Na-M/V-E4100 Black Veil Electronic Warfare Suite

Developed in YE 41 by NAM to replace outdated electronic warfare systems, the Black Veil Electronic Warfare Suite is a robust system that combines active and passive defensive and offensive elements with a system of decoys and attack elements. Intended to function alongside the ACE combat AI, the Black Veil incorporates numerous preexisting technologies

Designer:	Nepleslian Arms and Munitions
Nomenclature:	Na-M/V-E4100
Manufacturer:	Nepleslian Arms and Munitions
Fielded by:	Star Military of the Democratic Imperium of Nepleslia

History

The Black Veil is a new system that incorporates old, tried, and tested technology in a smaller, miniaturized package intended to equip all manner of power armor and vehicles.

Function and Design

The Black Veil has a number of functions and capabilities. These are split into categories depending on their function and realm of influence. When placed on a unit, the Black Veil is not a single "Black Box"- its components are spread out across the unit to achieve the best coverage possible.

The Black Veil can be used as a whole package, or be stripped of capabilities to better fit the needs of a platform utilizing it.

Threat Detection

To defend a mounting platform from incoming attacks, the Black Veil includes numerous defensive measures.

- An Electromagnetic/Subspace Warning Receiver, that alerts users when active electromagnetic or subspace sensors have pinged the platform.
- A Laser Warning Receiver, that alerts users when targeting lasers are being pointed at the platform.
- A Missile Warning Receiver, that alerts users when active homing ordinance is approaching.

ECM/ECCM

The Black Veil's ECM suites are robust and capable, based on earlier models of such hardware equipped to units such as the NAM VOID Advanced Tactical Power Armor. This ECM/ECCM capability includes, but is not limited to:

- Multi-spectrum electromagnetic and subspace-based jamming equipment, capable of jamming communications, detection, and target acquisition systems out to 5 kilometers while remaining undetected, or up to 20 kilometers while not being subtle.
- Robust multi-spectrum counter jamming emitters to cut through dense jamming.

Cyberwarfare

The Black Veil's cyberwar suite is mostly inherited from earlier platforms and features no major changes or innovations in technology.

- Archives and databases of cyberspace attack software and methods used to bring the fight to the enemy electronically
- A series of improved firewall and cybersecurity systems to defeat incoming cyberwarfare
- An active and passive dual-mode system which have different functions based on the needs of the unit.
 - Passive Mode monitors digital and electronic traffic to and from the target and sneaks its attacks in by way of piggybacking on legitimate data or by disguising attacks as legitimate traffic. Passive Mode is slow, but stealthy and runs a lessened risk of detection.
 - Active Mode is a full brute force style that does away with any sort of stealth or subtlety to launch open, full force attacks on target systems and electronics with as many different attack vectors as possible. Active mode is very overt, but acts fast and has a chance to overwhelm targets with the sheer number of attacks.

Active Defenses

The Black Veil system includes a complete suite of active defenses to protect a target platform from incoming sensor-guided fire and autonomous guided munitions. These systems are physically integrated into a unit.

- Laser Jamming Emitters to defeat laser-guided munitions by emitting a counter laser on the same wavelength at a higher intensity, confusing any munitions following the laser to a target. These emitters are normally placed on the helmet, chest, and rear shoulders of a Power Armor, and resemble small domes.
- Infrared decoy launchers, which launch 22mm long and 8mm in diameter pill-shaped decoys filled with rapidly burning magnesium and white phosphorus. These decoys burn brightly for roughly 10 seconds at a temperature and brightness comparable to the surface of most stars, which is generally enough to distract and defeat most infrared-guided munitions. These decoys are normally launched from small ports in the shoulders and shins of a power armor.
 - $^{\circ}$ A Power Armor is normally capable of carrying 60 of the pill-sized decoys; larger vehicles can

- carry substantially more decoys depending on the size of storage space of the vehicle
- Anti-thermal smoke dispensers, which launch small, 40mm long and 20mm in diameter canisters filled with a compound that rapidly billows out into a heavier than air thermal smoke- this smoke is thermally active and optically thick, providing protection against visual observation and thermal acquisition. These dispensers are normally integrated into the shoulder of a Power Armor or the turret of an armored vehicle.
 - A Power Armor normally carries 20 of smoke canisters; larger vehicles can carry substantially more.
- Anti-radar Chaff dispensers, which when triggered by the controlling platform's AI or user, dispenses a spreading cloud of radar-confusing material best compared to metallic confetti and more smoke. These dispensers are normally integrated into the lower back of a Power Armor or the rear fuselage of an aircraft.
 - A Power Armor is capable of carrying 12 loads of chaff normally; larger vehicles can carry substantially larger loads.

Stealth

The Black Veil Suite includes a trio of defensive, stealth oriented systems that are intended to protect the platform from detection and provide cover in combat situations: all of these technologies are preexisting technologies that have been miniaturized for use on all platforms.

- Mass Mesher Device: The Mass Mesher Device functions by meshing the platform's EM and physical signatures to nearby surfaces, or any significantly more massive object nearby. This device, in effect, hides the platform in the 'mass shadow' of nearby objects.
- Energy Mesher Field: The Energy Mesher Field is a scaled down version of the earlier Energy Mesher used on the VOID. The Energy Mesher Field allows a single platform to hide itself in a 'double-blind' field that masks it from detection by units more than a kilometer away; it does this by bouncing a near perfect masking signature back after absorbing the incoming active sensor pulse, making the hidden unit resemble the local environment. The new version of the Energy Mesher Field still does not allow a user to fire weapons, fly at high speeds, or send transmissions and remain hidden.
- NAM Fluctuating Pigmentation Coating "Snakeskin": The Black Veil incorporates automatic dispensers for NAM's Snakeskin coating, allowing an armorsuit to apply coatings as needed without carrying around additional spray bottles of the coating. The Black Veil carries enough coating for up to 24 hours of use.

Availability

The Black Veil is not available to civilian customers.

OOC Notes

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