

# Whirlwind

Lorath Matriarchy Joint Venture R&D ST-002

Whirlwind – Standing Tank/Large Scale Mecha

## History and Background

Due to the disdain of dishonorable combat through the use of ranged tactics, the Lorath people's battle tactics have not made any grand leaps or bounds, but the possibility of large scale ranged combat remained. Thus an honorable but survival suited vehicle was proposed and a humanoid-shaped war machine was designed. A humanoid design was chosen due to the shape of the machine being easily viewed as an extension of the pilot's own body. The intended role of the "Standing Tank" type of mech would be to serve as a defensive shield for ground forces, and to engage and destroy any other "Un-natural" combatants in the battlefield. Due to the complexity of the venture, the Lorath Fyunnan house was unable to accomplish the R&D of such a machine and it became a joint venture between the Fyunnan house and the Occhestia house, due to the Occhestia house's substantial knowledge of technological design and manufacture.

The research which led to the first standing tank "Bringer Of Thunder" was successful in yielding a formidable machine which has served as a test-bed for mechanical design concepts which has managed to endure several situations of 'trial by fire'. Due to managing to maintain a functional role within the LSDF, the Lorath Matriarchy has decided to approve developing beyond the testing phase which was the "Bringer Of Thunder" and move onto the proper production model, dubbed the "Whirlwind". While the Whirlwind was in its planning stages, the "Winter" was designed alongside of it, thus the systems of the "Winter" became far more influential in the "Whirlwind" than those of the "Bringer Of Thunder".

## About the Whirlwind

The Whirlwind has been designed with a humanoid shape that also mimics the shape and form of the Lorath physical structure. The overall size of the Whirlwind is approximately twenty meters in height and five meters in width at the shoulders, causing it to be quite the center of attention in a battle field, thus causing it to draw much of the fire it intends to absorb for any ground forces in the area.

## Application Of The Whirlwind

Role: Armor Support, and Short Term Artillery Support.

## Over View

The Whirlwind has been designed with the original intent of the Bringer Of Thunder in mind; providing cover and long-range support to small-scale combatants. Essentially, the Whirlwind has been designed to be utilized in the same role as a forward air-support craft, or a main-battle-tank. Unfortunately, due to the nature of this mission profile, the Whirlwind places itself into the middle of incoming fire, which needless to say is an inherently dangerous task, which may lead to the loss of numerous units... but with the benefit of protecting countless more combatants.

Essentially, the Whirlwind has been produced to be utilized as a troop-support and short-term siege unit.

## Planetary Operations

The intent of the Whirlwind is to provide firing support and a defensive position to smaller units deployed along with the Whirlwind. Due to the inability to sustain long-term fire, the Whirlwind's primary objective is to place precision strikes on pre-designated targets, and to provide support to friendlies which require a means of distracting the enemy's fire.

The primary design features of the Whirlwind are the systems which provide the unit with its robust defense. The unit has been designed to endure large amounts of long term damage due to the unit's inherent nature of being a 'ripe target' due to it's size and inability to be concealed.

## Space Operations

Due to the Lorath's current lack of a dedicated warship other than the Zahl-Class, and the complete lack of support ship, the Whirlwind has been designed to assist in the role of providing support to the LSDF's small scale combatants, providing essential firing support against large scale targets such as capital ships and stations, and being used as a protective wall against incoming hostile fire. Along with protecting smaller units, the Whirlwind's mission profile also calls for it to place itself between friendlies, and incoming hostile fire which poses a threat to full-size starships. Threats would include; heavy torpedoes, Heavy Subspace-Encased Positron Beams, and even Aether Cannon fire. Needless to say, even with the redundant defenses of the Whirlwind, it would be only a matter of three or four direct hits before the Whirlwind's defenses are rendered ineffective.

## Statistical Information

Government: Lorath Matriarchy

Organization: LSDF, Fyunnen Caste

Type: Support, Long range engagement.

Class: LSDF-ST-AMX-002 Whirlwind.

Designer: LSDF, New'Turlista, Fyunnan.

Manufacturer: Lorath Matriarchy Fleet Yards

Production: Mass Production, Refitted YE 32

Crew: 2.

Maximum Capacity: 3.

Appearance: Armored female humanoid appearance, 25 meters tall, 7 meters shoulder width.

Length: 1.5 meter not including rear wings, with wings included 3 meters

Width: 7 meters

Height: 25 meters

Mass: Roughly 18000lbs / 8,164kg

## **Speeds**

Ground Run: 110 – 130 MPH / 177 – 209 KPH Ground Skim: 600 MPH Air: Mach 2 Vacuum: .25c FTL: 1250c

Range: 10 LY

Lifespan: 50 Years service with maintenance.

## **Weapons Systems**

### **An Explanation**

The Whirlwind has been designed to be able to receive a wide range of potential components which can be held-in-hand, or mounted onto the exterior of the unit. Such a practice is commonly applied to small scale power armor, shuttles, and even full size starships. Despite the wide range of potential modifications, it is common place to modify the Whirlwind's load-out only to a certain degree to provide optimal effectiveness in deployment, yet maintain a low weight and high mobility through moderation.

### **Hand Equipment**

Some items listed as potential equipment for the Whirlwind are designed to be equipped in the hands of the unit. The limitation to these weapons is inherently the number of hands of the Whirlwind, which is

limited to two. The limitation of hand-space forces the Whirlwind's pilot to be selective in regard to the load-out selected for deployment.

## Ordinance & Ammunition Constraints

The primary armament of the Whirlwind is reliant on the use of expendable munitions, such as missiles, and ammunition slugs. Due to this limitation, the Whirlwind is unable to maintain an assault indefinitely, instead, the Whirlwind is meant to provide support and short-term decisive firepower.

Due to the bulk of the Whirlwind's munitions being explosive ordinance, such as the ammunition for the L-Mark-Two, and the missile stores held within its hand-held weapons and missile racks, the Whirlwind carries the inherent risk of premature detonation of ordinance when damaged, unfortunately this risk can not be avoided at this time.


## 'Whirlwind's Reap' Plasma Blade Projector (Maximum 2)

Carrying a design trait from the Winter, the Whirlwind utilizes an over-size version of the Winter's custom plasma blade. The blade for the Whirlwind has been designed to endure the structural stresses caused by the sheer virtue of it's design, while maintaining a manageable weight.

The Whirlwind's Reap has been designed to incorporate an edged blade, its own plasma collection and containment systems, and its own plasma accelerator systems. The structure of the 'Whirlwind's Reap' is a structural-mesh laminated durandium blade and structural supports. The plasma projection from the blade is capable of being extended well beyond the melee range of the Whirlwind.

The 'Whirlwind's Reap' has been designed to function like the [Magnetically Contained Charged Plasma Saber](#).

Location: Hand Held Primary Purpose: Anti-starship Secondary Purpose: Wide area ignition Range: 250

Meters Damage Rating: Tier 5 or Tier 6, Medium Anti-Armor or Heavy Anti-Armor (  **Fix Me!** : Staff needs to determine which) un-ignited, Tier 11, Medium Anti-Starship when ignited.

## Repeating Launcher System (Maximum 2)

The Whirlwind utilizes the mecha grade version of the [Repeating Launcher System](#)

## Multi-Role Ranged Gatling System - Large - Mark II (MRRGSL-MKII)(Maximum 2)

[L-Mark-Two](#) Number: 2 Payload in Whirlwind Application: Up to 12000 Rounds per L-Mark-Two.

## Gammatron Rifle - Sniper Configuration (Maximum 1)

A heavy rifle variant of the [UMC-GRA-E-S001 'Gammatron'](#), this rifle has adopted the starship grade configuration of the weapon.

Number: Only one can be mounted onto a unit due to size constraints. Requirements: Exterior reactor mounting, stable firing platform. Damage Rating: Tier 12, Heavy Anti-Starship Rate of Fire: One beam discharge per minute.

## Gammatron Rifle - Mobility Configuration (Maximum 2)

A specially developed mobile [UMC-GRA-E-S001 'Gammatron'](#) system built into a rifle-like housing for the purpose of deployment on Lorath mecha applications.

Number: A maximum of two units can be carried. Power Supply: Weapon integrated [QNC](#) reactor. Damage Rating: Tier 9, Heavy Anti-Mecha Rate of Fire: One beam discharge per second.

## Sunfury Rifle (Maximum 1)


Designed as a long-range engagement weapon, this adaptation of the [Kh-C2-W3000 'Sunfury' Cannon](#) is intended to be used as a long-range engagement weapon. Due to the power requirements of the system, the rifle requires a supply of physical ammunition in the form of [Compressed Helium Container](#) units. Due to the sheer size of this unit, which is comparable to a battle-rifle in scale to the Whirlwind, only a single unit can be carried and utilized.

Number: A maximum of one rifle can be carried. Payload 20-Unit Compressed Helium Container Magazine, 20 Discharges In Beam Mode, 60 Discharges In Packet Mode Damage Rating: Tier 11, Medium Anti-Starship

## Combined Particle Sub-Machine Gun (Maximum 2)

Designed as a mid-range engagement weapon, this adaptation of the [Compressed Packet Combined Particle Cannon](#) system is intended to provide the Whirlwind with mid-range engagement capabilities. Built into a system which functions and looks like a sub-machine gun built to the Whirlwind's scale, the Combined Particle Sub-Machine Gun is a self-contained unit which can operate with or without power delivered from the Whirlwind.

Number: Maximum of two units can be mounted and used. Payload 200 Discharges Self-Contained, indefinite when drawing from mounted unit. Damage Rating: Plasma, Tier 7 or Tier 8, Light Anti-Mecha or

Medium Anti-Mecha ( **Fix Me!**): Staff needs to determine which). Antimatter, Tier 8 or Tier 9,

Medium Anti-Mecha or Heavy Anti-Mecha ( **Fix Me!**): Staff needs to determine which)

Discharge Speed: 850 Discharges Per Minute

## Plasma Projector System (Maximum 2)

Using [Compressed Plasma Arc Disruptor](#) technology, a forearm-mountable plasma projector system has been developed for the unit. Incorporating both cannon and strip functions of the technology, the plasma projector system provides a capacity for increased capability in 'short-range' combat applications. This system when mounted is designed to latch around the unit's forearm, with vent-strip projectors placed on the underside of the forearm, and with a single-barrel cannon placed above.

Number: Maximum of two units can be mounted and used. Damage Rating: Tier 10, Light Anti-Starship  
Discharge Speed: Streaming beams from strip projectors, thirty discharges per-minute from cannon system.

## Aether Assault Rifle (Maximum 1)

Designed perhaps as a cruel joke, or as a tit-for-tat, the aether assault rifle is an adaptation of the ever increasingly used weaponized aether. Designed into a bull pup style housing, with a long blade-like protrusion which is in-fact the aether projector system, the aether assault rifle provides mid-to-long range engagement capabilities while drawing from an internalized power system. However, due to design limitations, this unit is unable to produce intensive beam effects like larger ship-mounted cannons, and is instead limited to short beam bursts.

Number: One unit can effectively be used at one time. Damage Rating: Tier 10, Light Anti-Starship  
Range: Up to 294,000 miles (473,177 km). Discharge Speed: 240 rounds per minute. Alternate Mode: Aether bayonet, a conformal discharge of aether energy around the discharge aperture, intended for use as a close-range bayonet, Tiers 13 through 15, Light Anti-Capital Ship through Heavy Anti-Capital Ship (



: Staff needs to determine which) in contact area.

## Held Artillery Weapon (Maximum 1)

Intended for the purpose of continuing with the Whirlwind's original design intent, the Held Artillery Weapon, or HAW, is a weapon designed to use [100mm solid projectile loads](#). Designed as something of a mobile artillery piece, the Held Artillery Weapon is built into a automatic rifle style housing, with a detachable magazine, bipod, and muzzle flash reducer. This weapon uses chemically propelled munitions.

Number: One mountable and usable. Damage Rating: Ammunition dependent. Range: 40km atmospheric. Muzzle Velocity: 1,000 m/s. Rate of Fire: 300 Rounds Per Minute. Payload 40 Round Detachable Box Magazine, 120 Round Detachable Drum Magazine Limitation: Due to weight issues, when equipped with a drum magazine, the Whirlwind must fire the weapon while stationary and supported.

# Integrated Components

## Linear Gatling Cannon (20) (Integrated)

The linear Gatling cannon is an integrated version of the [FMS-1 Linear Rifle "Stalwart Special"](#). This weapon is a linear accelerator which is used to propel high velocity needle-like rounds at an intended target. The linear Gatling units are placed throughout various small ports on the Whirlwind's limbs, torso, and head module.

Location: Limbs, head module, torso. Placed to provide even coverage in most directions. Primary Purpose: Anti-Armor Secondary Purpose: Anti-Personnel Payload The Linear Gatling Cannon fires [Linear Accelerator 'Needle' for Stalwart Special](#). Payload Note: Standard payload of ammunition is delivered by internally mounted containers. 2000 rounds per container in Whirlwind application. Rate of Fire: 700 Rounds Per Minute Notes: Internally mounted variant of [FMS-1 Linear Rifle "Stalwart Special"](#)

## Lorath Miniature Missile Racks (15)

Located on the shoulders, back, thighs, belly, upper arms, forearms, and head of the Whirlwind, these launchers are intended to provide the capacity to launch [Mi-Sized missile ordinance](#) as well as ordinance used by [Mini-Missile Launchers](#). Notably, this system was added in YE 32, as a refit to the Whirlwind, and was used to replace the countermeasure launcher system due to the capacity for these launchers to be loaded with countermeasure ordinance as well.

Ammunition Carried: 750 Mi-Sized Missiles Ammunition Per Launcher: 50

## Lorath Missile Launcher Racks (4)

Located within the Whirlwind's chest and outer thighs, these missile racks are retractable, thus allowing them to remain concealed until deployment. These racks can carry twenty missiles of mixed ordinance.

Ammunition Carried: 8 Missiles Per Launcher.

These racks are capable of launching [M sized missile ordinance](#).

# Countermeasures

## Hand Attached Defense Module

The 'Hand Attached Defense Module' for all intents and purposes is merely an optional shield which can be held by the Whirlwind to provide additional defense against incoming hostile fire. The module consists of a twenty meter by five meter rectangular one meter thick durandium slab with build in defense

augmenting measures.

Built into the durandium slab is a plasma reactor system which is dedicated to providing power to additional systems built into the defense module. The exterior of the module has been laminated with a mesh of stonethread fibers, and a layer of structural mesh material. Also built into the defensive module is a gravitational field generator, this field generator serves several purposes. The primary purpose of the gravity field generator is to reduce the weight of the defense module, the secondary purpose is to deflect inbound munitions, and the third purpose is to provide protection against scalar attacks.

ADR: 25

## Microwave Emitters (7)

Located on the 'belly' of the torso, lower back, head module, shins, and forearms, the Whirlwind includes a series of microwave emitters which are designed to project focused beams of microwaves. The beams projected from these emitters are designed to short-out electronic systems, cook organic matter, and cause electrical arcing in metallic objects. Due to the intensity of the microwaves projected, these beams also interfere with many EM tracking systems.

Location: Belly, lower back, head, shins, and forearms. Purpose: ECM, radar jamming, antipersonnel. Beam Arc: .25 Meters to 25 Meters. Range: 25 Kilometers for destructive results, 250 kilometers for EM interference. Rate of Fire: Continuous so long as power is supplied. Damage Rating: Tier 4, Light Anti-Armor

## Systems Descriptions

### Construction: Movable Frame & SMS:

[Movable Frame Technology \(MF\)](#)

### Integrated System Damage Rating

Armor Structural Points: 25

### Disposable Mounted plating

Mounted on top of the smooth External Frame, mounted plating (high density Durandium in this case) acts similarly to a wrap or body-armor over the unit and is a disposable layer of armor that can be modified based on the mission perimeters presented. If scorched and wrecked in the field, it can easily be ejected by the pilot and new armor added, allowing for tactical usage (such as decoying).



The intention is that this disposable armor plating can take a brunt of a first strike against similar-spec units or heavier units then be ejected as the Whirlwind returns fire, in effect giving it a 'second change'. If the External Frame were to be damaged, its deflection functionality would be hindered (hence its defense rating would suffer), the use of mounted plating means that the Whirlwind can take almost the same beating without any change to its mobility or defense allowing a pilot to take their time. Thicker plating can be mounted on special variants or foregone entirely to lessen the weight of the unit.

### Damage Rating

Armor Structural Points: 10 - Optional External Addition

## Multiple Power Sources

The Whirlwind utilizes [an antimatter reactor](#), [bacterial power cell](#), [energy/matter conveter](#), and an [emergency hydrogen power cell](#).

### New Addition

When possible, Whirlwind units are upgraded with [QNC](#) power cell technology.

## Life Support

To provide optimal protection to the pilot of the Whirlwind, the cockpit is filled with an oxygen saturated solution which can be inhaled by the pilot of the Whirlwind. This solution also provides the pilot with a degree of protection by cushioning the pilot in an event of an impact. Nutrients and medicines are held in a reserve cannister which can be added into the solution in the event of the pilot being malnourished or in the event of an injury or illness.

On entrance and exit, the Whirlwind's life support system utilizes a supply of gas based oxygen, which is then cut off when the solution is pumped into the cockpit. Small amounts of the solution which would remain on a pilot after the solution has been removed from the cockpit quickly dries within fifteen seconds. The pumping of fluid in, and out of the cockpit takes five seconds.

To ensure the cleanliness of the solution, an enclosure is placed around the pilot's waist which forms a seal onto the pilot's skin or uniform. A pair of tubes are then placed against (or around) the pilot's waste orifices to handle the disposal of waste.

### Pilot Suggestion

It is suggested to pilots that they lower the lower half of their uniform, or open ports of skin-tight uniforms to allow for the waste disposal enclosure to be sealed into place properly.

## Emergency Ejection

In the event of a failure of the Whirlwind's systems, the piloting enclosure can be ejected from the frame of the Whirlwind. The ejection is handled by the usage of magnetic accelerators which force the piloting module out from the armor. A gravitational plate is included on the exterior of the module, this plate provides protection from scalar pulses, and allows for the module to propel itself away from a battle zone, or to land safely on a planet's surface.

## Computing Systems

### ARIA

#### Non-SI

In mass produced Whirlwind units, the [Aria](#) which is usually found as a humanoid unit is instead 'dumbed down' to a non-synthetic-intelligence version of the ARIA system. The Non-SI ARIA lacks sentience but delivers the same processing power and calculating function as it's standard counterpart. The Non-SI application of ARIA is contained within a neural gel container and is interfaced with the majority of the Whirlwind's systems.

#### Limited Edition SI

In limited numbers of the Whirlwind, mostly assigned to commanders and high ranking VIPs, the Non-SI ARIA is replaced with a sentient ARIA system which consists of an ARIA unit enclosed within a small box attached to the pilot module. The ARIA unit in this application is kept in a tight 'fetal position' ball as she remains interfaced with the Whirlwind and provides crucial data processing, and decision making assistance.

### Conventional Neural Gel System

Along with the ARIA system, the Whirlwind also includes a conventional [neural gel](#) based processing and computing system which relies on the Lorath's Neural OS.

### Neural Interface System

#### [Neural Interface System](#)

## Plasma System Fuel and Storage

### Lorath Plasma Gathering and Containment Systems

## Propulsion Systems

The Whirlwind utilizes a number of [Lorath propulsion](#) systems. These systems include fusion, plasma, gravity, and subspace drive systems.

### Fusion Thrusters

Utilizing the standard fusion power and thruster systems found aboard most Lorath ships and machines, the Whirlwind includes a pair of large fusion engines mounted on extendable and pivoting pylons which allow for the fusion engine pods to be pulled close to the body of the Whirlwind, or held at a distance to prevent engine wash damage. The fusion engine pods also include magnetic confinement systems, and thrust vectoring.

### Plasma Thruster System

The plasma thruster technology utilized in the Whirlwind is a step away and above the usual fusion engine technology utilized by the Lorath in most of their projects. Utilizing a compact laser-based gas heating and acceleration system, the Whirlwind manages to produce a large quantity of super-heated gas which is accelerated and vectored through a pair of 'gas vents mounted near the shoulders of the unit, chest, elbows, knees, and foot mounted gas vents. Gas is routed through the use of a series of tubes which hold and channel the plasma with a magnetic confinement field. The openings of these ports also include a subspace field emitter which accelerates the plasma ejected, thus amplifying the delivered thrust by several fold, resulting in the delivered thrust to be far greater than what would typically be delivered.

### Optional Thruster System

An optional thruster system can be attached to the back of the Whirlwind which resembles a pair of metallic Lorath wings. These wings utilize a large number of plasma vents which deliver a wider range of thrust which allows for superior maneuvering, greater control at higher speeds. The wings also include a stronger subspace field bubble generator which allows for the Whirlwind to reduce it's mass by far greater amounts, resulting in greater maneuverability and acceleration. The optional wing module used on the Whirlwind is quite obviously a reproduction of the wings utilized on the original Bringer Of Thunder design.

## **Plasma Vernier Thrusters**

Located on the rear waist and calves of the Whirlwind are four plasma based vernier thrusters intended to deliver maneuvering thrust to the Whirlwind. These thruster pods include thrust vectoring and magnetic confinement technology which optimizes the delivered thrust from the units and minimizes the excess expenditure of plasma.

## **Gravitational Manipulation**

Several gravity manipulation generators have been fixed onto the Whirlwind, these devices allow for the Whirlwind to reduce it's weight and allow the Whirlwind to hover, and to move about through the manipulation of gravitational fields.

## **Subspace Field Coil**

A subspace field coil has been included in the Whirlwind's construction, this field coil produces a 'bubble' of subspace which encloses the Whirlwind, thus causing the Whirlwind's mass expressed in normal space to be greatly reduced, allowing for the Whirlwind's thrust to bring it closer to luminal velocities in comparison to what would normally be able to be accomplished. Fortunately due to the large size of the Whirlwind and the output of the power plants of the unit, the Whirlwind is capable of creating a proper subspace field to achieve low FTL speeds.

## **Magnetic Skimming System**

Located in the feet and palms of the Whirlwind are a series of electromagnetic coils which produce a magnetic field cushion which allows for the Whirlwind to either attach itself to surfaces, or to skim above ground. This magnetic field system also allows for the Whirlwind to block ground debris produced by high speed skimming.

## **Rollers**

Located on the feet of the Whirlwind are a pair of magnetically driven rollers which provide a means of propulsion while the Whirlwind is in contact with a solid surface. These rollers allow the Whirlwind to easily move on starship hulls and on urban streets.

## **Structural Locking System**

Each and every joint of the Whirlwind is capable of being locked into place to prevent jarring from impacts or by atmospheric friction. This allows for the Whirlwind to shift it's joints into an optimal flight configuration and lock the joints into position, which permits the Whirlwind to be used as a high speed

craft in atmosphere without resulting in the limbs of the Whirlwind being torn asunder.

This capability is a feature enclosed in the [Structural Mesh](#) of the Whirlwind.

## Sensor Package

Included in the Whirlwind are several sensor packages which are designed to provide the optimal range of sensor perception possible while maintaining a small size profile. These systems include [common and uncommon Lorath sensors](#). plus additional sensor equipment.

## Equilibrium Sensors

Through the use of a complex magnetic gyroscope, liquid motion monitoring, and gravitational force monitoring, the Whirlwind is capable of maintaining balance by detecting various changes in environmental factors which would influence the unit's stability.

## Tactile Sensors

Placed throughout the surface of the Whirlwind are tactile sensors intended to provide touch sensitivity to the pilot and ARIA in the event of precision control being required. The tactile sensor system also includes a filtering system which maintains a cap on the intensity of the sensation produced by the sensor readings.

## Enhanced Optic 'Eye'

A single 'fish eye' like lens has been incorporated into the forehead of the Whirlwind placed in the middle of a cluster of four sensor receiver nodes, thus giving the Whirlwind the appearance of having four eyes clustered around one larger eye. The enhanced optic 'eye' has been designed to provide superior visual sensor input which would allow for increased capabilities in regard to long range target acquisition in terrestrial combat. Other than the sheer size of the eye, and the enhanced digital capturing systems, the visual sensor is little more than a well built telescopic sight.

The lens also includes a retractable hardened stonethread cover which can be closed over the lens to prevent damage when the lens is not in use.

## Shield System

Overall Damage Rating: Armor SP 20

The Whirlwind utilizes [Lorath Shield System Technology](#), and is capable of using the combined shield system.

## Lorath Made Psionic Scrambler

### Psionics Scrambler Device

## External Mounting Points

Placed throughout the surface of the Whirlwind are small ports which can be used to attach various external components such as weapon modules, power packs, thruster systems, sensor equipment, or even to attach the Whirlwind itself to a larger object such as a carrier.

## Key physical components

### Chest

The chest of the Whirlwind houses the piloting enclosure, several sensor nodes, and has the single largest concentration of layers of structural layering material. Along with these features, the chest also has several mounting points for additional armor plate.

### Primary Arms

Two large primary arms, these arms house some of the Whirlwind's built in weapon systems, and are utilized for the mounting and grasping of weapon systems and for close range combat.

### Hips

The hips of the Whirlwind are mostly hollow and is capable of holding mission related cargo, or is able to hold up to six [AMX-101 WINTER](#) units. The openings to the hip compartments are usually sealed through the use of magnetic lock systems, but when opened the hip compartments are accessible through a cavity created by a controlled retraction of the structural layering system. Openings include between the legs of the Whirlwind, and both the left and right sides.

### Legs

The legs of the Whirlwind include four opening and closing cavities in the upper and lower legs which are used for holding or mounting weapons systems, ammunition, or troop carrying pods.

## Feet

The feet of the Whirlwind are capable of opening and closing depending on how the Whirlwind is being fielded. When walking terrestrially or maneuvering at low speeds the Whirlwind's feet are in an opened state which strongly resembles an oversize wide soled boot. Placed in the middle of the sole and heel of the foot is a plasma vent port which releases a rather poorly confined stream while open.

When deployed at high speeds and utilizing thrusters for space maneuvering, the heel and sole slide together to create a superior thrust vectoring nozzle for the plasma venting system located in the feet.

## Torso

Due to the relatively narrow space of the Whirlwind's torso, the torso compartment can elongate and expand depending on how much space is needed for additional equipment. Fortunately due to the magnetic field support given to the Whirlwind's frame, the alteration of structure has little impact on the durability of the Whirlwind's structure.

## Communications System

The Whirlwind includes, [hyperspace](#), [subspace](#), [radio](#), [laser](#), [subspace laser](#), [psionic transmission](#), [wired](#), and [touch-contact communications capabilities](#). Along with the signal transmission capabilities, the Whirlwind also includes a speaker and microphone system which allows for vocal communications. The Whirlwind's communications systems are also compatible with the PANTHON network and is fully compatible with the Lorath Matriarchy's network.

## Self Monitoring And Repairing System

Through the use of a synthetic nanoscopic crystalline/nanotube material gel, the Whirlwind is able to patch breaches in its hull and structure. Along with the capability to 'heal' damage in this manner, the Whirlwind also includes a complex monitoring system reliant on signals passed through this gel which warns the on-board ARIA of malfunctioning components of the Whirlwind, damaged systems, foreign objects, and even electronic or organic interference indicating malicious intrusion.

## Motor Function Drive System

Due to the complex nature of the mech design, there are several methods of motion for the various parts of the machine; different parts depend on different drive systems. For sections requiring a large amount of pressure to be moved, magnetic servo devices have been installed to provide the majority of the Whirlwind's motion and stability control. The Whirlwind's motions are also enhanced by the use of a synthetic nanotube insert which has been placed throughout the structural layering system of the Whirlwind and is capable of being used like muscle tissue. In case of massive system failures, the Whirlwind also includes a series of electric motor driven cables and pulleys which are meant to allow the

Whirlwind to vacate a battle zone by foot, or at least set down in a controlled manner..

## Optional Maneuverability Package

Designed and introduced for the Whirlwind's refit, the optional maneuverability package is an externally mounted system which provides the Whirlwind with an increased mobility in space and air. Built to be mounted to the whirlwind in place of its traditional wings and with portions which wrap around to the front and sides of the unit, the optional maneuverability package is a six-thruster system which is built to provide intense single-direction thrust, combined with rapid course-correction thrusts. In addition, the optional maneuverability package incorporates a [Enhanced Subspace Wave Drive](#) to aid in compensating for increased mass, while providing superior single-direction speed. Quite large and cumbersome, the optional maneuverability package is ideal for Whirlwind units assigned to space operations, and is largely considered a hindrance in atmospheric operations unless being used for atmosphere escape operations or rapid advancement upon a position.

### Effect

Increase in atmospheric speed to 17500 MPH / Mach 22 Increase in STL speed to .375c Increase in FTL speed to 7500c Increase in Range to 25 LY Decrease in ground speeds Increase in weight by 12,000 Lbs

## Appearance

(Art to be made later)

The Whirlwind bears at best a passing resemblance to the Bringer Of Thunder which was the unit's predecessor. Despite the size of the Whirlwind, it bears a strong resemblance to the Winter power armor unit.

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