

AMX-101 WINTER

History and Background

The development of the winter started even before the Lorath were forced to abandon Lor. The original designer, Leal 'Rebirth' Tur'lista unfortunately could not see the project through to the end due to a conflict of interest between himself and his fellow Occhestian developers, who murdered him in cold blood as they tried to flee with the plans, which were quickly seized by the Fyunnenn, and fellow New-Tur'lista, loyal to Leal.

Development after the Occhestian betrayal was slowed due to the upset in the social structure of the Lorath's civilization, and the impending SMX invasion. Thankfully though, due to the very same threat which forced the evacuation the development was able to continue with the aid of WIES computers found aboard the Kyoto-Class carriers assigned to moving the Lorath to their new home.

Now, after the continued effort of loyal developers and designers, the hard work of a martyr has been able to reach completion in the form of the first production model 'Winter' power armor.

About the Winter

The Winter was designed to accommodate a growing military need for a hot-swappable role interchangeable Power-Armor with the capacity to engage modern Power-Armors at various ranges and make interplanetary journeys under its own power.

The primary use for the Winter is as a common usage mid-range combat unit versus power armor, infantry, and small starships.

Statistical Information

Ownership

Government: Lorath, LSDF Organization: LSDF Type: Multi-role assault platform power armor

Production & Design

Original Designation: LO-AMX-W-101 Production Designation: LM-PA-"Winter"-001A Designer: Leal 'Rebirth' Tur'lista Manufacturer: Lorath Matriarchy Production: Mass production Added Note: Design simulation and calculation carried out by Kyoto-Class WIES systems.

Crew:1.5 Maximum Capacity: 1 .

Width: 2.5 Meters Height: 4 - 4.5 Meters Mass: 350 Lbs

Speeds

Ground speed: 650 MPH (Thruster assist) Air speed: Mach 8.3 (Interception) Air speed: Mach 4.2 (Cruising configuration) Zero Atmosphere: .400c

Range: Interplanetary Lifespan: 30 years with semi-regular maintenance and upgrade cycles

Weapons Systems

Subspace Field Assisted Rail cannon

Utilizing pre-existing technological concepts, the Subspace Field Assisted Rail Cannon utilizes complex magnetic and subspace fields to propel a projectile from the weapon at which border luminal velocities. The weapon is located on the right primary arm and is integrated into the armor's structure, but can be removed if required.

Location: Primary Arm (Right), Internally mounted. Purpose: Anti-Armor Effect: Various depending on rounds used. Range: 50 Km in atmosphere. Rate of Fire: 2 Rounds per second Payload 100 Note: Technology based on: [L-Mark-Two](#)

Ammunition

Ammunition for the rail cannon is provided by an externally mountable container which attaches to the upper section of the primary arm equipped with the rail cannon. Through the use of gravity manipulation, the ammunition container for the Winter has been granted a near feather-weight, even while carrying a full load of ammunition. Ammunition for the weapon is fed through a link less feed system.

[30mm Ammunition](#)

Linear Gatling Cannon

Located on the left primary arm of the Winter, 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 ammunition for this weapon is held in an external container which like the subspace rail cannon's ammunition container, has a gravitational control device which reduces the weight of the ammunition to feather-like weights.

Location: Primary arm (left), internal. Primary Purpose: Anti-Armor Secondary Purpose: Anti-Personnel
Damage: Tier 4, Light Anti-Armor Payload 2500 .05 Caliber Ceramic composite linear rounds. Payload
Note: Standard payload of ammunition is delivered by externally mounted container, 400 rounds are held internally. Rate of Fire: 700 Rounds Per Minute Notes: Internally mounted variant of [FMS-1 Linear Rifle "Stalwart Special"](#)

Plasma Vent Strips

Through the use of the pre-existing plasma vent strip technology, the Winter is capable of producing arcing streams of plasma from several vents placed throughout the surface of the unit. These vents utilize a highly efficient system to accelerate the plasma and maintain a heated state. Unfortunately due to the relatively small size of the plasma strips used on the Winter, the plasma ejected from these strips tends to plume outward at rather short distances. (Consult notes in relation to technical questions related to the approved for usage plasma vent strip technology.)

Location: Located upon the frontal torso, thigh fin tips, back of the neck and shoulders. Primary Purpose: Missile & drone defense solution Secondary Purpose: Close-quarters suppression. Damage: Tier 7 Payload 30 Second bursts. Five second recharge Rate of Fire: Semi-auto, three second burst, stream. Notes: [Lorath Plasma Arc Disruptor](#)

Magnetically Contained Charged Plasma Sabers (3)

Fourteen simplified plasma saber units have been mounted within the wrists of the Winter's primary arms. Due to the size of the arms of the Winter, the plasma saber units each use their own stores of plasma which would normally be in the hand-held variant of the [Magnetically Contained Charged Plasma Saber](#). An additional plasma saber is included in standard deployments of the Winter. This hand-held plasma saber is meant to produce a high strength projection of plasma, the power for the hand-held unit is delivered by its own plasma generating system and gas collection system but can be fueled by the unit if need be.

Location: Mounted within the wrists of the primary arms, and one hand held unit. Primary Purpose: Armor Cutting Secondary Purpose: Igniting targets Damage: Tier 9, Heavy Anti-Mecha Payload When attached to Winter reactor, three hours. Rate of Fire: Stream Note: [Magnetically Contained Charged Plasma Saber](#)

Optional Payload

Compressed Packet Rifle

Up to two [Compressed Packet Rifle](#) with external fuel generator and capacitor pack.

Systems Descriptions

Movable Frame:

Serving as the internal structure, the Movable frame consists of the following:

Cockpit

Enclosed around the pilot to provide a safe atmosphere, the [Interface Hive](#) consists of points and joints in a polygonal form comparable to a honey-comb (see Structural Meshing). One size fits all as the hive is able to stretch, tighten, loosen, provide motion feedback, soften and even harden all for protection of the pilot. Within each “honey comb”, a liquid based display screen and protective cushioning are suspended beneath a gel sheath which provides comfort for the pilot. The protective hive can be isolated and ejected in a basic emergency, on pilot command.

Endoskeletal Chasis

A remarkably organic looking humanoid skeleton, the Endoskeletal Chasis is static and it's bones are unable to stretch and warp. However, joints are placed carefully as so no joint can be locked into place involuntarily and no joints can be dislocated which also gives the frame a vastly higher range and ease of motion. Joints are also placed in unique locations as so limbs can “open” to accommodate fitted equipment and lock to fit it or “close” when no equipment is fitted reducing the overall profile of the unit. Key equipment often includes generators, engines, armaments, muscle/motors and so forth.

Structural Layering System

The structural meshing technology is a breakthrough in graviton control systems and is to be debuted with the Winter. This system is the reason for the Winter's substantially larger size over its potential competitors. It is expected that in the future it will give the Winter a tactical edge. More information can be found at: [Structural Layering System](#)

The following layers are used:

- [Mounting Mesh](#)
- [Armored Mesh](#)

Structural Points: 15

Multiple Power Sources

Bacterial Charge Packs

Utilizing the standard Lorath developed and produced bacterial charge packs, the Winter utilizes these power cells to deliver power to the power armor's less demanding systems such as computing systems, life support, and communication systems.

Miniature Antimatter Reactor

Utilizing magnetic bottle technology, the Lorath have included an antimatter storage container and a reaction chamber on the lower back of the unit. This assembly is capable of delivering enough power to meet 80% of the Winter's optimal power usage. Which is enough to provide power to the majority of the armor's systems.

QNC Power Cell

When possible, AMX-101 units are outfitted with the recently developed [QNC](#) power cell technology.

External Power Source Socket

The Winter is able to attach itself to an external power source through the use of a stonethread and structural mesh lined power cable. Aboard the Winter, fifty yards of cable are included. Additional cables can be "daisy chained" onto it, or a cable from a power source can be directly plugged in. Along with the capability to plug into a power source, the Winter is also able to serve as a power source for external components, or to provide power for other vehicles in case of emergency.

Life Support

To provide optimal protection to the pilot of the Winter, the cockpit is filled with an oxygen saturated solution which can be inhaled by the pilot of the Winter if no environmental suit is worn. 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 Winter'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.

Fluid utilized for the life support system is recycled through a purifying system, then put through an enrichment system which replenishes the oxygen in the fluid. Nutrients are also added in this stage, which the Winter is able to provide for up to two weeks in standard mode, and a month for long term rationing.

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 Winter's systems, the piloting enclosure can be ejected from the frame of the Winter. 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 Winter units, the [ARIA Ship Control System](#) 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 Winter's systems.

Limited Edition SI

In limited numbers of the Winter, 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 Winter and provides crucial data processing, and decision making assistance.

Conventional Neural Gel System

Along with the ARIA system, the Winter also includes a conventional neural gel based processing and computing system which relies on the Lorath's Neural OS.

Neural Interface System

To assist in piloting the Winter, the pilot module includes a built in neural interface system which is capable of interfacing with a pilot's brain and delivering and receiving data and instructions. This system also relies on the Lorath's Neural OS system.

P-DCT

The P-DCT (Plasma Drive/Circulation/Transmission System) collects, stores and allocates matter. On demand, it can be super-heated into plasma and then moved around the unit through a series of artery like tubes. The collected gases are harnessed for use in antimatter reactions and to be converted into plasma for drive and weapon functions by controlling the various densities, temperatures and wavelengths of the plasma. Plasma is sent to the thruster, shield, and weapon systems of the Winter from a pair of plasma-conversion chambers.

The P-DCT is a series of components which can be used in various submissions. For the original article, please see: [Plasma Drive/Circulation/Transmission System \(P-DCT\)](#). (The technology was pre-approved and only the layout has been changed, not the capabilities.)

Data

- Intake: Shielded gas-based magnetic collection system & silent intake pumps
- Environments: Atmospheres, nebulae, refueling chambers
- Storage: [amx-ps-01](#)
- Conversion: (General purpose: [amx-pc-1](#)). (Combat: [amx-pc-2](#)).

Propulsion Systems

Plasma Thruster System

The plasma thruster technology utilized in the Winter 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 Winter manages to produce a large quantity of super-heated gas which is accelerated and vectored through a pair of 'clamshell' gas vents mounted near the shoulders of the unit 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.

Thankfully due to the high grade of confinement and acceleration which is provided to the plasma used for the Winter's primary thrust, the plasma consumption rate to propel the Winter at high velocities is extremely low, allowing for a highly efficient use of the Winter's plasma stores.

Optional Thruster System

An optional thruster system can be attached to the back of the Winter 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 Winter to reduce it's mass by far greater amounts, resulting in greater maneuverability and acceleration.

Gravitational Manipulation

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

Subspace Field Coil

A subspace field coil has been included in the Winter's construction, this field coil produces a 'bubble' of subspace which encloses the Winter, thus causing the Winter's mass expressed in normal space to be greatly reduced, allowing for the Winter's thrust to bring it closer to luminal velocities in comparison to what would normally be able to be accomplished.

Magnetic Skimming System

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

Rollers

Located on the feet of the Winter are a pair of magnetically driven rollers which provide a means of propulsion while the Winter is in contact with a solid surface. These rollers allow the Winter to easily

move on starship hulls and on urban streets.

Structural Locking System

Each and every joint of the Winter is capable of being locked into place to prevent jarring from impacts or by atmospheric friction. This allows for the Winter to shift it's joints into an optimal flight configuration and lock the joints into position, which permits the Winter to be used as a high speed craft in atmosphere without resulting in the limbs of the Winter being torn asunder.

Sensor Package

Included in the Winter are several sensor packages which are designed to provide the optimal range of sensor perception possible while maintaining a small size profile.

Conventional Lorath Sensor Suite

The conventional Lorath sensor suite includes visual, IR, UV, thermal scan, and light-pulse sonar scanning capabilities which provide the bare minimum of sensor perception.

Multi-Space Monitoring System

Utilizing a sensor package consisting of subspace transmitters, hyperspace transmitters, quantum disturbance detection systems, universe expansion monitoring, and empathic emotional monitoring, the Multi-Space monitoring system manages to reach beyond the usual scope of Lorath sensors.

Hyperspace

Utilizing a series of low-power pulses into hyperspace, the Winter is able to monitor the movement of starships and armors in hyperspace and plot their courses based on the distortions caused by each vessel's hyperspace fold systems.

Subspace

Through the use of low-power subspace pulses, the Winter is able to monitor objects which are moving at super-luminal speeds or objects which are moving in subspace which are beyond the scope of regular detection.

Quantum

The Winter's quantum sensors work by utilizing a complex receiver mechanism which monitors gravitational distortions, m-brane stress, and ambient subatomic energy. With the quantum sensor the Winter is capable of monitoring quantum events such as gravity distortions, hyperspace folds, and other such disturbances in the fabric of space. This technology allows for the Winter to monitor disturbances which allows for the Winter to react to quantum disturbances as soon as they begin to transpire.

Dimensional

Utilizing the hyperspace and subspace scanning technology on various frequencies, the Winter is able to pierce the m-brane of the current dimensional plane which the Winter exists in, thus permitting the Winter to monitor dimensional events such as aether tapping, TDD usage, transposition cannon discharges, and even being able to see vessels trapped in the various pocket dimensions which the transposition weapon technology has locked so many vessels into.

Empathic Sensors

Through the use of a synthetic telepathic organ, the Winter monitors the ambient alpha and delta waves given off by nearby organic life forms, by monitoring the emotions given off by a subject, the Winter is able to detect feelings of hostility or even the rush of emotions accompanying the moment before a kill. The capability to detect such strong emotions results in the Winter's pilot being able to be warned of an impending attack or even of an opponent's fear.

Full Spectrum Barrier System (FSBS)

As trials progressed, the onboard AI of the Winter learned through trial error when to use which type of shielding rather than project all types at all times at maximum strength. The end result is a more efficient defense system which remains effective even under surprise attack. Though unintended, this is an emergent technology of the project.

The Winter utilizes [Lorath Shield System Technology](#).

Included barriers:

- Magnetic Shielding
- Plasma Shielding
- Gravitational Shielding

Overall Damage Rating: SP 15 (Threshold 2)

Combined Shield System.

Through a combined execution of the magnetic shield, and plasma shield systems at full strength simultaneously, the Winter can produce a combined shield which is capable of blocking incoming energy beams, volatile reactions such as super-novas, prevent crushing impacts such as collisions with starships, and even endure a point blank antimatter explosion.

Unfortunately, the strain of utilizing this protection prevents the special function from remaining permanently activated. Along with the short duration of the shield's protection, due to the shield's overall strength, the Winter is unable to physically interact with objects outside of the barrier, or fire outside of it. Along with the prevention of physical interaction, the Winter also would be unable to communicate over extended distances, and would be reliant on external information feeds transmitted by close-proximity subspace communications, this limitation also applies to the Winter's sensors, meaning that the Winter would be rendered blind during the activation of the shield, except for data transmitted from external sources through the proper means.

Lorath Made Psionic Scrambler

The Winter is equipped with the Lorath made psionics scrambler which prevents psionic interference being carried out against the pilot, ARIA, or even the armor itself. Unfortunately, this scrambler also prevents the pilot from receiving or transmitting psionic communications from distances greater than twenty meters.

External Mounting Points

Placed throughout the surface of the Winter 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 Winter itself to a larger object such as a carrier or shuttle.

Key physical components

Primary Arms

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

Secondary Arms

Folded into the chest are a pair of human-scale arms which can be used to grasp onto objects and interact with objects on a precise level.

Upper Leg Fins

Placed on the upper legs are a pair of folding fins which can be utilized for stabilization in atmospheric flight, or they can be used as mounting surfaces for weapon pods.

Legs

The legs of the winter include a pair of plasma venting thrusters located in the knees to aid in maneuvering, and a pair of opening and closing cavities in the upper and lower legs which are used for holding or mounting weapons such as human-scale firearms or mounting weapon pods.

Feet

The feet of the winter are capable of opening and closing depending on how the Winter is being fielded. When walking terrestrially or maneuvering at low speeds the Winter's feet are in an opened state which strongly resembles an oversize thick 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.

Clamshell thrusters

Attached to the upper back of the Winter are a pair of thrusters which are placed on a pivoting mount which provide the Winter with plasma based thrust. These thrusters are referred to as 'clamshell' thrusters due to the shape of their design and the opening and closing motion used for vectoring and focusing thrust delivered by the venting system.

Torso

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

Communications System

The Winter includes hyperspace, subspace, radio, laser, subspace laser, quantum, psionic transmission, wired, and touch-contact communications capabilities. Along with the signal transmission capabilities, the

Winter also includes a speaker and microphone system which allows for vocal communications. The Winter'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 Winter is able to patch breaches in it's hull and structure. Along with the capability to 'heal' damage in this manner, the Winter also includes a complex monitoring system reliant on signals passed through this gel which warns the on-board ARIA of malfunctioning components of the Winter, damaged systems, foreign objects, and even electronic or organic interference indicating malicious intrusion. Fortunately due to the magnetic structural support and charged nature of the structural layering system, the Winter's overall structure can easily be repaired and remain as strong as it was initially.

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