Weapons

What's available to the Agents to shoot at Big Bads? Cover image credit: Wikimedia Commons, USN, public domain.

Hand-Held Weapons

Pistol- and rifle-type weaponry.

The Proto-Cyclotron Blaster

This is the principal weapon of a Division One agent, commonly called a blaster in daily parlance. As the name suggests, it is based on a miniaturized particle accelerator; the particles are impelled into a spiral trajectory by a static magnetic field, while a high- frequency varying electric field provides acceleration. The radiation released by the accelerating charged particles (typically protons, hence the ‘cyclotron’ in the name) within the weapon is captured and the energy funneled back into the electric field, allowing for an extended lifetime of the power pack, though entropy is always a consideration.

The Winchester & Tesla Mark II Death Ray

The Winchester & Tesla has two modes of operation: beam and grenade. It is based on Nikola Tesla’s ‘teleforce ray,’ and was miniaturized for the Agency by a descendant of the Winchester family, a clan which originated on Chesharil. It is a directed x- ray beam, essentially an x- ray laser, but because x- rays are much more difficult to deflect than standard visible- light lasers, it is far harder to counter. An agent using a Winchester & Tesla therefore must be very aware of the downrange environment, to avoid collateral damage. Like any beam weapon, however, it is affected by the inverse- square law—beam intensity will diminish inversely with the square of the distance.

Hand-Held Weapons

The Mark IV Tachyon Splitter Rifle

The Mark IV is the latest version of this rifle, first developed on Emdali. This is one of the more common weapons in use by the Agency; it is utilized when higher power and/ or longer distances are needed than can be had from the proto- cyclotron blaster. The rifle configuration allows for a larger power pack and considerably more energy, as well as increased lifetime and targeting capability at longer distances.

It initially produces the tachyons near the speed of light, then feeds them into a resonator, which basically acts as a tachyon laser, and is highly disruptive. Some disruptions can be highly explosive in nature, depending on the materials targeted.

Plasma Rifles

Originally these were standard hydrogen plasma rifles, shooting jets of ionized hydrogen in a slightly- more- sophisticated variant on a gas- fueled flamethrower, and those are still available to agents who want them. But the danger of the hydrogen fuel igniting in what more than one agent has termed ‘a *Hindenberg*’ was high, especially in combat conditions.

Recently Alpha One Agent Omega, a scientist in her own right, applied her inventiveness to this perennial wallflower of the armory, and with the help of Weapons Lab chief Madrid, modified the rifles, replacing the hydrogen tanks with helium, and adapting the weapon to run on the standardized power packs used in other weapons. Further miniaturization was brought about when Weapons Design chief Madrid substituted pelletized fuel.

Lasers

Before the introduction of the proto- cyclotron blaster, lasers of various sizes and powers were in common issue to agents. This included the laser pistol and the more powerful laser rifle. Such weapons are still available and useful under certain circumstances, though there are relatively easy countermeasures to laser beam weaponry, such as mirrored shielding.

The Colt- Westinghouse Projectile Pistol

This is, in essence, a hand- held rail gun. It is useful in places where a blaster’s particle beam would be contra- indicated; the higher muzzle velocities, with magnetically- imparted spin, are also more accurate at much longer ranges. The powerful electromagnetic field is contained inside a full Faraday cage, and that inside a miniaturized force field.

Offworld Weapons

What else is available when you have an entire galaxy to shop in?

The Mark X Mosin-Dobrovolsk Trans-Warp Flux Rifle

This device is not often used by Earth agents, but a few are available at Headquarters. It is similar to the tachyon splitter, where the tachyonic beam is converted to a pulse weapon. A dynamic gravitational- component space warp field is heterodyned onto the pulse. The result is that the target at the point of impact is gravitationally detached from the rest of the target (punching holes) and accelerated away at ~1500c. This creates an apparent explosion in the targeted object. It works extremely well for long- range conditions, and is stealthy up until the point where the target explodes.

There is a scaled-up cannon version rumored to be available for spacecraft.

The Gluon Suppressor Pistol

The gluon suppressor pistol was developed in the remote and somewhat exclusionary Caerarri system, where quantum chromodynamics was developed and elevated to a fine art. As a result of the system’s politics, not only are such weapons rarely encountered, but the mechanism behind their operations is not fully understood by scientists and engineers of the Coalition worlds, including Earth.

What is known is that gluon suppressor weapons, by default and by unknown mechanisms, negate the strong nuclear force in the targeted object. This negation is confined to the area of the beam strike. It is a particularly nasty form of disintegrator beam.

Vehicle Weapons

When you want a really BIG badaboom...

Plasma Cannons

Basically a scaled-up version of a plasma rifle. The larger the vehicle, the bigger the fuel tank of the cannon can be.

Laser Cannons

A basic laser, scaled up. The larger the vehicle, the more powerful the laser beam, thanks to the ability to scale the size of the lasing core.

Mark VII Tachyon Splitter Cannons

This is essentially the same as the rifles but scaled much larger. The larger vehicle enables larger power systems to drive it, thus increasing the beam intensity, size, and range.

Trans-Warp Boson Cannons

The trans- warp boson cannon is a high- powered weapon typically found only on spacecraft, because it requires a large power plant, as well as the use of an Alcubierre warp. It generates a quark gluon plasma, then shunts it through the propulsion system’s warp bubble toward the target. In doing so, the plasma is stabilized and compressed into tiny gravitational singularities, effectively becoming mini- black holes. The combined gravitational- warp effect as it propagates through the propulsive warp bubble is therefore termed ‘trans- warp.’

The effect upon the target is to rip large chunks of mass from the target, which are then absorbed into the singularities.

Railgun Cannons

These are similar to the railguns being tested by the U.S. Navy, except that the power plant is much stronger and the equipment more miniaturized than the Navy weapons. Consequently the projectile fired by the cannons are faster, more massive, and capable of more kinetic damage. They are not recommended for endoatmospheric firing due to the extreme friction and bow shock; the ‘standard’ USN weapons can have a muzzle velocity exceeding Mach 7, but the Agency’s cannons can beat NASA’s X-43 scramjet speed record by several Mach. [The exact number is classified.]

Weaponry Adjuncts

What else can they do? A good bit, actually...

Tractor Beams

Tractor beams are usually thought of as the ‘tow trucks’ of space, and this is how they are most often used. However, it is entirely possible to use them in defensive and offensive fashion.

An example of the defensive use of tractor beams might be to pull an asteroid between one’s own spacecraft and an enemy spacecraft, in order to use the asteroid as a shield. Alternatively, one might use it to attach to the same asteroid—or to an enemy spacecraft, effectively using it as a hostage against other spacecrafts’ fire.

Offensive use of a tractor beam includes latching onto an enemy vessel in order to hold it in place (relative to the attacking vessel, at least) while firing upon it.

They are fundamentally a part of what is known in galactic circles as Higgs field technology, which includes pressor beams, artificial gravity, and force fields.

Pressor Beams

This is a reconfiguration of the same Higgs field used to create a tractor beam. In this instance, it reverses the direction of force, causing a push rather than a pull. It, too, can be used both offensively and defensively, and in similar fashion.

Force Fields

Force fields are yet another configuration of a Higgs field, typically in pressor mode. These fields can be any size from that required to protect a spacecraft carrier or space station, down to a portable, personal field. However, the smaller the field is required to be, the smaller the field generator must be, and the more limited its capabilities. (A single-being body-shaped force field is still in development.)

Force fields are designed to be adjustable, within limits; they can be programmed to be gas-permeable, to be ‘soft’ (meaning that impact upon it creates a nearly perfect elastic collision but does not harm the object impacting) or ‘hard’ (in which case impact causes significant damage, up to and including loss of the impacting part) or to allow nothing in or out save for very narrow bands of electromagnetic frequencies. In a pinch, even these frequency windows can be closed, and in such an event, the tiny but powerful field- unit force field is proof against even a nuclear blast—though they tend not to survive the blast, since the energies have to be diverted somewhere, and the central unit typically overheats and shorts out.

Artificial Gravity

Yet another offshoot of Higgs field technology, where a Higgs field in tractor mode is used over a large area. In a pinch, and under unusual circumstances, a particularly creative agent can manage to use artificial gravity as a weapon, something akin to a broad tractor beam; since it can be scaled, a wily agent might run up the gravity in one room of a spacecraft while running it down in another. The resulting gradient is extremely difficult to traverse without injury.

Passive Cloaking

The objective of cloaking is to make the object being cloaked as invisible as possible. To that end, passive cloaking replicates the surroundings such that what is behind the object or person, relative to an outside observer, is essentially projected in front of the object being cloaked, usually on the object’s surface, by means of a specialized coating or similar. Experimental craft being developed by the Research & Development department incorporate liquid crystal skins, which can then be tied into the sensor array to sample the environment and replicate it on the craft’s skin.

Active Cloaking

Active cloaking applies the same concept as passive cloaking, but rather than using a projection mapping skin, it sets up a field around the object, craft, or person that effectively reroutes the light around the object. There are several technologies found throughout the Galaxy that can do this, including adjusting a force field to serve as a high- resolution gravitational lens. Most are classified in nature.

Sensor Scrambler

The sensor scrambler is a newly- developed, classified technology, only just beginning to be used on Agency spacecraft. The details are classified.

Solid Holograms

This name is a slight misnomer. It is not a hologram in the usual Earth- laboratory sense, but rather a kind of photonic field, as photons are bosons. The ability to manipulate a Higgs field led to a revelation that certain other bosons could be manipulated in similar fashion, leading to shapeable photonic fields, dense enough to give the impression of a solid object when combined with certain other classified technologies.

Solid holograms can be overlaid on almost any object, including the human face. This results in the object underneath being perceived as whatever object the solid hologram is projecting. In the case of a small unit being used as a disguise, an additional scanning system underlies the solid hologram, reading the features and expressions of the agent and replicating them on the holographic face, thus enabling realistic interactions.