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Tethys Power Armour

The Tethys began development in YE 31 as an alternative or outright replacement for one or both of its older counterparts, the Anthedon Power Armour and Hikael Power Armour.

History

While the Anthedon Power Armour had served as the Celestial Navy's premiere Power Armour for a number of years after its inception and even as the Hikael began its production run. With the breakout of the Second Mishhuvurthyar War both suits began to show their age as disproportionate losses occurred in the opening bouts of fighting as they encroached on Elysian territory. A rapid redevelopment of Elysian assets would have only met with the same losses, so scientists began devising newer models of Armour to compensate and put their forces on even footing with the more 'advanced' NMX forces. The project began months after the first incursions, but was repeatedly stalled due to resource shortages as well as the fear of constant attack on Elysia Novus set in. And it wasn't until in YE 33 that the project began to bear fruit. The Tethys was the eventual culmination of almost two years of effort, of sweat, blood, tears and the sacrifice of many Elysians as they held the line against the NMX onslaught.

About the Tethys

The Tethys is designed to be a General-Purpose Armour with 'Armour Supremacy' attributes built in, acting as a Jack-Of-All-Trades, master of none in this regard, the Tethys combines the purpose of the Hikael and Anthedon into one suit, wedding the Anthedon's agility, high-speed and penchant for long-range weaponry with the Hikael's more aggressive up close and personal (Assault) appeal. Harkening back to its 'General Purpose' nature, the Tethys boasts a number of different offensive and defensive equipment that it can mount, including shields, rifles, missile racks and even more formidable melee weapons if the pilot so chose. On the Tethys "Everything is an opportunity." allowing the pilots a high-degree of varied combat tactics and engagement scenarios in which to play out owning to the philosophy of the project lead's influences on the design.

Appearance

The Tethys maintains the sleek, graceful profile of its predecessor the Anthedon Power Armour being slightly smaller in stature due to advances in system miniaturization. The conformal interlocking armor plates are blued-silver in appearance while the material of the joint armor and in-between the plates appears akin to smooth white metal, confusing someone not used to the organic armour. The wing sheaves allow an Elysian's wings to be housed within and are designed to amplify shield, and propulsive capability. However they are a lot more 'flexible' due to a change in construction allowing them a finer degree of movement more akin to the wings of the pilot. The neckline of the armor is elevated to prevent it becoming a 'bullet trap' and the helmet itself is a darkly tinted faceplate (It is slightly curved) with nose-guard including aspects of a Armet design for purely aesthetic reasons in regard to the faceplate.

Behinds the helmet and connected directly to the suit itself is a 'halo' that sits behind the helmet and contains the suit's active sensors.

Alternate Helmet

The lower portion of the faceplate however can be covered by a metallic plate for added protection; leaving the helmet having a visor'd appearance due to the lack of a nose-guard in this configuration. This decreases the chance of 'face-shots' against the armor's pilot. The pilot's view however remains unrestricted despite the additional plate due to a combination of a HUD in the helmet in addition to the suit's neural interface.

Basic Information

Government: Elysian Celestial Empire Organization: Elysian Celestial Navy Type: General Purpose Mecha

Class: El-M4-X1 Designer: Elysian Celestial Weapons Manufacturer: Elysia Novus Shipyards

Capacity and Dimensions

• Crew: 1.

Maximum Capacity: 1.Height: 2.4m (7.8 Feet)

• Mass: 200kg

Speed and Range Capabilities

• Air Speed: 2,695 km/h (Mach 2.2)

• Charged Particle Drive:.375c

• Range: 1 Week while active, suit stasis can maintain the pilot for up to one month.

• Lifespan: Twelve Years, much longer if serviced regularly.

Armor and Shields

Shields: 16 (Threshold 3)Armor: 18 (Armor Scale)

Weapons Systems

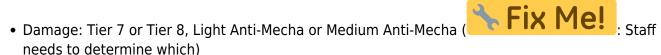
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(1): 'Deus Atromos' Particle Rifle

Atromos Particle Beam Rifle A scaled up version of the Atromos, while the standard fare included antipersonnel, the Deus Atromos is strictly anti-material due to stopping power. Not much has changed from the standard format save for punch and range.

Location: Left or Right HandPrimary Purpose: Anti-Armor

• Secondary Purpose: Anti-Personnel



• Range: 10,000km (Space) 5km (Atmosphere)

• Rate of Fire: 300 RPM

• Payload: 50 Round Magazine, Rechargeable from Docking Port.

(2): 'Xiphos Aurae' Blades

Built custom for the Tethys, the Xiphos system utilizes two sword-like devices sheathed within elevated wrist mounted housings on the forearms of the armor. Contained within each are a series of charged particle generation and control systems to keep a tight 'band' around each blade adding significantly to its cutting power. It should be noted that the housings for the Xiphos can act as recharging stations for the Atromos, replenishing its power pack while 'docked' atop one of the forearm housings. It takes approximately one minute for a full recharge, and during that time the rifle is unusable while docked.

- Location: Left and Right Wrist, sheathed in wristmounted housings.
- Purpose: Anti-Armor
- Effect: Slashing Damage via super-heated/electrical discharge. (Tier 5 or Tier 6, Medium Anti-Armor

or Heavy Anti-Armor (Fix Me! : Staff needs to determine which))

- Secondary Effect: With the generators deactivated, a simple twin blade system. (Tier 3, Heavy Anti-Personnel-2)
- Range: 1 1/2 FeetRate of Fire: None.

(2): "Generator Mini-Missile Pods"

The Tethys sports a pair of missile launchers, one mounted in each hip. The missiles use a small aetheric generator (simply referred to as 'the generator' by Elysians) to create rather massive destruction with a comparatively small charge. Each missile measures a mere 28cm end to end. Each charge contains basic computer systems, allowing them to correct their course and track an intended target within the limits of their range.

Location: One at each hip.Warhead: Aether charge

• Purpose: Mid-range dogfighting weapon; anti-armour/anti-starship



Damage: Tier 8 or Tier 9, Medium Anti-Mecha or Heavy Anti-Mecha (needs to determine which)

• Range: 600,000 km

• Rate of Fire: Fires in volleys of 5

• Payload: 40 per pod

(2): 'Lochos' Drone Launchers

The Lochos, meaning 'War-Band' is a set of semi-autonomous drones launched from the wing sheaves. Acting much the same as the Nodal Support Bits on Yamataian armours, the Lochos contain limited semi-sentient AI constructs to correlate targeting data for themselves as well as the host by using the Tethys as a central hub. This allows the Lochos, and Tethys to act in concert with the Lochos providing fire-support and defense while the Tethys goes on the offensive. Each of the wing sheaves houses five of these miniturized pinion shaped drones. They come complete with miniature particle drives to allow rapid maneuvering changes, a limited powersource/storage capacity and charged particle weapon.

• Location: Left and Right Wing Sheaves

• Primary Purpose: Anti-Armor

• Secondary Purpose: Anti-Personnel, Anti-Missile Ordinance

Damage: Tier 4, Light Anti-ArmorRange: 800 Meters Firing Range

• Rate of Fire: 120 RPM

• Payload: 195 Shots before docking station recharge.

Systems Descriptions

Suit Interior

The interior of the Tethys is organic, soft and vaguely womb-like, but not slimy like the Mindy. Elysian scientists found that rather disgusting and the idea of a Arch-Angel being in a synthetic vagina didn't bare thinking about. The organic innards mould themselves to the pilot, and provide excellent shock absorbency, and (combined with organic and synthetic muscles built elsewhere in the armour) provide greatly augmented strength to the piloted. The innards regenerate from damage quickly and efficiently. The organism also serves to protect the pilot from heat and radiation, vital both from surviving space travel and atmospheric re-entry (if the Tethys' shields have been disabled).

Exoskeletal Frame

The Exoskeleton of the Tethys is composed of a combination of organic and semi-organic materials. They form a 'bone' like structure in which the main armor, systems, and interior are built around and act as a load bearing weight distribution network. The frame itself has durability comparable to that of ADNR

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(Aggregated Diamond Nanorods) but allows for a higher degree of flexibility and malleability than average metallic/ceramic makeups. This affords the Tethys a more 'natural' flow of movement to the extent it acts as close to a 'second-skin' as can be had by current Elysian science. The material itself is controlled by the central computer system of the Tethys, regulating rigidity and malleability of the material down to the finest minuet detail as the armor works, flexes and moves about. Only changing depending on the task at hand or form of incoming attack and necessary defensive measures.

Main Armour

The Main Armour of the Tethys is a two-part system. External plates which act as a first line of defense, easily replaced and cheap to produce, and the underlying Elysian 'Scale' Armour, a self-regenerating organic base from which the durable 'Scales' grow from.

Armour Plating

The Plating itself is a composite armour made from a carbon fiber-reinforced quasi-crystals as a composite laminate over a titanium, platinum and carbon-composite base plate. The plate is formed via titanium fibers being interwoven with platinum and carbon-composites before being compressed into the necessary shapes. The laminate is added after the plate has been pressed into shape adding significantly to its heat, and energy resistant properties. It should be noted however some Elysian Scientists found the use of platinum questionable in the material makeup of the plate, considering it nothing more than to add a final aesthetic touch with little to no improvements on the plate's overall durability.

Scale Armour

First utilized on Elysian starships and then the Tethys' predecessors, the Anthedon and Hikael, Scale Armour is a toughend organic armor built upon a self-regenerating base. The Scales are an outgrowth of the base or 'skin' which quickly replaces lost scales as quickly as possible. The Scale's themselves act as a ablative material only breaking off or shedding after they have been dealt significant punishment from energy or solid munitions fire. The Scale Armour's main advantage is its ability to quickly regenerate. While the punishment the scales can take are truly impressive, the regeneration is the key feature of the armour, allowing a damaged suit to repair itself given time and putting the soldier back in the fight. The Scale Armour covers the entire suit, acting as the 'main' armour on which protects the joints and or whatever miniscule exposed parts the plates do not cover. Its appearance is akin to smooth white metal confusing one not used to seeing the armour for its organic nature.

Life Support Systems

The interior structure of the Tethys acts as a life support system, creating an oxygen rich environment for the pilot as well as regulating temperature to keep them within comfortable norms. The organic interior can provide limited water supplies, nutrient rich 'pellets' in which to sustain them as well as recycle the oxygen to keep it fresh. While originally only added to the personal armours of Patricians, the stem cell

organ has been added in a mere handful of the Tethys Prototype to test the viability of the addition with Caelisolan pilots. The remainder have been fitted with the organ for their Patrician pilots. This organ releases stem cells within the armour to heal wounds inflicted in combat, close gaps in the internal structure and overall 'try and keep the pilot alive.' While unorthodox, it may or may not be added to the final production model for Caelisolan piloted Tethys, and remain solely a Patrician addition for their private usage.

Control Interface

An updated form of the Superconducting Quantum Interference Device system was installed within the Tethys which is called 'SQUID' for short, while essentially the same system, minor tweaks have improved overall system performance by ten percent. The increase in performance will mean a better meshing between pilot and armor, smoother transition and piloting allowing them to become acclimated faster with the suit and decrease training times. The Interface works upon the principals of giving form to thought, or rather *action*, by reading the 'thoughts' of the pilot and enabling them a finer degree of movement. The advantages of this method of suit piloting allows the pilot to act as they normally would while not donning the armour. The SQUID system still remains linked to the Predictive Systems onboard to assist in this.

Shields

The Tethys takes advantage of the latest in Power Armour shield technology from the Elysian Celestial Navy. Building upon the Anthedon and Hikael's systems, the energy shields have increased in combat efficiency against all incoming attacks be they physical or energy derived. Power management and efficiency have risen due to a combination of better materials involved as well as computer management. The shields can be 'extended' outward into a spherical shape to provide the Tethys some limited 'breathing room' should an enemy be too close for comfort, but normally are conformal sticking to the armour. This extension however is very limited in diameter, being only one to two feet at best on all sides.

Power Generation

Main Power

Main power for the Tethys comes in the form of a 'Generator' (Elysian Terminology for an Aether Generator).

Auxiliary Power

Utilizing some form of system redundancy, the Tethys has a series of built in supercapacitors in which energy is stored for emergency use should the Generator be offline. They can power the Tethys at full

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combat status for a limited runtime of approximately forty five minutes before being depleted. Noncombat operations have varying degrees of power drain, but typically will keep the Tethys going for a maximum of eight hours should sufficient power saving measures be in place, i.e the bare minimum of functionality.

Propulsion

Main

The main propulsive unit of the Tethys are a series of charged particle drives situated along the back of the unit, and wings. While a Continuum Distortion Drive could have provided propulsion, they were deemed too energy demanding for all of their functions. A cheaper, more efficient alternative being the charged particle drives which also serve to fuel several weapons aboard the Tethys, and therefore compliment the unit.

Maneuver

The Tethys utilizes a limited form of Gravimetric Propulsion Technology to assist in movement, granting the Tethys a high-degree of maneuverability on the battlefield. While not directly used for main propulsion, the Gravimetric systems instead issue short 'pushes' which shift the armour's position on the pilot, and computer system's whim as necessary.

Electronics

Communications Suite

The communications suite of the Tethys utilizes some 'tried and true' technologies with better encryption methods built in to help ensure a safer communications line. The Tethys also comes standard with external audio systems to speak directly with persons close by.

Communication System	Туре	Broadcast Pattern	Range	Detectability
Laser	Visible EM	Directed, Requires Line of Sight	300 000 KM	Low
Radio	Visible EM	Radial	155 000 KM	Medium
Microwave	Microwave Emissions	Directed Area	300 000 KM	High
Subspace-Assisted Laser	Subspace-Laser	Directed to Point of Arrival	15 LY	Low/Medium
Subpace-Assisted Radio	Subspace-Assisted Radio	Radial from Point of Arrival	20 LY + 155 000 KM at Point of Arrival	Low/Medium

Passive Sensors

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The Passive Sensors of the Tethys include advanded long-range RADAR and Subspace Mass Sensors for area scanning as well as early warning purposes. They do not produce any traceable emissions at low-level operation making them ideal for this purpose. In addition to these two systems are optic systems built into the armour to allow it to see upwards of a 360 degree field of view. These sensors are located on either side of the helmet in small nodes, while the optical systems are built around the suit.

Includes:

- Subspace Mass Sensors
- RADAR

Active Sensors

Active sensors within the Tethys are typically held within the 'halo' above and directly behind the helmet. These sensors are used during combat operations and when not under orders for passive running.

Includes:

- LADAR
- Thermal Sensors
 - Tachyon Tracking System: This faster than light 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: 20,438km, (12,700 miles). This is a vital component of
 the Transphased Plasmatic Pulse Rifle, which requires accurate distance measurements in
 order to work at its full, devastating, efficiency.
 - Quintessent Wave Differentialometer: This device gives the Tethys' organic computer a
 highly efficient sensor by calculating the shape, mass and velocity of objects by looking at
 the ripples the objects make in the seas of energy. The QWD has a range of 241km miles
 (150miles). Works in conjunction with the Subspace Mass Sensors.

Computer System

Mikros Mnemosyne

A cutdown armour grade version of the Mnemosyne system, the first of Elysia's armours to utilize this powerful computational system, the Mikros Mnemosyne lacks the full power of its more potent (and large) counterpart. However, it was deemed necessary to utilize a more robust system for the Tethys' additional features and more up to date systems. Lacking its built in sensor suite, the Mikros utilizes what the suit already has built in to relay and correlate combat data as well as run the Tethys' systems.

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Fire Control System

Connected with the Predictive defense System, the Tethys' Fire Control sub-section of the organic computer can track around 20,000 targets at any one time, and monitors them for both defense and offensive purposes, using all of the suits sensory in-put to target sensitive areas of ships and armours, optimise its weapons power, range and frequency, guides the missiles and identify friendlies. If needed one more of the weapons systems can be assigned to the Fire Control system, which aims and fires them without any in-put of the pilot.

Attack Prediction System

This system is vital for the Tethys' survival against other armours and in mêlée. Effectively it predicts what the opponents next move will be using a number of parameters drawing of stance, last move and fighting style. It quickly 'learns' an opponents style. Upon predicting these moves it then uses this to help block and counter-attack, finding openings far easier than the pilot would. It then actually controls the Tethys' movements, blocking and attacking without the pilots direct control, given that the computer can think and act faster than the pilot can. Given the adaptive nature of this system, combined with the organic nature of its component, the more it is used the better it becomes given the more data it gathers. Thus a Tethys' which has been used a relatively large amount will likely defeat a new Tethys in mêlée.

Conformal PSC

The Tethys' is equipped with a Psionic Signal Controller, which protects the user from psionics, nullifying said activity. In order to allow the pilot to make use of his own telepathy, as a form of communication, the device can allow certain 'channels' of telepathy to be clear so that secure communication can be ensured even during telepathic assault. Unlike the older Alpha-Delta Neutralizer, which would lead to detrimental psychological effects if kept active for an extended period of time, the PSC can remain activated indefinitely. The PSCs field envelops the entire Anthedon, but does not extend from the armour and thus avoiding the creation of a zone which can be detected.

Passive Stealth

Active Camouflage

Using a sophisticated set of Volumetric display projectors in combination with the 360 degree sensors equipped on the Tethys' the power armour is capable of putting the image on one side of the armour what is on the other side. The speed of the organic computer means that there is effectively no 'drag' in the image even if the armour is moving. The system can also be used to project other Volumetric displays around the armour, controlled by the pilot's 'minds eye', which it turned in to a more complete image my a function of the organic computer. This allows the Tethys' to, from a visual basis at least, appear to be pretty much anything.

Stealth Armour

Active Stealth

Note: Optional! Not Standard!

The Tethys can come with, or have applied a form of Zanarium Stealth Coating applied to it to cut down on suit power emissions, and profile. When combined with the Active Camouflage system this would create a potent form of stealth. However, some pilots may find this detestable to use on the battlefield and as such it is not a standard addition, being an optional add-on that usually has to be cleared by the armourer in charge and or possibly the squadron leader.

OOC Notes

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