Project Centurion

Due to Psychopomp remnant terror attacks, continuing confrontations with hostile forces and raiders, and the loss of ST technology, Section 6 research and development has moved from more powerful weapons and into soldier surviveability. This is distinguished by improvements in medical systems, armor, tactics, and a few experiments.

One of these is a module added onto any weapon with at least three tac-rail style mounting systems. Initial prototyping was onto an S6-XW-3900 Storm Rifle giving it the name. Aster Blake came up with the idea of a gun mounted gravitic shield to help deflect kinetic weapons without compromising functionality of the existing Revenant shields, which were, at the time, simple bubble shields.

Theory of Operation and Development

With some modification, she and Rose Ironhart-Pine, along with multiple members of Weapons Development and other engineers, were able to modify a standard tractor beam to fire a concentrated beam of gravitons, which would suffer a stable, predictable, and exponential field degradation at a range of approximately one half meter. The gravitational forces in this mushroom shaped degrading field force projectiles and particle weapons off course, away from the user with localized gravitational forces in the order of several thousand Gs. Due to the rapid spread, field degradation, and spread of the gravitons emitted, the shield becomes very thin and weak near the edges, causing lessened effectiveness.

This class of shield is known as a "cascade" or "Constant field generation" monodirectional barrier, which does not suffer damage failures due to shield degradation like other shields, nor is it designed to stop a projectile when pushing it off course will do the job just as well.

The initial prototype has run into several problems, unexpected effects, and other setbacks. These include that the directed graviton beam pushes the aim of a Storm Rifle slightly up, and accelerates the rounds further to mach 18 or above, reducing range to 800 yards before the rounds disintegrate as designed ¹⁾. The shield also interferes with other shielding systems, literally forcing them out of the way. The blowback from this causes the gravitational force inside of the shield bloom to increase, resulting in better protection, whilst shortening the life of other shielding units.²⁾

The prototype was initially powered by the internal power cell of a Storm Rifle, however, the high power draw destabilized the internal nuclear reactor. This was solved by stripping the microfusion bottles out of two S6 portable space heaters, wrapping them in thermoelectric material, and siphoning more power off the core. These were mounted to the side rails, and the repair is stable and effective.

Another failing is the known weakness of gravity based shielding against energy weapons. While the shield is strong enough to cause a notable bend in the beam of a laser fired through it, this may not be enough to save the life behind it. Also known is that certain constant beam weapons in skilled hands may be able to track the distortions and compensate. These include charged particle beams. Any form of negative mass or antimatter weapon will be attracted to the center of the shield due to negative inertia and quantum polarity effects, causing damage to the unit and user.

In order to prevent the rifle from causing damage to equipment and personnel should it be dropped, the shield module was fitted with a safety in the form of a grip extension, supporting the weight of the rifle in the hands and securing the switch in the on position only when the rifle is in the hands of a soldier using it properly.

This research did not go anywhere after the incident, with the extant prototype being dug up in YE 42 and finding use in the Revenant Power Armor Mk III project as a permanently mounted directional shield.

Nomenclature Information

Designer:	Department Of Advanced Research And Development (D.O.A.R.A.D.)
Manufacturer:	Black Wing Enterprises
Nomenclature:	BW-SLD-01
Pricing:	500DS
Defensive rating:	T5 ³⁾
Size:	Approximately 4 foot wide dish, with an interior curved stem leading to the projector
Defensive Description:	"Cascade" style barrier shield
Effective Range:	0.5 meter forward from the projector
Recoil:	none
Energy Source:	Integrated to host system

OOC Notes

Madi Harper created this article on 2018/09/12 21:54.

☐ This article is a work-in-progress. Is it not currently approved.

33% decrease in range, and no longer causes hydrostatic shock based damage, simple through and through penetration

2) 3)

If used on any PA with an equipped shielding system, +1 tier to existing shields in the direction the weapon is pointed, -1 tier in all other directions.

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