Cyclone Infantry Power Armor

Cole Banson was a medium ranked soldier in the Nepleslian Army. After one engagement with a certain band of rebel forces, and after Cole saw his comrades fall around him, and after he himself lost a leg to the fighting, Cole decided that current issue armor was not up to the task of protecting the Nepleslian soldiers. After his discharge, Cole went to Frank Ruury, an old friend, and learned in the fields of mechanics. Together they designed a new suit of armor, intended to be simple yet protective, and loaded with features that would win any infantryman's heart. The Cyclone suit is not to be confused with the space-capable power armor suits; the Cyclone suit is purely a ground forces suit.

General: Designed to meet requirements of an armor system between unpowered and full power armor. It grants basic strength enhancements, target identification, and simple medical responses.

Basic Organization notes: Government: Nepleslian Army Organization: The Star Army of Nepleslia Type: Basic Infantry Power Armor Class: Semi-articulate Power Armor* Designers: Cole Banson Manufacturers: Zen Armaments

Mass: 87Kg

Weapons and Systems

The Cyclone suit does not have any specialized weapons assigned to it, instead utilizing current infantry weapons.

Nomenclature	System Name
RT-7	Exoskeleton Power System Harness
RTa-9	Exoskeleton Plate Armor
CAS-C	Internal Computing System
FOIL KtR	Shielding System

Systems: RT-7 Exoskeleton Power System Harness: This is the internal “harness” that fits over the wearers body and clothes. The RT-7 has a twofold purpose. First, to enhance the movements of the wearer. The RT-7 is studded with thousands of tiny pressure sensors. When the occupant moves an arm or leg, these pressure sensors are pushed on, and the suit recognizes that movement, and amplifies it. The second purpose is to provide hardpoints for the armor plate. Also included in this harness is a well-loved feature that allows the wearer to stratch any itches that may arise without taking the armor off. The Exoskeleton PS also monitors the wearers body for wounds, and if the wound is mortal, automatically relays a message to the commander to call for an evac. The harness is strong enough to support itself(the wearer feels no weight on his shoulders, in fact new users often feel naked), carry a full load of ammunition, the weapon, and a few packs, and be able to lift up to 250 kg, provided the wearer has a good grip. The harness also includes the powerplant, a high capacity battery that allows for 48 hours of continuous useage, and can recharge itself over time using body heat, and various generators built into the armor itself(moving in the armor will help recharge the battery. By no means will this totally recharge the battery, but it helps run the HUD, and allows the batteries to focus mainly on the harness' need for

power). the suit can also take charge from weapons batteries, although this does have the effect of reducing your ammunition supply.

RTa-9 Exoskeleton Plate Armor: This is the actual protective part of the suit. Each plate is mainly a one-size-fits-all, except for the helmet and the sabaton portions. Each plate is a metallic-backed ceramic section with a gel padding on the underside. the armor is proof against all but high-energy kinetic projectiles(such as railguns), while also being able to dissipate heat very effectively(from laser type weapons). The gel padding has two purposes: firstly, to provide shock absorbtion, and secondly, to release pain-killers in the event of a serious wound. When the armor plate is punctured, the gel is ripped open, saturating the area with pain-killers and anti-infectants. This gel also absorbs sweat and filters it to a collection point, where it can be consumed by the wearer. Each Armor Plate is non-reflective, to help prevent identification. Each plate, depending on where it is placed on the body, has various hooks and latches to affix packs and pouches to. The breast plate has little pockets built into it to carry grenades. The helmet has a simple filtration system to sort out particulate matter such as dust, dirt, and other large particles found on a battlefield. A gas filtration system can be added.

CAS-C Internal Computing System: Attached to the HUD. The HUD is not a faceplate with a computer screen projected onto it. Instead, the HUD is a pair of goggles that are attached to the inside of the helmet. Donning the helmet positions the goggles, which contain miniature computer screens, over the eyes. Upon each screen is displayed a view of whatever the helmet is currently looking at, angled to provide depth perception, and supplemented with vital fighting information. The HUD highlights Friendly units in green, enemy units in red, and neutral units in grey. The HUD can also highlight thrown grenades and RPGs to alert the wearer to their presence. Wether or not the wearer can dodge them is not the suits concern. The HUD diplays the number of rounds left in the weapons magazine, and how many rounds are carried on the wearer, where the weapon is currently pointing,and also displays where the wearer has been hit. The helmet not only houses the HUD, but also has auditory dampeners and radio communications. The wearer communicates via a pair of earpeices and a throat mike, while keeping a special plastic insert in his mouth to prevent unwanted jarring of the teeth. This mouthpeice also houses the tube which leads to the water reservoir.

FOIL KtR Shielding System: This is purely a backup defense system. It is used only when the suit senses that the wearer is in mortal danger, and no other actions will save him. When the wearer, for instance, raises an arm to ward off a blow, the shielding system kicks in. One centimeter over the armors surface is projected a kinetic-type shielding plane. When the shield is raised, and the blow connects, the kinetic energy delivered by the blow is converted into the same amount of heat radiation(that is, into heat which is radiated in the opposite direction of the blow). This, a last-ditch defense, usually drains the powerplant of most of its energy during the process, but not too much to prevent the wearer to crawl away. the shield can be overwhelmed, as the suit will retain a minimum amount of energy to continue functioning. In this case, the wearer should hope that the armor itself will save him.

Subsystems: Commander System: Has an extra-powerful communitations system, as well as an expanded HUD. This at the cost of a little more power, and thus mobility.

Scout System: Larger powerpack, as well as chemical propellant jumpjets, at the expense of armor plate.

Variants

MiniCyclone: Simply the armor plate alone, used to armor support personel without purchasing the expensive powering system. Since the plates' weight adds up, this configuration is usually restriced to breasplate and shoulder pads, shinguards, boots, and groin protector. This configuration offers the best balance between mobility and protection.

Maintanence

Armor Plate Damage: Since each plate is replaceable, reparing damaged plates is as easy as taking the old one off, and bolting the new one in place. Each plate comes in a tight, camoflauge sack that can be left on for the camoflague effect, or removed to reveal the matte black armor itself.

Harness Damage: This is a more complicated matter. The harness is not supposed to be exposed to enemy fire. It is supposed to be protected underneath the armor plate. Damage to the harness often requires the harness to be replaced, as the joints and motors are usually too complex for an average infantryman to repair. However, the joints and motors can be rapaired to a degree by someone with a mediocre background in mechanics.

Usage

To use the armor, one must simply put it on, and the suit will run through a two and a half hour procedure to familiarize itself with its user, and its user with it. The first half hour is spent adjusting the lengths of the harness, making sure the joints are properly positioned. The next two hours are spent with the user running through an introductory program to get a hang of moving in the armor, using its features, etc. After the tutorial has been completed, the program is deleted from the miniature hard drive in the suit, to allow for more space for other uses.

Other Features

Mobile Camera Platform: This is a small tube that is attached to the side of the helmet. When removed, the tube can be attatched to the end of a weapon. This tube contains a small camera that looks forward, to the left, and to the right. this feature allows soldiers to look around corners and aim their weapon all without exposing themselves. The tube, if no hardpoints exist on the weapon, can always be taped on the end of the weapon.

Grenade Assist System: When the user pulls out a grenade, the suit automatically goes into trajectory mode. By using low-powered lasers, the suit can detect where the wearer is looking, and then calculate the proper trajectory to place the grenade on the spot the user is currently looking at. When the user winds back his arm to throw, the suit automatically kicks in, using its motors to help add speed to the grenade, and correct the path of the arm, to allow for precise placement of the grenade.