp/MFY has. It taps into the Quantum of Space-

Time foam that makes up the universe, a sea of virtual particles snapping in and out of existence, and wormholes existing for fractions of a second, and takes some of the energy from this. Quantum foam is an amazingly potential source of energy, enough energy to boil all of a planets ocean every second, for every cubic centimeter. However the NovaCorp generator is not up to this level of efficiency, and can only take in a fraction of this energy. However this is offset as the generator does not tap only one centimeter cubed, but several generators each tapping five cubic meters. None of these run on full capacity, in order that if one generator or more is lost the ship can increase the capacity of the other Generators to compensate.

Anti-Matter Reactor (4)

Tsuyosa Series Matter-Antimatter Reactor

Antimatter Production

Antimatter is produced by the Energy Conversion method from energy produced by Kaminari Quantum Foam Generators or Aether generators either on the ship, or incases of smaller ships where matterantimatter reactors are their primary power source, on a base or other facility. Antimatter is stored in shielded containers until it is needed.

Matter Collection

Matter Collection System

Emergency Systems

Fire and Hull Breach Suppression

Through the use of precision force fields and a Pico-Jelly spray system the Amaterasu is capable of effectively snuffing out fires and halting hull breach caused decompression. Fires are put out by cutting off air circulation, and forming a Pico-Jelly layer over combustible materials. Hull breaches can be sealed by creating a force field layer which will halt decompression, and allow for a Pico-Jelly patch to be placed over the hull breach until it is properly patched. Pico-Jelly is supplied from a series of in-ship reservoirs and is provided courtesy of the Lorath Matriarchy.

First Aid

First aid on the Amaterasu is provided by the presence of Peacekeeper Field First Aid Kit units within corridors at regular intervals, and within regularly occupied compartments.

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Forcefield Nestled Isolation Doors

The Amaterasu includes Forcefield-Nested Isolation Doors, these doors are intended to separate compartments in the event of a hazardous event which would threaten surrounding compartments.

Escape System

The Amaterasu utilizes Harbinger-Series Drop Pod units as escape pods. These specialty Harbinger are equipped with Hyperfold systems to allow for ejected pods to escape into hyperspace to flee a hazardous area. The range of these pods extend to 25 LY.

Internal Security Measures

The Amaterasu has been designed to incorporate a series of internal safeguards to prevent intruders from easily making their way through the ship, the security measures include the following;

- Biometric identity confirmation
- Micro-sample DNA scans on contact with control panel interfaces
- Corridor and Compartment Installed Lorath Plasma Arc Disruptor vents which are under command control.
- Forcefield projector systems
- Internal sensor systems with phased scan technology
- Internal interdiction systems to prevent teleportation

Emergency Pathogen and Toxin Filtering

The atmosphere cycling system of the Amaterasu includes a series of emergency pathogen and toxin filters which utilize a series of Stone Thread mesh filtering devices, plasma wash systems, and nanomachine treatment. Maintenance shafts also include plasma wash systems to prevent the accumulation of any sort of mold or vermin. These systems are intended to be utilized in the event of the failure of the primary atmosphere cleaning system which is included in the ship's environmental systems.

Crew Protection

Vital compartments have been equipped with emergency supply lockers which house a compliment of M37/38 Environmental Battledress Uniform with helmets. These were provided courtesy of the Lorath Matriarchy.

Environmental Systems

The Amaterasu utilizes a complex series of Atmospheric Generation and Revitalization Systems where oxygen and other atmospheric components are derived from inorganic matter through a series of chemical reactions and circulated through a ship-wide duct system which runs in conjunction with interior room modules and maintenance tunnels. Nanoscopic scrubbers, chemical filters and ultraviolet radiation sterilizers remove harmful materials such as bacteria and viral pathogens. Contaminants are transported to the recycling system.

Water Circulation System

Deionized, Distilled water is passed from storage tanks through nanoscopic scrubbers and is then is pumped throughout the ship through a controlled membrane piping system derived from technology found on Sfrarabla Mishhuvurthyar Xhrafuklurp (SMX) ships through research done at the Chie Research Base. Wastewater is filtered and purified and sent back into the system. Contaminants pulled from the water are then transported to the recycling system.

Nanomechanized Cleaning System

Nanomachines are released into areas when there are no personnel present or at controlled times scheduled by the logistical staff or the Al. These simple nanomachines are designed to transport dirt, dead skin cells, hair and other waste products from surfaces of the ship into the MDRS.

Molecular Disruption Recycling System (MDRS)

Contaminants, waste and other products collected through the water, atmospheric and mechanized cleaning system are transported to the Molecular Disruption Recycling System, referred to as the MDRS. MDRS is a two-stage system that recycles as much material as possible for use in on board systems.

Stage 1: Molecular Sorting and First Stage Separation

Waste is separated into basic molecular forms, useful forms that can be utilized directly by the water circulation system or atmospheric generation and revitalization system are separated and put back into those systems.

Stage 2: Molecular Disruptor and Final Separation

A confined plasma beam is utilized in this stage. When waste is passed through the superheated plasma it is broken down on the molecular level; molecular bonds are broken and thus the waste is broken down

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into basic elemental components. Those elemental components are then either assembled or passed as is back into other ships systems for utilization.

Hazard Handling System

In the event that a compound is determined to be too dangerous to remain in the system; such as foreign nanomachinery, or other materials, it is immediately isolated in a subspace containment field and is jettisoned from the ship and into space.

Propulsion

- Mizu Series -- Umi CDD Assembly
- Hoshi Series -- Uuchu Gravimetric Drive System
- Yumeoibito Hyperspace Fold Drive

Shield Systems

The Fifth Expeditionary Fleet has utilized data gained from the Himiko-class Light Escort (the YSS Asamoya) assigned from the First Expeditionary Fleet for joint operations in YE 30. Motoyoshi Fleet Yards selected this system to be utilized in some of their designs. Using a series of shield generators each with a redundant generator that provide alternate coverage on specific regions of the ship when integrity drops below a predetermined percentage. In practice, this allows the active shield generator to bear the brunt of incoming fire while the redundant generator remains on hot standby. As the primary generator drops in integrity, power is then increased to the redundant generator which seamlessly takes over the burden of shielding that portion of the ship, allowing the other generator to once again recharge on standby. As shield piercing/tunneling properties are generally only good to cleave through one layer of energy shielding, the Amaterasu can offer up to six layers.

Regenerative Shield Generators

- Dorsal
- Ventral
- Starboard
- Port
- Bow
- Aft

Shield Value: SP 40 (Threshold 4)

Psionic Signal Controller

Psionic Signal Controller

Ablative Armor Projection System

Ablative Armor Projection System

Interdiction Field

Interdiction Field. 1.5 AU radius.

Graviton Projection Arrays (8)

Capable of producing graviton beams and fields which can be used to tow other spacecraft or shuttles. The projector is ineffective against ships using gravitic shielding.

Armor and Fighter Bays (4)

Within the aft section of the Amaterasu is housed four bays for the sole purpose of containing both the on board Power Armors, and Fighter compliments. These bays also house a small number of shuttles. The main corridors split into four corridors (two up, two below) which enter the armor bay via Forcefield-Nested Isolation Doors in the forward-most area of the bay on either side of two interconnected rooms. The first room is a small locker and changing area with showers and a head. The other room is the small fabrication area that is cramped with robotic arms and other machinery.

The floor of the bay is polished dark purple, the walls are light gray panels with polished black control panels. There is a direct cargo lift down to the cargo bay, racks storing armor accessories and spare parts line the other walls. There are 17 alcoves, eight on either side of the bay which can each hold a power armor.

The outer doors are solid Yamataium and can be closed and opened quickly to help shelter the bay during combat. Forcefields are used to keep the bay pressurized while allowing armors to enter and exit the bay.

Within the lower bays are house the fighters stationed on board the Amaterasu. Each two fighters has their own "garage" section that they occupy when not in use. Machinery and tools line the walls, and the same cargo lift system used in the upper bays are utilized in the lower. When ready to launch two fighters may do so at anyone time per bay. Also, within the back of each bay is a small section for shuttle storage.

Weapons Systems

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Main Gun(1):

UMC-GRA-E-S001 'Gammatron' Tiers 13

Or an option of a dedicated single-mounted Kh-C2-W3000 'Sunfury' Cannon Tiers 13

Subspace Encased Anti-Neutron Turret (6):

A powerful weapon on this most formidable ships is a fusion of the retro-engineering of the minds at KFY and the ingenuity of NovaCorp scientists. KFY supplied the Subspace Encased 'Tunnelling' technology stripped and studied from Mishhuvurthyar ships – the technology that allows penetration of distortion and repulsion shielding, and the ignoring of scalar and "hard" shields. NovaCorp supplied the antineutron technology – relying upon their superior mass visa vie positrons and their magnetically neutral state to ensure not only a greater kinetic impact, greater released energy and also greater range – removing the natural repellent nature of positrons and antiprotons. The technology needed to create antineutrons is somewhat larger and slower than that needed for positrons, but the offsetting factor is the markedly increased damage potential and range of the weapon.

Stats

Location: Primary Purpose: Anti-starship **Secondary Purpose:** Assault **Damage:** Tier 12, Heavy Anti-Starship. Range: 2 AU Rate of Fire: Twice every 20 seconds. Payload Effectively unlimited.

Combined Particle Cannons (12):

The Combined Particle Cannon Technology is a weapon technology borrowed from the Lorath, and enhanced with their Compressed Packet Weapon System technology to make an already fearsome weapon, even more so. These turrets are spaced along the hull at regular intervals, and are kept under armored covers when not in use. When needed they "pop up" out of their covers and are ready to use, they also offer 180 degrees of fire once activated.

MFY Multipurpose Missile Launchers (15):

These are buried into the hull of the Amaterasu, covered by armoured plates when they aren't in use. They carry a variety of different missiles and mines, sorting systems arrange the missiles quickly to allow quick firing.

Main Torpedo Tubes:

The Main tubes for the torpedoes are located along the bow of the ship in a rollbar mount, they are

capable of firing L-Sized - XL-Sized Ordinance Damages Vary Depending on Loadout. The Amaterasu has enough dedicated space to hold thirty L-Sized, or twenty XL Sized Torpedoes, and takes approximately forty five minutes to construct an additional torpedo of the XL Class, and thirty minutes for L class provided the energy to matter device is online, and operation to provide base elements. And the proper reactors are online to provide the warhead elements.

Electron Drill Missiles

After the invention of the Electron Countermeasure, SIP director and Fifth Expeditionary Fleet Officer Kage Yaichiro continued working on the concept, and elected to make the device slightly more offensive than defensive. This, however, would likely be produced by Motoyoshi Fleet Yards, as it contains no restricted technology.

Deciding that the best way to defend against positron weapons would be to overload enemy weapons, the Electron Drill Missile is designed to drill far enough to reach the inner hull and the power conduits, and dump the electrons into the ship's power system...or directly into any positron stores or positron generation devices, should they be in close enough proximity to do so.

The missile is also capable of disrupting both subterranean and conventional power lines and systems, making it a possible choice for attacking Mishhu cities and disrupting their defenses without completely destroying the salvageable technology or the victims they contain. While this may not be the main aim of the war effort, the situation may present itself where brute force against an enemy stronghold is not the most viable option, should hostages be involved.

Warhead: Electron Warhead **Purposes**: Offensive, Tactical Energy Denial **Damage**: Damage: Initial rating of Tier 11, Medium Anti-Starship in a 75cm circle, (Reinforced [nerimium] Drill), possible additional rating of Tiers 13, Light Anti-Capital Ship through Heavy Anti-Capital Ship **Blast Radius**: Initial point of impact and affected systems, much larger in case of antimatter reaction **Range**: 2 LY maximum, 0-40 AU practical **Speed**: 0c - .375c **Payload** 50 Electron Drill Missiles. More can be produced from the on board fabrication facility provided necessary systems are not in use, or are online.

Swarm missiles:

These small missiles are made for a mass attack, launching thousand of them. Each one has a complex navigation system on, controlled by the Amaterasu's AI, or failing that its own, cruder, systems, and as such is usually controlled in complex patterns, and kept in potent tactical formation. Each one carries a 250g anti-matter warhead, although is tipped a perfect diamond spike on the exterior of the shell, allowing for greater penetration ability. Understanding that this weapon would have problems against shields, it tends to explode before contacting with the shields (which would render the missiles useless), so that the energy from the anti-matter reacting with the matter of the missile (2.5 megatons) is inflicted on the shields. Actually only half of this energy hits the shields, due half the energy going in the other direction and being wasted in space (unless you count a very large flash as being a good use of anti-matter, which you could theoretically say). Each missile (each being 0.5 m long by 0.125 m wide), has a shield generator on, which serves two purposes. The first is to make it harder to shoot down, but the

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second is too allow it to penetrate shields more efficiently, which it does so, configuring its shield frequency to one as similar to the enemies shields as possible. They are launched from special launching pads, unlike those that fire the other missiles, capable of firing the thousands of missiles at high frequency.

Warhead: Swarm **Purpose:** Anti-fighter, anti-ship, mass distraction tactic. **Damage:** MDR 3 Range: 100,000 km Rate of Fire: Individually, or in volleys of 1, 2, 3, 4, 5, or 10 from each pod. Payload 2,000 Missiles in each launcher. More can be produced in the on board fabrication facility over a period of time.

Antineutron beam turrets (35):

This powerful weapon launches a stream of antineutrons at 99% the speed of light at the enemy. The speed of the particles deals significant damage in itself, to shields and matter, and the non-charged nature of the particle means it goes through certain types of charged shield designed to prevent particle beams, with ease. In addition the fact they are anti-particles means they annihilate on contact with matter, causing the matter to either explode due to mutual annihilation, or destabilise. The turrets have a 360 by 150 degree arc.

Stats

Location: Spread over the hull of the ship. They are placed near critical systems, bays, hatches, the main gun and 'wings'. Done thusly they have been spaced for maximum coverage along the entire hull. **Primary Purpose**: Anti-fighter **Secondary Purpose**: Anti-starship **Damage**: MDR 3 (against shields), MDR 5 (against hulls). Range: 6 million miles (after this any damage dealt to shields will be negligible) Rate of Fire: 20RPM Payload 50 canisters per turret. These are slowly restocked.

Plasma Vent Strips (8)

Compressed Plasma Vent Strips (8) Placement: Two along each "circular wing" on port and starboard sides and ventral and dorsal for a total of eight.

Vehicle Complement

Shuttles

- 2 Journey-Class Shuttle
- 2 Wayfarer-Class Shuttle

Fighters

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- 7x Hawk Fighter Bomber
- 8x 'Cardinal' High Mobility Fighter

Power Armors

- 15x AMX-101 WINTER
- 20x Tenshi no Yoru 'Tenshi' Light Mechanized Power Armor
- 6x Maelstrom Armor System

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