ELECTROCHEMICAL SLUGTHROWERS - "Sluggers"

History: Humans have always had a penchant for things that go boom. Most early technologies rely on fire and chemicals with violent tempers. From generators and vehicles that burn fuel to create propulsion or electricity, to shooting people with things that use chemical reactions to propel projectiles; human technology revolves around blowing something up in one form or another. There is no reason to believe this trend will diminish going into the future. As humans reach for the stars, they invent new fuels that make the reactions more efficient. Just as gasoline produces much more energy than burning wood to get steam, so will new fuels provide the energy needs of the future.

Description: ElectroChemical Weapons fire a slug by delivering an electrical charge to a chemical propellant block. This vaporizes the block into expanding gases that accelerates the round. The result is a "softer" launch that reaches a very high velocity without significant increase in recoil. Most electro-Chemical slugthrowers use caseless ammunition: a solid block of propellant replaces the traditional cartridge containing the loose propellant. Losing the cartridge reduces ammunition weight and bulk, eliminating the need for ejection ports (which can allow dirt into the weapon), making the weapon's action more reliable.

Skeinsuits and Inertia screen protect again Electrochemical weapons.

Why sluggers rule (advantages): Why would people still be using electroChemical weapons when other energy weapons are available? Several reasons. ElectroChemical weapons are simple, sturdy, and reliable. If a round should fail, it can be removed, and the weapon is pretty much good as new. There are very little electronics to damage or fail. They are unaffected by environmental conditions, such as vacuum, smoke, rain, or anti-laser aerosols. Lastly, the weapon itself is easily produced in any descent machine shop.

Why sluggers suck (disadvantages): Ammunition is non-reusable, easier to regulate or deprive, and much easier to detect. Energy clips are used in almost every piece of normal equipment and would be hard for security personnel to detect a weapon from normal devices, but electroChemical ammunition is easy to detect and as no use other than weaponry. Also, elimination of ammunition supplies (found by the same methods above) would seriously hurt any terrorist and revolutionary activities. They have significant recoil to overcome in zero-G. ElectroChemical weapons have limited endurance (shots), and they can't be plugged into vehicle or emplacement power sources to recharge.

Specific Rules:

[Star Frontiers]
Burst Fire: a weapon capable of burst fire, fires 3 rounds per pull of the trigger. Firing a burst counts as a normal attack and a weapon can fire a number of bursts equal to the ROF. Each attack has a +10 bonus to the attack, causes one extra dice amount (1d10) of damage, and increases the recoil for this attack by +5.
Automatic Fire: weapons capable of automatic fire can fire 1 full auto group per turn instead of the normal rate. A group uses 10 bullets but receives no bonus to the attack (the recoil negates the bonus). Full Auto fire can target up to 5 adjacent targets and does damage equal to 3 normal shots, plus 1d10 per target after the first. Damage is divided between all targets.

[Frontier Space]
Burst Fire: a weapon capable of burst fire, fires 5 rounds per pull of the trigger. Firing a burst counts as a normal attack and a weapon can fire a number of bursts equal to the ROF. Each attack has a +20 bonus to the attack, causes damage as per being hit by 2 bullets, and increases the recoil for this attack by +5.

{Star Frontier and Frontier Space]
Optional Rule: Shotguns, not using slugs, spread slightly as it travels, both making it easier to hit with and giving it the possibility of hitting adjacent targets to the original. Stats are kept consistent for ease of play.
Close range has no modifiers
Short range has +5 to attack, but cannot hit adjacent targets
Medium range has +10 to attack and can hit targets withing 2m of the original target. Roll separate attacks on valid targets with damage being 1d10
Long range has +15 to attack and can hit targets within 5m of the original target. Roll separate attacks on valid targets with damage being 1d10/2

Common Weapon Descriptions:

ET Pistol

This weapon is the most common ET handgun and is a commonly carried by those who want protection for typical situations. It uses standard pistol ammunition.

Heavy ET Pistol

This big, semi-automatic pistol fires a powerful round, trading higher power for fewer rounds and a larger frame. Its size makes it harder to conceal, and it requires a strong person to shoot accurately. This weapon is a common military and police sidearm for forces wanting a little more punch than the weapon above. It uses heavy pistol ammunition. This weapon used the Heavy template.

Heavy Pocket ET Pistol

For individuals wishing stopping power and concealability, there is this small weapon. It carries one round in each of its two barrels. It uses heavy pistol ammunition. This weapon used the Heavy and Hold-out template.

ET SMG

Submachine guns are fully automatic weapons that fire pistol-caliber ammunition. This model features a pistol grip and extra foregrip for better control. Due to their combination of firepower and maneuverability, SMGs find favor with anybody fighting aboard a spaceship or confined area. It uses standard pistol ammunition. This weapon used the SMG template.

ET Assault Rifle

The assault rifle is a simple bullpup-style weapon. It is standard human military weapon, often loaded with AP bullets. It uses standard rifle ammunition. This weapon used the Military template.

Heavy ET Battle Rifle

Sometimes you need more punch than an assault carbine. This caseless battle rifle fires a more powerful (if slightly lower velocity) 7.7mm caseless rifle round, making it popular with troops who expect to face armored opponents. Its drawbacks include heavier ammunition and noticeably higher recoil. It uses heavy rifle ammunition. This weapon used the Heavy and Military template.

Heavy Sniper Rifle

This is a big "anti-materiel rifle" - a large-caliber sniper weapon powerful enough to damage or cripple light vehicles more than a kilometer away. These weapons typically equip Special Forces and recon units and are used to pin down or neutralize high-value targets such as command posts, vehicles and combat robots. It uses very heavy rifle ammunition. This weapon used the Very Heavy and Long template.

Hunting Rifle

This semi-automatic rifle fires the same ammunition as the assault rifle above. It retains popularity as a sporting or colonial weapon even at higher TLs. Some armed forces upgrade these weapons to improve accuracy and issue them as a lower weight alternative to the heavy sniper rifle. It uses standard rifle ammunition.

MACHINE GUNS

These full-automatic weapons are designed to be fired in long bursts from a bipod (or in some cases, tripod) mount, using an ammunition belt (sometimes contained within a cassette or box). For firing on the move, machine guns often are carried using either an articulated weapon harness or the gyro-stabilized weapon harness. These weapons use the Projectile weapons skill.

Light ET Machine Gun

A light belt-fed machine gun, it comes equipped with a folding bipod or can use a tripod. It fires the same round as the assault rifle. It fills the same role as the Squad Automatic Weapon in today's military. It's extremely reliable action makes it excel in suppressive fire.

Heavy ET Machine Gun

This belt-fed, single-barrel machine gun fires the same round as the heavy sniper rifle from a tripod mount. It usually serves in perimeter defense or as a vehicular weapon. Normal humans can't handle its weight while firing removed from the tripod mount, but cyborgs and powered infantry sometimes use it as a hand-held weapon.

SHOTGUNS

Shotguns are a special category of slugthrower: they are smoothbore weapons firing large rounds. The usual shotgun ammunition is shot, a cartridge containing multiple small pellets, but rifled slug can be used. Damage for shot is variable by range; damage reduces for each range category. Unless otherwise noted, Projectile Weapons skill is used when firing them.

Shotgun

The shotgun is a typical semi-automatic shotgun commonly used as a hunting and defense weapon.

ET Slugthrower Ammunition Types:

For simplicity's sake, all calibers should be considered the same for recording purposes. It will reduce the amount of tracking that necessary. Assume any bullets a character has to fit whatever weapon (pistol, rifle, or shotgun) they have.

If a little more granularity is desired, use the following categories:
Pistol ammunition comes in light, standard, and heavy.
Rifles come in light, standard, and heavy.
Shotgun ammunition is standardized.

Standard Ammunition – use the stats listed for the weapon. Standard bullet cost 1cr per 10 rounds (assume magazines to be included in the cost).

Hollowpoint ammunition - Hollowpoint bullets have a deep dimple in the nose, a hollowed-out area on the front surface. When the hollowpoint bullet strikes a semi-solid object (such as a body), the dimple allows the bullet to expand, opening up almost like an umbrella or a parachute does. Some hollowpoint bullets are also designed to fragment as they expand. This increases the damage by 1 point per die, but armor add screen count double toward them. Therefore, if the target has a skeinsuit or an inertial screen, it does ¼ damage. If the target has both, damage is 1/8. Hollowpoint bullets cost 5cr per 10 rounds (assume magazines to be included in the cost).

Armor-piercing ammunition - The armor piercing bullets are strengthened with a harder jacket, much like the jacket that surrounds lead in a conventional projectile, a jacket which is destroyed upon impact to allow the penetrating charge to continue its movement through the targeted substance. Since the bullet does not expand like a normal round, the damage is reduced 2 points per die, but armor is half effective. Therefore, if the target has a skeinsuit, it only reduces the damage by ¼ (i.e. the round still does 75% damage). As an inertia screen only reduces the speed (inertia), AP ammo has no benefit versus them. If both are used the damage is ½. AP bullets cost 10cr per 10 rounds (assume magazines to be included in the cost).

Statistics

[Star Frontiers]

		Range													
	Damage	Close	Short	Medium	Long	Extreme	Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
ET Pistol	2d10	5	15	30	60	120	15	-15	-5	-10	100	3	Inertia	1kg	200
ET Hvy Pistol	2d10+4	5	15	30	60	120	10	-10	-5	-15	100	3	Inertia	1.5kg	250
ET Hvy Hold-out Pistol	2d10+4	2	5	10	25	50	2	-30	-5	-20	100	3	Inertia	0.5kg	150
ET SMG	2d10	7	20	40	80	150	30	-5	-5	-10	100	3B, FA	Inertia	1kg	300
ET Rifle	2d10+2	20	50	120	250	500	10	+20	-15	-10	100	3	Inertia	3kg	300
ET Assault Rifle	2d10+2	20	50	120	250	500	30	+20	-15	-10	100	3B	Inertia	3kg	400
ET Hvy Battle Rifle	3d10	20	50	120	250	500	20	N/A	-15	-15	100	2B	Inertia	4kg	500
ET Hvy Sniper Rifle	3d10	40	125	250	500	1000	10	N/A	-20	-20	100	1	Inertia	4kg	500
ET Lt MG	2d10+2	10	25	50	200	300	50	N/A	-10	-10	100	FA	Inertia	8kg	1000
ET Hvy MG	3d10	20	50	100	500	1000	100	N/A	-20	-20	100	FA	Inertia	20kg	2000
ET Shotgun	4d10/3d10/ 2d10/1d10	5	15	30	60	--	5	+15	-10	-20	100	2	Inertia	3kg	250

[Frontier Space]

	Damage	Range Inc.	Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
ET Pistol	2d10	20	15	-15	-5	-10	100	3	Ballistic	1kg	200
ET Hvy Pistol	2d10+4	20	10	-10	-5	-15	100	3	Ballistic	1.5kg	250
ET Hvy Hold-out Pistol	2d10+4	10	2	-30	-5	-20	100	3	Ballistic	0.5kg	150
ET SMG	2d10	25	30	-5	-5	-10	100	3B, FA	Ballistic	1kg	300
ET Rifle	2d10+2	40	10	+20	-15	-10	100	3	Ballistic	3kg	300
ET Assault Rifle	2d10+2	40	30	+20	-10	-10	100	3B	Ballistic	3kg	400
ET Hvy Battle Rifle	3d10	40	20	N/A	-15	-15	100	2B	Ballistic	4kg	500
ET Hvy Sniper Rifle	3d10	125	10	N/A	-20	-20	100	1	Ballistic	4kg	500
ET Lt MG	2d10+2	40	50	N/A	-10	-10	100	FA	Ballistic	8kg	1000
ET Hvy MG	3d10	125	100	N/A	-20	-20	100	FA	Ballistic	20kg	2000
ET Shotgun	4d10/3d10/ 2d10/1d10	15	5	+15	-10	-20	100	2	Ballistic	3kg	250

Nuts and Bolts

This section will delve into the way I created the statistics above and how to use templates to create new weapons. All ET weapons were created from the first two weapons: the ET pistol and rifle. By placing templates on those weapons, new weapons can be created for your universe. If this is not your style, feel free to disregard and use only the weapons provided. Not all templates will make sense with all weapons. Finally, this document is only to provide some flavor for an individual's campaign. Remember fun is always the goal, not to make the game complicated or feel like a wargame.

Description of templates:

Calibers detail how large of a projectile is shot out of the weapon.
Light – A small caliber used for those who don't need the power or are uncomfortable with the recoil of the standard caliber.
Standard (Medium) – The standard caliber in use.
Heavy – A more powerful round for use with those that want a little more stopping power than the standard. It trades ammo capacity for damage.

Pistol Templates:

Hold-out – A small sized weapon designed for concealment. It trades ammo capacity and range for concealment.
Compact – In between the hold-out and a standard pistol is the compact pistol. Its penalties aren't as extreme as the hold-out, but it isn't as concealable. Sometimes carried by those who want a lighter weapon and are not expecting trouble.
Target – A longer weapon made for better accuracy at longer ranges. It trades concealability for range.
Machine – adds a burst mode to a weapon. Typically used by the military or criminals.
SMG – A larger weapon, it adds points for holding with a second hand and a folding stock to support both burst and full automatic fire.

Rifle Templates:

Short – This template shortens the length of the barrel to make the weapon more maneuverable. It trades range for reducing the snapshot penalty.
Long – Opposite of above, this template lengthens the barrel to gain extra range. It makes the weapon more unwieldy, though.
Military – Adds a burst and full automatic mode. As per the name, it is generally used by the military.

Generic

Cheap – Made from inferior materials or craftmanship, these weapons cost less at the expense of reliability.
Very Cheap – Made of absolute junk or hastily thrown together with shoddy craftsmanship. Generally, these weapons are made for individuals who can't otherwise acquire better weapons (such as criminals or subjects in authoritarian regimes) or are used weapons that were not maintained well.

	Damage	Range					Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
		Close	Short	Medium	Long	Extreme									
Caliber															
Light (Lt)	-2 per dice						--	-5		+5				-0.5kg	--
Medium (No p	--						--	--		--				--	--
Heavy (Hvy)	+2 per dice						-33%	+5		-5				+0.5kg	+50
Pistols															
Hold-out		-50%	Close X 3	Short X 2	Med X 2	Long X 2	-66%	-20	+5	-10				-0.5kg	--
Compact		-25%	Close X 3	Short X 2	Med X 2	Long X 2	-33%	-5	--	-5				-0.25kg	-50
Target		+25%	Close X 3	Short X 2	Med X 2	Long X 2	--	+10	-5	+5				+0.5kg	+50
Machine		--	--	--	--	--	--	--	--	--		B		--	+100
Sub Machine Gun (SMG)		+50%	Close X 3	Short X 2	Med X 2	Long X 2	--	+20	-5	+5		B,FA		+2kgs	+150
Rifles															
Short		-25%	Close X 2.5	Short X 2	Med X 4	Long X 2.5		-5	+5	-5				-0.5kg	--
Medium		--	--	--	--	--		--	--	--				--	--
Long		+100%	Close X 2.5	Short X 2	Med X 4	Long X 2.5		N/A	-5	+5				+1kg	+100
Military		--	--	--	--	--	+200%	--	--	--		B		--	+100
Cheap		-5 to Attack									-1				-50
Very Cheap		-10 to Attack									-2				-100

Weapon Accessories

The following are options that can be added to a weapon for various bonuses.

Laser Sight / Red Dot Sight – Two devices that can be installed on a weapon to aid in aiming. Either reduces the Snap Shot penalty. The is no benefit to installing both on a single weapon.
Scope – An optical sight that reduces the penalties for range.
Recoil Compensation – A modification attached to the front of the weapon that redirects some of the escaping propellant to reduce recoil.
Customization – A series of modifications that improve the function of the weapon. These modifications may include: better grip, performance internal parts, and/or accurized barrels.
Personalization – A series of modifications that tune a weapon to a specific person like custom grips and/or customized sights.
Bipod – A device that extends 2 prongs that can be rested on a surface to aid in aiming and recoil.
Tripod – A device that is a larger version of a bipod. Usually used for larger weapons. Cannot be combined with the bipod.
Extended Magazine – An extension of the magazine that allows the weapon to hold more rounds.
Sound Suppressor – A device that attaches to the front of the weapon that uses sound bafflers and electronic acoustic dampeners to muffle the sound of the weapon. It will not remove all the sound but will make it much less noticeable. To notice the report of the weapon takes an INT check, -20 per range category (same as for attacking)
Gyrostabilization Harness – A large harness that can be strapped to the wielder of the weapon to absorb the recoil.
Security – A modification that ties a specific weapon to be used only a specific person. This may be accomplished by DNA sniffers, implants, or electronic bracelets.

	Damage	Range					Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
		Close	Short	Medium	Long	Extreme									
Weapon Accessories															
Laser / Red dot Sight									+5					--	50
Scope		Halves range penalty						+10						+0.25kg	100
Recoil Compensation								+5		+5				+0.25kg	50
Customization		+5 to Attack												--	100
Personization		+5 to Attack												--	200
Bipod		+5 to Attack when aiming						+10		+10				+0.5kg	25
Tripod		+5 to Attack when aiming						N/A		+15				+20kg	100
Extended Magazine							+100%							+0.25kg	25
Sound Suppressor								+10	-5					+0.5kg	300
Gyrostabilization Harness										-10				10kg	500
Security															100

Specific Weapons

This section uses the above statistics to create specific named weapons to use in an individual's campaign. The generic weapon above can be used with no problems, so use of named weapons is purely an option depending on the personal tastes of the GM.

[Star Frontiers]

Daesha T-16 Light Rodent Rifle

When little Duke wants to bullseye womprats (which aren't much bigger than 2 meters long, although most of it is tail), he relies on his trusty Daesha T-16 rifle. Its light caliber grants that smaller beings can reliably handle it and its long barrel guarantee accuracy for those far shots.

The Daesha T-16 Light Rifle is a small-caliber, long-range rifle perfect for plinking or small animal hunting.

Templates: Light Caliber, Long
Accessories: Scope
Damage: 1d10+4
Range: 10/25/50/200/500 (Range penalties halved)
Ammo: 10

Conceal: N/A
Snap Shot: -20
Recoil: -5
Reliability: 100
ROF: 3
Defense: Inertia
Weight: 3.5kg
Cost: 400Cr

SWD LW9c

For those of means that want discreet, powerful protection, Streel Weapons Division offers the SWD LW10c. Using premium hardware and quality craftsmanship, it is unparalleled in performance. With it state-of-the-art security features, it will never be used against the owner.

Templates: Compact, Heavy caliber
Accessories: Customization, Security
Damage: 2d10+4 (+5 attack)
Range: 5/15/30/60/120
Ammo: 10
Conceal: -10
Snap Shot: -5
Recoil: -15
Reliability: 100
ROF: 3
Defense: Inertia
Weight: 1.5kg
Cost: 400Cr

Ballistic Technologies "Wolf"

When Wolfe the Yazarian Bounty Hunter is chasing prey, he brings his custom pistol along. Made specially for him by Ballistic Technologies, it is a very intimidating weapon. Built on a very heavy target pistol frame, it adds recoil compensation to help with the enormous kick, high quality parts, personalization just for Wolfe, and a laser sight mainly for intimidation. Face it, who isn't intimidated by a red dot centered on your chest. Finally, in case the tables get turned, security is added to only work with a subdermal implant in Wolfe's hand.

Templates: Heavy Caliber, Target
Accessories: Customization, Personalization, Laser Sight, Recoil Compensation, Security
Damage: 3d10+2 (+10 attack)
Range: 6/20/40/75/150
Ammo: 5
Conceal: -5
Snap Shot: +0
Recoil: -10
Reliability: 100
ROF: 3
Defense: Inertia
Weight: 1.75kg
Cost: 800Cr

Mustutangu Arms Thundercat

Mustutangu Arms has come up with a pistol perfect for the customer on a budget. Small, affordable, and ready for your personal protection needs. [derisively called the noisy kitten by street gangs and criminals]

Templates: Light Caliber, Compact, Cheap
Accessories: None
Damage: 2d10-4 (-5 attack)
Range: 4/12/25/50/100
Ammo: 10
Conceal: -25
Snap Shot: +0
Recoil: -5
Reliability: 99
ROF: 3
Defense: Inertia
Weight: 0.25kg
Cost: 150Cr

Wartech MPS790 Assault Shotgun

Wartech, the premier maker of firearms, introduces the MPS (Military Projectile Shotgun) 790 Assault Shotgun. When your unit demands heavy firepower, the MPS790 delivers. With it burst feature, the MPS790 is guarantied to put more lead downrange than our competitors.

Templates: Military
Accessories: Recoil compensation
Damage: 4d10/3d10/2d10/1d10
Range: 5/15/30/60/--
Ammo: 15
Conceal: +20
Snap Shot: -15
Recoil: -15
Reliability: 100
ROF: 2B
Defense: Inertia
Weight: 3.25kg
Cost: 400Cr

PGCA M17A3 Advanced Combat Rifle

The M17 was developed by PGCA (Pan-Galactic Corp Arms) for use as a military rifle to equip planetary militias and corporate security forces. Its efficient and economic design make it very popular with those forces. The lighter caliber allows troops to carry more ammunition while reducing recoil and the underslung barrel-mount gyrojet attachment give the soldier versatility when engaging unusual targets.

Templates: Light Caliber, Military
Accessories: Recoil compensation, Underbarrel gyrojet
Damage: 2d10 / by ammo type (gyrojet)
Range: 20/50/120/250/500 / by ammunition type (gyrojet)
Ammo: 40 / 4
Conceal: +20
Snap Shot: -15

Recoil: +0
Reliability: 100
ROF: 3B / 1
Defense: Inertia
Weight: 4.25kg
Cost: 600Cr

Optional Rules

Concealment

It represents the size and bulk of the weapon which affects how hard it is to conceal. If the weapon has a CONCEAL of N/A, then that weapon is too big to be concealed on person.

Generally, unless an individual is trying to hide a weapon, it is readily visible. Checks should only be made if there is adverse conditions like darkness or distance or the individual is trying to hide the weapon. Checks are an INT check with penalties determined by the GM, the CONCEAL bonus or penalty applies to the INT check.

Example: a Light Compact ET Pistol has a -20 modifier. An observer would need to make an INT – 20 check to spot that pistol hidden on a person.

Other CONCEAL modifiers:
Dim Light .....-10
Very Dim Light.....-20
Per 5m.....-10
Bulky or heavy clothing .....-5
Clothing or holsters designed to hide weapons ..... -10 to -20

Snap Shot

It represents the bulk of the weapon and how hard it is to aim at a target. Typically, the smaller a weapon is, the faster it is to bring to bear on a target. This is why shooters prefer a smaller weapon (SMG) than a longer weapon (assault rifle) in a situation where they have to maneuver in tight spaces or targets appear unexpectedly.

This modifier applies to the first shot at a target. All subsequent shots at that same target do not get this penalty. Any aim action will also negate this penalty for that target. Certain weapon modifications will lower or negate this penalty, but it can never go below zero (i.e. give a bonus).
A shooter could aim at a specific area, like a door or edge of a wall, and would not get this penalty if a target appeared in the area they are aiming at.

Example #1: a shooter armed with a Laser rifle sees a target and wants to shoot immediately. He would take a -10 attack penalty on the first shot. After the first shot, he no longer gets a penalty unless he switches targets. Let's say he fires 3 times to take down the first target; he gets -10 on his first shot and has no snap shot penalty to shots 2 and 3. After that target is down he switches to a new target. He then has the -10 penalty again on his first shot at this target.

Example #2: an operative is armed with an ET Pistol. He is entering a room with 3 enemy guards. He tells the GM he wants to fire one shot at each of the three guards. Each shot gets a -5 penalty because each shot has a new target. Penalties, even in the same turn, do not stack; so it does <u>not</u> go -5, then -10, and then -15.

Increased Punching Score Option (Alpha Dawn book page 149, modified)

As it stands, having a punching score of +2 isn't that different from having a score of +4. Opponents have an average of 45 Stamina, and that makes strength have very little effect on melee combat. This rule increases the impact of Strength on melee damage.

PS: Punching score is calculated in a different manner. Divide your character's Strength score by ten, rounding up, then subtract <u>four</u> (modified from five due to 45 being average). This results in a number between -1 and +3, with rare occurrences of -4 or +6.

Application. Instead of adding to the damage roll, it adds to each die of the damage roll. Thus, if you get to roll 5d10 for melee damage, and your punching score is +3, you get to roll 5d10+15 (that is, +3 per die, then simplified to 7d10+3). This allows Strength to play a more significant role on melee damage, and weapons designed to amplify Strength do so in a more pronounced manner.

Recoil

This penalty represents how much a weapon kicks and the measure of control it has. It applies to any shot after the first during a turn and is cumulative. Certain weapon modifications will lower or negate this penalty, but it can never go below zero (i.e. give a bonus). This modifier does stack with the Snap Shot penalty. Recoil penalties reset at the beginning of every turn.

Continuing Example #2 above: The operative fired 3 shots in one turn, so the first shot does not have a recoil modifier. The second shot has a -10 penalty to the attack roll, in addition to the -5 for a new target. The third shot gets a -20 recoil modifier, again in addition to the -5 for a new target.

Strength reducing recoil (Optional)

This optional addition allows for persons of great strength to overcome some if not all recoil penalties. Take the punching score from above (use PS minus 3, if using the standard PS from Alpha Dawn), take the modifier times five and add to the recoil penalty.

Example: if a character had a strength score of 61, their Punching score would be +2 (+4 using standard rules). This would reduce recoil penalties by 10 (-5 if using standard rules, because it is PS minus three). Simply add this to the recoil modifier. So, the character with a 61 STR firing a Heavy slugger pistol would have a recoil modifier of -5 (-10 using standard rules).

Reliability

This statistic represents how "fragile" a weapon is. If an attack roll is this number or higher, the weapon does not fire and is disabled. Repairing the weapon will take 10 minutes, a toolkit, and a successful attack roll to repair the weapon. If critical success/failures are being used, a critical success would take less time and a critical failure would render the weapon broken and unusable.

Continuing Example #2 above: The operative above fires at a guard and rolls 100 on the attack roll. His pistol is now disabled and will not function. Assuming he makes it out of the situation, while back at his base, he can disassemble the weapon with an appropriate toolkit, and spend 10 minutes to get the pistol back into a usable condition.