LAMIA Kai

Finished in YE 33, the LAMIA Kai is a 'Proto-Thought Armor' developed by Chusa Kage Yaichiro with Project THOUGHT. The LAMIA Kai was initially intended solely as an easy-to-make training model for the then in-development Keiko Thought Armor and Kirie Thought Armor test pilots; but events necessitated its adoption as a combat unit during the Tachibana Incident and afterward until prototype Kiries and Keikos were available. It served alongside the Tsubame Prototype Fighter in those operations. While possessing slight to moderate superiority in specifications over the existing Power Armors in use by the Star Army of Yamatai, the the unit pales in comparison to the units it is intended to gather data and train pilots for.

As a training unit, the machine relies heavily on existing parts for the Mindy 2A and is a refit of existing LAMIA which can be made at a very high speed. In spite of its nature as a primitive model of Thought Armor, its power output is 200% that of the Mindy 2A, and it can take roughly 50% more punishment to its armor – while still being compatible with the hardpoint and handheld systems of the Mindy series. The LAMIA Kai is sometimes called the "LAMIA Daintyhands" or simply the "Daintyhands" internally by Project THOUGHT due to the disproportionate Mindy 2A hands which allow it to use Mindy 2A handheld weaponry. While inferior to later models, it can be used by non Yamataians and Nekos and can be made by Project THOUGHT via a proxy company to order for SAOY forces who desire them as it is not a KFY-adopted model. They need only provide the discontinued LAMIA frames and some Mindy components to construct them along with a modest payment for labor and additional parts.



History and Background

The LAMIA Kai is a descendant of the YE 30 LAMIA Agura in its X01M "Mixed Limbs" Configuration, constructed at Nishitama. The original LAMIA Agura was a cobbled together model with a child's plastic lunchbox containing its remote control testing system, a notoriously low budget, and no support or management from the military. Though only one unit of the planned six was produced, it gleaned valuable data and pioneered the concept of a Thought Armor which would be finalized three years later.

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In YE 33, the Keiko Thought Armor and Kirie Thought Armor were in development and a training model for test pilots was needed. The LAMIA origins of the project were remembered because the new models shared the size of their humble ancestor, and the remaining five LAMIA were pulled out of mothballs and modified in light of what three years of research had gleaned. The original LAMIA Agura was left untouched due to its historical value to the project. During this design process, the original LAMIA series was decommissioned in the Star Army of Yamatai.

While the Keiko was designed to be fast to produce in hopes of quickly overwhelming the enemy with surprise and shifting the momentum of the war more clearly in Yamatai's favor, it was still necessary to accumulate more data and determine what armaments would best be used with the machine before it could be mass produced. Due to this need to obtain more data as well as to train the test pilots, five LAMIA Kai were constructed from the spare models not used by the LAMIA Agura effort and redesigned to utilize Mindy armaments. Events soon conspired to push these test machines into combat duty at and near Nishitama as a stop gap until Project THOUGHT's earliest Kirie and Keiko prototypes could be deployed.

Afterward, due to their nature as a training model and the ability for Nepleslians and other conventional humanoids to use them, Project THOUGHT made the LAMIA Kai available to the SAoY via a proxy company on a made-to-order basis since KFY did not openly adopt the model. Models outside of Project THOUGHT or special Kirie/Keiko training units typically lack the Immersion System and use the Kylie/Mindy 3A interface with minor updates.

About the LAMIA Kai

The LAMIA Kai is fairly close to the concepts of a Thought Armor which the LAMIA Agura explored in YE 30, using as many existing and easy to produce parts as possible. The external armor has been replaced with a simplified Durandium armor which includes cameras and audio sensors. The STL Engines, Computer, Life Support, Hardpoints, Hands, Weapons, and Power Systems are all imported from existing elements of the Mindy series, upgrading the machine while also compacting its internal systems to allow a fetal cockpit to be installed. While the cockpit is not ejected in the normal sense, the core and backpack of the machine can eject from the rest of the LAMIA using explosive bolts. This can be triggered via a button pressed at significant depth – deeper than accidentally possible with an elbow or hand. The same method can be used on another button to matually open the cockpit hatch. The weight has been kept down enough to allow a Mindy's Teleportation Unit to successfully handle the mass of the craft, its weapons, its pilot, and possibly another unarmored person. It cannot teleport another Armor and pilot aside from itself.

The LAMIA Kai is a thought-controlled armor that uses an Armor Integrated Electronics System (AIES) with the Immersion System as a future option for the Mindy and Daisy lines of Power Armor which is simpler than the software on the Kirie and Keiko. It should be noted that the information saved by the AIES can be used by the CIES and its systems for configuration data, so a pilot can still have rudimentary settings from the LAMIA Kai transferred to the more modern units. Because of this, it is intended that pilots slated to use the Kirie and Keiko will have some extra familiarity with the software even when the first units roll off the assembly lines. It should be noted that those with analog brains have limitations in the sensory input they can receive from the armor, but can still effectively pilot the machines in the AIES mode – unlike the Kirie and Keiko.

In spite of its good use vs. cost ratio, the LAMIA Kai has some drawbacks. Its speed is limited to 0.25c, it is not as flexible as its contemporaries in Project THOUGHT, its cockpit can't be reattached without the replacing of exploding bolts, and its weapons are all designed for a lower size class machine. Its armor materials, while easy to make, are also a downgrade from the original LAMIA's so as to allow the quick refit and re-fielding of the machines – considered acceptable since the craft is not meant to permanently serve as a mainstay unit and because its protective capabilities are still superior to those of the Mindy and Daisy series.

However, the LAMIA Kai in its AIES software configuration allows standard humanoids to pilot the machine which compensates for these shortcomings in the minds of some, and Project THOUGHT makes the LAMIA Kai availale on a made-to-order basis for training and combat or support use to the Star Army of Yamatai. On a case-by-case basis, the requesting unit sends a discontinued LAMIA and various Mindy components to Project THOUGHT, along with a relatively modest payment of 5,000 KS for labor and additional components. A LAMIA Kai is built from these components provided and sent back for use. This case-by-case basis also allows for custom color options and variants to be requested as well, though the SAoY units using LAMIA Kai are responsible for maintaining and repairing the LAMIA Kai due to the fact they have easier access to the parts and are already trained to repair most of the hardware in the machine. Anyone with SAoY Engineering training can repair the LAMIA Kai due to the use of largely existing hardware, and many units outside of Project THOUGHT lack the Immersion System for security reasons as well as the lack of use with analog-brained pilots. Instead, these units rely solely on the Mindy 3A/Kylie control system with modifications.

Boarding the LAMIA Kai

The pilot, whose height cannot exceed 7 feet (2.13 meters) climbs into a LAMIA Kai by opening its back and climbing in before assuming the fetal position. Once the pilot has connected to the SPINE or the Mental Transceivers in the cockpit, the LAMIA Kai's sensory and motor input overrides that of the pilot's body. The pilot's body is massaged by the insert and cared for by the Pilot Pod's systems while the pilot's mind is free to use the armor as their body instead.

Because of this, the LAMIA Kai is usually stored on its knees, leaning forward. There is enough room inside the armor to untuck the arms and move as needed to leave the armor or to access the Utility Compartment. It should be noted that the pilot may wear a Spacesuit, bodysuit, or a regular uniform.

Piloting

The LAMIA Kai is intended to move much like the user's body, though it cannot exceed the Nekovalkyrja range of motion like some of its contemporaries. Those rookies accustomed to the Mindy will be able to utilize the machine quickly after donning it, and start with the Immersion System's Directed Vision setting to get used to detecting things outside their range of vision without jumping straight to Sampled Vision – the LAMIA Kai is not capable of pure Panoramic Vision, and must simulate it. Three dimensional sounds are also possible with the Immersion System and the equipped hardware, though its quality is not as high as in more advanced models. If the pilot is one who has an analog brain, they are not capable of using these features and can only see out of the LAMIA Kai's primary optics and hear raw audio via the Mindy 3A/Kylie-style interface. Still, a Mindy or Kylie veteran will be able to fight at least as effectively in a LAMIA Kai.

Every weapon which is in use by the Mindy as of early YE 33 is intended to be compatible with the LAMIA Kai.

Statistical Information

Government: Officially Civilian, potentially limited Yamatai Star Empire use Organization: Project THOUGHT, possibly Star Army of Yamatai Type: Compact Mecha/Proto-Thought Armor Class: PT-M0-1A Designer: Kage Yaichiro and Project THOUGHT Manufacturer: Project THOUGHT Production: Refit of existing Mass Production Model, Minimum of five. Made to order for SAOY forces eventually.

Crew: 1 **Appearance:** Humanoid compact mecha with various Mindy-inspired design elements and weapons. Heavily simplified armor compared to other models, often equipped with Mindy-compatible weaponry. Typically painted in a color scheme with the classic Grand Star Army Dark Blue of the early YE 20s and Star Army of Yamatai Gunmetal Gray of the late YE 20s. The disproportionally small hands are taken from the Mindy M2-2A for weapons compatibility.

Width: 3' 0" (0.9 meters) Height: 7' 6" (2.3 meters) head height Mass: 200 kg (440.9 lbs)

Speeds

Sublight: 74,948 km/sec (46,571 miles/sec) .25c in a vacuum **FTL:** 10c **Atmospheric (Cruise):** 1225 kmh (761 mph) at sea level, functionally considered Mach 1.0 **Atmospheric (Max):** 2082 kph (1294 mph) at sea level, functionally considered Mach 1.7. Limited more by frame than engines. **Underwater:** 112 kph (70 mph) to a depth of 100m, in 1G.

Range: Indefinite due to dual Aether Generators and primarily Yamataium construction. Life Support can support a pilot's needs for 20 days, **and** support a pilot in stasis indefinitely. Lifespan: Undefined, recommended systems check once every 5 years, OS and Hardware upgrades as-needed. **Price:** 5000KS, assuming delivery of LAMIA and Mindy components to be modified by customer (SAoY).

Note: The range is largely defined by food, water, and air stored in the machine's cockpit.

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Damage Capacity

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

- Hull: 9 SP (Mecha Scale)
- Shields: 15 (Threshold 3)

Systems Descriptions

Armor and Frame

The frame of the LAMIA Kai is the same Tungsten Carbide metal-ceramic alloy frame as used on the original Ke-M1-1C LAMIA, though its armor has been replaced with simple Durandium Alloy. Due to this and the simpler design used, the LAMIA Kai is lighter than the Kirie and Keiko series, though heavier than the Mindy series and other armors of the lower size classes. While heavier than the original LAMIA; the LAMIA Kai was designed specifically so that it, its armament, and its pilot were all under 350 kg so as to retain compatibility with the Ke-M2-P3000 Power Armor Teleportation Unit should there be a situation in which is it used. Active Camouflage has been removed from the armor, and stealth materials are rarely if ever utilized. The end result is a machine which has a hull roughly 50% more durable than that of the Mindy but still inferior to the Kirie and Keiko and their more advanced alloys.

Hands

The hands of the LAMIA Kai are notable because they have been replaced by the hands of the Mindy 2A, so as to utilize its handheld weapon systems. The craft's hands look slightly disproportionate compared to the rest of its frame because of this, earning the machine the internal designation of "LAMIA Daintyhands" or simply "Daintyhands" at Project THOUGHT. The hands have been carefully attached so as to not impede their movement or their strength. Their size allows the LAMIA Kai to grapple with Power Armor-sized craft or personnel, though it has a disadvantage against machines its own size with proportionately suitable hands. Its punches, however, have their force focused into a smaller area than its contemporaries.

Forearm Storage Compartments

Initially, it was planned to include Mindy-style forearm projectors in the LAMIA Kai, but this was dropped due to the illegality of Aether weaponry in civilian models. Fortunately, the LAMIA Kai can use a Mindy weapon in each hand and has a dedicated shielding system, offsetting the lack of the system to a degree. The hollow compartments that would have held the forearm projectors were repurposed into storage compartments on each arm. These compartments are designed to hold various items; particularly spare handguns, ammunition, and assorted kinds of Star Army Explosives.

Cockpit Block

The cockpit block is loosely based on the Type 33 Pilot Pod, but it is not ejectable through normal means nor is it part of a special joint. Rather, the cockpit and backpack eject by way of explosive bolts splitting the machine apart, leaving it unable to recombine with the machine without physical repair. This can be triggered via a normal ejection command to the computer or by pushing hard on a compact button in the left side of cockpit as a manual release. A similar button on the right side opens the back hatch of the machine and allows the pilot to leave the cockpit even if the computer is damaged. The buttons must be pressed fairly deep, recessing deeper into the Pilot Pod wall than an elbow or hand could press by accident. The cockpit uses Mindy-based life support systems and technology, and includes a Utility Compartment for a Star Army Butt Pack and a Type 32 First Aid Kit. The Cockpit also has a SPINE interface as well as transceivers lining its interior which can detect and induce voltages in the brain – operating on the same principles as the Kylie and Mindy 3A to allow for thought-controlled piloting. This is a more primitive method than what is used in the Thought Armors, however, and reaction time is not as high as it is in the Kirie or Keiko. It does allow a user with an analog brain to use the machine.

Life Support

The life support system is very simple. A supply of condensed oxygen with a rebreather system combined with a water store from which one can drink both last for fifteen days. A waste compartment is also present, connected to a catheter and a waste pouch. The tubes for these can snake up from the pant legs by the boot or through the waist of the pants to take care of these needs for the pilot, but cannot be used if the pilot is wearing a Spacesuit. The Butt Pack contains three weeks' worth of Star Army Emergency Ration Pills by default.

Should a pilot's body feel bodily needs, this sensation is felt by default even when the pilot is controlling the LAMIA Kai. Should the pilot wish to ignore these sensations, they are permitted to do so or even deactivate reception of the sensation, but at their own risk.

Conformal PSC Device

The Ke-M2-E2902 PSC (Psionic Signal Controller), imported from the Mindy 2A, allows the unit to operate with a full suite of information access and control. Transmissions are filtered through the PSC by default, as it is safe enough to stay on at all times. The field generated by the PSC protects the entire mecha, and extends only two inches out past the surface of the hull (thus, it will not create an obvious psionic "dead zone").

Utility Compartment

A compartment built into the cockpit is designed to hold a standard Star Army Butt Pack, Type 29 and all it contains. It is recommended to keep the compartment well stocked, as it consists of the only food rations and ammunition included in the cockpit. There is also room for a Star Army First Aid Kit, Type 32 in addition to this, though technicians have been known to carry items such as small toolkits. It is also Last update: 2023/12/21 corp:kage:project_thought:lamia_kai https://wiki.stararmy.com/doku.php?id=corp:kage:project_thought:lamia_kai&rev=1700311871 01:16

where most soldiers drop their rank pins and other miscellaneous items upon entry into the LAMIA Kai.

Joints

The LAMIA Kai's joint system is a more conventional version with some benefits of the Test Thought Component - X01M "Mixed Limbs" system from the old LAMIA Agura Prototype. This allows it to mimic the humanoid form without a mass of new parts, but it is not capable of the super-flexibility of the Keiko and Kirie lines.

Sensors and Communications

The LAMIA Kai uses the Armor Integrated Electronics System (AIES), and includes a suite of assorted sensory and communications hardware connected to a quantum computer. The standard version of the Kessaku Military Operating System created by Kessaku Systems for use within the PANTHEON network is used. Through networking, the LAMIA Kai's sensor input is augmented by that of nearby friendly forces. It is identical to the system used by the Mindy 3A, save for the addition of the Immersion System software in some models withing Project THOUGHT and assorted Kirie/Keiko training programs.

Its sensors include:

- Imaging array with night vision and thermal viewing
- Ultra Wide Band RADAR

The armor can communicate via:

- Voice, via microphone and loudspeaker
- Conventional Radio
- Subspace Radio (FTL)
- Laser Beam (using forearm cannon's range-finder)

The pilot can control the armor via the same methods as the Mindy 3A (save for the fact that the pilot's body does not move with the machine), though this is not as responsive as using the Kirie and Keiko's control system. It is still ample for most pilots, especially those with analog brains. The pilot can receive feedback via the Immersion System software or through conventional means used by the Kylie/Mindy 3A-based system. The latter is the only option of sensory input for those with analog brains and given that most LAMIA Kai ordered by the SAoY for combat will be for regular humanoids, these often ship without the Immersion System installed for security purposes.

Shielding

Combined Field System

The main shielding needs of the LAMIA are covered by the original KiE-m2451cq, a Combined Field System re-configured for optimal shield output. Due to this, it has a relatively high threshold and strength for its type. It is less technologically advanced than modern variants, and is one of the elements that has not been replaced with more modern components, but is capable of boasting more protection than the shields of the Daisy.

Optics and Audio

The LAMIA Kai, though not as advanced as other models, still uses the Immersion System to relay sensory data to its pilot via the Kylie/Mindy 3A-based electrode-based mind-reading hardware. If a pilot is unable to process the increased amount of data due to having a non-digital mind, such as if the pilot is Nepleslian, they will simply receive the raw audio from the Audio Detection System and the video from the Primary Optics via the Mindy 3A/Kylie system.

Audio Detection System

Since the LAMIA Kai is to be compatible with ground use, including inside of buildings, the Power Armor has a panoramic audio detection system comprised of a two Dual-crystal Crystalline Audio Sensor Array arranged in a stereo array on the sides of the head. These are designed to detect and determine the directional source of a wide array of sounds, manipulate the audio in real time as needed using the Immersion System's Audio System, and feed this data to the pilot.

If a pilot's brain is non-digital, the pilot will only hear the raw audio data without any directional processing.

Optical Tracking System

The LAMIA Kai may be cheap, but the redesign of the frame allowed the installation of an array of cameras on its frame. This system allows a computer-synthesized omnidirectional panoramic field of view at any given time when used in Sampled Mode in the Immersion System with help from the quantum computer for processing, and then is loaded in real time directly into the pilot's mind.

This typically manifests as the equivalent to Skin Vision, much like certain classes of Nekovalkyrja such as the NH-27. Unfortunately, since it is sampled vision, objects exceedingly close to the Thought Armor's exterior can be rendered incorrectly. This range goes out to roughly 40 cm, save for the hands and its own limbs which are always clearly shown. One must rely on other sensors within this range to fill in the gaps, or turn the LAMIA Kai's head to look at the target in question.

A pilot can configure the Optical Tracking System to work with other available sensors to display an array of normally non-visual energies and wavelengths for analysis as needed, though the fact that the sensor package is that of an AIES system means that these sensors are limited compared to full scale THOUGHT Armors in the same size class. Often, one only enables these capabilities as needed due to the potential cluttering of the field of view with the various visual cues. This can sometimes serve to help "fill in the gaps" in sampled vision when an object is within 40 cm of the machine.

It should be noted that it is difficult and disorienting to use the Immersion System's Sampled Vision setting right away unless experienced with Skin Vision, therefore the Directed Vision setting is recommended for beginners. If the pilot lacks a digital brain, this advanced functionality is not accessible.

Laser Reciever and Transmitter

The LAMIA Kai can receive laser communications, but only if they are shone into its primary or one of its numerous secondary optics. It can then respond by sending a laser from a rangefinder in its arm. These lasers can allow covert data transmission of many types, including audio and video. This functionality is fully integrated with the Immersion System software if installed.

This lower cost solution is not as elegant as the transceiver in the Kirie, but it is functional.

Primary Optics / Wide-Band Variable Optical Imaging Array

The Primary Optics are a pair of adjustable unidirectional sensors with longer visual range than the Secondary Optics allow and serve as the Wide-Band Variable Optical Imaging Array on all AIES-equipped Power Armors. Their use is typically for triangulating an enemy location distantly and precisely before attacking, or for gathering more detailed data on a specific object by focusing on it. They serve the same role as a pilot's eyes, and are usually the main optics used when operating the Immersion System in the Directed Vision or Legacy Vision settings.

Secondary Optics

The Secondary Optics are an array of high resolution optical sensors across the frame of the LAMIA Kai, serving to provide data for the Immersion System to parse into video data – be it synthesized panoramic vision in Sampled Mode, or motion detection in Directed Mode. They also pick up lasers for covert communications from friendly units. They are not directly used by the pilot in Legacy Mode.

Power System

The LAMIA Kai has a binary Aether Generator and Capacitor system, using two Ke-M2-G2901 systems from the Mindy 2A. This gives it twice the power output of the Mindy 2A – a significant advantage when choosing what weapon systems are available. Due to the notably more compact overall size when compared to the original LAMIA's KiP-m2450zp Zero-Point Energy Tap, these are fairly well shielded to reduce the chances of detection and still save enough interior space in the LAMIA to permit its new cockpit system to be installed. Using a great deal of energy, such as with high output weapons, increases the risk of detection. For planetary missions, this should be kept in mind when choosing the weapons to be used.

Propulsion

Maneuvering Thrusters

Across the LAMIA Kai's frame is an array of a dozen small thrusters which allow for changes in velocity and rotation, generally aiding in control of the machine. A secondary role of the thrusters is to aid in recoil reduction. The most powerful thrusters are on the bottoms of the feet, and can assist in jumps in gravity or rapid direction changes.

Combined Field System

Faster Than Light travel is also provided by the original LAMIA KiE-m2451cq, but only at 10c due to the fact that the CFS is re-configured for defense more than speed. The CFS can also allow the LAMIA Kai to travel at sublight speeds of up to 0.25c as a backup Slower Than Light propulsion system. The Combined Field System is sometimes used upon initial launching of a space-borne LAMIA from a ship or when in close proximity to friendly targets that could be damaged by STL engine output, such as when towing.

STL Options

The LAMIA Kai uses early Aether-assisted Laser Engines so as to avoid legal issues with Aether propulsion systems.. These engines are the same generation as the ones used on the PT-X1-1A Tsubame Prototype Fighter, though shrunken down. Due to this, the machine suffers in that its top speed and maximum acceleration are lesser than other Power Armor or Mecha – but these are still notable and able to allow the craft to fight effectively at the ranges at which it is likely to be used.

Weapons and Hardpoints

The LAMIA Kai adopts the Mindy's hardpoints to allow the craft to be better suited for various mission profiles and is designed to have full compatibility with the Mindy's systems. This includes the Mindy's Ke-M2-P3000 Power Armor Teleportation Unit; though the increase in mass makes it incapable of carrying much else but itself, its weapons, its pilot, and perhaps another unarmored person.

Like the Mindy 3A, the machine has built in Drone Hangars for the Mindy's Nodal Support Drones, though these are based on those of the Kirie and Keiko. Extra ones designed for the leg hardpoints of the Mindy 2A are not necessary.

Due to the inability to use Aether Weaponry without legal support, the handheld weapons most often used with the LAMIA Kai are the Ke-M2-W2909 Accelerated Plasma Rifle and the Ke-M4-W2901 Light Armor Service Rifle with optional Ke-M4-W2902 LASR-SLAG. The Forearm Weapons have been removed, replaced with Forearm Storage Compartments for Star Army Explosives or ammunition. Units fielded by the Star Army of Yamatai can field any Mindy-compatible weaponry they desire.

See: Mindy Accessories for specific accessories.

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Location	Туре	Number
Mid Backpack	Dorsal Hardpoint	1
Upper Backpack Behind Shoulders	Shoulder Hardpoint	2
Forearms	Forearm Storage Compartments	2
Outer Calf of Leg	Leg Hardpoints	2
Rear of Leg	Ke-M12-W3302 Nodal Support Drone Hangar (PT-M2-W3301)	2
Hands	Handheld Weapons	2

Self Destruct

The maximum damage a LAMIA Kai can cause when self destructing is an Tiers 13 through 15, Light Anti-Capital Ship through Heavy Anti-Capital Ship.(Tier 4, Light Anti-Armor5) explosion which is 28 meters in radius – a sphere two times the destructive volume of the Mindy's self destruct. This is due to the fact that it has two of the Mindy's power systems.

OOC Notes

Written by Toshiro. Approved by Nashoba in this thread.

Products & Items Database		
Product Categories	mecha, power armor	
Product Name	LAMIA Kai	
Nomenclature	PT-M0-1A	
Manufacturer	Kage Yaichiro, Sunflower Corporation	
Year Released	YE 35	

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