Null Entropy Capacitor (NEn Cap)

The Null Entropy Capacitor is a storage system devised for usage on the projected series-2 VANDR frames, as well as some light starships for specialized purposes. The name is derived from the fact that nearly all interactions in physics involve entropy, but that it cannot occur if there are no such interactions, such as when an area is in perfect or near-perfect 'stasis'.

Although considered capacitors, their primary purpose is not to store power, but to instead better regulate the output of a ZeP Siphon by assisting the unit in processing virtual particles, acting as secondary siphon modules to the main assembly. However, these NEn Caps are still true to their name in the sense of storing energy potentials in one manner or another, being able to function as an alternative power supply, and are capable of gradually building up stores of virtual particles to be consumed slowly to replace the siphon suite entirely for silent-running missions, or for sudden bursts of energy to recharge shields or perform an alpha strike without completely depleting available power.

They are comprised of a series of Veyrinite capture rods designed to process the energy released by the particle-antiparticle pairs that comprise virtual particles. The inner casing of each unit is lined in a series of emitters with generate intense, localized stasis fields which can virtually halt most subatomic reactions by slowing the spacetime inside of the field down by ten to thirty magnitudes. This enables the annihilation phase of the virtual particles' existence is slowed to the degree that it may be exploited within the lower bounds of the stasis effect, or delayed indefinitely at high levels.

Interestingly, the stasis technology developed for the NEn Cap is also under consideration for larger-scale developments, including storage for live munitions and perishable goods.

General Information

Name: Null Entropy Capacitor Type: Advanced Powerplant Subsystem Government: Government of the Astral Commonwealth Designer: Solan Starworks Manufacturer: Solan Starworks

Specifications

Specific functions may be accessed depending on how the NEn Cap is being utilized by it's subsystem operator or the Runner of the frame it is equipped to. Burst mode on the Null Entropy Capacitors requires fifty seconds of charging. When the capacitors are functioning as a backup power supply, both Passive and Burst functionality is locked.

Passive Usage

- Signature Reduction: Every Active NEn Cap reduces the heat and heat gradient emissions of the unit by 20%, with a maximum of 95%.
- Reactor Boost: Every Active NEn Cap increases total reactor performance by 10%, with a maximum

of 60%.

• Thruster Boost: Every Active NEn Cap increases the movement speed of the craft by 20%, but cannot exceed .4c as the stasis fields become unstable past those speeds.

Burst Usage

- Alpha Strike: Consuming one charged scale-appropriate¹⁾ NEn Cap allows for an alpha strike of all energy-projection and energy-reliant weapons without critical system failures.
- Shield Recharge: Consuming one charged NEn Cap allows a VANDR to immediately recharge shields by 4 ADR SP.
- Armor Restore: Consuming one charged NEn Cap allows a VANDR to immediately seal all breaches to its upper armor, or reinforce a specific location. Equivalent to 1 ADR SP.
- Overburst: Consuming one charged NEn Cap allows a VANDR to deal double damage with a laser or particle-based cannon. Destroys both the weapon and capacitor, and deals 1 ADR to the unit.

1)

VANDR or starship

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