NAM Dual-stage Hyperspace Tap Drive

Initially drawn up as a concept for an advanced STL propulsion drive in YE 33 by then Lieutenant (NSN) Jayden Solaris, research and development didn't begin on the Dual-stage Hyperspace Tap Drive until YE 34. Work on the drive completed late in YE 35, incorporated into the design for the Na-F/A-6 Series starfighters.

History

The concept behind NAM's Dual-stage Hyperspace Tap Drive was derived from comparisons drawn between Aether use by the Star Army of Yamatai and Hyperspace Tap energy systems in use by the Star Military of the Democratic Imperium of Nepleslia. For as close as the two systems seemed in their basic functionality, and as had been proven in years worth of use already in various starfighter and starship designs, Jayden began to research much needed improvements to Nepleslia's STL drives.

Combining the capabilities of a heated jet engine with a plasma drive, all powered by a dedicated miniaturized Hyperspace Tap Generator, the resulting two-stage atmospheric friendly STL hybrid propulsion drive was created.

About the Dual-stage Hyperspace Tap Drive

The Dual-stage Hyperspace Tap Drive functions as two STL propulsion drives in one. The hybrid engine offers exceptional endo/exo atmospheric performance without the need to carry fuel to support their use. Very similar to Yamatai's Dual Stage Aether Drive, it can operate as a cheap and environmentally friendly engine without the requirement of fuel for in-atmospheric use as well as be configured as a high efficiency plasma drive.

The cost of Dual-stage Hyperspace Tap Drive is far greater than that of standard Nepleslian made plasma drives, as is the cost to maintain. However, the performance and flexibility offered by this advanced drive outweighs its cost. Currently, this drive is not available for civilian use.

Operational Modes

Stage 1 - Hyperspace Tap-Heated Jet Engine (w/ Air-Boosted Ramjet Mode)

In this configuration, the Dual-stage Hyperspace Tap Drive acts as a Hyperspace Tap-heated Jet Engine. Utilization of this stage is only for in-atmospheric usage, and is the prefered method for atmospheric operation, where air is taken in and combusted using heat and energy from the built-in miniaturized Hyperspace Tap generator. Through the use of a specially designed force field array that rotates to draw air in and careful manipulation, this completely eliminates the need for conventional systems or fans.

With the use of dedicated system micromanagement provided by a ship's computer, performance and efficiency and be optimized. Also, this allows for the drive to perform as a Ramjet, therefore allowing for an impressive linear in-atmospheric top speed without the largely damaging effects of plasma use.

Stage 2 - Hyperspace Tap Plasma Drive

In this configuration, the Dual-stage Hyperspace Tap Drive functions as an extremely powerful Plasma drive with an incredible performance-to-cost ratio despite its higher price tag in comparison to conventional Plasma drives. When in this stage, armored plating slides over and closes the intakes when not in use or needed to prevent possible damage while used in the vacuum of space. The glow from this drive is notably different than Aether-infused plasma drives - not being teal or orange, but emerald green.

Unit Information

Nomenclature: NAM XX-DHTD-01 Type: Hybrid STL Drive Designers: Nepleslian Arms and Munitions, Jayden Solaris Manufacturer: NAM Production: Mass Production Civilian Purchase: Yes Cost: 4000 DA

Lifespan: 10 Years Refit Cycle: General maintenance is recommended after each flight to ensure system is kept in proper working order. Replace worn or damaged parts as necessary.

OOC Notes

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