BW-PCA-1A "Predator" Combat Armor

The BW-PCA-1A “Predator” Combat Armor is a man-portable, personnel-grade armor system designed to provide protection against conventional small arms fire, shrapnel, and personnel-grade energy weapons. It is the first conventional infantry armor of its type to be produced by New Dusk Conclave, which primarily produced powered and semi-powered armor systems up until YE 41. The Predator is designed to be a cheap and relatively light weight armor, while prioritizing protection along the chest, torso, thigh, crotch, knee and head areas. Optimization of the armor's mobility was a chief concern for Department Of Advanced Research And Development (D.O.A.R.A.D.), and as such, the armor utilizes low weight materials to protect areas that are less likely to sustain impact and an optional Revenant undersuit which is designed to enhance the mobility of the operator *and* to enhance the physical strength of the soldier to allow for the operation of heavier personnel-grade weaponry.

About the Armor

The armor is intended to provide light infantry soldiers the ability to maneuver across the battlespace with speed, agility, and unpredictability. It possesses an extensive, power-armor grade sensor suite which is designed to protect lightly armored operators from threats that would otherwise be unseen or undetectable to conventional sensors systems. There are also multiple inbuilt defensive countermeasures which are designed to protect the operator against flash effects, sonic weaponry, environmental hazards, and EMP attacks.

Statistics & Performance

The following section lists the stats and performance specifications of the BW-PCA-1A “Predator” Combat Armor

- Class: Personnel Combat Armor
- Nomenclature: BW-PCA-1A
- Designers: Department Of Advanced Research And Development (D.O.A.R.A.D.)
- Manufacturer: Department Of Engineering, Black Wing Enterprises
- Fielded by: New Dusk Conclave
- Range: 40 Days [1)]
    - Maintenance: Plating should be cleaned routinely, while the fabric pieces and undersuit should be separated from the plating and machine-washed after each mission. The undersuit should be replaced or repaired if it sustains damage and the electric power cell should be recharged after every four missions.
- Lifespan: Indefinite, as long as no damage is taken.

Appearance

The BW-PCA-1A “Predator” Combat Armor has a black and red color scheme, with black acting as the

primary color. The tactical vest is black, and it has multiple pocket areas which allows for the operator to carry spare batteries, ammunition, and explosives.

The shoulder pauldrons are black, along with the elbow protectors and wrist guards. A silver armorweave lining is located on the underside of the pauldrons as well.

The boots are heavily armored to protect against anti-personnel mines and as a result of the underground sensor suite installed within. The insides of both thighs, upper forearms, and the torso area beneath the black vest are red.

The full-faced helmet has a red-tinted visor and black armored lines. In contrast, the half-face helmet has silver lines, while red acts as a primary color. Many operators also wear a balaclava underneath the half-face helmet, for protection from dirt and harsh elements.

History

In late YE 40, Section Six was faced with the prospect of financial difficulties a few months after departing from Osman, which served as the organization's primary resource base. In response to an anticipated economic crisis, the Department of Military Assets ordered the development of a semi-powered infantry armor which would serve as the standard personnel-grade armor for the light infantry complement of the Section Six Armed Forces.

The armor underwent final field testing procedures in early YE 41 before it was cleared for mass production and distribution.

Design

The BW-PCA-1A “Predator” Combat Armor has multiple parts, segments, and components, including:

- BW-PCA-1A Tactical Helmet w/ Sensor Suite and Revenant Relay System
- BW-PCA-1A Full-Face Tactical Helmet w/ Sensor Suite, Revenant Relay System, Aural Dampening Systems, Environmental Protection, and Anti-Flash/Blinding Lenses
- BW-PCA-1A Anti-Ion Mesh
- BW-PCA-1A Armored Gloves
- BW-PCA-1A Armored Knee Plates
- BW-PCA-1A Armored Thigh Plates
- BW-PCA-1A Armored Arm Plates
- BW-PCA-1A Armored Vest w/ Trauma Plates
- BW-PCA-1A Light Groin Protector
- BW-PCA-1A Tactical Boots w/ Seismic/Underground Scanner
- BW-PCA-1A Revenant Undersuit (Optional)
- BW-PCA-1A Electromagnetic Grappling Line

Armor Size

The following section lists the size and mass specifications of the S6-PCA-1A “Predator” Combat Armor.

Height	+6 cm to the wearer's height
Width	+4 cm to the wearer's width
Length	+4 cm to the wearer's width
Weight	18.75% of the wearer's body mass

Damage Capacity Stats

The following section states the damage capacity and size tier of the S6-PCA-1A “Predator” Combat Armor.

DRv3 Tier: Tier 2, Medium Personnel

Donning the Armor

The BW-PCA-1A “Predator” Combat Armor is donned in a manner similar to that of a jumpsuit. First, the suit is gathered at the feet of the wearer. Then, it is drawn upwards to cover the legs. During this process, the wearer will insert the tactical plates into their designated compartments. When the suit is drawn up over the chest, legs, and arms, the wearer may begin the process of putting on the tactical vest and placing the external plates over their shins. Finally, after the body armor is donned, the wearer may simply place the helmet over their head and lock it into place by closing the chin and neck straps.

If the operator chooses to wear the optional Revenant undersuit, it is simply worn under the armor like a bodysuit.

Systems

The following section describes the various systems installed on and/or within the BW-PCA-1A “Predator” Combat Armor.

Armor

The armor plating is made out of Osmanium, which makes the armor resistant to kinetic, heat, and energy personnel grade weapons. The regenerative properties of Osmanium give the plates mild self-repairing abilities. However, it is still recommended for operators to replace compromised or partially damaged plates after missions.

Power Systems

The BW-PCA-1A “Predator” Combat Armor uses a small electric power cell, which provides power to the sensor system, electronic-based defensive countermeasures, and the helmet integrated heads-up display. The Revenant undersuit is powered solely by bioelectric currents given off from the wearer.

Defensive Countermeasures

In addition to a seismic/underground scanner installed in the boots, the full-face helmet variant features an active environmental protection system which provides air filtration functionality and a aural dampening system designed to protect the operator against sonic-based attacks. The full-face helmet utilizes an Poly-Chromatic visor which is designed to guard against flash effects and severe visual disruptions. Finally, in order to protect the sensitive electronic systems installed in the armor and to maintain the integrity of the sensor systems, the entire surface of the suit is coated in an anti-ion mesh designed to guard against electromagnetic pulses.

Sensors and Communications

The helmet of the Predator utilizes the Multifunction Optical/Audio Sensory Suite as the primary sensor system. The data from the sensors are fed directly into the HUD, which also displays the air quality of the surrounding environment, vital statistics of the operator, ammunition counts, and targeting aids. A high-frequency sonar scanner, motion sensor, and complex life-form detector serve as secondary sensor systems, which are also integrated within the helmet of the armor and linked to the HUD. The HUD interprets data from the sensors and mission control to provide an IFF system which distinguish friendly assets and enemy assets in distinct colors which are customizable to the personal preference of the operator. The boots feature a seismic/underground scanner, which is linked to the HUD and is designed *exclusively* to detect anti-personnel mines before they are triggered via footsteps.

Communication systems have subspace, laser-based, homing, encrypted, and radio functionality which are executed by a quarter-sized molecular circuit based noncollinear phased array device installed within the helmet. The device is based on technology found on the Eye-II Class Stealth Corvettes in the Section 6 fleet and a functionally identical system utilized by the Revenant Power Armor Mk II.

Utility Systems

The armor features a electromagnetic grappling hook system which extends out from a wrist-mounted module. The device allows for the easy scaling of vertical locations and grants the ability to *zip* across dangerous high-rising spaces by grappling onto a designated surface. Additionally, it also allows for the operator to easily create flanking opportunities and to access hard-to-reach sniping positions, granting them an immense advantage in mobility and reach in the battlefield. The “hook” works by latching onto an attached surface via an electromagnet, which has the capacity to support in excess of 500 pounds of

weight and a range of 35 meters.

OOC Notes

Immortal Cyan created this article on 2018/12/07 23:24; Ametheliana approved it (using the checklist) on 2019/01/28 11:31.

1)

Estimated time the electric power cell can go without recharging

From:
https://wiki.stararmy.com/ - **STAR ARMY**

Permanent link:
https://wiki.stararmy.com/doku.php?id=faction:ndc:armor:bw-pca-1a_predator_combat_armor

Last update: **2023/12/21 04:23**