

Ke-V3-1B "Ryusei II" Fighter/Bomber

Xenedine Corporation Xc-V4-1A Aero/Spacy Fighter-bomber "Athena" and Ke-V3-1B Aero/Spacy Fighter-bomber "Ryusei II" The Athena fills a role in the [Star Army of Yamatai](#)'s single-pilot arsenal that has never been known to exist. The only starfighter Yamatai dispatches to the battlefield is the [V2 Uriko](#), a heavy bomber rarely if ever used. With the retirement of the [V1 Hoplite](#) years ago, Yamatai has relied on power armor to do its dirty work, especially its legendary [M2 Mindy](#).

However, the primary purpose of the Mindy has been lost between a vastly shrunk military and starship designs that have effectively overcome the power of the Mindy to complete its designed task, direct starship attack. That leaves ships firing at ships, and waves upon waves of armors fighting each other and occasionally taking a ship out.

Enter the Athena. Using new munitions, the fighter-bomber is launched from even the smallest Yamatai vessel and closes on its target. Though it carries no "one-shot-kill" weapons, its array of five different self-propelled weapons allow it to be customized for any target. In ship-to-ship engagements, an Athena allows a vessel to effectively divide yet increase its firepower. In fleet battles, wings of Athena fighters can soften enemy formations to make way for larger ships.

However, also being a starfighter with aether cannon like those on the [T4 Fox](#), the Ryusei II/Athena makes a fair medium fighter.



Statistical data

Government: Yamatai Star Empire Organization: Xenedine Corporation Type: Aero/Spacy fighter-bomber
Class: Athena/Ryusei II

Designer: [Xenedine Corporation](#)

Manufacturers: Ketsurui Fleet Yards

Pilot Information: Requires one pilot between 5' and 6'5 tall.

Height: 2.8 m (~9 ft. 2 in.) Width: 5.25 m (~17 ft. 4 in.) Length: 9.75 m (~32 ft) Mass: 5,000 kg (~5.51 U.S./short tons) unarmed; 7,000 kg (~7.76 U.S./short tons)

Speeds: Optional Fold booster: 0.50 ly/min CDD: 5,000 c Sublight: 0.375 c Atmospheric: Mach 6 max, Mach 2 cruising (at 3,000 m)

Note: The Athena theoretically still operates (though at reduced efficiency) in the presence of anti-FTL fields.

Critical Systems

Systems in *italics* are for the Athena. Underlined systems are in the Ryusei II. Normal text appears in both models.

Xenedine Corporation *Xc-V4-E2901 Flight Assisting Redundant Computer* *Xc-V4-P2901 Continuum Distortion Drive (modified KiE-v2444cdd)* *Xc-V4-F2901 Titanium Alloy Frame* *Xc-V4-P2901 Gravimetric Propulsion Drives (4)* *Xc-V4-W2901 Medium Plasma Cannons (4)* *Xc-V4-F2901 Neutronium armor plating* *Xc-V3-S2900 Compact Sensor Suite* *Xc-V3-C2900 Hyper/subspace Communication Suite* *Xc-V4-G2901 Aetheric Generator Suite + Capacitor (based on the Lamia's aetheric tap)* *Xc-V4-D2901 Energy Shield Pod* *Xc-V4-E2901 Interchangeable Launch Sequencer* *Xc-V4-W2901 Self-propelled Tactical Drones (4)* *Xc-V3-L2900 Life Support Array*

Ketsurui Fleet Yards *Ke-M2-E2702 Conformal Psionic Signal Control Device* *Ke-V3-E2902 Compact Integrated Electronics Suite* *Ke-V3-W2901 Aether Cannons (4)* *Ke-V3-W2901 Variable Weapons Pods (2)* *Ke-V3-V2901 Hemosynthetic Insert and Life Support System* *Ke-V3-F2901 Outer Armor (Zesuauium-coated titanium carbide)* *Ki-V1-WXXXX Interior Micro-Missile Launchers (4)* *Ke-V3-R2901 Microthruster clusters* *Ke-V3-R2901 Inertial Redirection System*

Weapons

Entries in *italics* apply to the Athena; underlined entries apply to the Ryusei II. *Xenedine Corporation*

W2901 Medium yield plasma cannons (4): Simple plasma cannons. Effective enough against enemy mecha and fighters, they give the Athena some level dogfighting armament. Their power level ranges depending on the setting chosen by the pilot. Two are mounted side-by-side on the nose (cowl-mounted), and two are mounted on either side of the root of the nose, able to angle up or down ninety degrees.

- Purpose: Anti-starfighter, anti-mecha.
- Damage: Light-medium. Not a threat to Zesuaium-armored targets.
- Range: Up to 100,000 miles (160,934.25 km).
- Rate of Fire: 2,000 rnds/min.
- Payload Effectively unlimited.

Ketsurui Fleet Yards W2901 Aether Cannon (4): These cannon use spatial distortion to release condensed potentials from the aether in a coherent phased beam. Because of the subspace effects of beam, it naturally pierces distortion-based shields. The power of the cannon are enough to inflict damage on smaller vessels, but anything bigger than a freighter would be able to take a couple dozen strafing runs before their shields failed. They are also cowl- and noseroot-mounted.

- Purpose: Anti-starfighter
- Damage: Medium.
- Range: Up to 350,000 km (217,479.9 mi).
- Rate of Fire: 50 rnds/min.
- Payload Effectively unlimited.

Ketsurui Fleet Yards Interior Micro-Missile Launchers (4 - 6): Armed with four internal missile launchers, the Ryusei II makes use of the same micro-missile launchers found on the old Hoplite. The launchers are mounted in rows inside the wings under thin panels running from the wing root to the tip. There are two rows on each wing – one on top of the wing and one below. To replace the weapon pods on the Athena, extra micro-missile launchers are put in its place with double the missiles.

- Primary Purpose: Anti-mecha/Anti-tank
- Secondary Purpose: Anti-aircraft
- Damage: Light. Standard explosive.
- Range: About 40 km.
- Rate of Fire: Can be fired 1, 2, 5 and 10 missiles at a time.
- Payload 40 micro-missiles per launcher, 160 for Ryusei II, 320 for the Athena.

Ketsurui Fleet Yards W2901 Mobile Weapon Pods (2): The Ryusei II has two launchers on its top hull between the engines and forward fuselage that can form discoid custom weapons pods. The weapons take about two minutes to form and usually fire some sort of transphased energy beams or scalar electromagnetic interferometric pulses, due to the abilities of such weapons to hit and destroy shielded targets. When the pods are deployed, they move fully out of and around the ship (they float) and adjust their position to obtain the maximum volume of fire. Each pod has a maximum output of about 1/4 of the W2901 aether cannon. Should a Star Army ship be disabled or destroyed, the pods will actually jump to another suitable Star Army ship or power armor that passes close by.

- Primary Purpose: Anti-mecha
- Secondary Purpose: Projectile defense
- Damage: Light.
- Range: About 500 km.

- Rate of Fire: 900 rnds/min.

Xenedine Corporation W2901 Internal Launch Bays (2): Listed as a weapon because it usually holds the bombs, long-range missiles or extra weaponry. Each bay is 5 meters long and 0.8 meters wide. Multiple weapons can be fitted into each bay simultaneously if there is room. The following is a sample of weapons being developed, it is not final.

W2901 Light Anti-Starship Aether Missile: A 1-meter long missile using the same basic concept as the W2711 aether torpedo on the Uriko, but with far less range and about 1/10th of the power. It is more maneuverable and faster, but still a somewhat easy target. It is a blunt instrument compared to the other projectile weapons at the Ryusei II's disposal, but effective at damaging pocket ships quickly. Four per bay.

W2902 Light Subspace-Collapsing Rocket: Carried in 3 meter-long special gun pods and lowered from the bay, these 0.6-meter long rockets are meant to be fired within close range of a vessel and wipe its shields out quickly so a wingman or wing of power armors can close and directly attack the hull. Most effective against CFS-type shields; 25 rockets a pod.

W2903 Focused Anti-Shield Missile: A quirky weapon from the mind of XC Chief Engineer Kobayakawa. The missile uses a built-in radar system to close on a target, then, when inside 200 meters of hitting its shields, fires its nosecone from its body. The nosecone, upon hitting the shields of a vessel, fires off a very, very high-intensity plasma burst, opening a brief hole in the shields. The rest of the missile slips into the hole and dispenses its payload. Can be loaded with any manner of explosives. 2 meters long. Not as effective against CFS-type shields.

W2904 Anti-Mecha Mines: Three boxes, each with up to 50 mines, are stored in the launch bay. A box is dropped over a portion of terrain from at least 1,500 meters; about 500 meters before reaching the ground, the box explodes and disperses the mines in a preset pattern. The mines quickly dig into the ground, the trees, whatever they hit, and activate passive motion sensors connected to crude recognition computers. They explode upon recognizing an enemy. Mines can vary, from Claymore-like to anti-tank to plasma.

W2905 Anti-Mecha Missiles: A basic air-to-air missile, using plasma-based explosives to cause damage. A very maneuverable missile, only 0.4 meters long, and the Athena/Ryusei II can carry 20 in one bay alone using specially designed racks that can angle downward or fire in reverse. The missile can destroy non-Zesuaium, non-shielded armors in one shot, though faster, more maneuverable armors could possibly evade or destroy it. Max of 140 missiles (7 racks) per bay.

W2906 Plasma Bomb: Best for carpet bombing. Output can be modified. 0.7 meters long, eight can be carried per bay.

W2907 Slug Gun Pod: A favorite of CEO Dine, this weapon uses an old concept with a twist. A large single-barrel gun pod, this fires shells at a target at a rate of about 200 per minute. Each shell, however, uses the fighter's radar to decide whether to smash into a target or (if applicable) explode prematurely for anti-personnel purposes. The rounds themselves are fired at up to nearly 7,000 km/h. Each gun pod is about 3 meters long and stores 800 rounds of ammunition. Armor Piercing, Incendiary and Shrapnel rounds available. 1.6-meter-long ammunition packs can be stored behind the guns, giving them upwards

of 2,000 rounds.

W2908 Beam Pods: A variable weapon. In case the entire purpose is to just have a lot of guns, the beam pods carry either four more aether beam cannons or four heavy plasma cannons each. The pods take up the entire space of a bay, but they come with a power generator and another shield generator (about 1/4 of the power of the Shield Pod).

Defensive/External Systems

Outer Armor: [Zesuaium](#)-coated titanium carbide plates over most of the crucial areas. That includes the weapon pods. On the Athena, the armor is replaced with Neutronium.

Energy Shield Pod: A basic energy shield, fit between the launch bays (two portions of the fuselage that extend below the line of the nose to the back of the fighter). Based on the Zyro Shield system from the Ge-L2-1a Sojourner Medium Transport. Though not as advanced technologically as a CFS's warping shield, it takes nearly four times the punishment than an NDI XF-14 or -21, ensuring that though the Athena might not be able to damage a power armor, the power armor will have an equally difficult time damaging it. There are two shield units inside each pod.

The pilot is able to control both shield generators, putting them up both at once or saving one in reserve. The shield pod is detachable.

Conformal Psionic Signal Control Device: A form of psionic and telepathic protection, capable of nullifying all such activity. The device can selectively allow channels to permit secure telepathic operation and to maintain communication even under psionic attack.

This device is safe enough to remain active at all times, unlike older "ADN" devices. The field generated by the PSC engulfs and protects the fighter entirely, extending out two inches outward of the fighter to prevent the appearance of obvious psionic "dead zones."

Canopy: On the Athena, the canopy is made of transparent Neutronium. On the Ryusei II, it is transparent Zesuaium. It shifts up and then slides back when opened.

Paint job: On the Athena, paint is gunmetal grey. On the Ryusei II, it is blue-grey.

Internal Systems

Cockpit: Comfortable grey fabric upholstery, not unlike a car's driver's seat, with three crossing straps buckling into a single buckle to hold the pilot into the forward seat (left shoulder, right shoulder, waist). Multi-colored controls are found on both sides of the pilot in the form of old-style banks of toggles, switches, buttons, dials and other devices.

The right tan-colored control stick is mounted on the right side, close enough to the chair that it can be held without any uncomfortable bending of the arm. The left control stick, also tan, is the same, but is shaped a little differently. Foot pedals can be found near the pilot's feet.

The flight stick, throttle and pedals can extend themselves about 45 cm, and the chair can rise up to accomodate a taller pilot.

In the Ryusei II, the cockpit is much like the Mindy power armor with its hemosynthetic insert. Its controls are instead relied upon through the thoughts and muscle movements of the pilot, shown through the helmet they must wear. The insert wraps around the pilot seamlessly, leaving only their neck and head free. The [SPINE](#) is also available for Nekovalkyrja pilots.

Life Support Array: The system in the Hoplite was rather basic. With future projects in mind, a slightly fancier system was created. Activiating any of these systems is done with the helmet.

A more complex (read: bigger) rebreather system. Access to the unit is found directly behind the seat, which folds down. It provides oxygen for up to 50 days for one person. While it requires no maintenance, it must be exposed to air to repurify itself. Oxygen is provided through tiny vents around the cockpit, or in the case of the Ryusei II, provided by the hemosynthetic insert.

A small, self-cleaning (and pilot cleaning) toilet system inside the seat (bottom). Cushions fold upward and out to the sides to reveal a small toilet bowl. Excrement is filtered out a tube below the engines. Should be used sparringly. The hemosnythetic insert takes care of this through its typical fleshy catheters.

Two emergency oxygen units (two hours each) in the seat. A sealing mask is found behind a small slot on the left side of each seat back.

Sterile, nutrient-rich water supply. About a day's worth (3 liters).

Heated and massaging seats.

A dim light can be turned on from the forward control array.

Control Arrays: Keeping in mind that the pilots of future projects might not be Nekovalkyrja with wicked-fast computation abilities, manual and mental controls were incorporated into the Athena.

The two pedals at the pilot's feet control the microthruster strips on the wings. The right control panel has controls for weapons and sensors, while the left control panel has controls for the engines and shields. The forward control panel is essentially a large datapad, with a rotating screen and extending keyboard.

- Right control stick: Carries four buttons on top of the stick facing the pilot, one hat and one trigger. Button 1 (yellow, left) triggers micro-missile fire, Button 2 (red, center down) activates communication laser in a semiautomatic fashion, Button 3 (blue, right) triggers transformation modes and Button 4 (upper right, black below a small lid) initiates a quick shutdown of all systems (excluding vessel sealing and such). The hat is normally disabled; when engaged through the helmet, it allows for much the finer piloting needed for docking and such. The trigger, when weapons are activated, fires the plasma cannons.
- Left control stick: Carries one roller (facing port and starboard) and three buttons. The roller is for throttle control, the buttons (labeled 1, 3 and 2 from the port side) are pre-set maneuvers

performed with the help of the FACR. The maneuvers can be changed with the help of the forward control panel.

- **Flight-Assisting Redundant Computer (FARC):** The power of quantum computers cannot be overestimated, but their availability is limited. So the next best thing was a homegrown biological computer, which engineer Yali Chen happened to know how to make. The process is refined from the original FARC; no longer is it a "live" intelligence, but instead a much more "natural" AI. Instead of relying purely on wireless transmission, which can be jammed, good old wires were routed from the unit to the most important systems (pilot control, power regulation, weapons and maneuverability).

Its personality is computer-like with no humanesque presence.

Fire Control: The FARC has a sub-system dedicated to fire control operations. It can track 600 targets no smaller than micro-missile size and no larger than a very large capital ship – unless targets outside of that range are inputted or targeted manually. This is much more active fire control than the previous prototype "Artemis;" with several weapons needing tracking guns are usually the only manual weapons. Missiles are guided automatically toward targets, and ranges are calculated instantly. Targets are reassigned as necessary.

Database: Some of the work FARC does is informational – weak points, known model characteristics and transponder data. While it can rely on friendly computers to provide information, the FARC's database can simply store it all. It can draw on the Athena's own sensor data as needed.

Communication systems

The FARC comes equipped with a multi-channel wide-band comm array that provides security and versatility. Among the types of communication supported are radio, laser, subspace, and hyperspace. Communications can be secured using basic Quantum Encryption technology, which (due to the Heisenberg Uncertainty Principle) allows the system to detect any monitoring attempts. However the system is also set up to utilize laser communication to its advantage.

The FARC includes:

- **Radio:** Full spectrum, dual-modulation; range theoretically unlimited except by interference. Practical range is short, since the waves only travel at light-speed. Frequency-hop and multi-channel capable. In order to use the secure modes of communication, correct variables must be loaded prior to battle or transmitted to the ship receiving the transmission via laser. Such codes are changed as often as the pilot desires.
- **Laser:** For close-range transmissions, it is more difficult for the enemy to intercept, because they have to be in the area of the beam. Also limited to light-speed. Text only. Range: 1,000,000 km (621,371 mi).
- **Subspace:** Allows faster-than-light transmission. A standard means of communication; it is used for video streams. Inside the pilot's helmet and behind the pilot's seat, small cameras are pointed at the faces of those seated. Not to be confused with hyperspace communications. The Athena/Ryusei II's CDD bubble is used as the transceiver for these communications.

- External Audio: The Artemis has an external microphone and a speaker to allow the pilot to communicate more easily with nearby persons. Usually reserved for intermediate or soldier mode.

Homing Device: Normally inactive, this beacon has an independent backup power supply that can keep it transmitting for up to five years, even if the main power system is nonfunctional. If main power is available, the beacon will transmit constantly. If not, the beacon will put out a short distress message twice every two hours (five minutes between).

Compact Integrated Electronic System:

On the Ryusei II, the comm system can be hooked up to the Type 29 Communicator via a slot on the "dash."

For all other inquiries, please see the V2 Uriko.

Sensor Systems

Wide-Band Variable Optical Imaging Array (head): The majority of the sensor systems are located in the "head" of the fighter, including a high-resolution variable optical system capable of monitoring a very wide spectrum. By default, the system displays visual and infrared data. There is also a night-vision and ultra-violet mode. The Artemis has a gyroscopically-stabilized view of up to 300x magnification. Two spotlights on the "head" can be employed at night.

Time-Modulated Ultra-Wide Band Radar: Signals transmitted by UWB radars are pulses generated pseudo-randomly in time. They are only 0.1 nanoseconds in duration. The energy content in any conventional frequency band is below the noise, making TM-UWB transmission highly covert. TM-UWB has no carrier frequency or conversion, and because of the low frequency content of TM-UWB signals, they are capable of seeing through foliage and nonmetallic objects better than regular radar can. Ideal for atmospheric operations and nebulae. Range of about 100,000 km.

Tachyon Tracking System: FTL tracking system allows for precise targeting of targets that would normally be impossible to hit due to range and the limitations of standard sensory equipment. Range: 294,000 miles (473,177 km).

On the Ryusei II, there are also aetheric field sensors with a range of 1/10th of a light year. They are omnidirectional.

Propulsion and Miscellaneous systems

Gravimetric engines: The gravimetric units were reworkings from the Lamia units, which had gravimetric auxiliary drives. The tiny units of the Lamia were not big enough, so they were enlarged, keeping Phoenix Arms Corporation's XF-14 in mind as an example for engine size. Four units were installed, two behind each Bay. The engines draw a lot of power, but the aetheric generators provide more than enough.

There are small open vents near the engines to let air through over them, but it is mostly to refresh the air supply.

Continuum distortion drive: The Athena/Ryusei II propels itself at speeds many times the speed of light by generating continuum distortions and nesting them around itself to create asymmetric peristaltic fields. This allows it to travel thousands of times the speed of light. Distortion based systems allow it to stop or move nearly instantly because the Artemis has not "moved" in the traditional sense.

This is a single drive, rated for 5,000 c.

Delta wings: Simple delta wings were adopted mostly because they function better in an atmosphere for their size than swept wings. Also, room for the necessary servos wasn't available. However, the delta wings can fold up

Aetheric Generators and Capacitor System: The most important part of any vessel is its powerplant(s). Powering the numerous systems of the Athena was going to take as much as was needed to power the Artemis.

Six aetheric generators, all sized for power armor, were slaved in the center of the vessel. Producing roughly 20 times the power of the Zero-Tap, the generators work together or independently to power the vessel's engines, life support, weapons, shields and so on.

Redundancy created the idea for six small generators instead of one large generator. The six smaller units allow one or two to be rerouted to other functions (such as solely powering the shields)

Instead of a single system linking everything together, two systems were created - one acted as the standard "filter power from generators to x, y, and z" found on any starship. The second involved direct routes - Generator 1, when commanded, could feed its entire output to Engine 1, for instance. Two generators are directly routed to the Energy Shield Pod and one to each engine, allowing for power to be immediately sent to those areas without overloading circuits that could go to other systems.

OOO Notes

This article was created by [Doshii Jun](#). It was approved by [Wes](#) on November 6, 2006: [Approval Thread](#)

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