Prototype Aerial Navigation Suit

The Prototype Aerial Navigation Suit, or PANS as Donvan insists on calling it, is an early prototype design that was whipped up by Galactic Horizon's head of public relations in his spare time. The suit is made up from a combination of other Galactic Horizon products as well as a selection of off-the-shelf hobbyist electronics, built as a personal project until it was later refined into a consumer product – Donvan kept the old suit around as a keepsake that he takes out of storage for a bit of fun every now and then.

Design

The Prototype Aerial Navigation Suit uses a Padded Armour Layer under an Armoured Racing Suit as the base layer that everything is mounted on to. The backpack area is taken up by a large Cirrostratus Ion-Grid Propulsion Drive for primary thrust and the power system that uses two heavy power cores and two Parachutes from the ORC suit. Sleeved cables lead down to a pair of gauntlets that each have two smaller Cirrostratus Ion-Grid Propulsion Drives mounted in order to provide secondary thrust and vectoring.

All the suit's systems are linked up to a modified Racing Helmet that now features an ASCI controller, a HeCC and a holographic heads up display to show various statistical readouts on the system.

Controller modules line the chest and rib area of the suit to help keep track of all the various parts and let them communicate flawlessly – the belt area of the suit has a small latch on each hip that the thruster-gauntlets can be mounted to when not in use.

About the Prototype Aerial Navigation Suit	
Name:	Prototype Aerial Navigation Suit
Designer:	Donvan Black
Manufacturer:	Donvan Black
Cost:	Not Available for Purchase
Nomenclature:	N/A
Weight:	6kg
Defence Rating:	
Suit and Components:	DRv3 Tier 3, Heavy Personnel
Conformal Barrier Shield:	DRv3 Tier 4, Light Armour

Appearance

The PANS is a suit of racing body armour with wires and modules running all over it. It is very clearly a prototype suit, yet everything is kept neat and organized in order to not hamper Donvan when he flies it.

The backpack features a larger thruster along with housings for the power, parachutes, and systems – a few modules sneak under the arms to sit on the rib-cage area of the wearer's sides with cables leading to

even more modules on the chest.

Cables lead down from the top of the backpack to armored gauntlets that each house two smaller thrusters for stabilization and a secondary source of thrust. The gauntlets have handlebars contained inside to hold onto when in use.

Usage

The PANS is piloted through both the integrated synaptic controller and movement of the wearer's limbs; the helmet controls levels of thrust and provides data about temperatures, power levels, altitude, and more while steering requires the user to angle their body and arms.

The suit's two parachutes and original safety features are controlled through the helmet.

Donning and Doffing the Suit

Firstly the pilot steps in through the back of the Padded Armour Layer and moves their limbs into the appropriate cavity, next they do the same with the Armoured Racing Suit before shrugging on the backpack and fastening it - the helmet is then brought down over the head and connected to the oxygen system before the suit is ready to run at full capacity.

Simply reverse the process to leave the suit.

Communications

The communications capabilities of the implemented HeCC include satellite (if available), peer to peer relay, and a standard radio that has a slightly boosted 2LY range.

Mobility

The suit's five ion thrusters work in tandem to propel Donvan through the skies at high speeds, the inbuilt pressure suit keeps him going through hi-g maneuvers, and the parachute and "lockdown" systems are used to keep him safe.

- Space Speed: 2469.6 kilometers per hour (1534.5 miles per hour)
- Atmospheric Speed[1)]: 1234.8 kilometers per hour (767.2 miles per hour)

Parachutes

The PANS uses parachute modules from the ORC suit, rated for the heavier suit and possibly considered

overkill for this relatively lightweight project. A small pod is mounted to each shoulder of the suit, above the thruster and power assembly - this pod contains three circular, heat-treated parachutes that are 5 meters (16ft) in diameter and made of Bulletproof Wool.

Life Support

The PANS has a fairly basic life support system – the whole suit is sealed and space worthy with a small canister of liquid air that can keep the pilot going for up to 72 hours before a resupply is needed. This canister is linked up to a line and mask from the ERK kit that is wired into the mouthpiece of the helmet.

Protection

By using the ASCI to activate the emergency crash armour, the suit inflates about two inches to lock the user's limbs in place before the conformal barrier shield is deployed around the user's body – this barrier shield stays active for two (2) minutes or until it is depleted and is designed to further protect the user from harm.

Power

The suit's two heavy power cores can keep it flying at max speeds for up to 72 hours at a time, with the HUD, parachute and life support systems being powered via the bioelectric generator in the ASCI.

OOC Notes

sirskully created this article on 2018/08/06 08:48; approved it (using the checklist) on 2018/08/15 20:28.

Approval info here.

1)

Earth-like environment