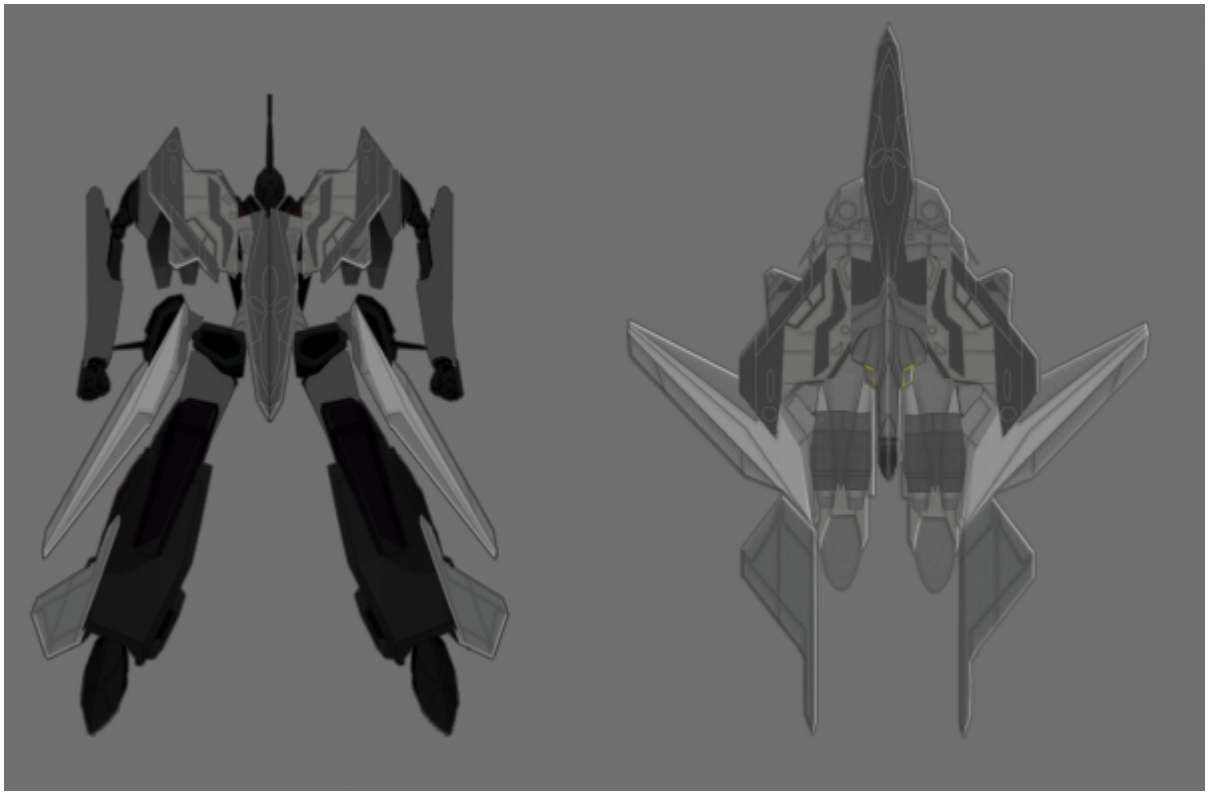
U-1 Unicorn Custom

The Unicorn is the custom mecha of Alex Patton. It was evolved out of the U-1 Prototype Variable Mecha as Alex's personal model of the prototype was continually upgraded. It has beefier engines than the U-1, as well as heavier armor.



About the U-1

The Unicorn is a U-1 Prototype Variable Mecha that has been modified heavily. Where the U-1 is adaptable to many situations, the Unicorn is more combat oriented, and is able to shift its engines close together in fighter mode as opposed to the classic U-1's forked appearance. It can also still shift its engines back apart to accommodate modules.

Key Features

The Unicorn sports life support as well as a computer system salvaged from Alex's first mecha, an Origin Industries OI-M3-1A Gekido. This computer is linked to Alex's brain, allowing him to pilot the Unicorn remotely. However, it also has the interesting side effect of essentially giving Alex two bodies.

Advantages

The Unicorn's advantages over the U-1 Prototype Variable Mecha include its larger engines, its link to its pilot, and its heavier armor. It also has a few built in weapons systems purchased from various corperations.

Drawbacks

The Unicorn is more expensive than a U-1 Prototype Variable Mecha as well as much harder to pilot.

History

The U-1 began development after the operation to save the I'ee. It became clear afterward that a standard war fighting machine was necessary. Junkers, mecha and fighters used in the operation each required different facilities for repair. The solution was the U-1, a standardized vehicle capable in almost every situation, highly modifiable, and modular for easy repair. It was tested by the OSO pilot Alex Patton. After the production models rolled out, Alex began to upgrade and customize it significantly.

After near destruction in YE 40 its shielding system was upgraded significantly.

Statistical Information

- Organization: OSO
- Type: Variable mecha/superiority fighter
- Class: U-1
- Designer: Dr. Aiesu Kalopsia (Ayetseu Karoupshea) L'manel, prototype design, Alex Patton original concept and modifications
- Manufacturer: OSO
- Production: One

- Crew: 1 pilot.
- Maximum Capacity: 1 pilot and 1 passenger.
- **Passenger Capacity:** One in the cockpit.

Mecha form

- Width: 7 meters.
- Length: 4 meters.
- Height: 12.5 meters.
- Mass: 20 tons dry, 25 tons standard takeoff, 40 tons maximum takeoff

Fighter form

- Width: 8.25 meters.
- Length: 14 meters.
- **Hight:** 3 meters (note; this measurement is the ground clearance with landing gear down.)
- Mass: 20 tons dry, 25 tons standard takeoff, 40 tons maximum takeoff

Speeds

- **Ground speed:**
- Running: 90 KPH
- Skimming: 100 KPH

Air speed:

- **In atmosphere:** Mecha form: Mach 1.7 Fighter form: Mach 5.2
- **Zero atmosphere:** Mecha form: .25 C Fighter form: .33 C

FTL

Hyperspace fold drive

Damage Capacity

See Damage Rating (Version 3) for an explanation of the damage system.

- Body: 25 SP (T8 under new DR rules) (Armor Scale)
- Shields: 25 SP threshold 5 (T8 under new DR rules) (Armor Scale)

Interior

The interior of the craft varies depending on the mode it is in. In fighter mode, the cockpit is fairly standard.

However when in mecha mode, the cockpit shifts around, becoming more compact and armored as well as activating the analogue controls for the arms and legs.

Getting In and Out

To enter the U-1, the user sends a signal to the computer to open up the cockpit covers, which unfold to either side of the front fuselage, and then the cockpit opens upwards, allowing entry.

After entry, the cockpit folds back down and the cockpit covers fold back over the cockpit. Then, the displays are activated as well as a system that allows vision as if the cockpit covers were transparent.

Hardpoints

The Unicorn has many hardpoints on which weapons,armor, thrusters or additional systems can be mounted. The Hardpoints are located all over the mecha, though a smaller amount are useable in the fighter form. The head hardpoints and one forearm hardpoint are used up by the built in weapons. There are:

- 1 hardpoints on each forearm. (oriented in such a manner that weapons can be mounted on both while letting both fire)
- 1 on each upper arm.
- 1 hardpoint on each shoulder.
- 1 on each side of the chest.
- 1 hardpoints on each leg (oriented in the same way as those on the arms).
- 4 hardpoints on each wing, 2 on the top face and 2 on the bottom.
- 1 hard point centrally located on the back.
- 1 hardpoint on either side of the inner fork in the rear fuselage, to allow for a payload, or large thrusters to be mounted. (Only accessible when legs/rear fuselage are forked, which they are not by default.)

Weapons Systems

The Unicorn has a few built-in weapon systems, such as two Pulse lasers located on either side of its head for point defense and medium anti-armor weaponry. (Tier 5)

It also has a cut down, internally powered OI-M3-W3304 Light Pulsed Plasma Cannon in each forearm to serve as medium anti mecha weaponry. (Tier 8)

It has eight Kernel mini missile cells, two on each side of the chest, taking up the space of one hard point for each set of two cells, and two cells on the outer facing side of each leg, taking up the space of one hardpoint.

Onboard Systems Descriptions

The Unicorn has standard sensor, life support,power and thrust systems. It is also very durable and has many redundant systems to keep it in the fight even after extreme damage.

Armor

The armor is composed of an outer layer of advanced metal alloys followed by several other layers. The spine and skeleton are composed of hardened metals alloys and Durandium Alloy. These layers serve as excellent armor against kinetic, cutting, energy and plasma based weaponry.

Shields

After its near destruction in YE 40 the Unicorn was upgraded with the Mythic Shield System.

Power Systems

The power plants for the Unicorn are an origin SLAM in the main fuselage, and four BURST reactors, one in each limb.

Propulsion

The Unicorn uses heavy fusion thrusters salvaged from a OI-M3-1A Gekido. These reliable thrusters are energy efficient and good for high acceleration.

Sensors and Computing

The Unicorn uses a salvaged FATE S.

Power Balancing System and Limiter

The Unicorn has a built in system that automatically balances power between servos, engines, shields and weapons. However, it can be deactivated and the pilot can manually balance power by allowing the computer to use his brain as wetware to process and balance the power on a constant basis, allowing them to assign power manually to specific systems, resulting in extreme increases in subsystem effectiveness for a limited time.

However, this process is extremely taxing, and will cause the pilot extreme duress and possibly physical injury as their brain attempts to meet the demands of balancing power as well as piloting.

When the power balancing limiter is disengaged, all the power and plasma conduits on the unicorn glow bright blue.

Additional Equipment

The Unicorn can spread its legs apart for modules to be installed.

Rear Modules:

- U-1bm Booster Module.

Weapons

Rifle gunpod

Missile pods

Ammuniton packs

Transformation

The major system of note is the transformation system. The transformation of the Unicorn is based on a simple concept: The hull being built around a single “spine” piece. This piece acts as a truss, pushing the legs further back in fighter-mode and bringing them to bear against the nose of the U1 in its frame-configuration.

The transformation begins by breaking the shoulder of the frame behind its front intakes, which are linked to its hips – which unlock from the underside of the body. The legs, supported on the spine-truss swing down to lock against the underisde of the fuselage.

The shoulders (resembling the “normal wings” of a craft directly behind the intakes but before the large forward swept wings) slide forward, rotate and lock against the body providing support while the back-plate rotates 90 degrees - making the shoulder-plates much smaller and providing mounting-trusses for the shoulders themselves to dock into.

The long forward swept wings sweep backward into a fork-like housing, becoming finlets on the hips - and the large rudders are rotated 180 degrees and angled rearwards to avoid contact with the ground.

The arms of the fighter are housed directly beneath its bulky engines – with the four nozzles above becoming part of its backpack and the arms below on segmented rail locking to the shoulder-housing.

At this point the intakes now on the hips tilt and shut, sealing the engines off.

It should be noted that a second pair of “arms” are located inside the knees, commonly used with the fore-arms and rotating rear engine-pods to tilt down as a VTOL lift system in flight configuration.

In addition, the forward swept wings can lock forward into a delta-formation for high speed forward flight during fighter mode operation.

The space between the two engine pods is designed for a bespoke mission operation package which in the transformation sits between the two engine-pods becoming the backpack of the frame on the armature which hangs between the two which in transformation becomes a 'tail' of sorts.

Standard Equipment

In the cockpit there is a emergency kit containing basic first aid items, basic repair tools and 3 days worth of emergency rations.

OOC Notes

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