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Arcangèlo Heavy Armor

The Arcangèlo Heavy Armor is a power armor first used in Elysian Celestial Empire in YE 33.

This is a highly restricted item. Do not allow any other factions to capture or examine this technology.

History and Background

The Arcangèlo is the brain child of Elysian scientists working with whatever tech they thought they could reasonably get their hands on to make a unit designed to be nothing more then a slightly mobile tank. With the central importance of Empyrean itself to the Elysian culture, and more so than that the importance of the Great Temple of Elysia Novus, they decided that with their recent reintegration into the Yamataian empire, they might as well get some use out of the technology they hadn't had access to until now. Thus, they worked with the main body of KFY to obtain the materials and design capacities to utilize some of the more rare and expensive things available.

About the Arcangèlo

The Arcangèlo was designed with the idea of being both imposing and beautiful at once, while removing the portions of a power armor typically unnecessary for its theorized duties. Thus, it was built to be big, heavy, and not nearly as mobile as most armors, but to be able to both withstand and deal out serious punishment. With the limited need for the armor in mind, the materials put into its production could be much more expensive or rare, allowing them to improve upon their original ideas even further.

With those specifications in mind, they built a set of armors capable of going "hull down" as a final line of defense for their most venerated places, and could literally shield these places with their bodies. At the same time, they armed them to both match the traditional Elysian ideals of grace and usefulness at the same time, giving them significant ceremonial presence in the process. The final result was an armor that was both hard to kill and hard to survive fighting against, even with its immensely reduced mobility, which fit the mentality of its duty as the final guard well.

Statistical Information

Government: Elysian Celestial Empire Organization: Tenth Fleet Type: Heavy Guard Mecha Class: El-M3-1c Designer: Elysian Celestial Weapons Manufacturer: Elysia Novus Shipyards, in collaboration with KFY Production: 14 in total, 2 decommissioned, 4 spares, customized for specific duties. Crew: 1 Patrician.

Appearance: The Arcangèlo looks, for the most part, like a massively bulked up Anthedon Power Armour. It has the same humanoid design, with increased bulk on all sides, appearing like a giant version of a fully grown, heavily armored Patrician. The armor is entirely pure white at the base, with a soft grey tone

used on the underlying portions such as the joints. The only exception is a golden crown design on the helmet, in addition to the silver halo directly above and behind the helmet.

Depth: 5 ft / 1.52 m (without wings), 9 ft / 2.74 m (with wings) Width: 7.5 ft / 2.29 m Height: 15 ft / 4.57

m Mass: 2.8 tons / 2540.12 kg

Ground speed: 80 kph

Maintenance: Directly following any non-ceremonial use, and after every third ceremonial deployment. Complete check-up and replacement of necessary systems every six months minimum. Lifespan: Approximately 3 years, without a complete systems overhaul.

Damage Capacity

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

Hull: 20 SP (Armor scale)Shields: 20 SP (Threshold 3)

Weapons Systems

Standard Handheld: Transphased Plasmatic Pulse Rifle (Arcangèlo Variant)

Missile Launchers (2): The Arcangèlo has four missile-launchers built in to it, one on top of another on each shoulder, protected by a sliding armour plate when not in use. The primary missile fired is the powerful penetration micro-missiles. These 3cm by 3 cm by 30 cm missiles contain a shield modulation device within them which makes them highly efficient at penetrating through many varieties of shields. Each also contains a 50g shaped high-explosive payload, equivalent to 2 kilotons of TNT.

- Warhead: Penetration Micro-missiles.
- Purpose: Penetrates shields, anti-armor.
- Damage: Tier 7 or Tier 8, Light Anti-Mecha or Medium Anti-Mecha needs to determine which)



- Range: 5,000 miles
- Rate of Fire: One missile at a time per launcher, approximately 1 every six seconds.
- Payload 10 Missiles each.

Forearm Pulse Weapon: This weapon fits in to the bulge of the Arcangèlo's left forearm. This is an adapted and slightly up-powered version of the pulse weapon employed in the Daisy armor system, but locked into position, and powered to be of some use in heavier combat.

- Location: Built into the left forearm.
- Primary Purpose: Anti-armor.
- Secondary Purpose: Anti-infantry.
- Damage: Tier 4, Light Anti-Armor

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• Range: 500km

• Payload Effectively unlimited.

Ceremonial Spada da Lato: The Arcangèlo has a proportionally sized side sword as part of its standard weapons package. This blade is a molecular knit, monomolecular edged Zesuaiaum power blade, with the fuller being replaced by the energy projectors.

• Location: Sheathed on the left hip of the armor.

• Primary Purpose: Anti-armor

• Damage: Tier 3, Heavy Anti-Personnel unpowered, Tier 5 or Tier 6, Medium Anti-Armor or Heavy

Anti-Armor (Staff needs to determine which) powered.

• Range: Melee

• Power Source: Internal batteries can power it for about 1.5 hours of use, unlimited if connected to the armor's power source.

Ceremonial Tower Shield: The Arcangèlo also comes equipped with a full sized Yamataium tower shield, fully 11 ft tall, 4 ft wide, and 4 inches thick. Its surface is pure white just like the armor itself, and is topped by the same crown around the topmost edge of the shield. It is designed in such a way that the shield can be planted on the ground to provide temporary cover for the armor if necessary, and is also shaped properly for use in a shield wall style formation.

• Location: The shield is traditionally held in the armor's left hand.

Primary Purpose: Defensive/CoverSecondary Purpose: Shield bash

• Damage: Tier 3, Heavy Anti-Personnel

• Range: Melee

Systems Descriptions

Exterior

Nerimium, reinforced with layered Yama-Dura on a Diamond Nanotube frame. The Arcangèlo was built to be both much more massive and solid then either of the other armors in use, and to this end, the designers of it built it with heavier materials then their earlier models. Through cooperation with KFY, they obtained Nerimium and Yama-Dura, and used the Diamond Nanotube armor composite they already had.

The armor's base layer is pure nerimium, thick enough to block most lighter weapons without shielding easily, at least for a time. This is boosted further by the addition of a decently thick layer of Yama-Dura over specific portions of the armor, including the chest, the upper legs, and the back of the armor covering the teleportation module and the power generators.

The final result is an armor impressively much bigger and heavier then its smaller cousins, with significantly more staying power and presence on the battlefield. While it is much more limited then either of its cousins, the design was thought up with that in mind, and it was decided that the benefits

made it worthwhile.

Damage Rating Value: Heavy-Class SP (20), Heavy Armor Modifier (1.0 Base SP rate)

Interior

The interior of the Arcangèlo is organic, soft and vaguely womb-like, but not slimy. 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, assuming the Arcangèlo's shields have gone down.

The Arcangèlo uses a Superconducting Quantum Interference Device or SQUID, which non-intrusively detects the brains electrical activity through detecting the minute magnetic fields. This specializes in detecting the motor and speech areas of the brain, meaning that the suit can detect all the movements the brain wishes to make and act upon it far faster than the pilot would normally be able to. It also means that the pilot can 'speak' to the armour, with the armour effectively hearing the pilots thoughts and acting upon them. In addition to this it uses a telepathic system to interact between the pilot and the armour, effectively allowing for the pilot to control the armour as an extension of itself. In addition to this the armour telepathically inputs data in to the pilots brain, including the visual data from visual sensors, and projects the effect of a HUD into the pilot's visual cortex.

Life Support: The organic center of the Arcangèlo is also a sophisticated life support system, recycling oxygen and supplying the pilot with water and extremely high nutrient pellets. If it is one Arch-Angel's 'personal' armour, the Arcangèlo is often fitted with a special organ which grows the stem cells of that Patrician, meaning that it can heal the pilot's wounds. The complexity of the organism means that the oxygen supply is recycled with virtually no loss, resulting in the pilot being able to 'breathe' for 28 days. An organ much like what we would know as a 'Texas Catheter', takes the pilots urine (if needed), and recycles it into the suits water reservoir for future drinking. That the urine is recycled is not actually usually known by the pilots, since it was deemed unlikely that the average arch-angel would like the idea of drinking his own urine, no matter how purified it was. This however, combined with the liquid that the suit comes with, does mean that the Arcangèlo can support the pilot for 28 days. Oxygen, pellets and water are all given to the pilot through an organic tube that fits in to their mouths, and oxygen is also supplied through the skin.

Control Systems: Correct manipulation of an Arcangèlo takes an immense amount of training to become adept with, getting used to relying on SQUID to reinforce your movements, to get used to the increased speed and reaction time of the armour, and how the armour sometimes acts by itself. The combination between the SQUID acting upon movements while they are still in your brain, telepathically telling the armour to act and the predictive system takes some time to get used to. The telepathic systems means that it does feel like an extension of the Elysian's body however.

Conformal PSC Device: The Arcangèlo is equipped with a Psionic Signal Controller, which protects the user from psionics, nullifying said activity. The version included in this armor system is an immensely much more powerful version then the standard package. 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

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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 Arcangèlo, and due to its boosted power source, has an effect field of about 3 feet past the limits of the armour itself.

Organic Computer: The computer for the Arcangèlo is that of a semi-autonomous, sub-sentient organism. This organism has extremely impressive processing speed and storage, and is very nearly sentient. It regulates all of the suits functions, takes care of all of the calculations needed, and helps aim the various weapons. It uses a trinary organic system, rather than the older binary system, DNA computing, but also relies upon some artificial elements of quantum computing.

Predictive System: This system is vital for the Arcangèlo's 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 Arcangèlo's 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 an Arcangèlo which has been used a relatively large amount will likely defeat a new Anthedon, or even a newer Arcangèlo in mêlée.

Communications

The Arcangèlo is equipped with an array of communication devices, the variety ensuring both security and versatility. These communication types include Radio, Laser and Subspace. These Communications can be secured using Quantum Encryption, utilizing Heisenberg's Uncertainty Principle (Or the equivalent in the SARP with the relevant name of whoever discovered it) to detect any attempts to monitor attempts and giving it the ability to counter them. Because of the lack of any system to talk in to inside the Arcangèlo, the computer instead reads the speech center of the brain using SQUID, or takes the thoughts of the pilot, and converts this in to a perfect simulacrum of the pilot's voice. The communications systems of the Arcangèlo are:

Radio: Full spectrum, dual-modulation. Although the range of the radio is theoretically unlimited, apart from absorbency and distortion by inter-stellar matter, its practical range is short given that it can only travel and light-speed and most military communication is required to be at least light hours, perhaps light years, apart. It is capable of both frequency-hopping and operating on multiple-channels. In order to secure the transmission, the correct set of code variable and equations must be loaded in to the armour prior to launch. These are changed at least every engagement.

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: 200,000 miles (321,869 km).

Subspace: Allows faster-than-light transmission. A standard means of communication; its used for video streams. The Arcangèlo's innards are not appropriate for video feed, given that there is no light from the inside and that a camera would take up valuable space, so what is done instead is that either an image is created from the pilot's minds eye (usually an idealized version), or the suit has a pre-recorded image of the pilot's face which it can manipulate. Either way it is impossible to discern it is not an actual direct

camera feed of the pilot's face.

External Audio: The Arcangèlo has an external microphone as well as a speaker to allow the pilot to communicate more easily with nearby persons. The Speakers go up to 158 decibels, enough to cause extreme vibrations in surrounding human tissue and extreme nausea.

Sensor Systems

Main Visual Sensors: The majority of the visual sensors are located on the head of the Arcangèlo, including a high resolution optical sensor, capable of monitoring the entirety of the electromagnetic band. The organic computer, by default, gives the pilot the image of the of the visible bands, often overlapping it with infrared data. The computer also records data in all other bands, including ultra-violet and micro-wave, but only notifies the pilot if there is something of note. The Arcangèlo has a gyroscope-stabilized view of up to 250x magnification. There is a spotlight on the right hand side of the armour's head which helps at night or in dark environments.

Complete Optic Cover: Using the same sensors used for the Active Camouflage system, these provide the Arcangèlo with 720 degree coverage of its surroundings in all of electromagnetic bands. While the Pilot can not take in all of this data, usually relying on the Main Visual Sensors, the Organic Computer constantly observes, and both alerts the pilot to anything of significance (the Pilot can be shown the date from these sensors), and factors it in to the Predictive defense System.

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: 12700 miles (20438.67 km). 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. This system is of reduced power in the Arcangèlo, but is present nonetheless.

Time-Modulated Ultra-Wide Band Radar: Signals transmitted by UWB radars are pulses generated pseudo-randomly. They are only 0.80 nanoseconds in duration. Since the energy of any frequency band is blow the noise the TM-UWB is 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 non-metallic objects better than regular radar can. It is ideal for both atmospheric operations and operation in nebulae.

Quintessent Wave Differentialometer: This device gives the Arcangèlo's 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 150 miles (241.40 km).

Fire Control: Connected with the predictive defense system, the Arcangèlo's Fire Control sub-section of the organic computer can track around 200 targets at any one time, and monitors them for both defense and offensive purposes, using all of the suits sensory input to target sensitive areas of ships and armours, optimize its weapons power, range and frequency, guides the missiles and identify friendlies. If needed one or 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.

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Propulsion

The Arcangèlo is designed for ground based operations only, being too large to use onboard ships, and lacking the high-speed propulsion systems necessary for spacy/atmospheric armours. Thus, it was designed with only two methods of propulsion, keeping its duties in mind.

Legs: The primary method of locomotion are its massive legs. Designed specially to support its immense mass, the legs are built to withstand speeds of about 60-65 kph, though the armor can be pushed slightly further at the cost of immense wear and tear on systems.

Teleportation Module: Located in the center of the back between the wings is a custom modified version of the Ke-M2-P3000 Power Armor Teleportation Unit, specifically designed for this armor system. The system is much heavier and bulkier then the normal version, and has a much longer charge time of a full 2 and a half minutes. This is balanced only slightly by a pair of dedicated capacitors, put there to ensure that its use doesn't drain the armor's power completely. Its range and extra capacity are both reduced as well, having a range of only about 20 km, and about 35 kg of spare mass capacity.

Power Systems

The Arcangèlo has a custom aether power system, composed of the aether generator itself, and a set of four capacitors surrounding it to store power for the massive drains that the system may undergo in combat. During purely ceremonial use, the capacitors are not needed, as the generator can provide enough power to power that much activity just fine. In actual combat situations though, assuming the maximum draw on its power at once (teleport module, Transphasic cannon, motion, forearm cannon, blade, and launching a missile), it will drain a capacitor with the generator running full power in approximately 30 seconds, limiting its power usage if it wants to outlast anything in a fight. The same capacitors can be used to flash charge the Arcangèlo's shields as well, but with its combat power drain levels, this is a wager on the part of the pilot, as flash charging the shields once drains a full capacitor and half of another at once.

OOC Notes

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