

Enhanced Subspace Wave Drive

Near the end of YE 28, the Lorath Matriarchy were in a process of adapting their pre-existing and future starship designs to accommodate the need to be able to achieve faster-than-light speeds. While making this vital step, the Lorath made contact with the Yamatai Empire. Due to this contact, the Lorath were prematurely thrust into the inter-stellar arena, because of this, the Lorath were forced to field a faster-than-light propulsion system which was ill-matched to those which were in use at the time by other space faring civilizations. With the passing of time, the Lorath have managed to develop their technological capabilities greatly since the time they were first found by the Empire. With this development, the Lorath have also re-thought their old faster-than-light propulsion system.

The 'Enhanced Subspace Wave Drive' is a product of the time which the Lorath have had to experiment with their original [Space Distortion Drive System](#). The enhanced system has been developed to deliver improved performance and efficiency, while maintaining the original concepts of the system.

Technical Information

The Foundation

The Enhanced Subspace Wave Drive still utilizes the fundamental concepts of the [Space Distortion Drive System](#) with new specifications to improve the performance of the system.

Subspace Field Projection

In the original [Space Distortion Drive System](#), the system utilized a tightly confined and semi-stable field to produce the needed differential between normal space and subspace which would allow the ship within the field to move at super-luminal velocities. With a few minor adjustments and new components, the same subspace drive systems are now capable of delivering a subspace field with improved field integrity and shape which requires less power to maintain the original speed specifications, and allows for higher speeds to be reached by requiring less overall power input.

Leading Edge

Due to the improvements made in Lorath subspace field technology, subspace field emitter systems are now capable of projecting tighter fields with increased distance. Due to this capability, ships utilizing enhanced systems are capable of projecting a 'leading edge' ahead of the ship which aids in inducing the propelling 'ripple' or 'wave' which propels ships utilizing the Lorath's FTL technology. Also, due to this 'leading edge', gravitational effects ahead of the ship are regulated thus further negating the effects of micro-gravity given off by particles such as nebula gases, and permitting the regulation of unstable space ahead of the ship.

New Components

To better improve the capabilities of the pre-existing drive systems, a series of easy-to-install additional components have been developed to improve the performance of the already existing drive systems aboard the Lorath Matriarchy's starships.

Capacitor System

A capacitor can be added to pre-existing drive systems which allow for power to be stored within a protected power capacitor system. This system is capable of storing the power required to propel the ship, but also, it is capable of providing additional power in the event of requiring more power to be put to the subspace field to increase speed.

Self Adjusting Field Regulator

Thanks to advancements in Synthetic Intelligence technology, the Lorath have managed to develop a self-correcting computing system which can regulate the subspace field projected by the propulsion systems to compensate for gravitic, subspace, quantum, and other interferences which would impair the efficiency of a given configuration of subspace field. When the SI system detects that a field configuration is proving to be inefficient, the field would be adjusted to improve performance.

Optional External Projectors

An option of attaching additional subspace projectors is available. Additional subspace projectors would allow for increased field range, improved stability, enhanced precision, and easier maintenance. However, external projectors carry the inherent flaw of being vulnerable to external interference, such as weapons fire.

Zahl Type 02 Projectors

These projectors designed specifically for the Zahl Type 02 are intended to be placed upon the topside of the vessel in the external mounting ports utilized primarily for weapons. When one of these units is placed upon the Type 02 Zahl, it permits the Zahl to provide a sufficient subspace field to carry itself, and up to four other vessels of a similar size.

Hawk Fighter Bomber Projectors

A wing-tip pod is available for the Hawk Fighter Bomber which would contain a subspace field emitter

system. When attached, the Hawk's FTL speeds are increased, and FTL maneuverability is also improved. The external module also can provide subspace field coverage for up to four other similar sized starships.

Harvester Projector

The external subspace field projector add-on for the Harvester is much larger than most others. The unit is designed to fit upon one of the mounting ports intended for the mounting of a full size cargo container. Due to the sheer size of the unit, the field which it can produce can influence an area of up to ten kilometers, and can provide sufficient field integrity to carry thirty ships of a similar size within the field.

Misc. Projector

The projectors intended for miscellaneous applications can vary in size, shape, and configuration to be suitable for ship sizes from shuttles to full size battleships. Thus making categorization difficult.

Field Masking System

Due to the new distinctive signature produced by the subspace wave drive system, an additional system has been developed to reduce the reduction in stealth caused by the propulsion system.

This system must be mounted externally in proximity to the ship's propulsion systems.



Note: The Field Masking System can not completely hide the subspace field of the originating ship. This system is primarily utilized for misdirection and misinformation.

Wake Disbursal

Complementing the actual propelling subspace systems, a secondary emission system can be added which can be utilized to disburse, or break up the subspace wake left behind the ship. This system operates by producing a wide-field irregular subspace distortion. This distortion masks the true trail produced by the traveling ship, and produces a wake which produces the sensor illusion that the ship has traveled in several different directions. This system is intended to make tracking the traveling ship more difficult.

Lead Masking

Prior to a ship traveling at faster-than-light speeds actually arriving, a preceding distortion in quantum and subspace fields is produced ahead of the ship. To reduce these apparent tell-tale effects, the lead masking system creates a masking field of misleading subspace signals and gravitic surges which produce a number of sensor 'ghosts'. Due to these sensor 'ghosts', there would be an increased difficulty in determining where a ship would travel, or drop out of FTL.

Benefits and Flaws

Due to the new field geometry, some benefits and flaws are created which have been accepted to be within the limits specified by the requirements of the Lorath's ship designers.

Benefits

Due to the improved field geometry, negative effects upon subspace have been decreased, speeds have been increased, and general field stability has been greatly enhanced. Along with the technical benefits, the speed which can be delivered by the system has been improved to yield results of 14,000c when powered by quantum/aether systems or antimatter with capacitor boost. A speed of 10,000c is sustainable utilizing only antimatter systems.

Flaws

Due to the new geometry, it is now easier to identify Lorath ships at a longer distance, intended directions of travel can be easily figured by determining the direction of the 'leading edge', and the new enhancements to the system require precision calibration to be maintained.



Note: Due to the nature of calibrations required for the enhanced subspace wave drive systems, attainable speeds may vary

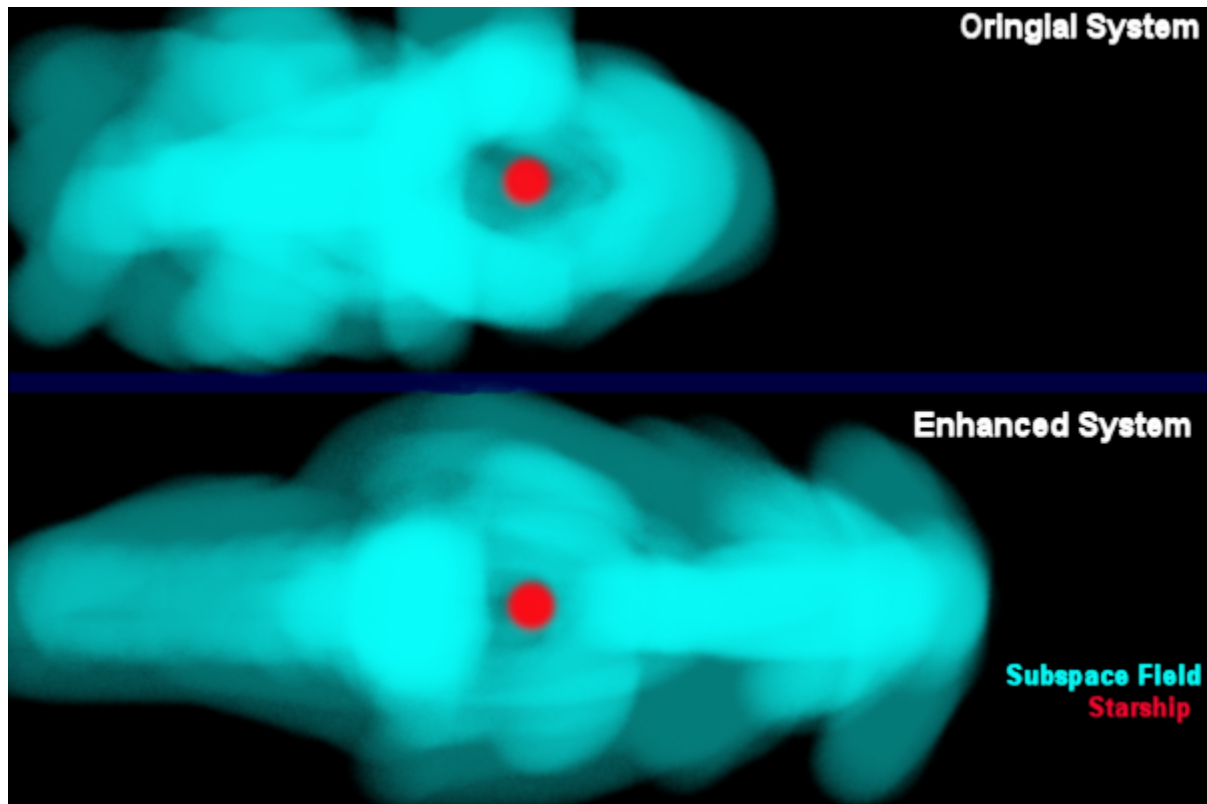
Strength In Numbers

Due to the new precision which is capable of being delivered by the subspace wave drive system, a new capability is available which involves the over-lapping of subspace fields to create a larger field with increased overall power and increased influence upon subspace and regular space. With the presence of additional field generators, attainable speeds are improved, field strength is enhanced, and power required to maintain speeds are decreased.

The Speed Of The Mob

With each additional contributing ship within the field of influence established by the overlapped subspace field systems a 10% increase in efficiency has been noted.

Graphic Representation Of Comparison



From:

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

Permanent link:

https://wiki.stararmy.com/doku.php?id=faction:lorath:technology:subspace_drive:enhanced_drive

Last update: **2023/12/21 05:25**

