

NaX-A-1a NOZH

History and Background

Although the [NaX-A-1b Britva](#) is useful to the IPG as an infiltration suit, it is almost worthless should full-scale power armor combat be required. Not content with the standard choices for armor, the Group's leadership asked X-Tech to design them something with a bit of a punch. Drawing inspiration from the femtomachine blood of the [Nekovalkyrja](#) species, since revitalized in them from the NSS Alliance's encounter with the malfunctioning [NH-7](#) Freespacer known as [Tweak Three Seven](#), X-Tech set to work designing a new, lethal weapons system.

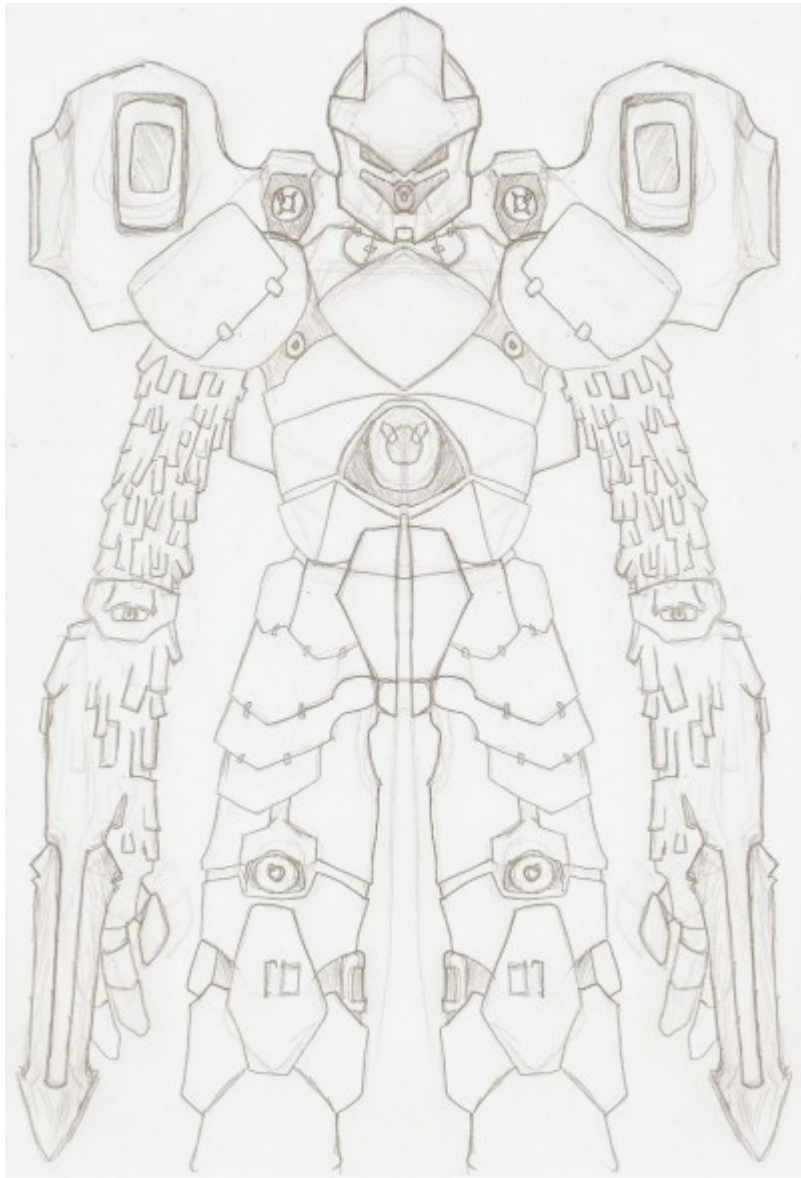
About the NOZH

The NOZH is a high-performance Power Armor designed for the [IPG Operator program](#), with plans to introduce it to regular SAoN forces at a later date. It utilizes experimental Nano-technology and a new propulsion system to make it an exceptionally powerful armor.

Statistical Information

Government: [Nepleslian Star Empire](#) Organization: [Intelligence and Pacification Group](#) Type: Heavy Power Armor Designer: [NAM X-Tech](#) Manufacturer: [Nepleslian Arms and Munitions](#) Production: Mass Production

Crew: 1 Appearance: A tall, relatively heavy-set black armor with a number of red monoeyes positioned over it's body. The armor has long arms that can reform themselves into blades, manipulatable hands, or into several designs of weapons.



Width: 1.5 meters Height: 3 meters Mass: 750 Kilograms

Speeds

Ground speed

Running: 75 kph Hovering: 125 kph

Air speed

Plasma Impulse Drive: Mach 5 Gravitic: Mach 3.5

Zero Atmosphere

Sublight: .365c Range: 3 days of operation, four weeks in stasis. Lifespan: Maintenance should be performed after every excursion.

Weapons Systems

Na-W-01a Plasma Projectors (2)

Location: Shoulders, mounted next to the Monoeyes Primary Purpose: Anti-armor Secondary Purpose: Saturation fire, Point Defense Damage: Very Heavy (7) Range: *"Flamethrower" mode*: 700 Meters, *Beam mode*: 1.5 kilometers Rate of Fire: Continuous stream Payload Effectively unlimited

The NOZHs only fixed weapons, the Plasma Projectors are meant to act as something of a plasma flame thrower. Although their range is relatively limited compared to some PA weapons, their ability to blanket large areas with the ultra-hot substance makes them a force to be reckoned with in a fire fight. Also, the weapons are capable of refining themselves into a much smaller, more coherent beam, which may be used effectively for point defense purposes. They are fed by the second Fusion reactor.

Template 1: Nerimium Plasma Blade

Location: May be constructed on either forearm Primary Purpose: Anti-armor Secondary Purpose: Anti-Personnel, General Use Damage Very Heavy (7) Range: Melee Rate of Fire: N/A Payload Unlimited

The blade is formed from a tough nerimium alloy, with a single long tube running the length of the blade. Inside the Nerimium, a magnetic field holds plasma brought from the fusion reactor assembly, and directs it downwards to the edge of the blade itself, where it is propelled through a small gap that runs along the edge. The plasma itself never touches the nerimium shell, but adds to the lethality of the weapon immensely.

- *Note: This weapon will take about forty seconds to construct to it's full length of 2.5 feet.*

Template 2: Railgun

Location: May be constructed on either forearm Primary Purpose: Anti-Armor Secondary Purpose: Assault Damage: Significant (4) Range: 4 Kilometers Payload 2000 rounds Rate of Fire: 1 round per second

This is a rather simple weapon system available for construction with the [Nano-Construction Layer](#). The railgun fires 6mm durandium rounds at a rather high rate. The ammunition is constructed with the weapon itself.

- *Note: This weapon will take about 35 seconds to fully construct.*

Template 3: Plasma Cannon

Location: May be constructed on either forearm Primary Purpose: Anti-Armor, Assault Secondary Purpose: Artillery, Saturation Fire Damage: *Heavy-fire mode*: Massive (8) *Rapid-fire mode*: Heavy (6) Range: 3 Kilometers Payload Unlimited Rate of Fire: *Heavy-fire mode*: One shot per two seconds *Rapid-fire mode*: 2 shots per second.

The most advanced template currently programmed into the NOZH, the Plasma Cannon is exceptionally useful and powerful. By constructing a mechanism that connects the forearm-mounted driver mechanism with the second fusion generator using magnetic fields, this weapon is able to unleash either a torrent of small but lethal plasma rounds or a barrage of high-powered precision artillery fire.

- *Note: Due to the advance nature of this weapon, it may take up to 2 minutes to construct. It is not recommended to begin construction of this weapon in the midst of combat, and that it should be constructed before a fire fight.*

Systems Descriptions

Hull

Durandium armor plating

The outer plating of the NOZH is a 5cm thick sheet of [Durandium Alloy](#). This material is light-weight and quite durable. There is a very thin covering of Nerimium over this plating, about .5 cm thick, over the chest, thighs, back, and shoulders.

Nano-Constructor layer

This is, essentially, the most versatile piece of the armor, and is essentially a mechanical version of the Sourcian organic material Sinthaloid, which was observed by the IPG when the Maras visited Nepleslia for diplomatic proceedings close to the end of YE 29. About 10 centimeters of this mixture of nanobots and various alloys separate the Nanomuscle from the innermost portion of the Durandium armor. The nanobots are controlled by impulses broadcast by the neural probe and suit AI. There are several of these broadcast “ports” at various locations in the nanomuscle layer, which are connected to a wide-spread “synapse” group of nanobots, which are capable of receiving and sending information, much like neurons in a human nervous system.

The constructor layer has a number of uses. The most prevalent of these would be the ability for the bots to completely reconfigure the forearm region of the armor at the will of the pilot. This can be used for both offensive and defensive purposes. It should be noted that, while a very skilled pilot working in conjunction with a very well-calibrated AI could create any number of things using this, this takes an exorbitant amount of time, patience, and skill. However, for the less demanding pilot, there are several

set designs programmed into the AI. These include a number of weapons (See [NOZH Weapons systems](#)). Another useful feature of the system is it's ability to repair damage to the Durandium armor plating that protects it. While it isn't an exceptionally quick fix (It will take about one minute to completely repair a 10cm-wide hole through the armor), it's still quite effective. However, due to material constraints, the layer is only able to carry enough metal to reconstruct the full armor layer once.

The breakdown of alloys present within this layer is as follows:

- 60 kg [Nerimium](#) alloy
- 10 kg [Zanarium](#) alloy
- 90 kg Durandium alloy
- 30 kg miscellaneous materials (These include buckypaper, rubber tubing, and various other things needed to repair/ construct new systems in the armor.)

Other materials can be absorbed by the nanobots, but this may take a very significant amount of time (Up to two minutes for 5 cubic centimeters for an alloy with a density similar to depleted uranium). They are unable to absorb Zesuaium, however, due to it's extremely dense structure.

Nerimium Frame

This is a rather simple frame simply meant to give the Durandium armor plating something to bolt on to. That said, it's still very durable. The frame also extends to the head, and creates the helmet.

Power Generation

2 NAM UFC-03b Ultra-compact fusion generators

These are two small, but powerful fusion reactors located in the back of the armor. One of these reactors is hard-wired into the suit's electronic systems and engines, while the second has been installed for use with the Nano-Constructor Layer, providing energy to the bots (deployed through the nanobot "synapse" groups) and powering the weapons.

Life Support

The NOZH has a soft rubber interior, although this is not felt for long as a number of needles containing muscle relaxants are released into much of the body. The brain, however, has a small cocktail of awareness-heightening drugs pumped into it to keep it awake and running. The blood-borne chemicals are stopped from intermingling through the use of a number of needles are automatically inserted into the jugular and carotid artery, which draw and "clean" circulating blood through an assembly of four separate filters. The purpose of this rather extravagant system is to allow the pilot the convenience of not feeling his body, as well as almost completely removing muscle resistance to the suit's movements, allowing faster reaction times and movement. To keep the heart pumping, a long needle-like instrument with a non-conductive coating is touched to the organ, and delivers light electric shocks to stimulate the muscle. *Note: For novice pilots, the experience of this procedure can be rather shocking, and that*

prolonged use of the device after the three days operational capacity may result in health complications.

Due to the potential bowel problems introduced by almost perfect relaxation of the muscles, a catheter organ is required to be attached to the pilots erogenous zones before the muscle relaxants are introduced to the bloodstream.

Propulsion

NAM Compact Gravimetric Drive Na-CGD-01a Using similar design techniques as those utilized in NDI gravimetric drives, NAMs version allows for high acceleration with almost no inertia. However, due to the smaller reactor size, the drive is not quite as potent as those found in NDI armors, but is still quite fast and very efficient.

NAM Plasma Impulse Drive PID-01a The PID-1a, based off of Magnetoplasma rocket technology, utilizes rather ordinary technology to generate a powerful propulsion system. Drawing ionized hydrogen into a magnetized chamber, The ionized Hydrogen is then super-heated using microwave radiation. At the same time, Radio waves are passed through the plasma to impart a very powerful charge. Shortly after, it is expelled through a nozzle using a magnetic channeling system. It should be noted that the plasma expelled from the armor is extremely hot, and may cause heavy damage or death to those in close contact to the device.

Shielding

Combined Shielding System This is essentially the same CCS present on the NAM WATER and FIRE armors, with a slight modification, adding in a small anti-gravity field. The shielding system is quite resilient to damage, and the anti-gravity added to the armor is highly effective against Scalar radiation.

Sensors

Monoeye Located on the shoulders, back of the neck, chest, and head of the NOZH, the Monoeyes are the primary sensory units. In passive mode, the Monoeyes emit low-key LADAR and RADAR waves, as well as actively search for visual and other data. In active mode, the Monoeye actively bombards contacts with subspace particles, and actively scans for data. While this allows for more sensor information to be collected, it is also highly visible to other sensor devices.

Control System

Modified Neural Probe As the NOZH requires more in-depth input from its user to direct it's more advanced operation and nano-construction capabilities, the standard NAM Neural probe has been upgraded to match. The non-invasive probe scans brain waves for various pilot thought commands, and has received capabilities to read several more regarding the construction of weapons systems and

repairing damaged armor.

Nano-muscle Layer

NAM Nano-muscle These are standard NAM nano-muscles, which react to specific electric impulses sent by the Neural probe. It increases the strength and dexterity of the wearer greatly.

Computer Systems

Combat SavTech

This computer controls the armors standard combat functions. It is capable of designating targets on the armors HUD, crafting firing solutions, and assisting in advanced armor maneuvers. It is also programmed to automatically evade incoming fire to the best of it's ability, unless specifically instructed by the pilot not to.

Modified SavTech JANE

The armor's secondary AI is linked into the Nano-Constructor layer through the "Synapse" network. It is the driving force behind the operation of the nanobots present in the armor, and contains the numerous templates for the weapons systems and armor repair.

Communications

The NOZH features directed laser, hyperspace, and radio communication, as well as an external microphone. The communications equipment is located in the back of the armor, with the directed laser transmitter based in the helmet.

Stealth

The Zanarium present in the Nano-construction layer may be deposited on the forearms and made to protrude from several gaps between plates. Connected with the Nano-Synapse network ever-present throughout the layer, energy from the Fusion reactor may be provided to these areas to project a partial stealth field, useful against enemy scanners.

See Also

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