

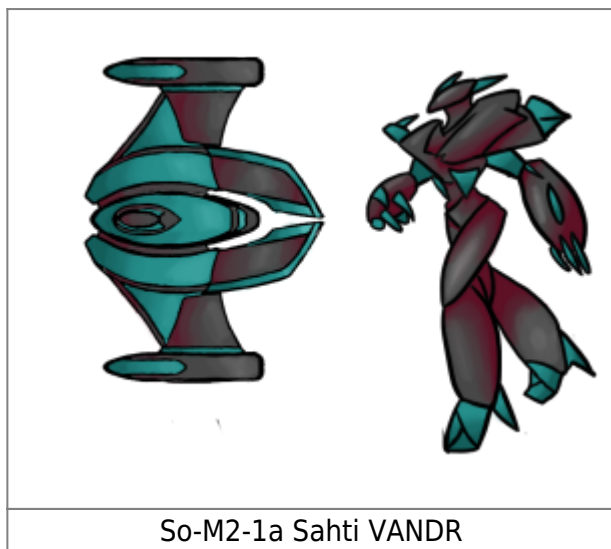
So-M2-1A Sahti VANDR

The Sahti Vandr is the first VANDR-type powered frame with the new variable mode system, a ploy to increase the [Astral Vanguard's](#) combat capabilities against the new units developed by the Anti-Government Forces.

History and Background

As was the original intention with the [So-M1-1A Erla VANDR](#), the designers managed to figure out how to get the variable deployment system working. Thus, the Sahti can both engage hostile forces as a space and air superiority fighter [Avynna Mode] craft and as a humanoid powered frame. [Janisar mode] Due to the advent of the [IVP \(Inverted Vector Pocket\) System](#) the Sahti can hold a larger payload of missiles than a typical organoid frame which suits it in it's role as a fast-attack, deep-strike unit.

Sahti means *jewel* or *treasure*, while *VANDR* is an acronym for *VAN*guard *DE*ployment *R*anger.



So-M2-1a Sahti VANDR

About the Sahti Vandr

As the [Erla](#) before it, the Sahti Vandr is a fast, agile organoid frame able strike from many directions. It improves upon the [Erla's](#) array of fin-like [MASC-based](#) propulsion and replaces it with two sleek paired fins. The two fins act as an extension to the [MASC Drive](#), which allows it to make sudden low-speed FTL jumps under conditions that would otherwise hamper other drives, allowing it to effectively cross short and medium distances on the battlefield. This grants the invaluable ability to make decisive jumps in combat to harass a more powerful enemy, and seed confusion in the ranks of a hostile force.

Avynna Mode As an air and space superiority unit, the Sahti Avynna mounts dual linked [CELB lasers](#) and a single [Rapid Charged Particle Accelerator Cannon](#) for dogfighting and strafing ground targets, with access to two of the four [PHID](#) or [Advanced Particle Lancing \(APaLa\) Missile](#) launchers located on the

Sahti, both of the and all four of the [LEMB arrays](#) for use mostly against larger targets such as starships and other organoid units.

Janisar Mode As a direct combat unit, the Sahti Janisar has access to the full range of weaponry equipped on the unit. Including the same [CIVW system](#) that came on the Erla for when melee encounters are necessary.

It is also well armored in both modes, mounting a protective layer of [Aerudirn](#) colonies that can absorb a high amount of damage, and boasts excellent shielding systems. However, forces should rely on remaining mobile and harassing the enemy with [ERP's](#) and assaulting them with a multitude of [PHID missiles](#) while the enemy's sensors are blinded.

Statistical Information

Government: [Iromakuanhe Astral Commonwealth](#) **Organization:** [Astral Vanguard](#) **Type:** Organoid Variable Powered Frame Prototype **Class:** So-M2-1A Sahti VANDR **Designer:** [Solan Staryards](#) **Manufacturer:** [Solan Starworks](#) **Production:** Limited Prototype Production

Crew: 1 [Iromakuanhe](#). Entry port inserts restrict the use of a standard model to [Iromakuanhe](#) pilots only. **Maximum Capacity:** There is sufficient room and life support resources to keep three people alive inside the cockpit.

Width: 6.0 Meters **Height:** 9.2 Meters **Mass:** 23.2 Tonnes

Speeds

Ground speed (Hover): 80 KM/H **Airspeed (Janisar Mode):** Mach 6 **Airspeed (Avynna Mode):** Mach 8.3 **Zero Atmosphere (Janisar Mode):** .33c **Zero Atmosphere (Avynna Mode):** .375c **MASC Drive (FTL):** 500c

Range: 7 Days of FTL (3500 LD, 9.5 LY), 6 Months STL (45 LD) **Lifespan:** 35 Years

Damage Capacity

Hull : [Tier 8](#) Mecha **Shields (VFS):** [Tier 8](#) Mecha

Interior Descriptions

Cockpit

The cockpit is an elegant, slightly spacious chamber dominated by a large oval chair with a cradled

headrest and the surrounding control panels and display screens. These are largely for maintenance, as the main controls are done by a series of interface plugs that are connected directly to the [Iromakuanhe](#) pilot. The walls of the cockpit are lined in a golden/orange material with a pearly semi-reflective sheen to it. The indentations for the doors of a pair of storage cabinets built into the walls can be seen a foot from the cockpit on both sides.

Weapons Systems

Main Weapons

(1): So-M2-W0935 "Shockmaul" RCPA Cannon

[RCPA \(Rapid Charged Particle Accelerator\) Cannon](#)

Location: Chest **Purpose:** Medium Anti-Armor, Anti-Mecha **Secondary:** Anti-Shield **Damage:** T8, Electrical Damage **Range:** 3 KM in Atmosphere, 18 000 KM in Space **Rate of Fire:** 180 RPM **Area of Effect:** 1.5 Meters **Muzzle Velocity:** .35c **Ammunition (Passive Mode):** 200 Particle Shots, Replenishes completely after 90 Minutes out of combat **Ammunition (Active Mode):** Unlimited so long as the unit provides power.

(4): So-M2-W2936 "Star Adder" APaLa Missile Rack

[Advanced Particle Lancing \(APaLa\) Missile](#)

Location: Vehicle-Mounted **Purpose:** Heavy Anti-Mecha, Anti-Vehicle **Secondary:** Anti-Starship **Salvo Size:** 3 **Damage:** T9, Electrical Damage

Range: 55 KM in Atmosphere, 5.4 Light Seconds in Space **Rate of Fire:** 1 salvo every 7 Seconds **Area of Effect:** 10 Meter 'Geyser' **Muzzle Velocity:** Mach 8.1 in Atmosphere, .27c in Space **Ammunition:** 30 Missiles - (Extended missile capacity due to [IVP](#) integration.)

(4): So-M1-W1784 "Divine Fist" CIVWS

[CIVW \(Close-In Variable Weapon\) System](#)

Damage: T8, Electrical/Kinetic Damage **Location:** Hands and Feet **Purpose:** Medium Anti-Vehicle/Anti-Infantry **Secondary:** Anti-Shield

(12): So-M1-W1935.B "Phantoma Needle" VT Fang

[VT Fang](#)

Location: Docked on ATA **Purpose:** Medium Anti-Vehicle/Anti-Mecha **Secondary:** Psychological Warfare

Damage: T8 **Range:** .35 Meters **Rate of Fire:** Varies

Secondary Weapons

(4): So-M1-W2784 "Searing Ray" CELB Laser Array

[CELB \(Compression-Enhanced Light Beam\) Laser](#)

Location: Shoulders, Thighs **Purpose:** Light Anti-Vehicle/Anti-Mecha **Secondary:** Navigational Protection **Damage:** T7

Range: 10 KM in Atmosphere, 300 000 KM in Space **Rate of Fire:** Beam can be maintained for up to 1 minute. Cooldown is 1/4 of projection time. **Muzzle Velocity:** 1c

(4): So-M1-W3784 "Storm Ray" LEMB Laser Array

[LEMB \(Light Enhanced Multi-Beam\) Laser](#)

Location: Rear Cockpit Pod, Torso **Purpose:** Point Defense Weapon **Secondary:** Light Armor / Anti-Infantry **Damage:** T4

Range: 5 KM in Atmosphere, 300 000 KM in Space **Rate of Fire:** Can maintain up to 12 beams simultaneously. **Muzzle Velocity:** 1c

(2): So-M1-W4784 "Star Locust" PASD Missile Pods

[PASD \(Particle Swarm Detonation\) Missile](#)

Location: Forearms **Purpose:** Heavy Anti-Armor, Anti-Vehicle **Secondary:** Anti-Shield **Salvo Size:** 9 **Damage:** T6, Electrical Damage

Range: 25KM in Atmosphere, 15 000 KM in Space **Rate of Fire:** 1 salvo every 8 Seconds **Area of Effect:** .5 Meters **Muzzle Velocity:** Mach 6 in Atmosphere, .2c in Space **Ammunition:** 72 Missiles **Ammo Replenish:** Can refill capacity in hospitable conditions in about 2 hours outside of combat. Any further attempts to refill will require an external source of biomass.

Systems Descriptions

Hull and Hull Integrated Systems

Hull and Chassis

Aerudirn Armor Colonies Aerudirn consists of living colonies that grow out into thick, smooth sheets of a high durability, that have been bred to be resistant to damages from radiation and can charge themselves with an electrostatic field to enforce their surface tension, thereby inhibiting penetration by weaker solid-ammunition weapons. Should the shell be damaged, the colonies underneath, which are dense enough on their own to survive exposure to vacuum can quickly have other sections stretch to accommodate tears, and regenerate completely with enough time.

Armor Type: Light

Organoid-type Substructure Highly resilient organoid tissues form the remainder of the body, including an endoskeleton, muscles and primitive organs that perform various functions related to keeping the unit and runner alive. The tissues have exceptional toughness compared to those of normal species, and can even survive in vacuum conditions should the entirety of the upper armor layer be destroyed. Given the living nature of the organoid, the frame will retain the ability to move its limbs, even in the event of power failure.

Armor Type: None

Life Support

The Erla VANDR's life support functions are tied in directly with the Organoid's natural bioelectrics and life functions, meaning that should power failure occur, these systems will continue to function until the components expire.

Organoid Integrated Life Support Functions + Prajna The organoid's Prajna glands will fill the cockpit module in the liquid breathing fluid once the pilot has activated the frame, and will withdraw it during the powering down process. The liquid also removes the need to eliminate waste, eat and can greatly assist in the healing process.

So-M1-R0784 KORD System The KORD (Kinetic Force Diffuser) is an essential system that protects the frame runner from the tremendous G-Forces and shocks the Erla VANDR experiences during both before and after FTL travel and during highly perilous combat maneuvers. It also protects from weapons that kill through kinetic force, in a manner similar to maces against armored troops in ancient times.

Shields

So-M1-S1784 Frame-type Vector Shroud Vector Shrouds are sophisticated vector field systems that envelop the craft in a conformal shell of compressed space, allowing one to become relatively invisible to electromagnetic and particle based sensors, and shrinking the frame's profile to other systems. As a shield, it is reliable and particularly effective versus energy weapons. **Shares SP with the Vector**

Barrier Guards.

Locations: Integral **Bonus:** - 1 MDR by Lasers, Particle Weapons **Runtime:** Limited by Power Source Only

So-M1-S1784 Vector Barrier Guards

More powerful but considerably less reliable than the Vector Shroud, the Vector Barrier is the first line of defense in the field, and an excellent last resort. They employ advanced space compression to generate a long 4m oval shield that is separate of the main unit and acts as a kind of disposable barrier. These are generated at various locations on the frame unit and remain fixed in proximity to the module that formed it.

Locations: Forearm and Shin Guards

Shield Points: SP 25 (5)

Bonus: - Decreases Beam Weapon Damage by One Tier

Runtime 3 Minutes

So-M1-S2784 Frame-type Repulsor Burst Array

Repulsor systems work by creating a temporary vector field, which at regular intervals can be overcharged and super-expanded, which generates an omni-directional concussive blast that is fully capable of causing tractor beams be dispersed and unwanted hangers to disengage, allowing one to temporarily shrug off the effects of such devices. It is commonly used to force boarding craft away from hulls, knock away incoming projectiles and can potentially kill or disable poorly protected infantry with pure kinetic force.

Location: Integral

Purpose: Defensive Countermeasure

Secondary: Deterrent

Damage: T5, Kills through Kinetic Force

Range: 1m radius

Rate of Fire: One pulse every 6 seconds

Power

Primary Power

So-M2-G0936 Frame-class ZeP Siphon

The Type-P ZeP Siphon is an experimental early production model of the basic frame-class zero-point energy sources, which has been down-tuned in regards to performance and output to prevent the reactors from being damaged until the equations required to achieve full draw can be perfected. The engineering of the Type-P is identical to the tentative completed model, but features a limiter that keeps the output bellow combat-capable levels. Consequently, the mecha features a capacitor system that stores virtual particles and can catalyze them to effectively replace the reactor entirely for several hours.

The reactor is contained near the cockpit unit, and ejects with the mecha's escape pod because the technology is too expensive to abandon in the field.

Capacitor System

So-M2-G1936 Frame-class NEn Capacitor x6

The NEn capacitors equipped on the Erla VANDR II were originally meant to supplement the reactor by storing virtual particles produced, to allow for silent running operations and replace the output of the reactor in case of emergencies. However, technology constraints on the reactor's potential maximum output have changed this purpose, making the capacitors the main power system for combat scenarios.

The capacitors are contained around the body in the limbs and backpack unit so that they can regulate with the environment.

Electronics and Propulsion

Control Systems

So-M1-E0784 VANDR-type Immersion Control Pod w/ [VCANIOS Core](#)

Due to their natural interface abilities, designing a responsive and intuitive control system for an [Iromakuanhe](#) was relatively easy. This system, know as the Immersion Control Pod, allows easy and natural control of most vehicles, including large units such as powered frames and starships. The Control Pod is the seat component of the cockpit, and is comprised of a rounded chair in which the pilot is most comfortable in a reclining position, and multiple [entry port](#) plugs. The chair itself is lined in a soft, organic material lined in a highly flexible rubbery skin that is smooth to the touch and has a light golden reflective sheen. It will naturally conform to the user's body, and can even form cushioned indentations for the tips of horns.

Use

To connect with the machine, one must connect the plugs to their [entry ports](#), which can be done manually, or automatically by the organoid. The pilot's senses and ability to move will then quickly begin to fade as they are rerouted to those of the frame, which they will be able to control as extensions of their own bodies. Weapons systems and certain functions may have to be practiced.

Note

Transfer of pain cannot occur because [organoids](#) lack developed tactile senses in most cases, however, the have been uncomfortable sensations reported by pilots when their units lost limbs or took heavy damage, similar to a sort of strong pressure. On very rare occasions, the sensory redirection effect caused by the control module lasts after disconnection from the craft, which will require immediate medical attention.

STL/FTL Propulsion

So-M1-P0935 Vector Transition Drive

The VT Drive is a variant of the [MASC Drive](#) that has been optimized for powered frames, that replaces the fins and extensions of the basic MASC Drive with a substructure and under-armor that has been heavily doped with purified [Veyrinite](#), effectively internalizing the complex geometry required to produce the funnel-like compression of space that could be turned to functional propulsion. Although such techniques were used on spacecraft, the technology could not be sufficiently micronized for practical usage in powered frames until the inception of the Mk II.

The drive allows for both slower than light and faster than light travel, as well as a third mode known as the 'Vector Translation' or 'Sublight Jump'. As long as sensors are functional, the pilot may initiate a sudden jump to any point within a range of under a light second without charging their drive system. When undertaking this 'Sublight Jump', the unit loses all directional momentum as a consequence of inertial dampening and the distortion of the mecha's compressed space fields.

Faster than light travel requires several minutes of charging and calibrations to ensure the creation of stable corridors in compressed space, else the unit might experience critical damages during or after transit.

Maneuver

So-M1-P1935 Lift Ring System

Because the MASC Drive itself is less effective than conventional drives in atmospheric conditions, the EV II partners it up with an array of [GravElectric \(GE\) Lifter](#) rings which have been placed at the joints and extremities of the powered frame. These generate anti-gravity forces that allow it to propel itself as easily as if it were in microgravity conditions, and can generate precise thrust through the manipulation of Lorentz Force fields. This allows it greater land¹⁾ and air speed.

Mobility Information		
Function	Speed/Distance	Detectability
Atmospheric Flight	Mach 6 [Janisar]	Low
	Mach 8.3 [Avynna]	
Zero Atmosphere	.375c	Low
FTL	500c	Medium
Sublight Jump	270 000 KM	Medium

Communications Systems

So-M1-E1784 Frame-type Communications Package

Location: Torso, Cockpit Pod

Includes:

- Laser
- Radio
- [MASC-Assisted Laser](#)
- [MASC-Assisted Radio](#)

Sensors

Passive Sensors

[So-M1-E0935 Frame-type Passive Sensors Pod](#)

The passive sensors of the Erla VANDR II consist of advanced long-range RADAR for area scanning, along with [Vector Wave Sensors](#) and [Subspace Mass Sensors](#) for early warning purposes. With the exception of RADAR, the components of the passive sensors package do not produce any traceable emissions at low-level operation. The array consists of two clusters, located in the head antenna and rear cockpit pod.

Includes:

- [Vector Wave Sensors](#)
- [Subspace Mass Sensors](#)
- RADAR

Active Sensors

[So-M1-E1935 Frame-type Active Sensors Pod](#)

For the purposes of separating sensors and streamlining design, the Erla VANDR II has its passive and active sensors separated and located in areas where they would be considered most effective. The pods that comprise the passive sensors contain a short-range thermal scanner for low-light operations and life sign detection, high-energy LADAR emitter as well as long-range [MASC Particle Scanner](#) nodes that allow the mecha to target or scan objects at an extreme distance. These sensors are often of greater importance during combat and when determining the course for high-speed STL and FTL maneuvers.

Includes:

- [LADAR](#)
- [MASC Particle Scanner](#)
- Thermal Sensors

Electronic Warfare

[\(5\): So-M1-E3784 ERP Projectors](#)

The Empty Resonance Pulse, or ERP, is a potent electronic warfare system that could be seen as a modern analogue to the flash bang, by generating short burst that temporarily render space void of traceable emissions. It employs a combination of space compression and exotic charged particles that generates a short-lived effect, however, lingering particles may continue to hamper sensors for some

time.

- Location:** Head, Hands, Torso
- Max Pulse Range:** 800 M
- Max Pulse AoE:** 50 M
- Duration:** 5 Seconds
- Rate of Fire:** 1 Pulse per 20 Seconds

So-M1-E4784 Listening Deveice

The Listening Device is a system employed to passively intercept and sample data being transmitted through unsecured methods. It is also a critical component in many important electronic warfare devices, and allows Astral Vanguard starships and vehicles to track the communications of hostile forces. As the unit approaches the source of the transmissions, it becomes increasingly easier to track, until a positive match can be made at a certain threshold.

- Location:** Head
- Can Intercept:**

- Radio
- Microwave
- Subspace (requires [Vector Wave Sensors](#))

Specifications		
Medium	Maximum Interception/Detection Range	Tracking Range
Radio	1 200 000 KM	30 000 KM
Microwave	600 000 KM	15 000 KM
Subspace	15 000 KM of Receiver or Sender	5000 KM

Passive Stealth

So-M1-E5935 Phantoma Sink System

The Phantoma Sink System is a system that was developed specifically for the Erla VANDR II, that uses the reactor and primary drive system to effectively regulate the space immediately around the unit, allowing it to camouflage itself by imitating background radiation and heat levels within 88% accuracy. This is done by effectively sinking reactor by-products such as heat, heat gradient, neutrinos, loose virtual particles and electromagnetic radiation back into the artificial space that it taps for energy. However, the reactor must be operating at at least minimal levels to initiate this effect or the system will be unable to function.

In practice, this means the mecha can hide in plain sight in areas with large numbers of mecha with Aether, Quantum Foam and Zero-Point reactors, and be difficult to track in even nominal conditions.

Active Stealth

So-M1-E5784 Muted Resonance Shroud

The Muted Resonance Shroud, or MRS, is a squad-assist stealth system that uses a combination of Vector Shroud-type space compression and exotic charged particles to create sections of space that appear very dim to sensors systems. These areas do not stick out as emptier than vacuum as with some related systems, but creates a signature similar to that of the space a significant distance from a star. The results in high difficulty in achieving targeting locks on and determining the nature of objects inside the field. Unfortunately, this has similar effects on the units deploying the field, forcing the runner to rely on FTL sensors such as [MASC Particle](#), which may reveal his presence, though not necessarily his position.

Field Size can be lowered or raised, though it is suggested to limit the area of the field to the approximate area of the frame employing it, as to hide effectively, but not arouse suspicion by creating overly large zones that the enemy cannot scan properly.

Detection Range: 250 M

Max Field Size: 1 KM

Countermeasures

(2): So-M1-E6784 Regenerative Beacon Flares

Location: Rear Hip Pods

Purpose: Anti-Missile, Anti-Targeting Lock

Secondary: Misdirection

Salvo Size: 1, 2 or 3

Damage: MDR 1

Range: 25KM in Atmosphere, 15 000 KM in Space

Rate of Fire: 1 salvo every 2 Seconds

Area of Effect: 500M in Atmosphere, 2500 KM in Space

Muzzle Velocity: Mach 6 in Atmosphere, .2c in Space

Ammunition: 24 Missiles

Ammo Replenish: Can refill capacity in hospitable conditions in about 1 hour outside of combat. Any further attempts to refill will require an external source of biomass.

(2): So-M2-E3936 Regenerative Canister Missiles

Location: Back of Torso

Purpose: Anti-Beam, Sensors/Communications Jamming

Secondary: Misdirection

Salvo Size: 3, 6 or 9

Damage:

- *Impact:* T5
- *Cloud:* T3

Range: 20KM in Atmosphere, 12 500 KM in Space

Rate of Fire: 1 salvo every 2 Seconds

Duration: Cloud dissipates after 20 seconds.

Area of Effect: 400M

Muzzle Velocity: Mach 3 in Atmosphere, .1c in Space

Ammunition: 27 Missiles

Ammo Replenish: With power supply from reactor, can refill capacity in hospitable conditions in about 2 hours outside of combat. Any further attempts to refill will require an external source of biomass.

Misc

Internal Storage

There are internal storage compartments within arms reach of the pilot on the left and right, with each roughly 50cm x 25cm x 25cm in size. By default, they contain:

- Rations
- 2 Litres of water
- (4) [Leyflar Supercapacitor](#)
- (1) [Solanii Laiz Carbine](#)

BHS

Biomass Harvest System (BHS)

1)

While hovering and performing low-atmospheric maneuvers.

From:
<https://wiki.stararmy.com/> - **STAR ARMY**

Permanent link:
https://wiki.stararmy.com/doku.php?id=faction:iromakuanhe:sahti_vandr&rev=1558267979

Last update: **2023/12/20 21:32**

