

The Book of Armaments

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I've come to realize that I have a lot of rules and weapon stats spread out in a lot of places. It's time to fix that, and consolidate all of my weapon rules in one place. This document will contain "generic" weapons; specific weapons, such as Shotguns, Shuriken Launchers, or the Guns of Titan, will be found in other documents.

The design ethos of this document can be stated as "if we can do it today in 2015, it's absurd to think we cannot do it in 10 AF." If any of this stuff seems overpowered from a game balance standpoint, that's because you're hitting an area where real-life military technology outstrips your expectations of game balance. This point was brought up to me once WRT the effective range range given for a grenade launcher, and I explained that the effective range I gave was that of the M79 grenade launcher deployed during the Vietnam War.

In the conflict between verisimilitude and game balance, this court always rules in favor of verisimilitude. If you don't like it, just remember that the entire point of a military-industrial complex is to make your soldiers' gear more OP than that of their enemies. And thanks to cracked nanofabrication, you too can enjoy the fruits of their labor.

New Weapon-related Rules

Anti-Missile Systems

Anti-Missile systems are intended to shoot down incoming missiles and other explosive projectiles aimed at vehicles and large synthmorphs. Specifically, an AMS can shoot down any of the following: Seekers and missiles, grenades and mortars (if someone is actually using mortars in 10 AF), and artillery shells fired in ballistic arcs. They cannot shoot down artillery shells fired directly at a target.

An Anti-Missile system *must* be mounted directly on the chassis of a Large or larger synth or vehicle, or permanently emplaced. They *cannot* be made in a hand-held form-factor.

An Anti-Missile System makes an attack roll in direct opposition of anyone who fires one of the above weapons at the unit carrying the AMS. If the incoming attack would take considerable time to reach the target (for instance, artillery fired in a ballistic arc over dozens or hundreds of kilometers,) the AMS makes its attack roll in the round and phase in which the ordnance was due to land. If the AMS exceeds the attack roll of the incoming attack, it has defeated the incoming attack and shot down all incoming projectiles related with that attack. If it does not, it may still reduce the attacker's measure of success if it and the attacker both succeeded.

AMS units typically come loaded with AI drivers with an appropriate weapon skill of 40, with a +30 bonus for a complimentary knowledge skill applicable only to shooting down incoming ordnance at a rating of 80. The weapon system will also have a smartgun link, for a total attack roll of +80. An AMS is forced to shoot down more than one incoming attack roll in a round, each successive attempt takes place at a -20 penalty. If it is firing projectiles which have a significant explosive range add a +10 bonus to their efforts to shoot down incoming missiles; such as a rotary autocannon firing Frag shells. If the shells have the Proximity Smart Ammunition Option, the bonus increases to +20.

AMS units may be engaged to protect all friendly targets, all targets, or to shoot down all incoming projectiles, out to the edge of its Short range, allowing them to project an umbrella in which they will shoot down incoming weapons. Shooting down projectiles aimed at other targets incurs a -10 penalty. They may not intercept weapons launched within 10m.

AMS units may be taken off of AMS duty and used for direct fire attacks. The onboard AI can be directed to act offensively (in which case, it fires at a total skill of 50, including the smartgun option.) An AMS can also be controlled directly by an ego gunner, using their Gunnery skill and Speed. An Ego can do either AMS duty or attack on its own, but an AMS may not be used for both direct attacks and AMS overwatch in the same round.

Anti-Vehicular Weapons

Some things are armored like tanks, and among those things are actual tanks. When you need to kill one, you need a pretty damn big can-opener! That's where this rule comes in.

Some weapons are designated Anti-Vehicular Weapons. There are two kinds; those that deliver a big fuck-off explosive into a target so it can blow up from the inside (see Penetrating Explosive Weapons, below,) and those that blast a lance of white-hot death straight through it.

Weapons which are designated Anti-Vehicular Weapons deal double damage to all targets of Large and larger size. Anti-Vehicular Penetrating Explosive Weapons deal double damage to those targets as well, but *only* if the explosive goes off *inside* the target. A surface blast will *not* double its effect.

Big Magazines and Belts.

The default rules assume that the ammunition count of your weapon is an intrinsic property thereof, and can only be changed by applying a weapon modification.

This is, quite simply, a gross oversimplification, suitable for non-gun-smart game nerds and perhaps suitable for game balance. It is not suitable for me. Instead, assume that the default ammunition count listed is how much ammunition the standard magazine for that weapon was designed for.

Some weapons' magazines will be internal, or the weapon will be designed in such a way that a higher-capacity magazine is simply impossible to use; real-life examples of these would be tube magazines (you can only really make the magazine longer if you make the barrel longer,) weapons with cylinders (You can't use a larger cylinder without drastic alterations to the weapon's design,) and weapons with highly unorthodox magazine attachments, such as the FN P90. Bullpup weapons are also notoriously unforgiving of huge magazines, because of where the mag needs to go in relation to the shooter's body.

In Eclipse Phase, you won't be able to increase your loaded ammunition count on weapons such as those without some seriously drastic tinkering to the weapon itself, which will likely require some heavy Hardware: Armorer rolls to redesign the weapon to accept a larger mag.

Weapons with standard box magazines in front of the trigger, however, suffer none of these limitations, and you may freely slap on larger magazines as you see fit. They are not as compact, however, so if you're fighting in *really* tight quarters, you should suffer a -20 penalty to your weapon rolls, unless you're using a very short weapon, such as a carbine or an SMG.

Standard ammunition magazines have a cost of **[Trivial]**, no matter the size. They're really just boxes with springs and a few optional electronics. On belt-fed weapons, it's really just a box containing an ammunition belt which has been folded up inside it.

Smart Magazines, however, have a cost of **[Moderate]** each, and they are bulkier than regular mags with the same capacity. Additionally, using a Smart Magazine requires that the weapon receive the standard Smart Magazine modification to boot, since swapping ammunition types that quickly will require a mechanism in the weapon to unchamber a chambered round and swap it back into the magazine, whilst accepting the next round. Unless, that is, you're okay with just ejecting the round in the chamber when you need a different round.

Then there are belts, for when you absolutely, positively have to rock and roll all day long. Some weapons can feed from belts, and modern weapon which have "# Belt" for their ammunition capacity can go from a magazine to a belt without any changing of parts or monkeying with the weapon. Other weapons can be modified to accept both belts and magazines as a **[Low]** cost purchase.

Any weapon with "Machine Gun" in its name is by default set up to feed from either a belt or a magazine interchangeably, as is any weapon which has been so modified. Belts have a cost of **[Trivial]**, same as standard mags, but they *cannot* be combined with the Smart Magazine mod. On an infantry weapon which is being lugged around by someone, belts tend to come in ammo cans, boxes or drums that look very much like magazines, and so tend to confuse the unwary observer. Belts can, however, be linked together for essentially continuous fire if more than one person (or a person and an ammo-helper robot) are manning the weapon. Belt feeds are typically how internal ammunition hoppers for weapons mounted to a synth or vehicle are fed, allowing for an absolutely incredible ammunition count.

Magazines tend to come in multiples of 10, typically capping out at 100; the twin-drum C-mag is a compact, venerable, and effective design. Using

significantly larger-than-designed magazines on pistols can make holstering and unholstering cumbersome and difficult, but it can be done, and some people load a standard mag in their pistol while it's in the holster, and carry an expanded magazine to swap in if they actually have occasion to reload. Belts tend to start at 50, and increase in multiples of 50 to 300, if you're storing the ammo in a can you intend to attach to the weapon like a magazine. If you're going to be firing from the prone position with someone attaching new ammo belts to your existing one, or mounting it on a morph or vehicle, however, the sky is basically the limit, within reasonable volume constraints.

Burst and Full-Auto Explosives

For when you absolutely, positively have to make Chunky Salsa, there is no substitute for ripple-fired seekers, belt-fed full-auto grenades, or throwing a whole bandolier of grenades with one pin missing at your enemies.

Grenades and Seekers need far fewer explosives to get the effects of burst and full auto than bullets do. A burst of explosives is only two shots, and a full-auto long burst is only five. And yes, gatling (see below) grenade launchers and autocannons do exist. They will strike the fear of God into an atheist, or wipe out an entire horde of exsurgents.

In all cases, resolve the attack as normal - line up your target, resolve your attack roll, and resolve scatter as necessary.

Many of the rules below modify blast areas. In all cases, this is assuming a standard grenade sized weapon; modify the numbers below according to the size of the weapon. (For example, Heavy Artillery Seeker burst-fire spreading the love would increase the uniform blast area of the weapon by 40m radius.)

HEAT and similar rounds (Including but not limited to PLAT) *do not function well* if you're spreading the love. Do not increase damage to anything, they lose all AP, and damage falloff is -4/m as normal after the uniform blast zone.

Note that explosive burst-fire and full-auto attacks are **exempt from the Hardened Armor Rule**. No matter how hard your armor is, it's not hard enough to completely bounce rapid-fire explosives the way it can bounce bullets. If you're on the wrong side of these rules, you're going to need to resist these attacks with your straight armor value. I hope you're driving a tank.

Explosive Burst Fire

With an explosive burst, you launch two explosives in rapid success - whether by hand, with a grenade launcher, or from three kilometers up, at mach 3, firing two artillery seekers (See above) at something that needs to *die*. When making an Explosive Burst, you may choose from the following two benefits.

Spread the Love: You don't aim for a direct hit so much as to get your explosives in the general vicinity of your target. Add +10 to your attack roll. If you hit your attack roll, your target (and your target alone) takes +1d10 damage. Hit or scatter, the explosions create a uniform blast from your impact point of 5m, spreading out normally from there. If your weapon already had a uniform blast or an absolute area of effect, it increases by +5m instead.

Direct Fire: You're attempting to put both rounds on-target. This is gonna hurt, a lot. Increase the damage rolled by +1d10.

Explosive Full-Auto

For those times when fire isn't working, nuking it from orbit isn't an option and it seems to literally eat lead, your only option may be more dakka. Explosives at full-auto fit that bill nicely, whether you're throwing a bandolier of grenades, going full-auto on a grenade launcher's belt, or ripple-firing five Seekers from a rack mount.

Spread the Love: You're not so much targeting someone as targeting him and everything in his general and intermediate vicinity. Add +3d10 to your attack roll. If you hit your attack roll, your target (and only your target) takes +1d10 damage. The explosions create a uniform blast from your impact point of 10m. If your weapon already had a uniform blast or absolute area of effect, it increases by +10m instead.

Direct Fire: You're probably not going to directly hit with *all* of the explosives, but close enough to make no nevermind. Increase the damage rolled by +3d10, and create a uniform blast of 5m from your point of impact, whether hit or scatter. If the weapon you're using already had a uniform blast, increase its radius by 5m instead.

Gatling Explosive Weapons

If a Firewall Sentinel is seeing a Gatling explosive weapon, chances are that they've either so royally screwed the pooch that an Erasure Squad is being sent in to remove them and everything they've seen, or they've picked a fight with the Jovian Navy. These are true military weapons which can annihilate even hardened targets with focused fire, or saturate an area with so much boom that nothing is going to be left standing.

As with the Gatling Weapon rules below, you may make two full-auto attack rolls with a single Complex Action. You eat through the same number of rounds per attack as with a bullet-firing minigun. If you Spread the Love, you increase the damage everyone takes by +1d10, the damage your target takes (on a successful attack roll) by +3d10, and increase the Uniform Blast by +20m. If you focus fire, you increase the damage everyone takes by +3d10 and increase the uniform blast by +10m. And you can do this twice in one phase. The lethality of these weapons is mind-boggling, which is why rotary autocannons tend to be very strictly controlled.

Explosive Magazines and Belts

Even minigrenades are much larger than most bullets, and consequently the ammunition counts tend to drop. Magazines for these explosives come in multiples of 2. Minigrenade/Micromissile magazines top out at 30 with a big, Beta-C style or Drum type magazine, whilst Grenade/Minimissile top out at 15.

Belts holding Grenades or Seekers have expanded ammunition capacity, and these belts come in multiples of ten. A single belt of minigrenades tops out at around 40, whilst a belt of grenades tops out at around 30. Again, if you're feeding belt after belt together into a giant ammo hopper, these numbers go up precipitously, and they would have to if you plan to unload a rotary autocannon on someone.

Shotgun shells are approximately the same size as a minigrenade, and use the same numbers when expanding their magazines or belt-feeding them.

Coaxial Weapon

Mounting a weapon coaxial to another weapon is basically the same as creating a combination weapon for your hands. This is often done on heavy war machines, so that the gunner in command of the main barrel has a weapon at their disposal short of the main cannon with which to engage targets, to limit collateral damage, or to avoid spending comparatively rare main barrel munitions when the coaxial weapon is more than sufficient.

Because these weapons are likely to be wildly dissimilar in range capability, using them together is a challenge, but not impossible. You may fire both of these weapons at a time, but whichever you fire secondarily suffers a -30 penalty to-hit.

Double-Barreled

Historically, before the advent of automatic reloading weapons, most weapons were only single shot. Most folks who had single-shot weapons, however, were less than keen on having to reload after every shot. So they came up with the simple solution of putting two barrels on the same weapon, and it wasn't very long at all before those folks figured out that if they wired the two triggers together, they could get a *lot* of damage from one trigger pull.

Double-Barreled Weapons are single-shot weapons with two individual barrels which may be reloaded and fired separately, or together. A double-barreled weapon may be fired twice in one complex action as a semiautomatic weapon may be, or you may fire both barrels simultaneously. In this case, you make one attack roll, and deal damage with both weapons simultaneously, but individually. Armor applies to each damage roll individually, and each damage roll counts as a separate attack for determining Wounds.

For instance, if you shoot an old-fashioned double-barreled hunting (sniper) rifle at someone, you deal 2d10+10 and 2d10+10, not $[2d10+10] \times 2$, and not 4d10+20.

Dual/Quad-Mount

When you need to deal more damage *and* be sure of landing a shot, the simplest solution is to use more gun. Dual and Quad mounted weapons are weapons capable of Burst and Full Auto fire only. (Theoretically you can Dual/Quad-Mount a weapon which is also capable of SA rates of fire, but if you do, it loses its SA mode.)

When you Dual-Mount a weapon, it gains *both* bonuses of Burst and Full Auto fire: +1d10 damage *and* +10 to hit when Bursting, or +3d10 damage *and* +30 to hit when firing a Long Burst.

When you Quad-Mount a weapon, it gains both bonuses of Burst and Full Auto fire, *and* it deals two shots' worth of damage, as per *Double Barreled*, above.

For example, if you have four Heavy Machine Railguns in a quad-mount, you make a single attack roll at a +30 bonus. If you hit, you deal 5d10+12 and 5d10+12 damage. This is a *great* way to take down moderately armored targets, and to give your quartermaster a headache.

Gatling Weapon rules

Known to those who lack a sense of historical majesty as Rotary Cannons, or miniguns, Gatling-style weapons are machine guns used when single-barreled weapons just don't give you a high enough rate of fire. First invented almost three centuries ago, the purpose of a rotary barrel was and is simple: enable a higher rate of fire than any one barrel can tolerate individually by using three, four, or more barrels.

Gatling weapons can be machine guns or heavy machine guns, or even larger weapons. They can be propellant or mass driver weapons, but not even the generators and supercapacitors you can cram into a Large morph or a vehicle can cope with the voracious demand for power that a Gatling machine railgun demands... But Large vehicles/morphs can handle a propellant Gatling Gun just fine. Alternatively, you can make a Gatling weapon that fires pistol-sized railgun rounds.

All modern designs, of course, use electric motors and tend to have counterbalancing gyros to prevent unwanted torque from rotating you if you're in microgravity, which means you're perfectly free to keep the barrel spinning continuously on most designs, but there is no practical reason whatsoever to do so, as contrary to popular game depictions, Gatling weapons do not typically require any kind of spin-up time before firing. There is no way to make these weapons stealthy in any kind of an atmosphere, but one could argue that the time for stealth is past when you're breaking out the minigun anyway.

Rotary Cannons fire in fully-automatic mode only, and consume a voracious 25 or 50 rounds per shot. Like semiautomatic weapons, they may be fired twice with the same complex action (using the same rules.) A normal shot (directed at one person and everybody unfortunate enough to be in his general vicinity) consumes 25 rounds and may be focused on the one target, using normal rules for either focusing your fire for increased damage, or spreading the shots out for increased chance to hit. Anyone unfortunate enough to be within three meters on either side of your target, whether you focused your attack on him for damage or spread it out for increased aim, is also going to be at risk of taking damage unless they can succeed on a Fray roll.

Secondary targets only have to succeed on a Fray roll to scramble for cover, they do not need to succeed and overcome your attack roll. The primary target is not so lucky.

An expanded shot, using the higher rate of fire, hoses down an entire area with fire. Pick a dramatic direction (such as "everybody on the left side of the street," or "anyone on that rooftop") and hose 'em down. Everyone in that area you named is subject to your attack and damage roll, and must attempt to Fray normally.

Alternatively, you may focus the full 50-round high-rate-of-fire attack on one individual target, in which case you receive both possible benefits of full auto against them - a +30 bonus to-hit, and a +3d10 damage roll. Anyone in his vicinity is subject to collateral damage as well.

Notably, Particle Beam Bolters and lasers can be manufactured as miniguns whose power requirements meet the power budget of a small vehicle or synth, which provides a significant amount of relief to those on a budget who need the firepower volume of a minigun. Minigun lasers and particle beam bolters cannot cook, nor may minigun lasers operate in stun mode.

Hardened Armor Rule

If a given piece of armor is tough enough, you're just going to flatten ammo against it without doing any damage. Firing more bullets at it just lets you flatten light ammo against heavy armor faster than before.

If an armored target's single strongest piece of armor has double or more a weapon's armor penetration value, burst fire doesn't add any damage to the attack, and full auto only adds +1d10. If it has triple or more a weapon's armor penetration value, even full autofire fails to add any damage.

EXAMPLE: VIOLET PERDIDO IS GOING INTO A TOUGH FIGHT, AND NEEDS TO GRAB ALL THE PROTECTION SHE CAN GET. SHE ACQUIRES A SUIT OF HEAVY BODY ARMOR (13/13), ADDING A FULL HELMET (+3/+3), IS WEARING SMART SKIN (3/2) AND SECOND SKIN (1/3) UNDERNEATH IT, AND APPLIES ABLATIVE PATCHES (4/2) TO HER ARMOR; LASTLY, HER SKIN HAS A LIGHT BIOWEAVE ARMOR WOVEN IN (2/3). SHE HAS AN ARMOR VALUE OF 26/26, WHICH IS RATHER IMPRESSIVE, ALL TOLD. HER TOTAL AMOUNT OF PROTECTION IS GREAT, BUT HER HARDENED ARMOR VALUE IS ONLY 13/13 - THE VALUE OF THE SINGLE STRONGEST PIECE OF ARMOR. ANY WEAPON WITH AN AP OF 7 OR GREATER WILL DEAL FULL DAMAGE TO HER WITH BURSTS OR AUTOMATIC FIRE. IF ON THE OTHER HAND, SHE HAD ACQUIRED A BATTLESUIT (21/21, AND WORN THAT ALONE, HER ARMOR VALUE WOULD BE 23/24. SINGLE SHOTS HAVE THE POSSIBILITY OF BEING SOMEWHAT MORE DAMAGING TO HER, ESPECIALLY WITH HIGH AP VALUES, BUT THE CHANCE THAT SHE WOULD BE KILLED INSTANTLY BY A LONG BURST WOULD BE GREATLY REDUCED, AS HER HARDENED ARMOR VALUE WOULD COMPLETELY NEGATE BURSTS AT AN AP OF 10 OR LESS AND REDUCE FULL AUTO TO THE EFFECTIVENESS OF A MERE BURST, AND ANYTHING WITH AN AP OF 7 OR LESS WOULD PING OFF THE BATTLESUIT, EVEN LONG BURSTS BEING WHOLLY INEFFECTIVE AT BOOSTING DAMAGE.

Heavy Weapons

Heavy Weapons are two-handed weapons of roughly Large size. They are differentiated from normal two-handed weapons primarily for the purpose of how Small and smaller characters use them. The following canon weapons are considered to be Heavy weapons: Diamond Axes, Sniper Rifles, Machine Guns, Plasma Rifles, Disposable Seeker Launchers, Freezers, Sprayers, and Torches.

Penetrating Explosive Weapon

Some weapons, such as High-Explosive Armor Penetrating shells, are designed specifically to use a kinetic impactor to carry an explosive charge inside a target, whereupon it then explodes. (Laser Cannons also make use of this effect.)

A Penetrating Explosive Weapon has stats similar to an inert kinetic armor penetrator. If the penetrator completely bypasses the target's armor, or if it deals at least one wound of damage, the round penetrates and the explosive detonates inside, automatically hitting the target struck (and any occupants in the struck compartment, if the target was a vehicle,) and ignoring the target's armor. (Occupants' own worn armor is applicable.)

If the attack fails to penetrate the armor completely and fails to deal a wound, then the explosive simply detonates on the surface, damaging the target (and anyone within normal blast radius,) but not bypassing armor or harming passengers.

If the attack is a critical failure, then the Penetrating Explosive was a dud.

Penetrating Explosives (that are actual explosives and not the result of laser cannons,) may also be fused just to explode on impact, if you'd rather spread a lot of boom in the area rather than inside your target. Penetrating Explosives have *no effect* on standard-sized morphs; the impact is just not enough to arm their fuse. (This is not true of Laser Cannons, which always get their effects.)

Stable Morph

A "Stable" morph is one which is for some reason or another more stable than your average morph, with your "average" morph being anything from a Flat to a Fury. This rule comes into play when deciding what kind of weapons you may operate without screwing up badly.

To be Stable, a morph must meet at least one of the following criterion:

- Affixed to the ground somehow. This can be for reasons of being permanently attached, or for temporary attachment. Even a normal morph qualifies as stable for the purposes of firing a heavy weapon if they and the weapon are affixed to some much larger object, or if they are firing from the prone position. Even in 10 AF, dropping prone and using the bipod is still the fastest and most expedient way to get an HMG into action.
 - Affixed can mean that your boots have smart soles and your weapon has a smart bipod. It can also mean that you're stationed inside a vehicle on which the weapon is mounted on a pintle, and you are manually operating it.
- Have more than two legs, or are otherwise very stable on the ground, such as by having treads or a vehicle-like chassis.
 - Some morphs just don't mass enough or are not rigid enough to qualify as stable, even if they technically meet this requirement.
 - Alternatively, some morphs that never touch ground qualify, just by virtue of being massive enough.

- Are benefitting from heavy, strength-enhancing power assistance, such as that in a Battlesuit.

A full list of canon morphs which are considered Stable is as follows: Arachnoid, Cetus, Cloud Skimmer, Courier, Daitya, Fenrir, Flexbot (depending on exact configuration,) Mimic (Depending on exact configuration,) Nautiloid, Neo-Beluga/Gorilla/Orca/Whale, Novacrab, Q-Morphs, Reaper, Slitheroid, Sundiver, Surya, Synthtaur (whilst quadrupedal only,) Takko, Whiplash, and Xu Fu. Variants on the above morphs are likewise Stable.

Otomorphs are not considered stable. They just are not rigid enough. Scurriers are not stable, despite being hexapodal; they simply are not massive enough.

Small and Very Small Characters and Weapon Sizes

The default rules for gear sizes assume that the character is the size of an adult baseline transhuman. This can become problematic when you're trying to explain to someone sleeving a Scurrier why they cannot use an assault rifle which is bigger than they are. This should hopefully clarify those situations.

Small characters cannot use Heavy Weapons without the benefit of stability. They cannot use anything a normal sized human would be unable to use without the benefit of Stability, unless it is mounted on something else. Two-handed weapons which normal characters do not consider to be Heavy weapons may be used by Small characters as Heavy Weapons. (An Assault Rifle is to a Neotenic what a Medium Machine Gun is to a Fury.)

Very Small characters are *even smaller*. They cannot use the weapons a Neotenic would require Stability to use unless the weapon is mounted on something else. They require Stability to use weapons a normal-sized Transhuman considers non-heavy Two-Handed weapons, and consider Medium weapons to be Heavy for them. (A submachinegun is to a Scurrier what a Medium Machine Gun is to a Fury.)

Stupidity Rule

It's going to happen sometime: You're running from position to position with an antimateriel rifle in your hands, and some Exsurgent horror-show pops up in your face. You don't have time to get a rifle out, and your sidearm isn't going to stop this thing. You don't really have a choice. You *have* to shoulder that gigantic cannon and blow that Exsurgent's head off.

Trying to fire a weapon you can carry but cannot fire unsupported is a Bad Idea, but sometimes it beats the alternative. Make an appropriate attack roll, at a -30 penalty. You are incapable of achieving any measure of success greater than having succeeded or having failed, and thus cannot make called shots. After your attack is resolved, you must immediately make a $DUR \div 2$ test. If you fail, you are knocked back and the weapon flies out of your hands. If you fail with a Measure of Failure of 30 or greater, you are knocked back and knocked prone, and the weapon flies out of your hands.

Very Small (Morph Trait)

Some morphs (and robots) are just *absolutely* tiny, so small that a Neotenic could probably stomp them flat. This size category includes everything from half a Neotenic's size (such as a Scurrier,) on down. Very Small morphs are quite difficult to hit, applying a -20 penalty to attack rolls against them. Larger morphs have reach advantage against them, beginning with Small morphs and all larger morphs enjoying twice that benefit.

Very Small morphs treat Medium and Two-handed non-heavy weapons - such as assault rifles - as Large Heavy weapons, requiring that they achieve Stability to fire them. Two-handed Heavy weapons, such as machine guns, sniper rifles, and disposable seeker launchers, are just not in the cards for a Very Small Morph, even if they're in a Very Small Battlesuit. Medium weapons can be used if they're built into the morph's frame. Smaller weapons (such as pistols) may be used if they've been designed for the Very Small morph's frame and stature. Very Small Morphs have a SOM aptitude maximum of 25.

The following existing morphs are considered to have the Very Small size trait: Blackbird, some Critters but not all, a single Flexbot, Mimics, Opteryx, Scurrier, Spare, individual Swarmanoid bugs.

Individual Heavy Weapons

Individual heavy weapons are weapons which are heavy, but which a normal biomorph (ex: a Splicer or a Flat,) can operate on the go. These weapons are sometimes found pintle-mounted on vehicles, and sometimes found in the hands of individuals. They may be used in any regard like normal. Among this category of weapons are light and medium machine guns, sniper rifles, and grenade launchers. Disposable Seeker Launchers and other shoulder-fired Seekers would also fall into this category.

Electrical Discharge Rifle

Also known as an Arc Projector, the Electrical Discharge Rifle is a heavy weapon the size of a medium machine gun. It can be likened to the hulking Bruiser big brother of a Stunner's flat, but it isn't just a stun weapon.

The EDR uses an ionizing laser to paint a beam of ionized gas between its projector and the target. Painting this beam is time-consuming, requiring that the user use a whole complex action to fix their aim on the target. As a result, the Arc Projector is best used by characters who have at least Speed 2.

When it discharges, the Arc Projector unleashes a visible, damaging electrical discharge that has led to it being nicknamed the "Miniature Lightning Cannon," even though it has no technical heritage in common with the vehicular-sized Particle Blast Cannon beyond having been invented by Omnicor.

Upon discharge, the EDR jumps to nearby targets from its impact, jumping to targets up to 3m away from the first one. If more than one target presents themselves, decide randomly who - or what - gets struck, by rolling scatter and seeing who is closer to the indicated direction. This effect is very uncontrollable, and has a tendency to strike significant objects and animate targets alike. It's particularly noted for the effects it has if it finds a container full of volatile fuels, an ammunition crate, or electrical equipment - or when it's discharged into a crowd. No more than three jumps may occur, and no target may be struck more than once, including the original target. If a discharge with an EDR misses, it has to strike *something*, so roll Scatter and go from there.

The discharge of an EDR is a Shock Attack, but this level of discharge is enough to overload synthmorph and bot electrical systems. It's a much greater jolt than even a Big Shock Slug can deliver; even Very Large Synths must make a DUR + Energy Armor Test, after deducting DUR from the impact of the weapon, to see if they are shocked. A character, bot, or vehicle which rolls a critical failure on this resistance test will be incapacitated for a full minute. Even targets which take no DUR damage from the attack are subject to the Shock effect. Targets whose combined DUR + Energy Armor is greater than 100 are completely unaffected by the shock effect.

There is some good news, though; if you're wearing Shockproof armor, the EDR's electrical discharge won't jump to you. You can still be subjected to its effects if you are directly targeted, but you cannot become a secondary target. **[Expensive (10,000)]**

Heavy Laser Rifle

When you need more firepower, "use more gun" is always an option. The size of a shoulder-launched rocket launcher, the Heavy Laser Rifle is the old-guard go-to for dispensing massive quantities of laser, in a form a human can heft and fire. While novel innovations on Titan may be bringing similar levels of laser firepower to a smaller rifle form, the Heavy Laser Rifle is reliable and deadly. Though a bulky, obvious heavy weapon that's sure to draw a lot of attention if you deploy it, the Heavy Laser Rifle makes beam weapons attractive options again.

The Heavy Laser Rifle carries a *massive* battery that's good for a dozen seconds of continuous fire. As with the Laser Pulser, you may Cook with this weapon, holding it on target to deal heavy damage. There is no Laser Stun setting on this weapon; this is a weapon with which you seek out your enemies and do them *harm*. Comes equipped with a scope equivalent to Viewers. **[Expensive (10,000)]**

Heavy Rifles

"Heavy Rifle" is a supercategory of weapons firing a projectile in size between that shared by normal autorifles and light machine guns, and the very large projectile shared by full sniper rifles and heavy machine guns. While these are not popular with logistics personnel or beancounters who only look at statistics, they are exceedingly popular amongst grunts who can get their hands on them.

These rounds trace their origins back to hunting rifle ammunition used to bring down big game, to rounds such as the .30-06 Springfield and the 7.62

NATO rounds. They became unpopular in military use when it was realized that the massive recoil of these rounds made effective use at full-auto very difficult, and the weight of them made them generally unpopular. Smaller, lighter rounds were seen as just as effective at achieving a combat kill, more effective at penetrating armor (without the use of dedicated armor-penetrating rounds,) and more likely to cause grievous wounds owing to the fact that the major militaries of the time were prohibited by treaty from using rounds specifically designed to cause grievous wounds, and so the lighter bullets' tendency to tumble inside the target was seen as an acceptable substitute.

That trend continues today, but after the events of the Fall and the advent of modern recoil-compensation systems, these heavier rounds are making a comeback. Their drawbacks are largely negated - recoil is a nonissue for these rounds with modern recoil dampeners, most people carrying weapons today are stronger and have more endurance than the Flats who did battle in the early 20th century (and will be lugging them in light gravity to boot,) and nowadays you can pretty much use whatever kind of ammo you damn well please.

All of these weapons use the same range profile as their standard brethren (Battle Rifles and Autorifles, Marksman Rifles and Sniper Rifles, Medium Machine Guns and Machine Guns,) and have the same cost category. If acquiring a heavy rifle with reputation, apply a -10 penalty to the Networking test to represent the general nicheness of these weapons meaning you have to work harder to find a hook-up. If acquiring one with credits, it should cost 25% more to acquire than the standard version. (For example, if a normal assault railgun costs 5,000 credits, a Battle Railrifle should cost about 6,250. Marksman Rifles are exempt from this; they cost the same as a normal Sniper Rifle.)

Battle Rifle

The first true battle rifle invented was the *Fallschirmjägergewehr 42*, a weapon with the factor and general size of an automatic rifle, and firing a heavy, full-sized rifle. This remains true today; these are weapons with the form-factor of assault rifles, firing the heavier rounds. Battle Rifles are two-handed non-heavy weapons. **[Moderate (1,250)]**

Marksman Rifle

The weapons referred to as Marksman Rifles are a bit of a misnomer - anyone who uses a long arm by taking careful, accurate long-ranged shots, is a marksman. However, the term "Marksman's Rifle" has been in use in military parlance for over a century to refer to a rifle wielded not by a dedicated sniper (operating as part of a sniper team, with objectives to kill a specific target or sow general mayhem, and then withdraw,) but as a soldier with an accurate rifle, operating as part of an infantry squad to provide long-ranged accurate fire.

In modern parlance, the Marksman Rifle is a rifle that has all the range of a full sniper rifle, but fires the Heavy Rifle round, which is actually *lighter* than that fired by the full Sniper Rifle. Whilst snipers used to these heavy rifles deride the reduced stopping power, Marksman Rifles are perfectly serviceable as hunting weapons on exoplanets, and for taking down lightly armored transhuman enemies. They also boast the additional benefit of being able to fire at burst and fully automatic rates of fire, *unlike* the full-sized modern Sniper Rifle. **[High]**

Medium Machine Gun

The first practical, widespread weapon which modern transhumanity would recognize as a Medium Machine Gun was the Browning Automatic Rifle, engineered in 1918, though it was then designed as a light machine gun. (Today, we use the term Light Machine Gun to refer to what was first referred to in military parlance as a "Squad Support Weapon" or "Squad Assault Weapon," to wit, a machine gun firing an assault rifle round.)

These weapons typically resemble Battle Rifles, and are often designed with largely interchangeable parts. In some particularly notable examples, the only difference is that the MMG version has a longer barrel. They can be thought of as Battle Rifles with longer range, and wielded as such, though insufficiently impressive specimens of transhumanity may find an MMG an odious chore to lug around, even in lighter gravity than that of Earth. **[High (6,250)]**

Grenade Launchers

Grenade launchers are a rarity in this day and age, having been largely supplanted by Seekers, which have much greater range. Newer is not always better, however, and in the rush to adopt the highest technology, proven technologies have sometimes been left behind. A Seeker Rifle has nothing near the volume of fire a grenade launcher can put out. Additionally, although they are shorter-ranged than a Seeker, launched grenades have much greater range than a thrown grenade, and operate using the Kinetic Weapon skill, which allows a person trained in Kinetics to rapidly adapt to using these weapons, as opposed to learning Seekers or Thrown. As with all modern weapons, grenade launchers are presumed by default to be manufactured with

smart safety systems and smartgun links. Laser sights are of no use in providing aim bonuses to grenade launchers, but smartgun systems do.

Launched grenades are direct-fire weapons, and as such, they may be manufactured as HEAT grenades. Additionally, they may take smart ammo options, and may be configured for impact, air-burst, or time-delay detonation.

Grenade Pistol

Much like a Seeker Pistol fires only Microseekers, a Grenade Pistol is chambered for Minigrenades, and typically has a wide, fat, or cylinder magazine affixed ahead of the grip. These can be attached to the underside of rifles. Their chief advantage over a Seeker Pistol is their rate of fire, while their chief disadvantage is their range. Grenade Pistols are one-handed weapons. **[Moderate]**

Single-Shot Grenade Pistol

Resembling nothing so much as a survival flare gun with a long barrel, a single-shot grenade pistol is both concealable and very lightweight, allowing you to simply pack one in a pocket. Arguably, a shotgun pistol firing a grenade slug can do the same job, and it's honestly somewhat hard to tell where the line between them is drawn. The real use for this is as an underbarrel ordnance projector you can attach to another kinetic weapon. It holds one round, and barring a multi-barrel modification, absolutely cannot be expanded to hold more. Its barrel must be reloaded manually after each shot. Single-shot grenade pistols can be chambered for both minigrenades (though why would you) and regular grenades, and for some reason logistics personnel and statistics crunchers demonstrate a marked preference for issuing the former, whilst the people who actually have to use them have expressed a marked preference for the latter.

Those intended for standalone use *exclusively* typically break open like a break-action shotgun, whilst those intended for use as an underbarrel weapon (either exclusively or as handheld weapon that you can affix to the underside of your rifle,) either have some kind of sliding breach, or they break-open to the sides. Single-Shot Grenade Pistols are one-handed weapons. **[Trivial]**

Grenade Rifle

This is where the rubber hits the road. A grenade rifle is a grenade launcher with a rifle form-factor, firing either minigrenades or standard grenades. Cylinders are sometimes used because a cylinder magazine is an easily-reloaded form of Smart Magazine, and are preferred by logistics bean-counters who would prefer the grunts *not* go hog-wild with these weapons.

Grunts, of course, would much rather have the versions made for use with magazines or even full belts, so they can go hog-wild all over their enemies.

Grenade Rifles can be mounted on vehicles and synths, but you're typically better off using a Heavy Grenade Rifle (See below), which has a significantly longer range and higher default ammunition capacity. **[Moderate]**

Single-Shot Grenade Rifle

Some hierarchies issue single-shot grenade rifles to seriously unloved troops, generally cannon fodder or even indentured soldiers working out a hitch. They have the same range as a Grenade Rifle, but operate on the simplest possible mechanisms. These are basically the same weapon as the M79 grenade launcher deployed by the United States during the Vietnam War. Their only advantage is that they can be tooled literally out of scrap, without any nanofabrication whatsoever, by an armorer who knows what he's doing, if for some reason he has an abundance of launched grenades and scrap, no nanofabber, and has lost his grenade rifle. Single-Shot Grenade Rifles are two-handed non-Heavy weapons. **[Trivial]**

Hand Grenade, Holy, of Antioch

"... And Saint Attila raised the hand grenade up on high, saying 'O Lord, bless this thy hand grenade, that with it thou mayst blow thine enemies to tiny bits, in thy mercy.'"

...

"And the Lord spake, saying, 'First, shalt thou take out the holy pin. Then shalt thou count to three; no more, no less. Three shalt be the number thou shalt count, and the number of the counting shall be three. Four shalt thou not count; neither count thou two, excepting that thou then proceed to three. Five is right out! Once the number three, being the third number be reached, then lobbest thou thy Holy Hand Grenade of Antioch towards thy foe, who, being naughty in my sight, shall snuff it.'"

See also: *Caerbannog*, *Rabbit of*; *Arthur, King, of Britons*; and *The Holy Grail*, *Search for*.

Particle Blast Cannon, Portable

The PBC is a weapon which was allegedly invented in 3 AF by Omnicor as a by-product of their research into energy sources. It may or may not be true; some records of the Fall indicate TITAN war machines using “Lightning Cannons” and “Guns that shoot explosions.” On the other hand, it is clearly understandable as a variant of existing particle beam bolter technology.

Either way, the Portable PBC is a new take on the weapon invented in 3 AF, a radically miniaturized version that is the size of a Medium Machine Gun, but much heavier. It suffers some other drawbacks - for instance, the discharge is insufficiently energetic to get the awesome “lightning cannon” effect that heavier versions evidence in atmosphere. Somewhat more relevant to the practical use of the weapon, the intense power requirements push modern supercapacitive batteries beyond their limits. Holding enough charge to discharge this weapon indefinitely very rapidly ruins supercapacitors of a size small enough to fit in this weapon. That is not to say that they *can't* hold that kind of charge, just not for *long*. In other words, it has a charge-up time. It also builds up a lot of heat that needs to cool-off. But it's a gun that *shoots explosions!*

The Portable PBC can only fire twice in a full combat turn, and requires one phase to charge up. A character with less than Speed 4 may initiate the charging on a phase in which they do act, and then hold their action to the next phase to fire. A charge may be held for up to one minute (20 turns) before the supercapacitor risks being ruined, so if you know a fight is coming, you can charge up in advance - but there's nothing at all subtle or stealthy about the glow of doom or the loud sound of a PPBC charged-up and ready to fire, making this a poor ambush weapon. Additionally, after firing several times, the weapon's heat sinks will be glowing, and it will need time to force-cool. In an atmosphere, this takes a Complex Action and one turn of forced induction over the heat sink, generating scalding-hot blasts of steam to the left and right of the weapon. In vacuum, this requires changing the heat sink, which requires a one-turn Hardware: Armorer test.

PPBCs lack the firepower their larger brethren need to be considered Penetrating Explosive Weapons, but that's okay, since they go off with a level of firepower between a HEAP Minimisile and a HEAP Standard Seeker. Against the struck target, they gain the benefit of -8 AP, but not against other targets, and the damage falls off rapidly from the epicenter of the blast, at -4/m. The struck target must also make a SOM × 2 test, or be knocked down. Even if they succeed, they will be staggered, arresting any further movement they were making and imposing a -10 penalty to any actions for the rest of the turn. If the damage from the blast was sufficient to take the target into their incapacitated health levels, this weapon tends to *dismember* them instead of just knocking down. **[Expensive]**

Shotguns

Shotguns are a very niche weapon with a long history, and require an absolute metric fuck-ton of rules for them alone. Please consult [their individual document](#) for my Shotgun rules. Most shotguns are not Heavy weapons.

Seeker Launcher

Sometimes, firing just one shoulder-fired full-sized Seeker is not enough. This is where the Seeker Launcher comes into play. This is a full-sized shoulder-mounted Seeker Launcher, like the PIATs and bazookas of the early 20th century, or the RPG-#s and MANPADs of the early 21st. They function rather more like the PIATs, however; as with all Seekers, magnetic acceleration is used to eject the Seeker from the barrel at incredibly high velocity. Depending on your needs, your Seekers may be using this acceleration to kickstart their SCRAMjets, or as a way to get the projectile some distance from the launcher before the rocket motor ignites; this second choice, though less popular with logistics personnel, is much more popular among grunts, even those operating in atmosphere, as it gets the rocket trail away from them and makes the enemy's job of returning fire much harder.

Seeker Launchers are not intended to be disposable one-shots. They feature an integral smartlink system, laser designator, and imaging scope equivalent to Viewers. They need to be reloaded after each shot, which per usual takes a physical complex action. This can be performed by the operator, or it can be performed by another party, such as another grunt or a Battle Buddy, who reloads the weapon after the operator fired their first shot. The battery for the magnetic launch system has to be replaced after five shots.

The launcher has a cost of **[Moderate]** all on its own, while the individual Seekers have a cost of **[Low (450)]**. These Seekers come with one smart ammo option that is not Biter or Flayer, as per usual.

Rocket Launcher

Traditional rocket-propelled grenades are *still* available! They fire using the Seekers skill, and act just like a full-sized Seeker Launcher, except that they create a hugely dangerous back-blast in the vicinity behind the launcher. This is of no consequence if there's nothing at all (that the user cares about) behind them, but greatly imperils any friendlies that may be in the area. If used in an enclosed space, the backblast will flare around the user and scorch them, too.

Rocket backblast deals 3d10 AP-4 Energy (fire) damage to everyone and everything caught in it. If the backblast is in an enclosed space, this increases to 5d10, and affects everyone in the enclosed space, including the operator.

You can also fall back on the ancient PIAT system of using a massive spring - or a crossbow-like launcher - to eject the rocket with significant force from the launcher, following which it ignites its motor once it has reached a safe distance from the user. An automatic recocker retracts the spring, eliminating the need for the user to do it manually, but this still slows down the reloading immensely, meaning that the weapon cannot be reloaded until the next combat turn (although someone other than the operator is still able to do the reload, allowing the operator to fire again.)

Rockets fired in these manners have a shorter range than traditional seekers. Shoulder-fired rockets have a range 25% shorter, and mechanically-projected rockets that then fire up their motors have a range 15% less. The launcher may be acquired at a cost of **[Moderate]**, and the rockets at a cost of **[Low (450)]**, and are otherwise the same as the Seeker Launcher, above.

One particular advantage that traditional rocket launchers have is that they are dirt-simple to manufacture, and can be made out of damn-near anything. If you omit the viewing scope and smartgun system, the launcher can be made for a **[Low]** investment of resources in a nanofabricator, without the need for supercapacitors and superconductors that a Seeker needs to fire.

Ultra-Light Rotary Cannon

An Ultralight Rotary Cannon is a two-handed heavy weapon, a snub-nosed Gatling weapon firing heavy pistol rounds. These beasts push the envelope of what is usable by a non-Stable morph, and require a gyromount to be used if the user is not Stable or Large.

The ULRC *can* be made in a railgun version, but the railgun version can only be mounted on or used by Large Synthmorphs or larger. **[Expensive (10,000)]**

Ultra-Light Rotary Cannons may be configured as Anti-Missile Systems for an additional 5,000 credits.

Beam Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Electrical Discharge Rifle	0	4d10	22	SS	10
Heavy Laser Rifle	-4	3d10	16	SA	32
Particle Blast Cannon, Portable	-8 ↗	4d10+18	40	SS	4

↗ Only against directly struck targets.

Beam Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
Electrical Discharge Rifle	0-20	21-50	51-100	101-200
Heavy Laser Rifle	0-60	61-200	201-300	301-500
Particle Blast Cannon, Portable	0-100	101-250	251-750	751-1,000

Kinetic Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Battle Rifle	-7	2d10+7	20	SA, BF, FA	30
Battle Railrifle	-10	2d10+9	23	SA, BF, FA	30
Marksman Rifle	-7	2d10+7	20	SA, BF, FA	10
Marksman Railrifle	-10	2d10+9	23	SA, BF, FA	10
Medium Machine Gun	-7	2d10+7	20	BF, FA	50 Belt
Medium Machine Railgun	-10	2d10+9	23	BF, FA	50 Belt
Ultra-Light Rotary Cannon	-4	2d10+4	15	FA	200 Belt
Ultra-Light Rotary Railcannon	-7	2d10+6	17	FA	200 Belt

Kinetic Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
Battle Rifle	0-150	151-250	251-500	501-900
Battle Railrifle	0-225	226-375	376-750	751-1,350
Marksman Rifle	0-180	181-400	401-1,100	1,100-2,300
Marksman Railrifle	0-270	271-600	601-1,650	1,651-3,450
Medium Machine Gun	0-100	101-400	401-1,000	1,001-2,000
Medium Machine Railgun	0-150	151-600	601-1,500	1,501-3,000
Ultra-Light Rotary Cannon	0-10	11-35	36-60	61-80
Ultra-Light Rotary Railcannon	0-15	16-52	53-90	91-120

Launchers table

Weapon	Firing Modes	Ammo	Short	Medium	Long	Extreme
Minigrenade Pistol	SA, BF, FA	8	5-20	21-50	51-100	101-300
Grenade Pistol	SS	1	5-50	51-150	151-350	351-400
Grenade Rifle	SA, BF, FA	10 Box	5-50	51-150	151-350	351-400

Minigrenade Rifle	SA, BF, FA	20 Belt	5-20	21-50	51-100	101-300
Seeker Launcher	SS	1	5-300	301-1,000	1,001-3,000	3001-10,000
Rocket Launcher	SS	1	5-225	226-750	751-2,250	2,250-7,500
Rocket Projector	SS	1	5-255	256-850	851-2,550	2,551-8,500

Large Heavy Weapons

These are weapons which are classically mounted on vehicles, and for good reason; they tend to be very heavy, and have huge amounts of kick, or are just too bulky for a normal transhuman to wield. A normal-sized Stable morph may wield these, as may a Large morph. Some of these weapons may well have to be built into the chassis of a vehicle or Large synth to function, this will be noted; otherwise, they can be manufactured in handheld versions for Large hands. Heavy Machine Guns and Antimateriel rifles fall into this range.

Antimateriel Rifle

A very old concept that fell by the wayside except for niche applications centuries ago, an Antimateriel Rifle resembles nothing so much as an absolutely enormous sniper rifle. There is some ambiguity on exactly what constitutes an antimateriel rifle, as many people deploy full-sized sniper rifles out of the core rulebook in that role and to great effect. An Antimateriel Rifle does not necessarily throw a round which is all that much greater than a Sniper Rifle's in size; what it does is share ammunition in common with light autocannons, meaning that you can load up and fire light autocannon shells out of a rifle.

Antimateriel rifles remain niche weapons, given that they have somewhat less range than a proper sniper rifle and cannot be fired on the move. However, sometimes they are considered to be particularly worth it, especially an Antimateriel Railrifle firing APFSDS rounds - for when you absolutely, positively have to punch through *unreasonably* heavy armor. **[High (7,500)]**

Heavy Grenade Launcher

The crew-served weapon version of the Grenade Rifle, the Heavy Grenade Launcher launches projectiles with the same explosives as its smaller brethren, but using much more propellant and a longer barrel to achieve much greater range. They make excellent area-denial weapons. **[High]**

Heavy Machinegun

A machine gun firing a projectile shared in common with sniper rifles, for historical reasons a great many of these have dimensions of 12.7x99mm. These are much-beloved as either hand-wielded or integrated weapons by the users of Battlesuits, as mounted weapons for vehicles and stable Synths of all size, and as tripod-mounted crew-served weapons by infantry in all theaters. **[High (7,500)]**

Heavy Particle Beam

Known affectionately to users as the "Particle Hose," the Heavy Particle Beam is to the Particle Beam Bolter what the Heavy Laser Rifle is to the Laser Pulser. It's just too heavy and unwieldy for an infantryman to carry it and wield it by hand, sadly, but they do make quite economical mounted weapons, for the supply chain that wants to pay for a weapon once and then never bother spending money on it again. **[Expensive (10,000)]**

Standard Seeker Rifle

Exactly what it says on the tin, a Standard Seeker Rifle is a heavy weapon that magazine or belt-feeds Standard-sized seekers. Even for a Battlesuit, this is a bulky, heavy weapon system (though not unusable), but it can be reasonably emplaced stationarily, or mounted on larger vehicles. **[Expensive (15,000)]**

Light Laser Cannon

Lasers are a weapon which scaled down poorly, but scaled up well. Every mesh nerd gushing about how energy weapons were (barring the almighty plasma rifle,) clearly babby's first gun by comparison to a simple rifle has never seen a laser cannon in action;

The Light Laser Cannon is a Penetrating Explosive Weapon that delivers an enormous amount of energy directly to the target in one pulse. If the damage from the cannon is enough to penetrate a Large or larger target, that target takes double damage from the blast, and no armor is applicable against it. **[Expensive (12,500)]**

Light Rotary Cannon

The Rotary Cannon is the Gatling version of a Light Machine Gun. They make good weapons for militarized Daitya, door-guns for military transports, and all around general-purpose Gatling-speed machine gunnery. The railgun version *must* be mounted on a Very Large synthmorph or vehicle of similar scale. **[Expensive (15,000)]**

Light Rotary Cannons can be configured as Anti-Missile Systems for an additional 5,000 Credits.

Seeker Rack

Seeker Racks are large racks of Seeker launch tubes, allowing for excessive rates of fire. A Seeker Rack can have any number of tubes, but 2, 5, 6, 10, 12, and 20 are common. Seeker Racks can fire individual tubes, two-seeker Bursts, and five-seeker Long Bursts. A rack with enough tubes can function as a Gatling Explosive Weapon, firing 10 or 20 Seekers for Gatling Long Bursts.

Seeker Racks can be reloaded from internal magazines, but this process takes two full combat rounds, and cannot be initiated unless all tubes are empty; they can either be empty from being fired, or the operator can eject the leftover ordnance. Some racks may not be provided with additional internal ammunition storage, and will require external reloading, such as the racks on rear-line artillery units.

Seeker Racks cost **[Moderate per tube]** for Micro/Minimissiles, **[High (2,500) per tube]** for standard Seekers, **[High per tube]** for Light Artillery Seekers, and **[High (7,500) per tube]** for Heavy Artillery Seekers.

If more than one Seeker Rack is present on the same morph/vehicle and are armed with like Seekers, they may be treated as one rack for making attacks with them. (Two 5-tube racks may launch one ten-seeker Gatling Explosive Long Burst, for instance.) A reloading system and internal magazines have a cost of **[High (2,500) per tube]**.

Seeker Racks come in many, many sizes, but they *must* be mounted on synthmorphs or Battlesuits. A Small sized Synth/Battlesuit may mount a Micromissile Seeker Rack; a normal Synth/Battlesuit may mount a Minimissile Seeker Rack, a Large morph may mount a Standard Seeker Rack, a Very Large morph may mount any size of Seeker Rack. Any unit may mount an undersized Seeker Rack. Range and damage are determined by the seeker size and type.

Beam Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Heavy Particle Beam	-4	3d10+6	22	SA	24
Light Laser Cannon	-4 ✚	3d10+9	25	SS	6
Light Laser Cannon Blast *	-	3d10+10	26	-	-

* Anti-Vehicular Penetrating Explosive Weapon. Double damage against Large and larger targets *only if* the round explodes inside the target.

Beam Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
Heavy Particle Beam	0-50	51-150	151-250	250-500
Light Laser Cannon	0-200	201-500	501-1Km	1Km-3Km

Kinetic Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Antimateriel Rifle ♀	-12	2d10+16	27	SA	5
Antimaterial Rail Rifle ♀	-17	2d10+18	39	SA	5
Heavy Machine Gun	-12	2d10+10	21	BF, FA	50 Belt
Heavy Machine Railgun	-15	2d10+12	23	BF, FA	50 Belt
Light Rotary Cannon	-6	2d10+6	17	FA	500 belt
Light Rotary Railcannon	-9	2d10+8	19	FA	500 belt

♀ Listed values assume inert shells; consult Cannon Shells, below, for more information.

Kinetic Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
Antimateriel Rifle	0-250	251-1Km	1Km-3Km	3Km-6Km
Antimaterial Rail Rifle	0-375	376-1.5Km	1.5Km-4.5Km	4.5Km-9Km
Heavy Machine Gun	0-100	101-400	401-1,000	1,001-2,000
Heavy Machine Railgun	0-150	151-600	601-1,500	1,501-3,000
Light Rotary Cannon	0-100	101-400	401-1,000	1,001-2,000
Light Rotary Railcannon	0-150	151-600	601-1,500	1,501-3,000

Launchers table

Weapon	Firing Modes	Ammo	Short	Medium	Long	Extreme
Heavy Grenade launcher	SA, BF, FA	25 Belt	10-100	101-250	251-500	501-750
Standard Seeker Rifle	SA	6	5-300	301-1,000	1,001-3,000	3001-10,000

Very Large Heavy Weapons

These are weapons which are just too damn big for any morph of transhuman size to use. You either need to be Very Large, or Large and Stable, to use weapon systems of this size. Seeker Racks, Light Autocannons, and Laser Cannons fall into this range.

Laser Anti-Missile System (LAMS)

The Laser AMS is basically a Heavy Laser Rifle with sufficient cooling and generator/supercapacitor capacity to fire continuously. It is an Anti-Missile System, though it is effective, if not particularly economical, as an emplaced laser weapon for engaging light targets indefinitely.

The Laser AMS cannot be form-factored as a handheld weapon, it must be mounted to and draw from the power generation systems of the large synth or vehicle it is mounted on. The cost is assumed to include not only the weapon system, but the cooling and generator expansions required to operate it. **[Expensive]**

The LAMS may be constructed and deployed as a standalone unit. The cost remains the same.

Light Artillery Seeker

Light Artillery Seekers share much in common with the standard Seeker warheads featured in Eclipse Phase; they come in any version (except Concussion and Overload,) and quadruple the listed damage values. Quadruple the radius of any uniform blast or static blast. These weapons have notably long ranges; even on Earth, this would be a beyond visual range engagement weapon. On Mars, they can engage targets over 500 Km distant. A Light Artillery Seeker has a cost of **[Expensive]**. Comparatively, the launcher is rather simple and inexpensive, and the cost is usually subsumed in the cost of the vehicle or synth on which it is mounted. See Seeker Racks, above. A standalone Light Artillery Seeker's stats are available below.

Light Artillery Seeker Launcher, Standalone

This relatively simple weapon consists of a free-rotating, elevation-adjusting rack with two Light Artillery Seeker launchers on the sides. It may be quite easily erected on a short pillar and operated from any conceivable distance away, by remote control or hardline connection, concealed under a hatch on the surface of a planetary body, affixed to the underside of an aircraft's wings, or built onto the back of a heavy vehicle. It is capable of firing its seekers semi-automatically, or as an explosive burst, and may engage targets in direct line of sight or may fire at targets far, far beyond visual range. **[Expensive (10,000)]**.

Light Autocannon

The Light Autocannon is exactly what it says on the tin - an automatic cannon firing cannon shells at fully automatic rates of fire. Basically the same weapon as an Antimateriel Rifle, except capable of fully automatic rates of fire. Sentinels who have acquired too many (or as they would say, "adequate") resources love to mount these on Daityas and go for a little ride. Light Autocannons are typically mounted to Large or Very Large morphs, but can be made as handheld versions for Very Large synths (such as Wreckers,) or built as standalone weapon systems for semi-permanent emplacement. **[Expensive (30,000)]**

Light Particle Blast Cannon

Omnitor's original PBC was powerful, but very large and bulky, and did not scale down well, until a breakthrough was made in 6 AF, allowing the LPBC to be made. These weapons are similar to the Particle Beam Bolter in that they discharge a bolt of accelerated particles at near to light speed. The LPBC, however, discharges orders of magnitude more than even the PPBC, boring into the target with incredible power. The weapon's discharge seems to create a bolt of lightning-like energy connecting the cannon and the target, but this is not an electricity-based weapon. The visual effect in atmosphere is mostly harmless, especially compared to the actual impact of the weapon.

Unlike the Portable PBC, or the Particle Beam Bolter the LPBC and its larger brother do not deliver all of their energy immediately, but over a very short duration; and many of the particles involved are energetic enough to skip a few centimeters before interacting with the target matter. As a result, this weapon does not have the all-at-once Boom explosion of the PPBC, but rather *bores* into the target, making it a very potent direct-fire antivehicular weapon. However, this *does* require that it be mounted on a vehicle or a heavy synth, as the energy requirements are just too great to be form-factored as a rifle. **[Expensive (60,000)]**

Beam Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Laser Anti-Missile System	-4	3d10	16	SA	- *
Light Particle Beam Cannon *	-12	6d10+10	43	SS	-

- * Anti-Vehicular Weapon: Doubles damage vs. Large and larger targets.
- ✚ Only against directly struck targets.
- * The LAMS can fire continuously.

Beam Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
Laser Anti-Missile System	0-60	61-200	201-300	301-500
Light Particle Beam Cannon	0-500	500-2Km	2Km-5Km	3Km-10Km

Kinetic Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Light Autocannon **	-12	2d10+16	27	SA, BF, FA	50 belt
Light Rail Autocannon **	-17	2d10+18	29	SA, BF, FA	50 belt

- ** Listed values assume inert shells; consult Cannon Shells, below, for more information.

Kinetic Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
Light Autocannon	0-250	251-1Km	1Km-3Km	3Km-6Km
Light Rail Autocannon	0-375	376-1.5Km	1.5Km-4.5Km	4.5Km-9Km

Launchers table

Weapon	Short	Medium	Long	Extreme
Light Artillery Seeker ✱	20 m - 1 Km	1 Km - 3 Km	3 Km - 10 Km	10 Km - 200 Km

✱ Exact firing modes and ammunition count depends on the mounting. See the description of the vehicle/heavy synth mounting them.

Superheavy Weapons

This is where the rubber hits the road; where the *real* military toys come in. Firewall Erasure Squads dread an encounter with weapons of this size, because they may well lose. Large Stable morphs may use these weapons *if they are built-in* to the morph. Otherwise, only Very Large morphs, or vehicles, may field these weapons. The GM must make some judgement calls here - a Synthtaur is not going to be able to mount and fire an artillery cannon. A Fenrir is.

Heavy Autocannon

The Heavy Autocannon is exactly what it says on the tin - an automatic cannon, heavier than the light version. Use more gun, indeed. **[Expensive (60,000)]**

Heavy Artillery Cannon

Guns for main battle tanks and artillery units alike, the Heavy Artillery Cannon is the final word in launching a gigantic can of boom. They can fire at quite incredible ranges, and the destruction these weapons can wreak is incredible. **[Expensive (120,000)]**

Heavy Artillery Seeker

Heavy Artillery Seekers are, quite frankly, cruise missiles, with a range more than ten times greater than that of their smaller brethren. On Mars, they become small intercontinental missiles; their range is effectively limitless, as they have sufficient fuel to enter orbit and deorbit onto any target they choose, and to engage targets in low and intermediate Martian orbits. They are capable of hitting any target on Mars from a surface launch with a powered in-atmospheric flight.

Heavy Artillery Seekers with conventional warheads deal eight times the listed damage on the Seeker table of Eclipse Phase, and this is cumulative with the damage increase against Large and Very Large targets with an appropriate warhead. For example, a Heavy Artillery Seeker with a conventional (although "conventional" in this case most likely means metallic hydrogen) HEAT warhead deals 228 damage against normal or smaller targets, and 456 against a Large or larger target.

These are not weapons to be deployed lightly. You don't target a Heavy Artillery Seeker at one unit (unless the shit is really hitting the exhaust stream, and you need to take out a superheavy TITAN warbot or superheavy conventional tank,) you target them at enemy formations, and vital infrastructure. One of these warheads could devastate a city block.

But that's only half the battle. Heavy Artillery Seekers are big enough, with enough warhead throw weight, to launch a thermonuclear warhead, the heaviest of which have variable yields from 0.2 to 150 kilotons, for which I recommend consulting [NUKEMAP](#) and plugging in your numbers. Bear in mind that shockwaves will go farther on bodies with thicker atmosphere than Earth (ex. Venus, Titan,) but ionizing and thermal radiation will be decreased by that same thicker atmosphere. These effects are reversed if the atmosphere is thinner (like Mars's,) and of course, radioactive fallout, assuming the fireball touches ground, will go much, much farther in lower gravity.

Or you could throw an antimatter warhead instead. In this case, the limiting factors are almost certainly going to be "how much antimatter do I want to throw today" and "how much antimatter do I actually have." To calculate how much of the Martian geography is permanently altered by throwing around antimatter, for example, use [Edward Muller's calculator](#) and (optionally) [Google](#) to calculate the yield of the quantity of antimatter you have. Then reduce

that yield to 70% (~30% of the energy released by antimatter is released as basically-harmless neutrinos, which do not significantly interact with anything,) and plug those numbers into [NUKEMAP](#). These numbers are going to be highly speculative, but even highly speculative numbers will help you to quickly grasp just how destructive antimatter can be. For example, a mere 33 Kg of antimatter has a working yield of roughly 100 Mt of TNT. This is a good approximation of the bomb dropped on [Chicago](#) during the fall. That's fairly excessive, admittedly, especially for an artillery seeker. But 1Kg wouldn't be.

To put that in perspective, [1 kg of antimatter, detonated at a height of 2Km](#) over Central Park, would wipe out anything except hardened military bunkers from Washington Heights to the East Village, and do the same to light-duty buildings from Yonkers to the middle of Brooklyn, and everybody from Chappaqua, NY, to Middletown, NJ, is getting third-degree burns over any exposed skin with line-of-sight to the blast.

In other words, this is not a weapon you survive designating the target for, unless you're designating it from orbit. On the other hand, you don't really need a precise detonation; even with a worst-case scenario of an MoF on your Seekers skill of 100, with a 10 on your scatter distance die, moving the epicenter of this blast by 30m is not going to have a significant effect on the destruction wrought. Ironically, this means even an untrained newb with maximum penalties can easily annihilate the target of their choice with this weapon system. So keep it locked up tight!

Heavy Artillery Seekers have a cost of **[Expensive (50,000)]**. Comparatively, the launcher is dirt-cheap, and the cost is usually subsumed in the cost of the vehicle on which it is mounted. See Seeker Racks, above.

Heavy Laser Cannon

When you need an economical way to blow the scrap of out your enemies, for certain values of the word "economical," you need look no further than the Heavy Laser Cannon. It may lack somewhat in luster compared to a PBC, but for what a PBC costs, you can bring six! **[Expensive (40,000)]**

Light Artillery Cannon

Light Artillery Cannons occupy a niche between Light Autocannons and Heavy Artillery Cannons. They have a higher rate of fire than the latter, and greater firepower than the former, but reach neither extreme. **[Expensive (80,000)]**

Particle Beam Cannon

The Particle Beam Cannon is quite possibly the most devastating yet economical weapon that can be mounted on anything smaller than a naval warship, capable of laying waste to lighter armored vehicles in one shot. It's generally considered gross overkill to have more than one of these in an entire division of armor. Needless to say, every vehicle jock wants at least one on every vehicle. **[Expensive (240,000)]**

Rotary Autocannon, Light

The light rotary autocannon is nothing less than a Gatling version of a standard autocannon. **[Expensive (80,000)]**
The Light Rotary Autocannon can be configured as a CIWS AMS for an additional **[Expensive (40,000)]**.

Rotary Autocannon, Heavy

A heavy autocannon in a Gatling configuration, this is the standard weapon for naval warship point defenses. **[Expensive (120,000)]**
The Heavy Rotary Autocannon can be configured as a CIWS AMS for an additional **[Expensive (60,000)]**.

Beam Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Heavy Laser Cannon	-10 ⇄	3d10+20	36	SS	10

Heavy Laser Cannon Blast *	-	4d10+30			
Particle Beam Cannon *	-24	[6d10+10] × 4	172	SS	-

- * Anti-Vehicular Weapon: Doubles damage vs. Large and larger targets.
- * Anti-Vehicular Penetrating Explosive Weapon. Double damage against Large and larger targets *only if* the round explodes inside the target.
- ✚ Only against directly struck targets.

Beam Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
Heavy Laser Cannon	0-400	401-1Km	1Km-2Km	2Km-6Km
Particle Beam Cannon	0-500	500-2Km	2Km-5Km	3Km-10Km

Kinetic Weapons Table

Weapon	AP	DV	Average DV	Firing Modes	Ammo
Heavy Autocannon **	-12	[2d10+16] × 2	54	SA, BF, FA	50 belt
Heavy Rail Autocannon *	-17	[2d10+18] × 2	58	SA, BF, FA	50 belt
Heavy Artillery Cannon **	-12	[2d10+16] × 4	108	SA	10
Heavy Artillery Railcannon *	-17	[2d10+18] × 4	116	SA	10
Light Artillery Cannon **	-12	[2d10+16] × 3	81	SA, BF	20
Light Artillery Railcannon *	-17	[2d10+18] × 3	87	SA, BF	20
Rotary Heavy Autocannon **	-12	[2d10+16] × 2	54	FA	500 Belt
Rotary Heavy Rail Autocannon *	-17	[2d10+18] × 2	58	FA	500 Belt
Rotary Light Autocannon *	-12	2d10+16	27	FA	500 belt
Rotary Heavy Rail Autocannon *	-17	2d10+18	29	FA	500 belt

** Listed values assume inert shells; consult Cannon Shells, below, for more information.

Kinetic Weapons Range Table

Weapon	Short	Medium (-10)	Long (-20)	Extreme (-30)
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Heavy Autocannon	0 - 350 m	351 m - 1.5 Km	1.5 Km - 4 Km	4 Km - 8 Km
Heavy Rail Autocannon	0 - 525 m	526 m - 2.25 Km	2.25 Km - 6 Km	6 Km - 12 Km
Heavy Artillery Cannon	0 - 1 Km	1 Km - 10 Km	10 Km - 25 Km	25 Km - 70 Km
Heavy Artillery Railcannon	0 - 1.5 Km	1.5 Km - 15 Km	15 Km - 37.5 Km	37.5 Km - 105 Km
Light Artillery Cannon	0 - 1 Km	1 Km - 5 Km	5 Km - 15 Km	15 Km - 35 Km
Light Artillery Railcannon	0 - 1.5 Km	1.5 Km - 7.5 Km	7.5 Km - 22.5 Km	22.5 Km - 52.5 Km
Rotary Heavy Autocannon	0 - 350 m	351 m - 1.5 Km	1.5 Km - 4 Km	4 Km - 8 Km
Rotary Heavy Rail Autocannon	0 - 525 m	526 m - 2.25 Km	2.25 Km - 6 Km	6 Km - 12 Km
Rotary Light Autocannon	0 - 250	251 - 1 Km	1 Km - 3 Km	3 Km - 6 Km
Rotary Heavy Rail Autocannon	0 - 375	376 - 1.5Km	1. 5 Km - 4.5 Km	4.5 Km - 9 Km

Launchers table

Weapon	Short	Medium	Long	Extreme
Heavy Artillery Seeker ✱	20 m - 1 Km	1 Km - 10 Km	10 Km - 500 Km	500 Km - 5,000 Km

✱Exact firing modes and ammunition count depends on the mounting. See the description of the vehicle/heavy synth mounting them.

New Weapon-Related Equipment and Weapon Mods

There’s more to being an effective combatant than laying your hands on the biggest gun you can find and going to town. You’re going to want some of this gear if you’re planning anything more involved than a smash and grab shootout.

Ammunition Fabbers

If you’re using your Desktop CM to make ammo, you’d better be making a *hell* of a lot of ammo at once, or you’re wasting precious CM cycles that could be better spent doing something else.

Pocket Ammofabber

The “pocket” referred to by this device is meant to be a cargo pocket, not your hip pocket, but it delivers on that promise. This flat device is specifically designed to manufacture whole box magazines and the ammo to fill them. It works like any fabber - scoop your material into the top, let it run, and bing bang presto, you’re done.

It does have limitations, however; especially if you buy it from someone who believes in DRM. Assuming you've got an unlocked one (or cracked a locked one,) you can have it fab up flat box magazines for all small arms, containing 30 or fewer rounds. The rounds may be whatever type you wish (and have the materials for,) but more complex ammo will take longer, naturally. If you have the misfortune to have bought a locked one, you will likely be limited in the size of magazine you can make (If the Junta embraced nanotech at all, they would probably institute a law saying that civilians may not fab up ammo mags larger than ten rounds), the type of weapon you may make it for (for example, some sold by Direct Action are locked by weapon type - IE, a Pocket Nanofabber for Assault Rifles, while versions sold by Fa Jing only print magazines that fit Fa Jing's proprietary weapon ammunition feeds,) or by the type of ammunition you may print (The LLA is just fine with Joe Everyclanker fabbing up plastic rounds; Reactive Armor-Piercing, not so much.)

[Moderate]

Portable Ammolathe

The "Portable" in this case means "Backpack sized." It's a heavy load to hump around in the outback, but when you need to supply your team with ammunition in great quantities, this is the device for you. Not only does it manufacture ammunition (seldom subjected to restrictions except intellectual-property based ones,) loose or in whole magazines, it also functions as a handy storage hopper for great quantities of loose ammo (It can hold up to 300 rounds in its internal storage,) it also functions as an automatic reloader. Just attach the magazine or belt you want to reload, and one combat round later, you have a fully-loaded magazine ready to go. These are often built into vehicles, especially those with mounted small arms, in which case they tend to have much larger ammo hoppers and can feed directly into the mounted weapons' hoppers.

Some models can manufacture and refill explosive weapon magazines, whilst others are strictly small-arms only. While the price is the same, you will have to decide for yourself whether or not you want to lug a backpack full of boom under construction into danger zones. **[High]**

Robots

Battle Buddy

Looking like a squat, truncated cube on treads, with sensors and manipulator arms, the Battle Buddy is basically a beefed-up, heavily-modified Automech, and has been likened to an exceptionally militant R2-D2 (the holoprojector didn't help this simile).

It is basically a Small robot wrapped around a portable ammolathe, which gathers its own feedstock, scavenges ammo from fallen combatants (if it's permitted to do so,) keeps tabs on the ammunition levels of its allies and fabricates in anticipation of their needs, retrieves tossed magazines to refill them and store them until they're needed again, passes mags to allies in danger of running out, and helps to serve a crew-served weapon by attaching and feeding ammo belts.

A lot of people who have one also like to just go ahead and give it a weapon mount, so it can provide an additional gun in a fight, too. Personality and cosmetic mods are quite common, and some people actually fork or put their muses into these, just like some do with Automechs. **[Expensive (15,000)]**

Battle Buddies are Stable, but they are Small. They cannot mount any weapon that would require a normal Stable morph. However, you can mount weapons up to a medium machine gun on one. Models which are sold in IP-respecting space typically come loaded with the bare minimum of software required to fulfil its intended function, whilst those sold or manufactured in non-IP respecting space tend to come crammed to the gills with complementary knowledge skills. The short of it is that if called upon to make any rolls, the Battle Buddy will roll vs. 40 if it doesn't have complimentary skillsofts, and s. 70 if it does. The exception to this are weapon rolls; it will fire vs. 50, counting the smartgun bonus.

Mobility System: Tracked 4/12, Vector Thrust 8/20

Armor: 20/20 (with Heavy Synth Combat Armor)

Durability: 40 (WT 8)

Stock Automech Enhancements: Access Jacks, Electrical Sense, Extra Limbs (4), Headlights, Magnetic System, Radiation Sense, Utilitool, Misc. Tools

Battle Buddy Enhancements: 360° Vision, Chemical Sniffer, Direction Sense, Enhanced Vision, Grip Pads, Heavy Combat Armor, Holographic Projector, Lidar, Portable Ammolathe, Radar, Radar Absorbent, Retracting/Telescoping Limbs, Structural Enhancement.

New Weapon Mods

Bipod/Tripod

A centuries-old classic, the bipod is a (usually) underbarrel weapon attachment that serves the simple purpose of supporting them weapon to increase

accuracy and stability when it is braced on something, most expediently, the ground, but also crates, window frames, low walls, crenelations, and the like.

A bipod grants a +5 accuracy bonus when in use; this *is* cumulative with the bonus from using a smartgun or a laser sight. Bipods also provide Stability for heavier weapons, such as heavy machine guns, if the shooter drops prone to fire or otherwise secures *themselves and the weapon* firmly. Simply resting the bipod on a wall and standing behind it is *not* enough to make an HMG or an antimateriel rifle Stable. Engaging a bipod is a Quick action if you're in circumstances that allow it to be used, such as bracing it on a wall or crate, or free if you have dropped prone.

Tripods serve the same function as a bipod, but in less temporary firing positions; a tripod is usually set up behind some kind of cover, for a gunner to sit behind and fire from their improvised (or not-so-improvised) fighting position. They are usually quite large and heavy, and as a result provide Stability even for heavier weapons, even if the operator is not particularly secured themselves. **[Trivial]**

Smart Pod

The high-tech version of the old classic, a Smart Monopod/Bipod/Tripod uses smart materials and gecko pads to secure your weapon. When you deploy it, the smart-material legs extend to the nearest chunk of anything heavy and immobile that the system thinks will work to secure the weapon, and attaches via grip pad. The weapon is now very securely attached, and may be fired. Disengaging the Smart Pod is mental quick action, or physical quick action if for some reason you prefer to use the button.

Smart Pods can also be used to arrest unwanted momentum with relation to a microgravity habitat. They provide automatic Stability, even with a heavy machine gun or an antimateriel rifle, and otherwise provide the same benefits as a bipod - +5 bonus to aim, cumulative with the smartgun bonus. **[Low]**

New Ammunition

Seeker Warheads

~~High-Explosive Armor Piercing~~

Struck from the register of Seeker shells. HEAP rounds function by using a heavy kinetic penetrator to smash through armor, carrying an explosive *inside* the target. This is not possible with a Seeker round. The Seekers that used to be called HEAP, however, did not actually *function* like HEAP warheads, they were HEAT warheads, featured below. What used to be HEAP is now called HEAT, and HEAP is now reserved exclusively for cannon projectiles (see below). **[Not Available as a Seeker Warhead]**

High-Explosive Anti-Tank

HEAT Seekers are what most people call HEAP seekers - they generate a fantastically powerful jet of molten metal that slices into armor. Calling them HEAP is a misnomer, as HEAP is specific type of shell that does not work as a Seeker warhead. So what you used to call HEAP rounds, please call them HEAT now. **[Moderate]**

Plasma-Lance Anti-Tank

PLAT Seekers are the plasma equivalent of a HEAT Seeker; the round detonates seconds before impact, generating a Hellball's worth of plasma, which is directed only in a finger towards the target. The result is a finger of fusing plasma that slices through armor and delivers a whole metric truck-fun of energy directly to the target, rather like a plasma rifle fired at point-blank range. **[High]**

Cannon Shells

Shells are a concept so old that they date back to the days of wooden ships and iron men: take the thing you're shooting out of your giant boom-cannon, fill it with more boom, and when it hits the target, it goes smash and then boom, rather than just smash.

The technology available has come a long, long way since those days. Prices given are per 10, for Light Autocannons. Each size higher than that (Heavy Autocannon, Light Artillery Cannon, Heavy Artillery Cannon), increases the price by +25%. Adjust cost category up as appropriate. The first step (from Light Autocannon to Heavy Autocannon) doubles the damage, and each step after that increments the multiplier by 1, and doubles the range of any uniform blast or static area effects.

Cannon shells may be made with Smart Ammo options. Thanks to their increased size, they may be manufactured with a number of smart ammo options equal to their size category - IE, a Light Autocannon Shell can only take one Smart Ammo option, while Heavy Artillery Shells can take 4. The costs are cumulative. Explosive shells may not take the Biter or Flayer options, not even if they're penetrating explosive weapons. Proximity shells with explosive payloads explode within 1d10 meters of the target per measure of failure. (Roll Scatter to determine in which direction the proximity shell fails to hit, rerolling a result of directly ahead or behind.)

Rail-Cannons do exist, and possess the expected benefits of increasing AP by -3, the damage roll by +2, and the maximum range category by 1.5. Rail-cannons can only fire Inert, AP, and APFSDS ammunition, however, which when compared to the cornucopia of explosive shells and the already-high armor penetration values of most shells, may not be the obvious no-brainer choice that it is for firearms.

Armor-Piercing

Take an inert round, and make it out of tungsten-carbide and make it pointy. Basically the same as standard armor-piercing rounds, just scaled up. **[Low]**

Armor-Piercing Fin-Stabilized Discarding Sabot (APFSDS)

Most people just ignore the "Fin-Stabilized" part of this ammunition, because "APDS" is a much handier and catchy acronym. This mainstay of cannon combat has been around for well over a century. The idea is that you make a big cannon fire a very small projectile which is sheathed in something big (which occupies the full diameter of the muzzle and thus lets all of the propellant act upon it, rather than allowing gas to seep out around it,) which splits off as soon as the projectile leaves the barrel. The result is something akin to a super-hardened, needle-nosed dart streaking towards the target at several times the speed of sound. Armor might as well not exist when shot with an APDS round, though you do lose quite a bit of gross damage potential.

APFSDS is ideal for making called shots, even against targets against which, or for purposes which the GM would otherwise not allow a called shot.

The reason, in case you're wondering, that APDS isn't available for your rifle is this: It is available, some anarchists engineered small-arms sized APDS a long time ago. It just doesn't *work* worth a damn: the principle only scales down so well, and at small arms sizes, you're basically just firing single Shredder shards at a time, to very little effect. **[Low]**

Frag

Exactly the same as high-explosive rounds, only the casing has been scored to make it more shrapnel friendly. These are most frequently useful to shoot through windows (and light structural elements) of vehicles and buildings in order to frag the squishy infantry behind, but on occasion you run into that lightly-armored, massive-and-dangerous target which could really use a dose of shrapnel on the inside. Frag shells which are set for penetration use the same direct-fire stats as an inert shell. **[Moderate]**

Gas/Smoke

The use of artillery shells to dispense gas dates back more than two centuries, to the war which raged across Europe in the second decade of the 1900s. These are basically exactly the same as Gas/Smoke Seeker warheads/grenades, found on page 340 of *Eclipse Phase*, only larger in most cases. They fill an area of roughly 30m when detonated, and can be used just to fill the area with billowing smoke of any color, they can also carry a load of any chemical agent which may be dispersed as an aerosol effectively; such as Frog Bite. Each size step up requires double the doses to get the full effect.

Ex: A Heavy Artillery shell loaded with BTX² would require eight doses of BTX2 (eight High purchases, or 40,000 credits worth, if you're actually paying for it,) and would fill 240 cubic meters with deadly neurotoxin. **[Low + Payload Cost]**

In a pinch, a Gas/Smoke grenade can be direct-fired at someone or something, and it deals damage as an inert shell if it does.

High Explosive (HE)

High explosive compound inside a metal shell, this type of ordnance dates back centuries, and is great when you just want to blow some shit up. As with frag rounds, they can be fused to explode on impact, or directly after armor penetration. In the event of a successful post-penetration explosion, only the target (and anyone or anything within the target) takes damage, but the damage is doubled.) **[Moderate]**

High Explosive Anti-Tank (HEAT)

Specialized tank-killing shells, HEAT rounds (which are thank to the ignorance of the average mesh chatter, frequently and mistakenly referred to as HEAP,) flagrantly abuse the Munroe effect to penetrate armor with a stream of high-velocity, molten metal in a state of superplasticity. Technically this is still a kinetic weapon, though only technically, and anyone whose stack was pulled out of an armored vehicle's smoking wreck which was destroyed by one of these weapons could be forgiven for thinking she was killed with plasma. The downside is that there's little or no burst to these weapons, as centuries of optimization has resulted in HEAT rounds which deliver upwards of 99% of their explosive potential exactly where it's supposed to go: into the target. Damage falls off at -6/m, and only direct hits on the main target result in any armor penetration at all. **[Moderate]**

High Explosive Armor Piercing (HEAP)

The *other* main school of thought on "how do I get through this thing's armor and hurt it once I'm through," HEAP is the standard alternative to APFSDS in tank-on-tank warfare. It couldn't be simpler: combining a big fuck-off AP shell with HE that detonates hopefully inside the target. HEAP may also be used as regular HE and fused to explode on impact, if you wish. **[Moderate (1,250)]**

Hollow Point

There is *almost* no point to the existence of hollow-point cannon shells. It used to be there was *absolutely* no point to their existence, but then someone realized the TITANs sometimes made things which were very big and beefy (to varying degrees of literality on the word "beef"; the things their nanoswarms did at the great cattle farms of the American midwest are best left unmentioned,) but not very well armored. Since hollow-point ammunition is literally as easy to manufacture as inert rounds, the nanofabrication blueprints propagated. **[Low]**

Inert

Take a chunk of high-density metal. Wrap it in something that will hold together in the barrel better than that high-density metal. Put a laughably high amount of propellant behind it and fire it out a cannon. Inert ammo is to autocannons what regular ammo is to an assault rifle. It is cheap, though, which makes it good for training purposes, and equipping troops you don't expect to do more than delay the enemy. **[Low]**

Plasma Lance Anti-Tank (PLAT)

PLAT shells are the plasma equivalent of a HEAT round; the round detonates seconds before impact, generating a Hellball's worth of plasma, which is directed only in a finger towards the target. The result is a finger of fusing plasma that slices through armor and delivers a whole metric truck-fun of energy directly to the target, rather like a plasma rifle fired at point-blank range. **[High]**

Plasmaburst Armor-Piercing (PBAP)

Essentially the same shell as HEAP, but with a Hellball instead of a conventional explosive. **[High (5,250)]**.

Plasmaburst

A Hellball on an impact fuse, this shell isn't robust enough to try penetrating. If you attempt to fire it without it detonating on impact, it just breaks. **[High]**

Reactive

Exactly like the Reactive ammo you chamber into a handgun, only bigger, this is an inert shell with a coating which releases a large amount of energy on impact. **[Low (400)]**

Reactive Armor-Piercing

In the case of weapons, "fun-sized" means bigger, not smaller. That explained, RAP shells are the "fun-sized" version of standard RAP rounds you fire out of your rifle; an armor-penetrating tungsten-carbide shell coated with a reactive casing. **[Moderate]**

Splash

Splash rounds are most often used for live training purposes with paint rounds, though some devious armorer is certain to find an alternative use for them. These are *not* non-lethal rounds; if they impact anything with less than 20 Kinetic armor and less than 80 DUR, they act just like an inert shell, which typically means somebody's innards wound up splattered, rather than the contents of the splash round. A Splash grenade coats a 10-meter radius

when it goes off. **[Low + Payload Cost]**

Cannon Shells Table

Shell Type	AP	Light AC DV	Heavy AC DV	Light Artillery DV	Heavy Artillery DV	Strikes Armor
Armor-Piercing	-17	2d10+14	[2d10+14] × 2	[2d10+14] × 3	[2d10+14] × 4	K
APFSDS	-35	2d10+10	[2d10+10] × 2	[2d10+10] × 3	[2d10+10] × 4	K
Frag	-10	2d10+6	[2d10+6] × 2	[2d10+6] × 3	[2d10+6] × 4	K
Frag Blast	-4	3d10+6	[3d10+6] × 2	[3d10+6] × 3	[3d10+6] × 4	K
Gas/Smoke		-	-	-	-	-
High Explosive	-10	2d10+5	[2d10+5] × 2	[2d10+5] × 3	[2d10+5] × 4	K
HE Blast *	-	3d10+10	[3d10+10] × 2	[3d10+10] × 3	[3d10+10] × 4	E
HEAT *	-8	3d10+12	[3d10+12] × 2	[3d10+12] × 3	[3d10+12] × 4	K
HEAP	-17	2d10+6	[2d10+6] × 2	[2d10+6] × 3	[2d10+6] × 4	K
HEAP Blast *	-	3d10+10	[3d10+10] × 2	[3d10+10] × 3	[3d10+10] × 4	E
Hollow Point	-	3d10+16	[3d10+16] × 2	[3d10+16] × 3	[3d10+16] × 4	K
Inert	-12	2d10+16	[2d10+16] × 2	[2d10+16] × 3	[2d10+16] × 4	K
PLAT *	-8	3d10+20	[3d10+20] × 2	[3d10+20] × 3	[3d10+20] × 4	E
PBAP	-17	2d10+6	[2d10+6] × 2	[2d10+6] × 3	[2d10+6] × 4	K
PBAP Blast *	-6	3d10+10	[3d10+10] × 2	[3d10+10] × 3	[3d10+10] × 4	E
Plasmaburst	-6	3d10+10	[3d10+10] × 2	[3d10+10] × 3	[3d10+10] × 4	E
Reactive	-16	2d10+18	[2d10+18] × 2	[2d10+18] × 3	[2d10+18] × 4	K
RAP	-21	2d10+15	[2d10+15] × 2	[2d10+15] × 3	[2d10+15] × 4	K
Splash		-	-	-	-	-

* Anti-Vehicular Weapon: Doubles damage vs. Large and larger targets.
* Anti-Vehicular Penetrating Explosive Weapon. Double damage against Large and larger targets *only if* the round explodes inside the target.

New Smart Ammunition

Metallic Hydrogen Seeker

Most Seeker that use rockets instead of SCRAMjets use some form of metastable solid rocket booster. Not all of them, however. Some operators are

just batshit crazy enough to carry around rockets loaded with metallic hydrogen. The disadvantages to doing this are steep; it's very volatile (getting shot in the rocket won't just disable the rocket, it'll let the metallic hydrogen explosively revert to regular gaseous hydrogen, causing Bad Things for you and everyone near you,) and the magnetic containment hardware needed to contain even the tiny amount of metallic hydrogen needed for this purpose prevents you from using another Smart Ammo option on the Seeker. The advantage, however, is extant; increase each range category by 25%. Additionally, if the shot is made within short range, the remaining fuel adds +1d10 damage to the explosive power of the Seeker. Obviously, this is highly unsuitable for use with Seekers carrying what were *intended* to be less-lethal payloads, as in this case it creates a 3d10 AP -4 blast. (Or you can consider this to be *bonus* damage if you're shooting someone with splash rounds loaded with napalm or something.)

MH Seekers may be used with traditional shoulder-fired rocket launchers and rocket projectors (see below,) in which case all range calculations are performed upon the original range category. A shoulder-fired rocket with MH rockets has the same range as a Seeker, while a projected MH rocket has 10% greater range than a standard Seeker.

Obviously, this Smart Ammo option is exclusive to Seekers and rockets, and thus has no extra cost, as Seekers and Rockets automatically come with a Smart Ammo option.