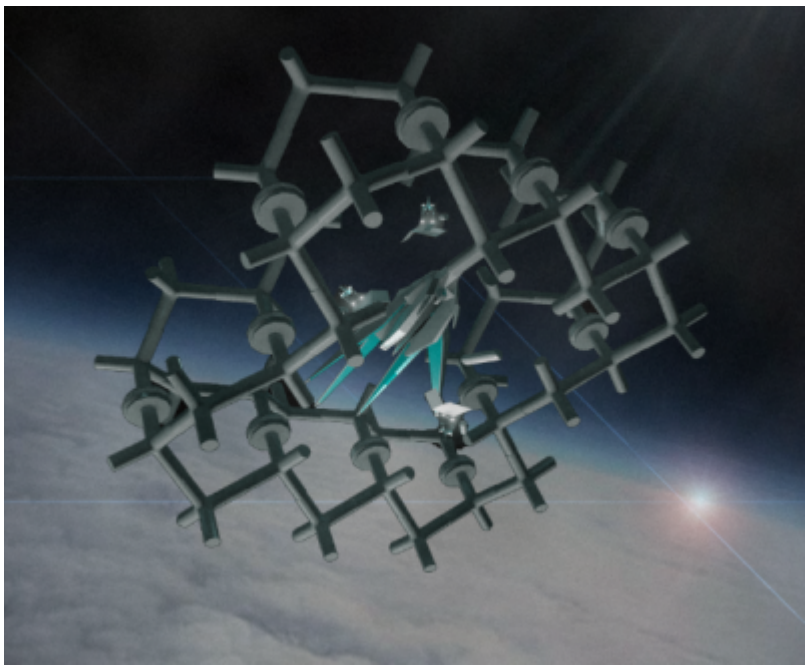
LAZARUS.CONSORTIUM

"Caernarfon" Variable Drone



The Caernarfon is a flexible multipurpose droneship designed by the Lazarus Consortium, introduced to the market in YE 37. Its true strengths are in its relative simplicity, modularity, and capacity to improve its operational parameters by linking up with additional units.

The greatest strength of the drone however is its price point intended to remain affordable in spite of its myriad of functions.

- Price: 20,000 KS
  - Additional replication of a Caernarfon is possible using one unit to create another, or alternatively production via a manufacturing lease is possible at a facility with sufficient capabilities.
    - Costs 10% of original price (2000KS)
    - User will require their own resources

About the Caernarfon

While at its most basic the Caernarfon is merely a droneship, it designed to function as a massively reconfigurable unit allowing it to be able to serve as a mining vessel, communications satellite, sentry unit, or cargo-carrier based on its configuration. In addition it is designed to repair or even preform the construction of another Caernarfon. Beyond the versatility of individual units additionally, each Caernarfon can be docked into other Caernarfon units in order to form complex configurations including

ship-yards, starships, starbases, gas-miners, colonies, and mobile cities.

While each unit is designed to be able to potentially fulfill a wide variety of roles, a single Caernarfon is designed to be relatively inexpensive to produce. Due to the intentionally inexpensive of the unit a single Caernarfon will generally preform adequately compared to a dedicated vessel, however when joined with additional units the capabilities of the drones multiply.

Each Caernarfon is designed so as to be able to be docked into other complex configurations including ship-yards, starships, starbases, gas-miners, colonies, and mobile cities.

Key Features

Key to the Caernarfon is its lack of a true up or down. Each of its four arms can extend to dock with other units - not unlike carbon atoms.

Within each of the Caernarfon's four arms is room for up to eighty SSCC-Medium cargo containers each and up to 320 in a single drone - often specialized for a given set of tasks. The base set, commonly, are modified AL100 Universal Constructors machine-shops, fitted with molecular applicators used to refine and convert materials for the creation of specialized tools inside the arms of the Caernarfon. For example, it is not unusual for a Caernarfon to surround itself with mined ore and refine that ore during the journey back to its destination.

Linked together, Caernarfon units share power, material resources and act as a unified structure with remarkable redundancy and resilience.

Four large gravitic centrifuges are the caernarfons primary method of locomotion and defense, permitting the unit to remain permanently airborne in an atmosphere - with even the largest Caernarfon constructed cities able to achieve escape velocity in special cases.

It is considered unusual for a cluster of Caernarfon to be manned by more than two people, typically at least one of them being an ARIA based Synthetic Intelligence neutral body avatar to the vessel at its heart.

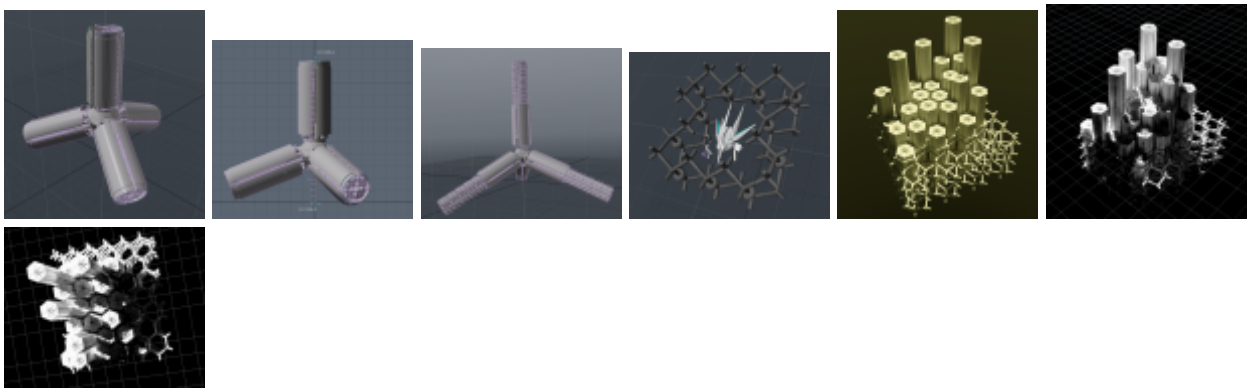
Appearance

The appearance of the Caernarfon is reminiscent of a massive tetrapod or caltrop with four evenly spaced cylindrical arms radiating from a central spherical core. The entire drone by default is a silvery-grey somewhat similar to graphite occasionally displaying an oily rainbow like effect and shine.

The panels on the arms can be reconfigured to form a sphere with a radius approximately the length of the arms which causes the Carnarfon to appear as a spherical unit rather than it's typical tetrapod shape.

Due to the Caernarfon using gravitic systems as its primary means of locomotion it has the result of appearing to float placidly in place, the powerful centrifuges generally capable of allowing the unit to ignore most atmospheric effects without shifting.

When joined together the individual Caernarfon drones attach at the end of the arm locking in place and potentially forming 'hubs' within which they can construct additional modules as needed. These inter-locked structures can be also used to form scaffolds from which new structures can be extruded as the Caernarfon drones complete new sections and shift the structure 'up' out of the scaffold.



General Information

History and Background

Initially conceptualized after the Lazarus consortium had identifed a niche in mining construction, assembly and transportation. While many other companies in the past generally choose to perform these roles with specialized units which are extremely specialized in their purpose and scale of operation, a generalist modular unit was proposed.

Early plans indicated that a push behind the production was the need to begin acting independently in the physical world and not just the electronic world as this limitation was fast becoming an issue with Lazarus. As they were still identified as part of the Lorath Matriarchy – a state that was viewed as severely limiting what they were capable of without inditing the Lorath in operations they were not involved with.

Along the way however the project lost support and was mothballed, momentarily forgotten leaving the a collection of files and concepts adrift among the Consortium's network.

Discovery of the project files by a contractor resulted in a breath of new life for the the platform. Leading to its eventual completion.

The end result as originally intended was named the Caernarfon: An affordable jack-of-all-trades allowing for the expansion of territory, the ability to form large scalable adaptive structures and even the capacity to defend, move and preserve them.

While initially designed for a bid at sustainable independence the Caernarfon represents a strong step into the civilian market. Its careful hybridization of adapted Sourcian, Yamataian, Lorath and even Mishhu technologies makes it a swiss-army knife that will serve buyers for decades to come.

Statistics and Performance

While appearing quite unwieldy, the Caernarfon is meant to carry massive loads and as such has powerful propulsion systems - though it takes time to accelerate in a given direction. The Caernarfon can leave atmosphere unassisted, carrying tremendous loads with it and float seemingly indefinitely.

General Data

Government: NA Organization: Lazarus Consortium

Typology: Variable Drone Starship Production: Mass Produced, publication traded Lifespan:

- Civilian usage: One hundred years without maintenance

Taxonomy:

- Caernarfon α (Single drone)
  - Starship 1SP
- Caernarfon β C60
  - A large sphere made of Caernarfon (like a Buckyball)
  - Starship 60 SP
- Caernarfon Ω C60 x 60 sphere
  - A step above the β configuration, Ω is a “buckyball made of buckyballs”.
  - Starship SP3600

Manufacturers:

- Lazarus Consortium

Occupants: 1 Non-SI ARIA each node as CPU Maximum Capacity (Per Node): Each Caernarfon node can support 250 people indefinitely so long as power is available and the proper SSCC-Huge cargo-containers and(cargo-container form-factor chambers and equipment) have been fitted, making it an ideal vessel for moving refugees and civilians. Importantly, the Caernarfon can produce its own equipment and containers with its integrated universal constructor.

Speeds:

- Gravitic Drive: 0.20c
- Subspace Wake Drive: 750c
  - Hyperspace Fold: 0.25 LY/m (only with Hyperspace Fold Booster)
  - Atmospheric: 80mph
  - Underwater: 10mph (16.0934kph)

Dimensions:

- Height: 121 Meters

- Decks: Up to 5 per section (4 total), 16 chambers per deck (80 per section, 320 total possible SSCC-Medium cargo containers/ cargo-container chamber modules)
    - Core: A small area containing room for the ARIA and maintenance equipment. Life-support must be filtered in from cargo-container style habitat modules. Passages link each section to each other section.

Structure Points

- Hull: 1 SP (Starship)
    - Full Spectrum Shielding: 5 SP (Threshold 2)
    - CFS: 5 SP (Threshold 4)
    - Note: Only one shielding type can be used at a time.

Topology & Layout

- Core: Houses the main reactor and the core ARIA based SI acting as the primary computer and communications relay. There is a limited amount of room which while air tight is not oxygenated unless a Habitat with a filtration module is linked close to the Core.
- Gravitic Centrifuges: Located at the base of each arm, four massive gravitic centrifuges serve as the primary propulsion and defense systems, manipulating gravity and creating defensive barriers.
- Modules: Fitted in the arms, a number of custom chamber modules can be mounted for an array of different purposes.

Systems

While using a number of advanced systems, the main focus of the Caernarfon is its reliable long-life generator and its powerful gravitic centrifuges - with other technologies being tried and tested reliable equipment that is easy and cheap to produce, repair and maintain.

Armored Hull and Hull Integrated Systems

The primary structure of the Caernarfon is composed of carbon composites of quasiperiodics, carbon rings and stonethread laminate. Lain within them via structol self-healing transmission systems are energy and information transmission systems which also serve as the motivators for moving the mobile components of the Caernarfon. This is then laminated in graphene and then another layer of structol.

Integrated Systems

Integrated into this hull are a multitude of systems, including four docking airlocks per-arm module (allowing access to the AI system at its core) compatible with Lorath, Nepleslian and Yamataian ships, standard gas gathering and containment systems (making the Caernarfon ideal for mining gas-giants in

conjunction with its impressive pressure resistance).

Finally, when used in combination with the Lazarus AL100 Universal Constructor/Machine shop units (augmented with molecular applicators inside) the Caernarfon is capable of constructing other Caernarfon in the span of two weeks, akin to the "Wh'ki"-Class Shipyard.

Power

The default primary power source of the Caernarfon is a thorium nuclear cell - not unlike a hafnium quantum nucleonic cell, though its fuel-cycle is much longer lasting and designed to benefit a slow burn: rather than the rapid on/off release of the hafnium device. In place of the previous gamma-voltaics is a Gammora quasicrystal based ruggedized model with a higher conversion rate. In addition, thorium is much more abundant than hafnium, meaning Caernarfons can essentially be operated for peanuts.

It is exchangeable with other generator components, should an owner demand more.

In addition, the Caernarfon can provide External and remote power to small craft, construction equipment and other ships through the use of umbilical cables, microwave transmission, arc-beam transmission, or the wide-field support system.

Propulsion

The Caernarfon, despite being a drone, has a respectable propulsion array including an Enhanced Subspace Wave Drive, integrated gravitic propulsion and even a basic hyperspace fold-system inspired by the Tamahagane Corporation Geshrinari Shipyards' GE P3301 Hyperspace Fold Drive. Unlike the P3301, the Caernarfon's DC3801 is much slower but has a much much larger “capture” radius to carry other vessels and equipment with it well beyond its confines.

As units are docked together, the jump range of the drones increases, as well charging speed of hyperspace fold systems improve cumulatively shortening the time it takes to preform jumps. This allows formations of drones to rapidly move to new locations increasing the efficiency of their FTL travel as well as their general productivity.

Computing & Sensors & Communications

The primary computing system of the Caernarfon is a hybridized ARIA control system. Passive quasicrystalline pickups make up her communications and sensors, in conjunction with Lorath common communications equipment and both common and uncommon sensor packages.

Structol Panelling and Mining Systems

The outer-panelling of the Caernarfon is composed of “openable” Structol panels which not only provide

general protection for the drone but also serve as a mining and refinement system. They can be can be grown and extended into a sphere about the body of the machine, or a series of bridged domes: and then used to produce a breathable atmosphere. Primarily however, their purpose is the refining and chemical processing of materials - rather than as a defensive structure.

For the purposes of mining generally a GENI from a C-F06 module 'crack' a structure, after the Caernarfon using gravitic resonance imaging to assess where the ore of interest is likely to be via density scans. After the structure is cracked, structol tendrils extend from the body to 'milk' the surface of the object, similar to the branches of a plant - branching and anchoring to it to explore the vein in full.

The ore or material is then drawn toward the main body of the drone where it is chemically processed and stored in 'scales' beneath the exterior of the Caernarfon, making it appear to swell or expand. The Caernarfon then carries material with it as a spherical ball, filling in the gaps between its arms. While mining and travelling the drone refines the materials before transporting them either to a resource dump or using them to fabricate products using its internal systems.

Shield & Defense Systems

The Caernarfon comes with shipyard grade Lorath Shield System Technology and integrated gravitic shielding. In a non-defensive posture, Caernarfon are quite easy to pick off in small numbers as targets of opportunity but moving as a group, when synchronized and aware of a threat, they rapidly become a force to be reckoned with as they spool their gravitic centrifuges up to deal with the threat as they see appropriate.

While not a publicly advertised system; in practice, the Caernarfon is more than capable of creating the Combined Field System - improving the mobility, defense, and offense of the Caernarfon, though this system usually isn't activated until a threat is identified due to the extra strain placed on the generator, and components of the drone. [1)]

A more passive defence is the presence of a radiation nullification field that exists out to a maximum of double the drone's radius. This field is composed of particles of structol arranged in a fine mesh forming a farraday web that allows the Caernarfon to keep harmful radiation and signals that may potentially interfere with the drone away from the high precision equipment inside. This field can be used to screen other craft, provided they enter the bubble.

Optionally, crew may bring a psionics scrambler with them, ensuring that when manned, the Caernarfon is not vulnerable to psionic attack.

Emergency Systems

The Caernarfon comes with a small number of fairly basic backup systems: primarily, an emergency subspace beacon with radio communications systems can be used to call for help. The drone also features a purposefully isolated design (which ensures contaminants cannot be spread from cargo container to cargo container). Finally a fire-surpression and hull sealing system through the use of structol helps prevent the spread of damage throughout the drone. Habitat areas typically include emergency response kit variants of the Lorath First Aid Kit and as a final measure the neural data of

users can be preserved onsite in a blackbox system providing a chance at revival in the event of fatalities.

In the event there is a risk of capture, the main generator can be overloaded and the resulting charge can be used to detonate and destroy the Caernarfon at a variable yield with the maximum yield atomizing every unshielded component in a 1km, with a detectable blast radius of around 15 kilometers. This functionality makes its existence and whatever structure it is part of legally deniable, a feature that may be ideal when secrecy is of the upmost importance. The sequence can be timed, based on proximity, logical-conditions or remote detonation. The sequence MAY be prevented if the sentient-intelligence aboard the Caernarfon is successfully negotiated with using an imprinted keyword or phrase unique to each unit. Used properly, a Caernarfon can theoretically seriously damage even large military ships should it be close enough when it self-detonates.

OOC

Originally created by Osaka/Osakanone finished by Eistheid Approved 22:46 09/26/2015

[1)]

In addition, the use of CFS like systems reclassifies the drone as a military vessel, and is subject to the legal repercussions resulting from the civilian ownership of military technologies. As this is not a standard firmware feature, the Lazarus Consortium is not responsible for any legal repercussions that may result from the use of this feature.

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