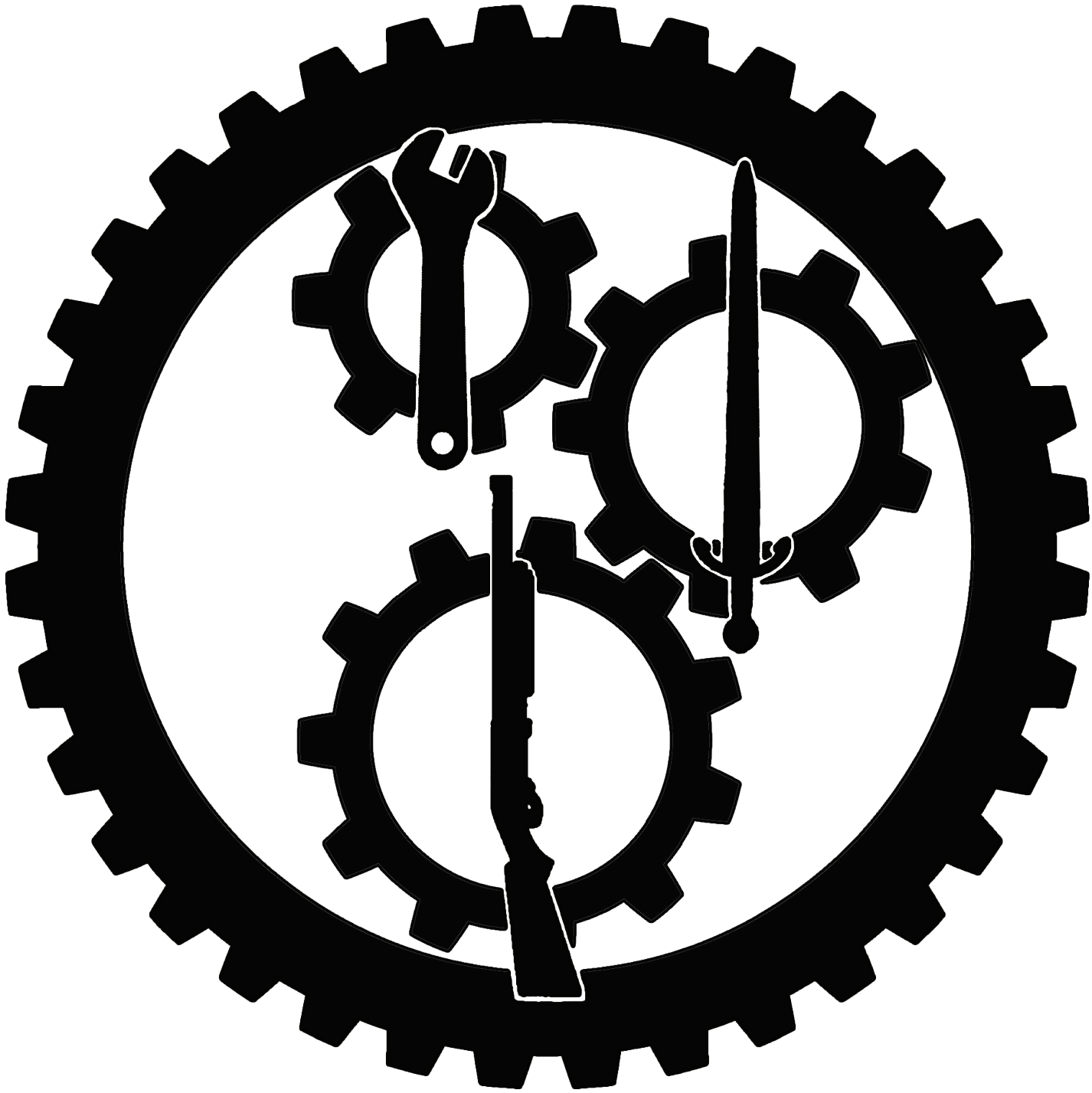
HERO SYSTEM
EQUIPMENT GUIDE



HERO SYSTEM EQUIPMENT GUIDE

An Equipment Book for the *HERO System*

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INTRODUCTION

ABBREVIATIONS

This book uses the following abbreviations to refer to other *HERO System* books:

6E1: *The HERO System 6th Edition, Volume I: Character Creation*

6E2: *The HERO System 6th Edition, Volume II: Combat And Adventuring*

APG: *The HERO System Advanced Player's Guide*

HSB: *The HERO System Bestiary*

HSG: *The HERO System Grimoire*

HSMA: *HERO System Martial Arts*

HSS: *HERO System Skills*

Regardless of their powers, spells, or Skills, characters often have to have just the right tool to get a job done... and this is the book where you'll find just what they need!

The HERO System Equipment Guide contains hundreds of pre-generated weapons, defensive devices, sensors, communication devices, movement devices, and other gadgets for use in your *HERO System* games. It includes only personal equipment — the sorts of weapons and devices characters might carry themselves on their adventures. It doesn't have any vehicles, siege engines, robots, or similar devices; other *HERO System* books cover those.

Each chapter of *The HERO System Equipment Guide* features a specific category of equipment:

- weapons
- defensive equipment
- movement devices
- sensory and communications equipment
- miscellaneous equipment

Within each chapter, the equipment is organized by genre/time period:

- *Fantasy,* covering the sort of equipment typically found in Fantasy-era games (*i.e.,* that found in the ancient through medieval/Renaissance periods of human history, or approximating such technology).
- *Modern,* covering the sort of equipment found in games set during the late twentieth and early twenty-first centuries. (Chapter One has a related section on Historical Firearms.)
- *Superheroic,* covering the super-technology found in Comic Book Superhero stories and the like. This section also covers the "Weird Science" technology found in Pulp-era campaigns (which can easily be converted into "Steampunk" gadgets suitable for Victorian-era games with a fantastic twist). Additionally, many of the Superheroic devices are appropriate for high-technology Science Fiction campaigns (such as most Space Opera games).
- *Science Fiction,* covering the sort of equipment found in games set in the far or near future. In many cases this section of each chapter is a little shorter than the others, since the Superheroic equipment can also be used in Science Fiction games (perhaps with a few changes to appearance or special effect).

Of course, not every chapter covers each genre/time period equally. Every genre has plenty of weapons, but movement and sensory devices are nonexistent or rare in Fantasy settings, for example.

USING THIS BOOK

The "HSEG" has two primary purposes. First, it's a time-saver. If you have to generate a character quickly, or you don't want to take the time and effort needed to create all of a character's gadgets from scratch, *The HERO System Equipment Guide* provides you with the shortcut you need. Just open to the appropriate section, select the sort of gadget you want, tweak it to taste, and in seconds you've got a new device for your character.

Second, it's an idea generator. If you're at a loss for what type of character to play, you can flip the book open at random and see if anything on that page catches your attention. If you already have a general idea of the type of gadget-based character you want to create, some of the more unusual gizmos may inspire you to take the character in new and intriguing directions.

Although many of the gadgets come with a list of options, don't feel constrained by what the book says. You can easily alter a gadget to suit the character you have in mind, and in most cases substitute one special effect for another with only slight alterations. And for many gadgets, increasing or decreasing the number of Active Points always remains an option.

POWER FRAMEWORKS

The HERO System Equipment Guide is particularly helpful for characters trying to construct Power Frameworks involving gadgetry (or who are using the Resource Points rules from the APG to define how much gear they have). Between the various gadgets and their options, a character can choose a suite of, say, weapons or utility gadgets with just a few minutes' work. Where possible and advisable, gadgets are built in the 40-75 point range, to make it easy to create Multipowers without having to alter point totals too much.

Players with characters who have *Gadget Pool* VPPs may find this book particularly helpful. Rather than having to build a new gadget using the *HERO System* rules every time, they can simply choose the device they want out of *The HERO System Equipment Guide* and proceed without interrupting the game.

WHAT THIS BOOK IS NOT

Having noted what this book *is,* it's also important to note what it is *not,* and what it doesn't contain.

First, it's not a book of rules about gadgets, or for building gadgets. Occasionally new rules are necessary to explain how a particular device works, but that's all. *The HERO System Equipment Guide* is a collection of pre-built gadgets — a resource book rather than a rules supplement.

Second, it doesn't include any mystic artifacts or enchanted items. That's a subject worthy of a book in itself. However, you can easily change the special effect of a gadget to make it mystical instead of technological; for example, the *Power Staff* (page 180) could be a mystic talisman.

Third, it doesn't have any vehicles. See *HERO System Vehicles* for all the vehicles and vehicle-related rules you need.

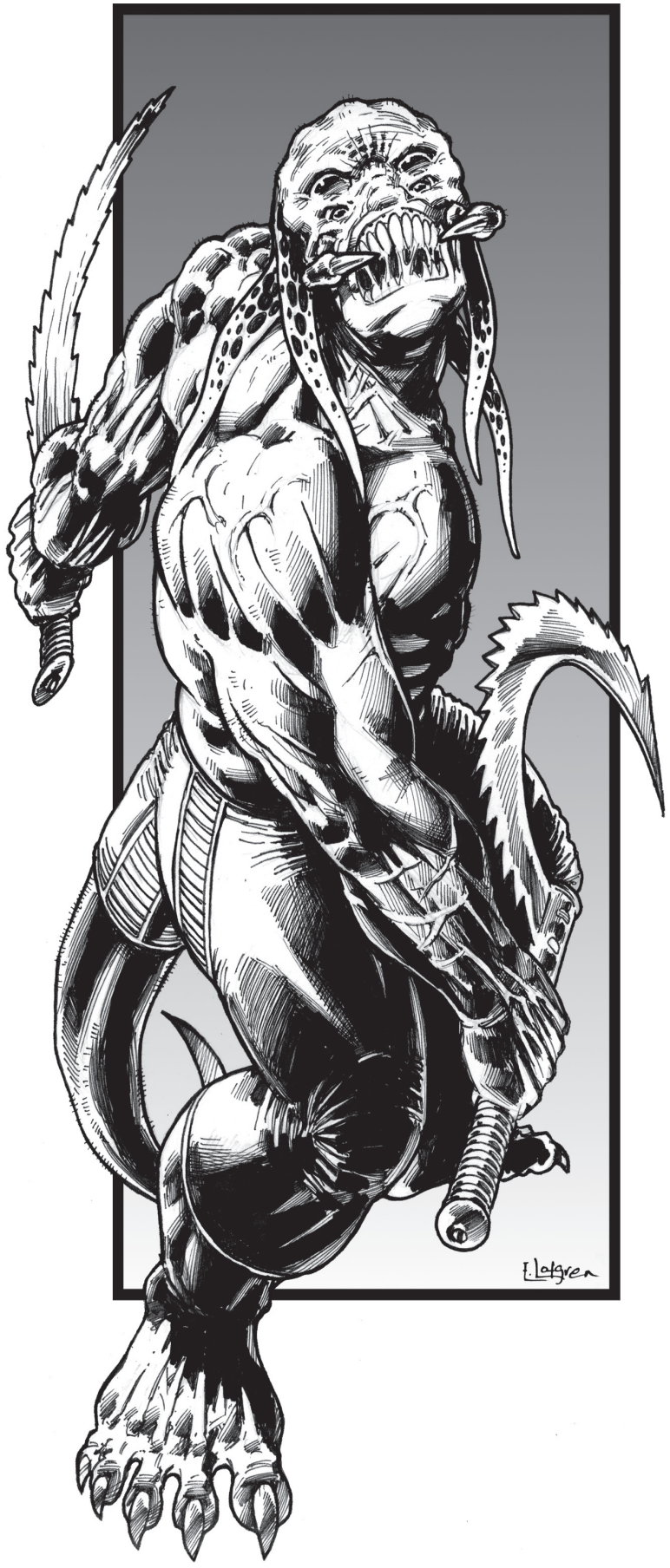
Fourth, it doesn't have any bases or devices for bases. See *The Ultimate Base* for all the Base-related rules and equipment you need.

Fifth, it doesn't include any "doomsday devices" or like items. Many other Hero products, including *Champions* and *VIPER,* cover that subject adequately.

Sixth, it doesn't feature any robots, computers, or like devices (though a few of the gadgets are built as Automatons or Computers because that's the best way to simulate a particular special effect).

Seventh, it's not a blank permission slip to use any of these gadgets in your game. Some of the devices listed in the book are powerful, with high Active Point costs, and may not be appropriate for every campaign. The GM should approve the use of any gadgets from this book.

Eighth, and most importantly, *The HERO System Equipment Guide* is not a straitjacket. You can often build a particular gadget two or more ways using the *HERO System* rules, so don't let the fact that this book chooses a particular method deter you from doing something else if you prefer. Rarely, if ever, is there an "official" way to build any given device using the *HERO System.* The



options provided for each gadget often describe alternate ways of creating it to help spur your imagination.

THE GADGET TEMPLATE

For ease of use this book describes many Superheroic weapons and gadgets with a standard template. (Fantasy and Modern weapons and gadgets, being historical and/or not requiring lots of options, are more often summarized in tables, with additional explanatory text as needed; Science Fiction weapons and gadgets may be described either way, depending on what's most logical.) The information provided applies only to the standard gadget; the options may have different areas of effect, ranges, END costs, and so forth.

Name indicates the name of the gadget. You can, of course, rename it to suit your own character if you prefer.

Effect lists the basic game effect of the gadget in simple terms: Blast 8d6, Double Knockback; Desolidification; Telekinesis (30 STR). This tells you quickly what a gadget can do so you don't have to delve into the full game write-up.

Target describes who or what the gadget affects. A weapon usually indicates "One character" or the area covered due to the *Area Of Effect* Advantage. (Of course, sometimes even a "one character" attack can be Spread, or used with a Multiple Attack to affect more than one target; a gadget's shorthand description doesn't override the rules.) "Self" indicates the gadget only works on the character using it (though it may still "affect" other characters; for example, other characters can perceive the effects of Shape Shift, even though it's a "Self" gadget.)

Duration lists the duration of the gadget's effect, typically Instant, Constant, or Persistent (see 6E1 127). "Uncontrolled" indicates the gadget has that Advantage.

Range lists the range for the gadget. Ranged gadgets usually have a range in meters (Base Points x 10m in most cases), but may have "LOS" (Line Of Sight) or RBS (Range Based On STR) range. "No Range" indicates the gadget has No Range; "Self" that the gadget only affects the character using it; "Touch" that the gadget involves having to touch another character (which usually requires an Attack Roll).

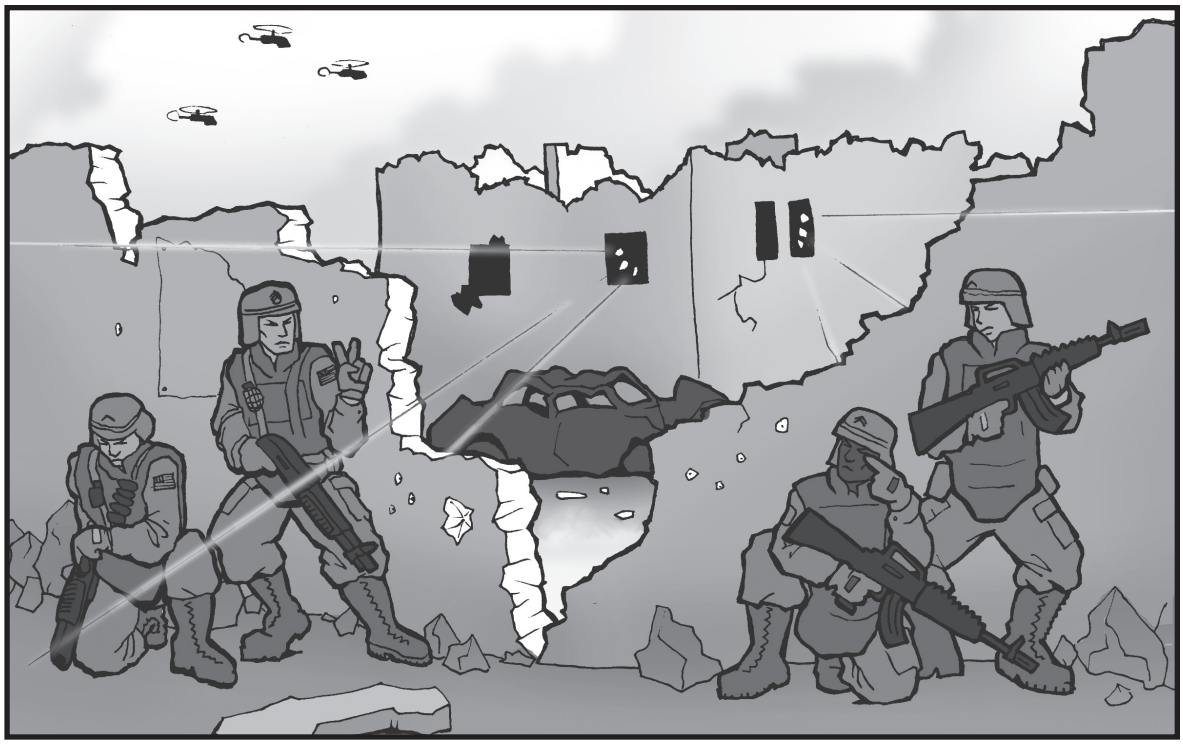
Charges or *END Cost* lists the gadget's Charges, or its Endurance cost if it uses END.

Breakability lists the object's PD and ED. They're usually equal, but the GM can vary the two defenses if that seems appropriate. If the device is unbreakable, that's stated here.

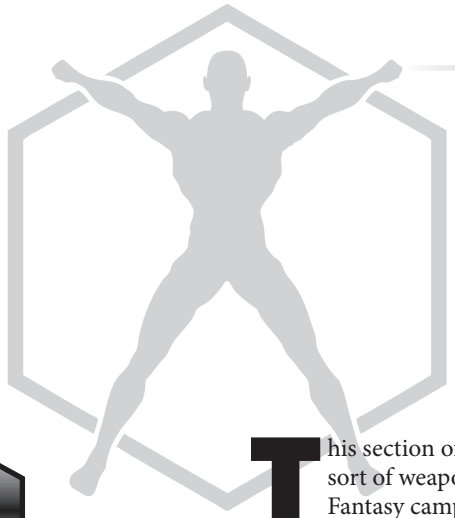
Description provides a (usually brief) textual description of the gadget. This section notes any special rules or rules applications relevant to the gadget.

Game Information is a full write-up of the gadget in game terms, including Active Point and Real Point costs. (If only one point total is listed, that means the Active and Real Point costs are the same.)

Lastly, many gadgets have *Options* listed below the game information. These describe various standard ways to alter the gadget to create a slightly different ability. Optional gadgets often have their own names related to the standard gadget's name. Typical options include "Strong" and "Weak" versions (built on more or fewer Active Points, or otherwise better or worse than normal); "Realistic" versions (designed to mimic "reality" more closely); "Experimental" versions (which have an Activation Roll or other Limitations reflecting the fact that they're prototypes, don't always work properly, or the like); and versions with more or fewer Charges.



CHAPTER ONE
WEAPONS



FANTASY WEAPONS

1

This section of Chapter One covers the sort of weapons most commonly found in Fantasy campaigns, historical campaigns set in ancient and medieval times, and by extension most Martial Arts campaigns. (And of course, such weapons may appear in campaigns set in just about any time, place, or genre; Cyber Hero "street samurai" may wield katanas, and Science Fiction adventurers like John Carter are often quite skilled with melee weapons.) It covers everything from the classics — swords, axes, spears — to some of the much odder weapons developed in the Orient and elsewhere.

The accompanying weapons tables — one for HTH Combat weapons and one for Ranged Combat weapons — provide *HERO System* statistics, write-ups, and notes for these weapons. The text below provides additional information about specific weapons or types of weapons.

To see which weapons require which Weapon Familiarities, refer to the Weapon Familiarity Table on 6E1 94 or APG 43.

HAND-TO-HAND WEAPONS

Most melee weapons are well-known to the average gamer and require no explanation. The text below provides information on some of the more obscure or unusual ones, as well as other useful data. Readers interested in learning more should consult some of the books in the Bibliography.

Axes

Axes consist of a wooden handle with a heavy chopping blade at one end. Compared to a sword an axe has more ability to cut through armor, but it's less controllable, precise, and versatile. Some are single-bit (they just have one cutting edge); others are double-bit (with a blade on both sides of the haft, giving the weapon a little more tactical flexibility but making it heavier [add +1 to STR Minimum]); some are single-bit but have a spike opposite the blade (same rules as for double-bit axes, or a character could buy the axe as a Multipower and consider the spike a lower-powered HKA with Armor Piercing). Characters can wield most of them effectively in one hand, though the battle axe works better in two hands, and the great axe requires two. The francisca and hand axe are both weighted for throwing.

Some specific types of axes include:

Axe, Chinese: This weapon has a medium-length handle and a single broad blade; it's chiefly used by southern Chinese Kung Fu fighters.

Francisca: The francisca was developed in the early Middle Ages by the Franks (hence the name). It has a long, thick, narrow head that widens slightly at the blade, making it balanced for throwing as well as suitable for HTH Combat. In battle the Franks were known for throwing their franciscas as they charged to break enemy shields and disrupt the enemy lines, then fighting in HTH Combat with their swords.

Chain And Rope Weapons

Chain and rope weapons are most common in Asia, but some types (*e.g.,* the flail in its various forms) are found in many cultures. They consist of a length of chain or rope to which are attached various weights, blades, and handles.

Chain Sword: This weapon, called *lien tzu jen* in Chinese, consisted of two sword-like blades about as long as a human forearm connected by 1-2' of chain. Sometimes the blades can be detached for throwing (this would be bought by turning the weapon into a Multipower: one slot for the connected blades, one with two Recoverable Charges of RKA that Lockout the HKA).

Flail: A flail has three parts: a metal or wooden haft, two or more chains attached to one end of the haft; and metal balls or weights attached to the end of the chains. The differences between various types of flails depend mainly on the number and length of the chains and what's attached to them. One well-known type, the *morningstar,* has a single chain with a large, spiked metal ball on the end.

The benefit to flails is not only that the chain-and-weight arrangement allows the wielder to obtain extra momentum and power for strikes, but that the chain can arc around a shield to hit the target behind it. To use this *Flail Maneuver,* the wielder takes a -1 penalty to his OCV, but may then ignore the target's DCV bonus from a shield

(the target still gets the benefits of any Combat Skill Levels he has assigned to DCV). The OCV penalty effectively makes the Flail Maneuver pointless against a small shield (which only provides +1 DCV), but the maneuver becomes quite effective against larger shields.

The ability to perform the Flail maneuver is bought as a naked Advantage: Indirect (+¼) for the Active Points in the flail, with the Limitations OAF (-1), Required Hands (varies), Real Weapon (-¼), and Side Effects (-1 OCV, always occurs; -½).

Flying Claw: Similar to the Rope Dart (see below), this weapon is a large, clawed metal hand on the end of an up to 25' long rope. The user whirls the hand around and slashes people with it; sometimes the claws are poisoned. The Chinese call it a *fei chua.* You can also use this weapon's statistics for: the Dragon's Beard Hook (*don shu gao*), which resembles a U with a serrated, barbed outer edge; the Iron Lotus (*tai lien far*), which resembles a bladed lotus flower; and the Rope Hook (*gin tao sou*), a large, barbed hook.

Flying Guillotine: This peculiar Tibetan weapon consists of a metal hoop (or sometimes a hat-like object) with a very sharp inner edge, or an inner edge lined with razor-sharp blades; the hoop attaches to a rope. It's an effective ambush weapon; if the attacker can get above an unsuspecting target, he can drop the Guillotine over the target's head and yank. (Alternately, when the guillotine's thrown over an opponent's head, the blades snap shut, neatly severing the neck.) Some forms of the weapon have a sort of mesh basket attached so the severed head may be easily gathered. It's somewhat less effective in active combat; the weapon only does damage if it hits an extremity (head, hand, arm, leg, or foot; this is a -½ Limitation). The attacker can roll Hit Locations normally (with attacks to Locations 9-14 simply failing to do damage); or he can choose to aim for specific locations, taking the OCV penalties for aiming. In campaigns that don't use Hit Locations, a character using a flying guillotine must always take a -6 OCV penalty when using the weapon.

In game terms, a flying guillotine attack severs the neck if it does BODY damage greater than twice the character's total BODY in a single strike. For an Average Person (6E1 438), this requires a total of 17 BODY, for the average Player Character this requires 21 or more BODY. Since the character suffers the standard -8 OCV penalty for targeting the Head, he gets the usual damage bonus if he hits. The GM may wish to simply declare that faceless minions fall victim to this weapon instantly, with no die rolling needed.

HKA 2d6, Reduced Endurance (0 END; +½) (45 Active Points); OAF (-1), Must Be Aimed At Extremities (see text; -½), No STR Bonus (-½), Side Effect (always -1 OCV to use weapon; -½), STR Minimum (10; -½), Real Weapon (-¼) (total cost: 10 points) ***plus*** *Reach +6m (6 Active Points; total cost 6 points). Total cost: 16 points.*

Kusari: A flexible weapon consisting of a chain about 12' long with a weight on one end and a metal ring on the other. It can be thrown at a target to do him harm or to grab him (*e.g.,* grab his legs to trip him, or wrap around his arms to bind him).

FANTASY HAND-TO-HAND WEAPONS TABLE

Weapon	OCV	Damage	STUNx	STR Min	BODY	Def	Mass	A/R Cost	Length	Origin	Notes
Axes											
Axe, Battle	+0	2d6	+0	13	6	4	1.6	46/16	M	Various	1½H
Axe, Chinese	+0	1d6	+0	11	5	4	1.2	27/10	M	China	RBS
Axe, Francisca	+0	1½d6	+0	12	5	4	1.2	45/17	M	Europe	RBS
Axe, Great	+0	2d6+1	+0	16	8	4	2.1	53/16	M	Various	2H
Axe, Hand (Hatchet)	+0	1d6	+0	6	3	4	0.6	26/10	S	Various	RBS
Axe, Small	+0	1d6+1	+0	8	4	4	0.9	31/13	M	Various	
Chain And Rope Weapons											
Chain Sword	+0	1d6	+0	10	4	5	1.6	23/9	M-L	China	
Flail	+0	1d6	+0	9	4	4	2.0	28/11	M	Various	Flail
Flail, Battle	+0	2d6	+0	18	5	4	2.2	57/17	M	Various	2H, Flail
Flail, Bladed	+0	1d6+1	+0	13	4	4	2.0	38/14	M	Various	Flail
Flail, Large	+0	1½d6	+0	16	5	4	2.3	47/16	M	Various	Flail
Flail, Military	-1	1½d6	+0	15	4	4	2.0	47/14	M	Various	1½H, Flail
Flail, War#	+0	1d6	+1	13	4	4	2.6	33/12	M	Various	Flail
Flail, War, Large#	+0	1d6+1	+1	18	4	4	3.0	45/16	M	Various	Flail
Flying Claw	+0	1d6	+0	10	4	2	1.8	29/15	Text	China	+7m Reach
Flying Guillotine	-1	2d6	+0	10	4	2	1.9	51/16	Text	China	2H, +6m Reach, Must be Aimed at Extremity
Kusari	+0	3d6 N	—	9	4	4	1.4	25/9	EL	Japan	2H
Kusarigama or Kyogetsu Shoge					4	5	2.0	Text	EL	Japan	2H, Ninja Weapon; see Kusari, Kama
Manriki-Gusari or Kusari-fundo	+0	3d6 N	—	8	4	5	1.6	27/8	M	Japan	RBS, Ninja Weapon
Morningstar	+0	1½d6	+0	15	4	4	1.8	47/16	M	Various	Flail
Rante					4	5	1.5	Text	L	Indonesia	
Using Chain	+0	3d6 N	—	5							
Using Blade	+0	½d6	+0	5							
Rope Dart	+0	½d6	+0	8	3	2	1.6	22/13	Text	China	+7m Reach
Soft Hammer	+0	1½d6	+0	12	4	4	1.8	47/16	M	China	Flail
Clubs											
Baton/Shillelagh	+0	3d6 N	—	8	4	3	1.2	23/9	M	Europe	
Chakar	+0	6d6 N	—	20	7	3	5.0	46/12	M	India	2H
Club	+0	4d6 N	—	10	5	3	1.5	31/11	M	Various	
Club, Great	+0	6d6 N	—	15	7	3	2.0	46/13	M	Various	2H
Club, War	+0	5d6 N	—	12	6	3	1.8	38/12	M	Various	1½H
Gada	+0	5d6 N	—	13	6	3	4.0	38/12	M	India	2H
Hanbo	+0	3d6 N	—	6	4	3	1.2	23/9	M	Japan	
Jo	+0	3d6 N	—	7	4	3	1.6	23/9	M	Japan	
Lathi	+0	3d6 N	—	8	4	3	1.5	24/10	L	India	
Makila	+0	1d6	+0	8	4	3	1.5	23/9	M	Europe	Use Club Weapon for stick blows
Stick	+0	2d6 N	—	5	3	3	0.9	15/5	S	Various	

Weapon	OCV	Damage	STUNx	STR Min	BODY	Def	Mass	A/R Cost	Length	Origin	Notes
Fist-Loads (Do Not Require Weapon Familiarity)											
Ashiko	+0	½d6	+0	5	3	4	0.5	17/7	S	Japan	+1 to Climbing Roll, Ninja Weapon
Brass Knuckles	+0	2d6 N	—	3	3	4	0.5	33/10	S	Various	HP
Cestus	+0	+1 point	+0	—	2	2	0.3	19/5	S	Greece	See text
Fist-Load	+0	2d6 N	—	3	2	2	0.2	15/6	S	Various	
Nekote	+0	1 point	+0	3	1	2	0.2	7/3	S	Japan	Ninja Weapon
Ring Needle	+0	½d6	+0	4	2	2	0.2	17/7	S	China	RBS
Shuko	+0	1d6-1	+0	5	3	4	0.5	20/8	S	Japan	+1 to Climbing Roll, Ninja Weapon
Hammers And Maces											
Hammer, Copper	+0	4d6 N	—	10	5	5	1.5	30/10	S	China	
Hammer, Small#	+0	1d6-1	+1	8	4	4	1.0	22/9	M	Various	
Hammer, War#	-1	1d6+1	+1	13	5	4	2.0	36/11	M	Various	1½H
Hammer#	+0	1d6	+1	10	5	4	1.3	27/10	M	Various	
Mace	+0	1d6+1	+0	10	5	5	1.5	31/12	M	Various	
Mace, Great	+0	2d6	+0	15	6	5	2.0	46/14	M	Various	2H
Mace, Hand Mace	+0	1d6	+0	11	4	5	1.3	23/9	M	China	
Mace, Small	+0	1d6	+0	8	4	5	1.3	23/10	M	Various	
Maul#	+0	1½d6	+1	18	5	5	2.5	45/13	M	Various	2H
Picks											
Kama	+0	1d6	+0	11	4	4	1.3	27/10	M	Japan	RBS, Karate Weapon
Pick#	+0	1d6 AP	+0	11	4	5	1.3	27/10	M	Various	
Pick, Great#	+0	1½d6 AP	+0	14	6	5	1.5	45/13	M	Various	2H
Pick, Military#	+0	1d6+1 AP	+0	13	5	5	1.4	36/13	M	Various	1½H
Pick, Small#	+0	1d6-1 AP	+0	8	4	5	1.0	22/9	M	Various	
Spears And Polearms											
Arbir	+0	1d6	+0	10	4	3	1.0	24/9	L	Indonesia	2H
Awl Pike#	-1	1d6+1 AP	+0	14	5	3	2.0	39/12	EL	Europe	2H, Set
Chai-Dao	+0	1d6+1	+0	12	6	3	2.1	32/11	L	China	2H
Chiang	+0	1d6+1	+0	12	5	3	2.0	32/11	L	China	2H
Ghi	+0	1d6+1	+0	13	6	3	2.1	38/14	L	China	2H, +2 OCV w/ Bind, Block, Disarm
Glaive	+0	2d6+1	+0	16	6	3	2.1	55/17	L	Europe	2H, Set
Guisarme	-1	2d6	+0	16	6	3	2.1	48/13	L	Europe	2H, Set, Unhorse
Halberd	+0	2d6+1	+0	17	6	4	2.3	55/17	L	Europe	2H, Set, Unhorse
Javelin	+0	1d6+1	+0	10	4	3	0.8	38/15	L	Various	RBS
Military Fork	+0	1½d6 RP	+0	13	5	3	1.8	40/12	L	Europe	2H, Set
Naginata	+0	1½d6	+0	13	6	3	2.1	39/13	L	Japan	2H
Nine-Dragon Trident	+0	1d6+1	+0	13	6	4	2.3	38/14	L	China	2H, +2 OCV w/ Bind, Block, Disarm
Partisan	+0	1d6+1	+0	9	5	3	2.0	33/11	L	Europe	2H, Set
Pike	-1	2d6+1	+0	15	6	3	2.2	56/16	EL	Europe	2H, Set
Pole Axe	-1	2d6	+0	13	5	4	2.2	48/14	L	Europe	2H
Ranseur	-1	2d6	+0	13	5	3	2.0	48/14	L	Europe	2H, Set

Weapon	OCV	Damage	STUNx	STR Min	BODY	Def	Mass	A/R Cost	Length	Origin	Notes
Spear, Long	-1	2d6	+0	14	6	3	2.2	49/14	EL	Various	2H, Set
Spear, Medium	+0	1½d6	+0	12	5	3	2.0	47/18	L	Various	Set, RBS
Spear, Short	+0	1d6+1	+0	10	4	3	1.7	38/15	L	Various	Set, RBS
Sword-Spear	+0	1d6	+0	12	3	3	1.6	27/10	M	China	RBS
Tai-Dao/Kwan Dao	+0	1½d6	+0	18	6	3	2.1	39/12	L	China	2H
Tiger Fork	+0	1½d6	+0	13	6	3	2.1	39/13	L	China	2H
Trident	-1	2d6 RP	+0	13	5	4	1.5	55/17	L	Various	RBS
Voulge	-1	2d6+1	+0	15	4	3	1.0	55/15	L	Europe	2H, Set, Unhorse
Yari	+0	1½d6	+0	13	5	3	2.0	46/15	L	Japan	2H, RBS
Yari (Kamayari)	+0	1½d6	+0	14	5	3	2.1	52/18	L	Japan	2H, RBS, +2 OCV w/Bind, Block, Disarm
Staffs											
Bo (Staff)	+1	4d6 N	—	10	4	3	1.0	33/10	L	Japan	2H, Karate Weapon
Tetsubo	+1	6d6 N	—	14	7	4	5.0	47/13	L	Japan	2H
Wolf's Teeth Staff	+0	1½d6	+0	13	4	4	1.6	39/13	L	China	2H
Quarterstaff	+1	4d6 N	—	10	4	3	1.0	33/10	L	Europe	2H
Swords And Knives											
Bokken	+0	5d6 N	—	10	4	3	1.3	38/14	M	Japan	1½H
Bundi	+0	1d6	+0	10	5	5	1.0	24/9	M	India	+1 OCV w/ Block
Butterfly Sword	+0	1d6+1	+0	9	5	5	1.1	31/12	M	China	
Cinquedea, Long	+0	1d6+1	+0	13	5	5	1.3	31/12	M	Europe	
Cinquedea, Short	+0	1d6	+0	11	5	5	1.2	23/9	M	Europe	
Cutlass	+0	1d6	+0	10	5	5	1.2	41/13	M	Europe	
Cymbal	+0	1d6	+0	10	3	5	0.8	26/10	S	China	RBS
Dagger/Dirk	+0	1d6-1	+0	6	3	5	0.8	21/8	S	Various	RBS
Darn Do	+0	1d6+1	+0	12	5	5	1.2	31/12	M	China	
Epee	+0	2d6 N	—	7	3	5	0.9	16/6	M	Europe	
Falchion	+1	1d6+1	+0	14	4	5	1.5	33/12	M	Europe	
Foil	+0	1d6 N	—	5	3	5	0.8	8/3	M	Europe	
Hook Sword	+0	1d6+1	+0	13	5	5	1.3	55/19	M	China	+2 OCV w/Bind, Block, Disarm, Takeaway; HP
Jien	+0	1d6	+0	10	5	5	1.1	23/9	M	China	
Katana	+1	1½d6	+0	12	5	5	1.4	40/14	M	Japan	1½H
Knife	+0	½d6	+0	4	2	5	0.4	17/7	M	Various	RBS
Knuck-Knife	+0	½d6	+0	7	4	5	0.9	33/10	S	USA	HP
Ko-Gatana	+0	½d6	+0	5	2	5	0.2	15/6	S	Japan	
Kris (knife)	+0	½d6	+0	7	3	5	0.8	15/6	S	Indonesia	
Kris (normal)	+0	1d6	+0	10	5	5	1.0	23/9	M	Indonesia	
Kris (sword)	+0	1d6+1	+0	12	5	5	1.2	31/12	M	Indonesia	
Kukri	+0	1d6-1	+0	6	3	5	0.8	21/8	S	India	RBS
Main-Gauche	+0	1d6-1	+0	7	3	5	0.8	22/9	S	Europe	+2 OCV with Block/Bind/ Disarm
Navaja	+0	½d6	+0	5	2	3	0.4	15/6	S	Europe	
Nine-Ring Sword	+0	1d6+1	+0	12	5	5	1.2	37/15	M	China	+1 OCV with Disarm, Takeaway

Weapon	OCV	Damage	STUNx	STR Min	BODY	Def	Mass	A/R Cost	Length	Origin	Notes
Ninja-To	+0	1½d6	+0	12	5	5	1.3	Text	M	Japan	RBS, 1½H; Ninja Weapon, see text
No-Daichi	+0	2d6	+0	17	7	5	3.5	47/14	L	Japan	2H
Parang	+0	1d6+1	+0	10	5	5	1.2	31/12	M	Indonesia	
Pedang	+0	1d6	+0	10	5	5	1.1	23/9	M	Indonesia	
Puñal	+0	1 point	+0	5	2	3	0.1	7/3	S	Europe	
Rapier	+1	1d6	+0	10	5	5	1.0	23/9	M	Europe	
Razor, Straight											
Large	+0	1d6	-1	7	2	3	0.1	22/7	S	Various	Reduced Penetration
Small	+0	½d6	-1	5	2	3	0.05	15/5	S	Various	Reduced Penetration
Sabre	+0	1d6	+0	10	5	5	1.2	23/9	M	Europe	
Schlaeger	+0	1d6	+0	10	5	5	1.2	23/9	M	Europe	
Scimitar/Tulwar	+0	1d6+1	+0	11	5	5	1.1	31/12	M	Arabia/ India	
Shinai	+0	2d6 N	—	5	3	3	1.0	16/6	M	Japan	1½H
Spread-The-Water Knife	+0	1d6	+0	10	4	5	1.4	23/9	M	China	
Stiletto#	+0	½d6 AP	+0	5	3	5	0.7	20/8	S	Europe	RBS
Sword, Bastard	+0	1½d6	+0	13	6	5	1.7	38/13	M	Various	1½H
Sword, Broad/ Long	+0	1d6+1	+0	12	5	5	1.2	31/12	M	Var	
Sword, Great	+1	2d6	+0	17	7	5	3.5	48/15	M	Various	2H
Sword, Short	+0	1d6	+0	10	5	5	1.1	23/9	M	Var	
Sword, Small	+0	1d6-1	+0	8	3	5	0.9	19/8	M	Europe	
Tanto	+0	½d6	+0	5	3	5	0.8	21/12	S	Japan	RBS
Tetsu-To	+0	2½d6	+0	20	7	5	6.0	61/17	M	Japan	1½H
Tjaluk	+0	½d6	+0	8	3	5	0.9	15/6	S	Indonesia	
Urumi	+0	1d6	+0	12	5	5	1.3	31/12	M	India	May be up to AF (4 shots), see text
Wakizashi	+0	1d6	+0	8	5	5	1.1	23/9	M	Japan	RBS
Yoroi-Toshi#	+0	1d6-1 AP	+0	10	3	5	0.7	21/8	S	Japan	
Miscellaneous And Unusual Melee Weapons											
Arit	+0	1d6	+0	8	3	4	1.0	23/10	M	Indonesia	
Bunot-Page	+0	1 pip	—	8	2	2	0.5	52/11	S	Philippines	Poisoned (see text)
Chain Whip	+0	1d6	+0	7	4	5	1.6	24/11	L	China	
Dropped Marbles	—	—	—	—	2	5	0.6	18/5	—	Japan	NWF, RBS, 2 RC, see text
Fang	+0	½d6	+0	8	4	5	1.9	15/6	S	China	
Fo	+0	2d6 N	+0	5	1	5	0.3	16/6	M	Europe	
Garrotte											
Strangling	+0	3d6 N	—	5	1	1	0.01	37/8	S	Various	2H, Must Follow Grab, see text
Wire	+0	½d6	+0	5	1	2	0.02	22/5	S	Various	2H, Must Follow Grab, see text
Kanzashi	+0	½d6	-1	5	1	2	0.04	15/5	S	Japan	Ninja Weapon

Weapon	OCV	Damage	STUNx	STR Min	BODY	Def	Mass	A/R Cost	Length	Origin	Notes
Kiseru	+0	2d6 N	—	5	3	5	0.8	15/5	S	China	
Lajatang	+0	1d6+1	+0	12	3	3	1.0	31/12	M	Indonesia	
Lance, Light	+0	1d6+1	+0	10 †	6	3	4.0	34/11	EL	Europe	Only On Horseback
Lance, Medium	+0	1½d6	+0	13 †	7	3	6.0	41/13	EL	Europe	Only On Horseback
Lance, Heavy	+0	2d6	+0	15 †	9	3	8.0	49/14	EL	Europe	Only On Horseback
Mourn Staff	+0	1½d6	+0	14	4	4	1.2	31/11	M	China	
Nunchaku	+0	3d6 N	—	7	3	3	0.8	23/9	M	Japan	Karate Weapon
Pendjepit	+0	½d6	+0	10	2	5	0.5	18/6	S	Indonesia	+1 with Grab, Grab Weapon, Takeaway
Petjat	+0	½d6	+0	10	2	2	0.3	23/9	L	Indonesia	
Rings	+0	2d6 N	—	7	3	5	1.0	18/6	S	China	RBS
Sai											
Cinematic	+0	½d6	+0	8	3	5	1.1	23/10	S	Japan	RBS, +2 OCV w/Bind, Block, Disarm
Normal	+0	3d6 N	—	8	3	5	1.1	32/12	S	Japan	RBS, +2 OCV w/Bind, Block, Disarm
Shinobi-Zue	+0	4d6 N	—	6	4	3	1.3	32/12	L	Japan	2H, Ninja Weapon
Tetsubishi	+0	1d6	+0	—	2	5	0.8	34/10	—	Japan	NWF, RBS, 1 RC, see text
Three-Section Staff	+0	4d6 N	—	9	4	3	1.1	38/14	Text	China	2H, +2 OCV w/Bind, Block, Disarm; see text
Timbe	+0	½d6	+0	10	2	3	0.6	17/6	S	Japan	RBS
Tonfa	+1	3d6 N	—	7	3	3	1.2	24/9	S	Japan	Karate Weapon
Umebi	+0	1½d6	+0	—	3	3	0.7	44/12	S	Japan	1m Radius, Triggered when stepped on
War Fan, Basic	+0	3d6 N	—	6	2	4	0.7	24/9	S	Japan	+2 OCV w/ Block
War Fan, Edged					2	4	0.7	Text	S	Japan	+2 OCV w/ Block
Blunt Attack	+0	3d6 N	—	6							
Razor Attack	+0	½d6	+0	6							
Whip	+0	½d6 RP	+0	5 †	2	2	0.3	15/9	Text	Various	+6m Range, can Grab
Wind/Fire Wheels											
Saw-Blade	+0	½d6	+0	8	2	5	1.0	23/10	S	China	RBS, +2 OCV w/Bind, Block, Disarm
Traditional	+0	3d6 N	—	8	2	5	1.0	29/12	S	China	RBS, +2 OCV w/Bind, Block, Disarm

FANTASY HAND TO HAND WEAPONS KEY

#: Weapon has a +¼ Advantage that affects how damage is added with STR, velocity, and the like (see 6E2 99-102)

†: STR Minimum Doesn't Add To Damage

1½H: One-And-A-Half-Handed Weapon

2H: Two-Handed Weapon

AP: Armor Piercing

E: Energy damage

Flail: Can perform the *Flail* Combat Maneuver (page 8) (*i.e.,* it has Indirect (+¼))

HP: These weapons are built so that they protect the hand, or have a special type of hilt that does so. This is bought as: Resistant Protection (6 PD/6 ED) (18 Active Points); OAF (-1), Activation Roll 11- (-½), Only Protects The Hands (Hit Location 6; -2) (total cost: 4 points).

Karate Weapon: A weapon used by practitioners of Karate (a category sometimes established as a separate WF).

N: Normal Damage (all other weapons do Killing Damage), bought as a Hand-To-Hand Attack (but to which characters add damage only by exceeding the STR Minimum)

Ninja Weapon: A weapon primarily used by and associated with ninja (a category sometimes established as a separate WF).

No horse: Characters cannot wield this weapon while mounted (a -¼ Limitation)

Only On Horseback: Characters can only wield this weapon while mounted (a -½ Limitation)

RBS: The weapon can be thrown; it has the *Range Based On STR* (+¼) Advantage.

RC: Recoverable Charges

RP: Reduced Penetration (-¼)

Set: Characters can use this weapon to perform the Set Versus Charge Combat Maneuver (see *Fantasy Hero,* page 185)

Text: Refer to the text for information.

Unhorse: Characters can use this weapon to perform the Unhorse Combat Maneuver (see *Fantasy Hero,* page 186)

All HTH Combat weapons are built as HKAs (or HAs) with the Advantage *Reduced Endurance* (0 END; +½) and the Limitations *OAF* (-1), *Real Weapon* (-¼), and *Strength Minimum* (varies). Many also have the *Required Hands* Limitation.

OCV: This is applied as a bonus or penalty against all attacks made with the weapon. OCV bonuses are bought as a 2-point Combat Skill Level with the Limitations OAF, Required Hands, and Real Weapon. OCV penalties are a minor Side Effect (automatically occurs; -½) for the weapon. Until the penalties on a weapon reach the 30 Active Point level (which is highly unlikely to ever occur), the Side Effect remains at this value. Even if a weapon has both OCV and RMod penalties, it takes only one Side Effect until the penalties exceed 30 points.

Damage: The amount of damage the weapon does. An "N" indicates Normal Damage; otherwise the listed damage is Killing. For further information and discussion, see the text boxes on 6E2 200 and 201, and the Realistic Damage, Equal Damage, and Bashing, Slashing, And Piercing Damage options on page 39 of this book.

STUNx: This is the STUN Multiplier for Killing Damage weapons (a +0 means "no modification"; use the standard ½d6 STUN Multiplier). Apply the STUNx modifier to the STUN Multiplier roll (or to the STUNx for the Hit Location struck, if the campaign uses Hit Location rules). For example, if a character with a War Flail (STUNx +1) hits an opponent in the Head, the total STUNx would be 6.

STR Min: The STR Min necessary to use the weapon effectively; see 6E2 199 for rules. Remember to apply the Adding Damage rules on 6E2 99-102 when using STR to increase the damage of a weapon bought with Advantages.

BODY: The weapon's BODY.

Def: The weapon's PD and ED.

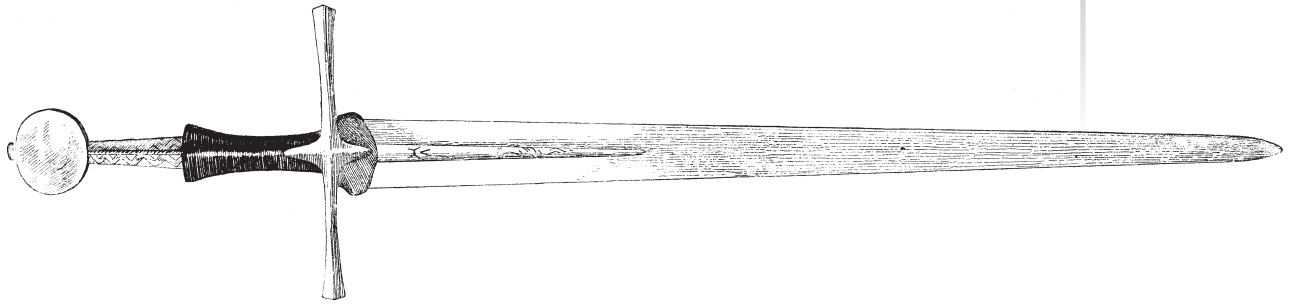
Mass: The weight of the weapon in kilograms.

A/R Cost: The Active Point/Real Point Cost of the weapon, in Character Points. For greater variation, these costs use the expanded Killing Attack costs on APG 56 (thus, an RKA 1d6-1 costs 12 Character Points).

Length: The weapon's length — Short, Medium, Long, or Extra Long. See 6E2 201 for more information.

Culture: The culture or civilization the weapon comes from. "Var" means "Various," indicating that the same or similar weapons were developed in many times and places throughout the world.

Notes: This catch-all category includes any information not listed elsewhere.



Kusarigama: This is a *kusari* with a *kama* (sickle) on one end. The wielder of the kusarigama holds the kama by the hilt and swings the chain to strike or grab a foe; once he snares the target, he follows up with the sickle end. You can buy it as a Multipower combining the Kusari and the Kama (but give the Kama a Limited Range of 3m, representing the length of the chain).

Several variants of the kusarigama deserve mention. The first is the *bakuhatsugama,* a kusarigama with a *nagedeppo* (explosive grenade, see below) or *metsubishi* (flash grenade, see below) attached to the weighted end of the chain. The second is the *mamukigama,* a kusarigama with a live poisonous serpent loosely attached to the chain! In theory, the snake will bite an enemy wrapped in the chain. Last is the *oh-gama,* an extremely large (4'+) battlefield version of the kusarigama; it does double the damage of the kusarigama but has a correspondingly larger STR Minimum in Heroic campaigns.

Kyogetsu Shoge: This weapon is much like the *kusarigama,* but has a bladed grappling hook on the end instead of a kama. It's also carried as a grappling hook, its chain acting as its climb-line.

Manriki-gusari: Also called a *manriki* or a *kusarifundo,* this is a 3' chain with weights at both ends. It can be swung to strike a foe or thrown to ensnare him, just like the kusari. You can also use this weapon's statistics for the following weapons: the *suruchin,* a weighted rope used by some Kobujutsu practitioners; the *kabit,* a chain weapon used in Arnis; the *panu,* a scarf or handkerchief weighted with coins used by some Arnis exponents; and the *sarong,* a type of waistcloth worn in the Philippines and Indonesia which is used like the *panu,* but is much heavier — there are reports of skilled practitioners "flicking" the *sarong* at thick boards and snapping them in two!

Rante: A chain weapon from Indonesia. The chain can be used in typical fashion, to whip and snare, but many rante also have some sort of blade or barb attached to one end, making the weapon more lethal than it otherwise would be.

Cost	Power
10	**Rante:** Multipower, 24-point reserve, all OAF (-1), Real Weapon (-¼), STR Minimum (5; -¼)
1f	**1) Chain:** HA +3d6, Reduced Endurance (0 END; +½); OAF (-1), Hand-To-Hand Attack (-¼), STR Minimum (5; -¼), Real Weapon (-¼) **plus** Reach +2m
1f	**2) Blade:** HKA ½d6 (plus STR), Reduced Endurance (0 END; +½); OAF (-1), STR Minimum (5; -¼), Real Weapon (-¼) **plus** Reach +2m

Rope Dart: A small blade on the end of an up to 25' long rope. The weapon was used by whirling the dart around and slashing people with it. The Indonesian equivalent for this weapon is the *suk piao,* used in Kuntao.

Soft Hammer: This Chinese weapon (*nuan chuai*) is the same as the European morningstar: a metal ball (spiked or not) connected to a wooden shaft by a short length of chain.

Clubs

Clubs are heavy wooden weapons, the relatively primitive precursors to hammers and maces. They range from batons and shillelaghs easily wielded in one hand, to the two-handed great clubs favored by ogres and their ilk.

If necessary, the GM can use the statistics for clubs for various "impromptu" weapons characters acquire. For example, if a character in a barfight uses a stool to smash someone, the GM could consider that the equivalent of a Club (perhaps with -1 OCV because it's an awkward object not designed as a weapon).

Some specific types of clubs include:

Chakar: This unusual weapon, used by Gatka practitioners, resembles a wagon wheel with a heavy weight at the end of each spoke. To use it, the wielder spins it, building up momentum and power, and then strikes with it to cause serious crushing injuries.

Gada: The gada is a heavy wooden club used by Kalaripayit exponents. It has a relatively thin shaft and a large, bulbous head, making it look something like a large wooden mace. It requires great strength to wield effectively.

Hanbo: This is a fighting-stick weapon, from 2' to 3' in length. Use these statistics also for the scabbard of a short sword (any blade with a base damage of 1d6) when used as a weapon, for the *pentjong* (a knobbed club used in Bhakti Negara Pentjak-Silat), and for the following weapons from India: *kettukari* (cane), *muchan* (a tapered 2' long staff), and the *otta* (curved heavy sticks).

Jo: This is a single stick around 4' in length. Use these statistics also for these weapons: the scabbard of a long sword (any sword with a damage of 1d6+1 or better) when used as a weapon; the sticks used in the *escrima* martial art; the *tieh tzu* ("iron ruler," a flat iron bar used as a weapon); the *chuu,* a weapon derived from the Chinese grain pestle; for the Indonesian sticks, *tongkat* and *tekken* (the latter resembles a small walking cane); the Korean sticks, *dan bong* and *joong bong;* and the Vietnamese stick, *tien bong.*

Lathi: This is the six to eight feet-long stick used in the Indian stickfighting art of the same name.

Makila: Used by Zipota practitioners, this is a 1.5 meter-long stick traditionally used as a shepherd's tool. One end has an iron cap, and the handle unscrews to reveal a long, sharp needle-like thrusting weapon. The sharp part is an HKA 1d6; using the stick as a blunt weapon is a *Club Weapon* Maneuver doing 3d6 Normal Damage.

SALVAGED WEAPONS

In Post-Apocalyptic Hero campaigns, one of the most picturesque ways to emphasize the realities of the setting to the players is to give them weapons (or other gear) made from bits and pieces of pre-apocalypse technology that their characters don't necessarily recognize, but which the players themselves will. Examples include:

Anchoring Post Maul: A length of metal pole with a cylindrical mass of concrete on one end; it once held a swingset, sign, mailbox, or other object firmly in the ground. Only large, strong characters can wield this unbalanced weapon. (This weapon is the equivalent of a maul, but with a -1 OCV.)

(Continued Next Page)

Fist-Loads

Generically speaking, fist-loads are small weapons held in or wrapped around the user's fist (or sometimes feet). The "Fist-Load" listed specifically in the Hand-To-Hand Weapons Table is a small, heavy rod held in in the character's fist. A thong or ring protruding from the center of the rod goes around one or two of the wearer's fingers to hold it in place. It's also known as a *yawara.*

Other types of fist-loads include:

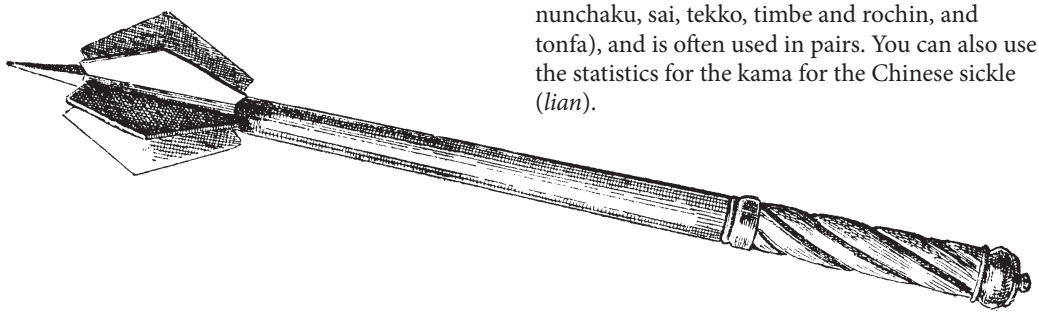
Ashiko: These are climbing claws strapped onto a ninja's feet; they're the companions to the *shuko*. They can become weapons when the wearer uses a kick attack. They provide a +1 to the wearer's Climbing roll if he has the Climbing skill. The character must wear both ashiko to get the +1 to his Climbing roll.

Cestus: This weapon is a glove with spikes or jagged protrusions along its knuckles and back. The character using it does his normal Punch damage, and also does 1 point of Killing damage (he cannot add to this with his STR; it always does only 1 point of Killing damage). The Cestus provides 4 PD/4 ED Resistant Protection to the hand wearing it.

Nekote: Nekote, or "cat's claws," are a set of five metal claws fitting on the fingertips. By themselves they do relatively little damage, but they're often poisoned. Use this weapon's statistics for Chinese fingernail razors (small blades that fit underneath the fingernails) and the Japanese *kakute,* or "horn finger" ring. This ring has a small spike on one side that is normally poisoned, making even the lightest punch fatal.

Ring Needle: Also known as an *er mei tzu,* or "sting," this weapon consists of a ring attached to a thin, sharpened metal rod. It was originally designed for underwater fighting. Pakua practitioners use it to stab or thrust, and can throw it.

Shuko: These are the ninja climbing claws worn on the hands, usable in hand-to-hand combat to slash a target. They provide a +1 bonus to Climbing rolls (when wearing both the shuko and the *ashiko,* or foot-claws, the ninja gets a total bonus of +2 to Climbing rolls). A character cannot carry a weapon in a hand which has a shuko in it. And the characer must wear both shuko, one on each hand, to get the +1 to his Climbing rolls. Shuko are also known as *tekkokagi.*



Hammers And Maces

Hammers and mauls are simple weapons — a metal or wooden haft with a blunt mass of metal on the end. Sometimes the "hitting end" is spherical, at other times it's shaped more like a hammer used to drive nails. The war hammer, which is of the latter type, also has a short blade projecting from the back of the hammer, with which the wielder can more easily pierce armor if necessary. Thanks to their heavy impact, hammers have a +1 Increased STUN Multiplier.

Maces are similar to hammers, but more powerful. In place of a single mass of metal they usually have four to six metal flanges, or sometimes a spiked ball. This gives it greater hitting and armor-penetrating power than a hammer.

Some specific types of hammers and maces include:

Copper Hammer: A short-hafted hammer with a large ball of copper on the striking end. You can also use this weapon's statistics for other types of Chinese hammers (*chuai*), and for the *ton zen* (a type of mace in the shape of a 2-3' tall solid brass statue of a man, somewhat similar in appearance to the "Oscar" statuette given to Academy Award winners).

Hand Mace: This term refers to a number of mace-like Chinese weapons in the shape of hands, fists, or claws. Some of the hands hold objects, such as pens or brushes, or have one or two fingers upraised, which helps the mace pierce armor. Examples of this sort of weapon include the *ch'uan bi* ("fist pen"), *chua* (long-handled claw), and *fu sou* ("Buddha hand").

Picks

Similar to axes, picks are metal- or wooden-hafted weapons with a single blade that looks something like a dagger or sword-point projecting from one end. Some versions are picturesquely known as "crow's bills" because of this. The heavy, sharp head and force of the swing provide excellent armor-penetrating power (*i.e.,* the *Armor Piercing* Advantage).

Some specific types of picks or pick-like weapons include:

Kama: This is the Okinawan sickle, which consists of a short wooden handle topped by a short curved sickle blade. It's one of the principal weapons of Karate (the others are bo, eiku, nunchaku, sai, tekko, timbe and rochin, and tonfa), and is often used in pairs. You can also use the statistics for the kama for the Chinese sickle (*lian*).

(Continued from Previous Page)

Parking Meter Mace: The pole and coin receptacle of a standard parking meter make an excellent mace. (This weapon does the same damage as a standard mace.)

Sharpened Hubcap: This disk of thin metal has carefully-sharpened edges so that it can be used as a throwing weapon. (The hubcap does damage equivalent to a dagger, but can only be thrown — if wielded hand-to-hand it becomes bent and useless after one good hit.)

Signpole Sword: A three foot-long length of the standard metal "pole" used to hold stop signs and other street signs in many places could have its edges sharpened to make a crude but effective slashing sword. (Treat this weapon as a longsword with -1 OCV.)

Spears And Polearms

Polearms are various weapons with long (up to 2-3 meters) wooden shafts tipped by various blades and points. The differences between them are often minor, based on the shape, nature, and number of blades, axe-heads, spikes, barbs, and spear-points attached to the "business end" of the weapon. The most popular polearm, and in fact one of the most popular weapons of all, is the spear, which unlike most polearms can usually be thrown.

For most polearms, including all the Chinese and Japanese polearms, the ones that do HKA 1d6+1 damage do 3d6 Normal Damage with a Club Weapon attack; the ones that do HKA 1½d6 damage do 4d6 Normal Damage with Club Weapon.

Some specific types of spears and polearms include:

Arbir: A polearm used in some styles of Pentjak-Silat. It's a 5'-long weapon consisting of a shaft, a convex chopping blade at one end, and a sharpened metal spike on the other end. It's used two-handed to slash and stab; the pole generally isn't used as a staff.

Chai-Dao: This Chinese polearm is also called the "Bandit's Encampment Broadsword." It's usually about 5'3" tall, with 2'6" of that length a wicked curved blade; the rest is haft. Traditionally, it was used in camp defense, often to chop at the legs of horses riding through.

Chiang: The Chinese spear, which comes in dozens of unusual styles. Often the spear has a red tassel tied behind its head, partly for decoration and partly to keep blood from running back down the shaft and fouling the spearman's grip. Use these statistics for the following weapons in addition to the standard spear: *mao chiang* ("snake spear," a wavy-bladed spear); the Eyebrow Spear (a spear with a crescent-shaped head); *ba* ("rake," a combat rake with sharp tines); *ba tou* (a hoe converted to combat uses); *chan* ("shovel," a term for several types of polearms with heads shaped like large coins, crescent moons, shovels, and other objects); *chang* (Korean spear); *sode-garami* (a T-shaped Japanese spear with barbs all around the end to entangle an enemy's sleeve); *tombak* and *tjio* (two of dozens of different types of Indonesian spears); *kuntham* (Indian spear); *kue* (an Okinawan hoe used as a weapon by some Kobujutsu practitioners); *thuan* (Thai spear).

Ghi: The Chinese halberd, which consists of a spear with one or two crescent moon-shaped blades set just below the spearhead. The Vietnamese equivalent is the *dai dao;* the Thai equivalent is the *ngow.*

Naginata: This Japanese weapon consists of a 2-3' edged blade on a long staff; the weapon is usually 7-8' long. It's traditionally a very popular weapon with female Japanese fighters. Warriors use it as both a bladed weapon and as a staff; it's very versatile. You can also use this weapon's statistics for the *nagemaki* or *nagakami,* which has a somewhat longer and heavier blade but a shorter handle.

Nine-Dragon Trident: This Chinese polearm consists of a 6' shaft with a trident on top, plus two cross-bars further down (turned at 90° to one another) which bear an indescribable array of flanges and protrusions. It grants a +2 OCV to Maneuvers including the Bind, Block, and Disarm Bases. In Chinese, it's called the *gao loon cha.*

Sword-Spear: A type of short (3-4') Chinese spear, known as a *jen chian.* Also use these statistics for a Double Hook Arrow (*shunn gou shih*), a type of large arrow with two hooks which curve away from the arrow head.

Tai-Dao: This Chinese polearm is two meters long and topped with a heavy, curved blade. It was used both from foot and horseback. The *kwan dao* (also spelled *quan tao,* meaning "General Kwan's Knife"), *da dau* (a long-handled broadsword-like weapon), *bisento* (a Japanese weapon), and the *chun jung whule-do* ("heavenly dragon moon knife," a Korean weapon) use the same statistics as this weapon, as do the *kwanto* and *sjang sutai,* two weapons used in Kuntao.

Tiger Fork: The Tiger Fork, or *hu cha,* is a large, trident-like weapon with broadly-spread tines. You should also use these for various types of Chinese tridents, such as the *shan char,* and the Korean trident, or *dang pah.*

Yari: This is the Japanese spear. It comes in two basic versions. The normal version works just like any other spear. Another version, the Kamayari, comes with a back-hook (a backward-pointing spike mounted at the head), which gives the weapon a +2 OCV bonus when used with Maneuvers with the Bind, Block, and Disarm Bases. There are several other varieties with different spearhead and combinations of hooks and and other projections. The Vietnamese counterpart to this weapon is the *thuong.*

For the Kamayari, use the same write-up, but increase the STR Minimum to 14.

Staffs

The *quarterstaff* is a thick cylindrical piece of wood about five to six feet long. It requires two hands (and WF: Staffs) to wield, but can strike lightning-fast flurries of blows (a form of Multiple Attack). Furthermore, a character who loses or breaks his staff can easily make another one out of an appropriate sapling or branch.

Some specific types of staffs include:

Bo: A 5'-6' hardwood staff, also known as a *rokushakubo* ("six-foot staff"). Use these game statistics for the Chinese staff (*kuen*), the Indonesian staff (*toya*), the Korean staff (*jang bong*), the Thai staff (*plong*), and the Okinawan oar (*eiku*; also known as a *chizikunbo* or *sunakakebo*).

The bo is one of the principal weapons of Karate (the others are kama, nunchaku, sai, eiku, tekko, timbe and rochin, and tonfa).

The kuen is one of the most famous weapon of Kung Fu; these statistics can also be used for two other Chinese weapons, the Long Rod (*gunn*) and Water and Fire Rod (*shui for gunn*).

Tetsubo: A Japanese hardwood war-staff 6' long and covered with studded iron plates at the end; the plated area of the shaft is octagonal rather than round. You can also use the tetsubo's statistics for the *konsaibo*, a hardwood staff reinforced with metal strips and iron studs, and for the *kanabo*, an iron club.

Wolf's Teeth Staff: This weapon, called *lan yar barn* in Chinese, consists of a staff approximately 6' long. About 1' of one end of it's covered with small metal spikes.

Swords And Knives

The most common and significant weapons in the Fantasy era are swords, daggers, and similar bladed weapons. Most are so well-known that they need no explanation. They come in literally thousands of varieties, with many different lengths, blade widths, curvatures, point styles, and preferred methods of use. If you don't find a specific type of sword listed, adapt the nearest equivalent weapon on the table and use its statistics. For example, if you want your character to carry a large *kukri* knife, you might use the write-up for the Short Sword.

GENERAL DESCRIPTIONS OF SWORDS

The following terms, while mainly taken from Europe, can be applied to describe many different types of swords from all over the world; see below for some information on specific types of blades.

A *bastard sword* is somewhat longer and heavier than a longsword, with a longer hilt as well. A swordsman can wield it one-handed, but for best effect uses two.

Broadsword, or *longsword,* typically refers to straight-bladed, double-edged swords of the type popular in Europe and depicted in countless Fantasy illustrations. Most had blades from 61 to 90 cm (25-35 inches) long; a few had only a single edge or other variations.

A *greatsword,* or two-handed sword, is the largest sword of all. Requiring two hands to wield, it usually has a dull ricasso (the part of the blade right above the guard) so the fighter can grasp it either entirely by the hilt, or with one hand on the hilt and the other on the ricasso. In the latter

mode, it could be used almost like a short staff, giving it a great deal of offensive flexibility — in addition to making broad, sweeping strokes if necessary, the wielder could stab, jab, block, trip, or even smash his opponent with the pommel. Examples include two-handed Scottish claymores, the German *zweihander,* and many similar blades.

Short swords are similar to longswords, but have shorter blades — typically from 40 to 60 cm (15-24 inches) long. Examples include the Roman *gladius,* the Greek/Iberian *kopis*/*falcata,* and some Celtic and Greek leaf-bladed swords.

A *smallsword* is a short dueling weapon fashionable among European gentlemen of the seventeenth and eighteenth centuries; it's sort of the "short sword version" of a rapier. It would make a good weapon for light fighters and in "swashbuckling" campaigns.

OTHER BLADE WEAPONS

Bokken: This is a wooden practice sword shaped like a katana. It does Normal, not Killing, damage. It's no toy or mere practice blade, though; it's made of heavy, tough wood, unlike the *shinai.* Many duels in feudal Japan were fought with bokken; it's possible to kill an opponent with one.

Bundi: Also known as a *katar* or a punch-dagger, the bundi is a broad, double-edged knife-blade set into a frame/handle grasped in the fist (thus, the wielder's arm appears to have a blade on the end rather than a hand). Two panels of the frame/handle extend down the sides of the arms for about a foot, helping the user block an enemy's attacks. Use the bundi's statistics (minus the +1 OCV for Blocks) for any sort of modern punch-dagger or T-knife.

Butterfly Sword: This short sword has a heavy, flat cleaver-like blade with one cutting edge. It's used by ninja and by Kung Fu practitioners, often in pairs. The Willow Leaf Knife, the Korean *dan sang gum* (twin short swords), and the *to* of Kuntao are all very similar in appearance to the butterfly sword and share the same statistics.

Don't confuse the Butterfly Sword with the *balisong,* a switchblade-like Filipino knife sometimes called a "butterfly knife."

Cinquedea: The *cinquedea* is an Italian weapon from the early 1500s; its name means "five fingers," the blade's width at the hilt. It comes in both short sword and broadsword lengths. Although a little heavier than comparative blades, it's also a little sturdier; if you're using the weapon breakage rules (page 47), give both versions +1 BODY (this costs +1 Character Point; see page 44).

Cutlass: This is a European weapon, a short slashing blade with a heavy guard to protect the hand; fencers use it. The hand-guard provides 6 PD/6 ED Resistant Protection to the hand holding it; the character can attack with the blade or punch with the hand-guard (a *Club Weapon* Maneuver). The Vietnamese counterpart to this weapon is the *song dao.*

Cymbal: This weapon is a small, hand-held cymbal with sharpened edges. Warriors can use it as a punching/slashing weapon, or throw it. This weapon's statistics also apply to the Tooth Saber, a sort of half-cymbal that comes in two varieties: the Sun Tooth Saber, with sharp teeth along its cutting edge; and the Moon Tooth Saber, which is smooth-edged. Tooth Sabers cannot be thrown.

Darn Do: The Chinese sabre, a long, heavy, single-edged sword with a curved blade. It's also known as a *dau.* The Vietnamese equivalent is the *ma dao.*

Epee: A light steel practice sword used by fencers. Modelled after the rapier, it has a light, flexible blade ending in a blunt steel tip (which is itself covered by a plastic cap), and is used only for thrusting.

Falchion: The *falchion* is a European weapon that comes in two varieties. The first is a heavy chopper-like blade that's wider near the tip than at the hilt. The other is a narrower version, equally wide through its length, with a slight backwards curve and a clipped point. Although not much longer than a short sword, it has excellent slashing and stabbing power.

Foil: This weapon is much like the epee, but even lighter and more flexible. You can also use its statistics for the *daab,* a Thai sword used in Krabi-Krabong.

Hook Sword: This is a Chinese sword popular in some Kung Fu styles. It includes a straight, double-edged blade, a forward-curving hook at the end of that blade, a bladed crescent-shaped guard for the hand (providing 6 PD/6 ED Resistant Protection to the hand on an 11- Activation Roll), and a butt-spike protruding from the hilt. This weapon has a +0 OCV bonus for most Maneuvers, but because of its unusual configuration gets a +2 OCV for Maneuvers including the *Bind, Block,* and *Disarm* Maneuver elements. The Fire Wing sword, Elephant Trunk sword, and the *sang kauw* of Kuntao use the same statistics.

Jien: The Chinese broadsword, often used in Kung Fu styles. The weapon's blade is straight, light, and double-edged; it's a thrusting weapon, and normally only the four inches at the tip of the blade are used in combat. Sometimes it comes in unusual configurations, such as: the *sher ther jien,* or snake-tongued sword, which has a forked tip; the *giau tzu jen,* which has tiny serrations along both edges; and the *wu grou jen,* or Centipede Hook, which has a hook protruding from one side. The Vietnamese equivalent to the jien was the *kiem.*

Katana: This is the traditional samurai sword; it's the larger of the *daisho,* the pair of blades worn by the samurai. The *odachi* is an older-style blade using the same game statistics. The katana is worn in the belt, edge upwards. The *tachi,* another long Japanese blade, has identical game statistics to the katana, but is slightly more curved than the katana; the tachi is either worn in the belt (with the edge down) or worn over shoulder instead of in belt.

Use the katana's statistics for the traditional Korean sword (*gum*), the Vietnamese sword (*guom*), for the Chinese Seagull Sword (a double-bladed sword with a bulbous tip), and for the *to sangto,* a form of twin swords used in Kuntao.

Knuck-Knife: This is a normal folding, lock-back blade... except that its handle is a set of brass knuckles.

Ko-Gatana: A small knife attached to one side of the scabbard of a wakizashi (*q.v.*).

Kris: This weapon is the Malaysian double-edged, wavy-bladed sword/dagger. It's mainly a thrusting weapon, and the waves in the blade make wounds very, very painful and more likely to bleed profusely. Kris blades vary in length from 5 inches to over 30 inches. The Kris Knife stats shown are for a blade in the 5-10 inch range, the Normal Kris stats are for a blade in the 10-20 inch range, and the Kris Sword stats are for a blade in the 20-30 inch range.

The kris has the same significance for Indonesians that the katana has for the Japanese. Every part of the weapon has its own designation and lore. A large number of magical abilities, or *tasawwaf,* are attributed to it (see HSMA 61); they're allegedly implanted in the blade by the *pande,* or master smith, who crafts it. Every male is supposed to possess a kris, and it's a father's duty to see that his son is furnished with one. Kris from different areas of the Indonesian archipelago can be told by their distinctive styles or forms.

Kukri: An Indian knife which is also frequently used by Bando practitioners and by the Gurkas of Nepal. It has a recurved blade and a slightly oval or rounded point. It can be thrown. You can also use the kukri's statistics for the *badik,* a type of Indonesian dagger, which is not normally thrown.

Main-Gauche: The *main-gauche* is a European fencing dagger. It has a heavy hand-guard (6 PD/6 ED Resistant Protection on an Activation Roll 11- for the hand holding it) and extra-long quillions. It's especially good at, and so receives an extra +2 OCV for, Maneuvers with the Bind, Block, and Disarm elements.

Navaja: A large folding knife used by European knifefighters, with a very slight curve toward the tip of the three to six inch-long blade.

Nine-Ring Sword: A single-edged, sabre-like weapon with nine rings set into its back edge. The rings help to catch an enemy's weapon and disarm him. Another name for this weapon is Ghost Hat Sword.

Ninja-to: This weapon, also called the *shinobi-gatama, shinobigatana,* and *ninja-ken,* is the traditional ninja sword. It has a blade about 24" long and is about 40" long overall. It looks something like other Japanese swords such as the katana, but the blade is straight and the handguard (*tsuba*) is square instead of round.

The ninja-to is a tool as much as a weapon — to use a modern comic book analogy, it's a sort of "utility belt" for the ninja. It can be used for climbing and for digging holes in the earth as well, an indignity the owner of a katana would never subject his blade to. Its scabbard, or *saya,* is longer than the sword itself and can be used to carry concealed powder weapons or bo shuriken. The scabbard cord, or *sageo*, has a variety of uses. These additional uses are bought as part of a Multipower.

Ninja only use a ninja-to on stealth missions; when disguised as ordinary people, they use whatever weapons are appropriate to those folk. Ninja also often use the katana.

Cost	Power
18	**Ninja-to And Saya:** Multipower, 37-point reserve, all OAF (-1)
1f	**1) Blade:** HKA 1½d6 (plus STR), Reduced Endurance (0 END; +½); OAF (-1), STR Minimum (12; -½), Real Weapon (-¼) **plus** Reach +1m
1f	**2) Saya As Club:** HA +2d6, Reduced Endurance (0 END; +½); OAF (-1), HTH Attack (-½), STR Minimum (12; -½), Real Weapon (-¼) **plus** Reach +1m
1f	**3) Saya And Sageo As A Climbing Platform:** +1 to Climbing Roll; OAF (-1)
1f	**4) Blinding Powder In Saya:** As Metsubishi, Blown, above
1f	**5) Sageo As Strangling Garrotte:** refer to "Garrotte," above, for details on that weapon
1f	**6) Saya As Breathing Tube (Takezutsu):** Life Support (Breathe Underwater); OAF (-1), Only Works Close To The Surface (-1)

No-daichi: This is a Japanese two-handed sword.

Parang: A cleaver-like Indonesian blade, about 10 inches to three feet in length. You can also use its statistics for other Indonesian weapons, including the *golok* (which has a more convex cutting edge and a sharper point than the parang).

Pedang: A straight or curved Indonesian short sword (10-35" long). It's used one-handed. Other Indonesian blades using similar statistics include the *kělewang* (a single-edged sword with a pronounced notch near the tip on the blunt side).

Puñal: A folding knife similar to the *navaja,* but somewhat smaller and more streamlined, without the slight curve at the tip.

Rapier: The *rapier* is a long, narrow stabbing sword, a European fencing weapon popular with "swashbuckler" type warriors and other light fighters. Fast and relatively light, it often has an elaborately-shaped and decorated hilt, guards, and other furniture.

Razor, Straight: This is the normal shaving implement; the large variety is larger than the types

normally used to shave. It's ineffective against Resistant Protection (it has the *Reduced Penetration* Limitation) and doesn't do as much STUN as cleaving or stabbing weapons. It's the preferred weapon of capoeiristas. Two types of Straight Razors are shown on the chart, one of ordinary length and one extra-long.

You can also use the statistics for the smaller Straight Razor for the Justice Pen (*bi*), a Chinese stabbing weapon which resembled a large metal brush or pen.

Sabre: This is the European fencing sabre, a sharp, curved weapon used principally for slashing. You can also use the sabre's statistics for the *krabi,* a sabre-like sword used in Krabi-Krabong.

Schlaeger: A duelling sword favored by German students, particularly during the latter half of the 1800s. It has a straight, double-edged blade, a large basket hilt (to allow the wrist a full range of motion), and a dull point (it was used for slashing, not stabbing).

Scimitar: The *scimitar* (or *shamshir*) is a curved Middle Eastern sword meant for slashing (particularly from horseback). The *tulwar* is an Indian version of the same weapon. Some tulwars are heavy and thick-bladed; increase their BODY by +1 and their STR Minimum to 12.

Shinai: This is a bamboo practice sword shaped like a katana and used in the sport of kendo.

Spread-The-Water Knife: A bladed weapon shaped like a thin D, with the curved edge being the blade and the straight bar being a wooden shaft. The straight bar averaged about 2-3' long.

Tanto: A Japanese dagger, sturdily constructed, with a curved, single-edged, chisel-pointed blade. It's 9" or so long and has no hand-guard.

Use these statistics for two other Japanese blades, the *aikuchi* and *hamidashi,* and for several short Chinese bladed weapons, including the *shaou dau* ("scrape saber," a small version of the Chinese saber) and *shou li jen* ("sleeve sword," a sword about the size of a dagger with a concealed spring that allowed to to expand to twice its length). The tanto's statistics also apply to a number of Indonesian daggers, including the *pisau.*

Tetsu-To: A heavy iron sword, curved in the Japanese fashion, used by samurai and ninja alike as a strength-training weapon. It's too heavy for most people to use effectively in combat (see the weapon's STR Min).

Tjaluk: A blade weapon used in Setia Hati Pentjak-Silat. It consists of a hilt (with a curved metal handguard) from which a sickle-like curved blade about 1' long emerges. The sharp edge of the weapon is the *reverse,* or outside, edge — so parrying it can be a risky proposition. It's best used in surprise or assassination attacks, not in open combat.

Urumi: The *urumi,* or spring-sword, is a flexible sword from India; it's also known as a *velayudaya.* It consists of a hilt with 1-4 blades of metal (sharpened on both edges) projecting from it. The blades are thin and flexible, allowing them to be whipped through the air and into an enemy. When not in use the urumi can be carried around the waist like a belt.

HKA 1d6 (plus STR), Reduced Endurance (0 END; +½) (22 Active Points); OAF (-1), STR Minimum (12; -½), Real Weapon (-¼) (total cost: 8 points) ***plus*** *Reach +1m (1 Active Point; total cost 1 point)* ***plus*** *Autofire (4 shots; +½) for sword (8 Active Points); OAF (-1), Real Weapon (-¼), Requires A DEX Roll (-½) (total cost: 3 points). Total cost: 12 points.*

Wakizashi: This is the companion sword of the katana; it's the smaller of the *daisho* pair of samurai blades. The *kodachi* is the older form of the same blade.

Yoroi-toshi: This weapon, the same approximate size and shape as the *tanto,* is a dagger designed to pierce armor. It's very heavy and very sharp, and does armor-piercing damage.

Miscellaneous And Unusual Weapons

Some other weapons devised by humanity over the centuries include:

Arit: The Indonesian sickle, adapted for combat. Its blade is much rounder than that of the kama. A similar weapon is the *tjelurit.*

Bunot-Page: This weapon is simply the tail of a stingray, cut from the animal and used to strike an opponent. Some Arnis/Kali/Escrima exponents fight with it. The stingray spine itself does relatively little damage — but the poison in it can kill. Usually enough poison remains in the tail for about two good hits. The effects of the poison are not included in the cost listed in the table, since it varies in amount and potency; the average poison would work roughly as follows:

Stingray Poison: *RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1) (45 Active Points); Spine HKA Must Do BODY (-½), No Range (-½), 2 Charges that Never Recover (-3½).* ***Total cost: 8 points.***

Chain Whip: This Chinese weapon (*bian*) is like a whip, but its length consists of metal plates connected by chain links; it has a slashing blade at the tip. It shares a Weapon Familiarity with the normal bullwhip, but lacks that weapon's range. This weapon's statistics also apply to the *bian tzu chiang,* or Whip Spear, a 6'-plus length of chain whip with a spearhead attached at both ends.

Dropped Marbles: A character can drop these where he thinks his enemies will run or walk,

hopefully causing those enemies to fall to the ground. Marbles do not require a Weapon Familiarity. They're built as follows:

Change Environment (anyone entering or moving through area slips and falls unless he succeeds with a DEX Roll each Phase), -3 to DEX Rolls, Area Of Effect (4m Radius Surface; +½), Uncontrolled (removable by spending a Full Phase to sweep them aside; +½) (18 Active Points); IAF (see text; -½), Activation Roll 14- (-¼), Only Applies To Horizontal Surface (-0), Range Based On STR (-¼), 1 Recoverable Charge (-1¼). Total cost: 5 points.

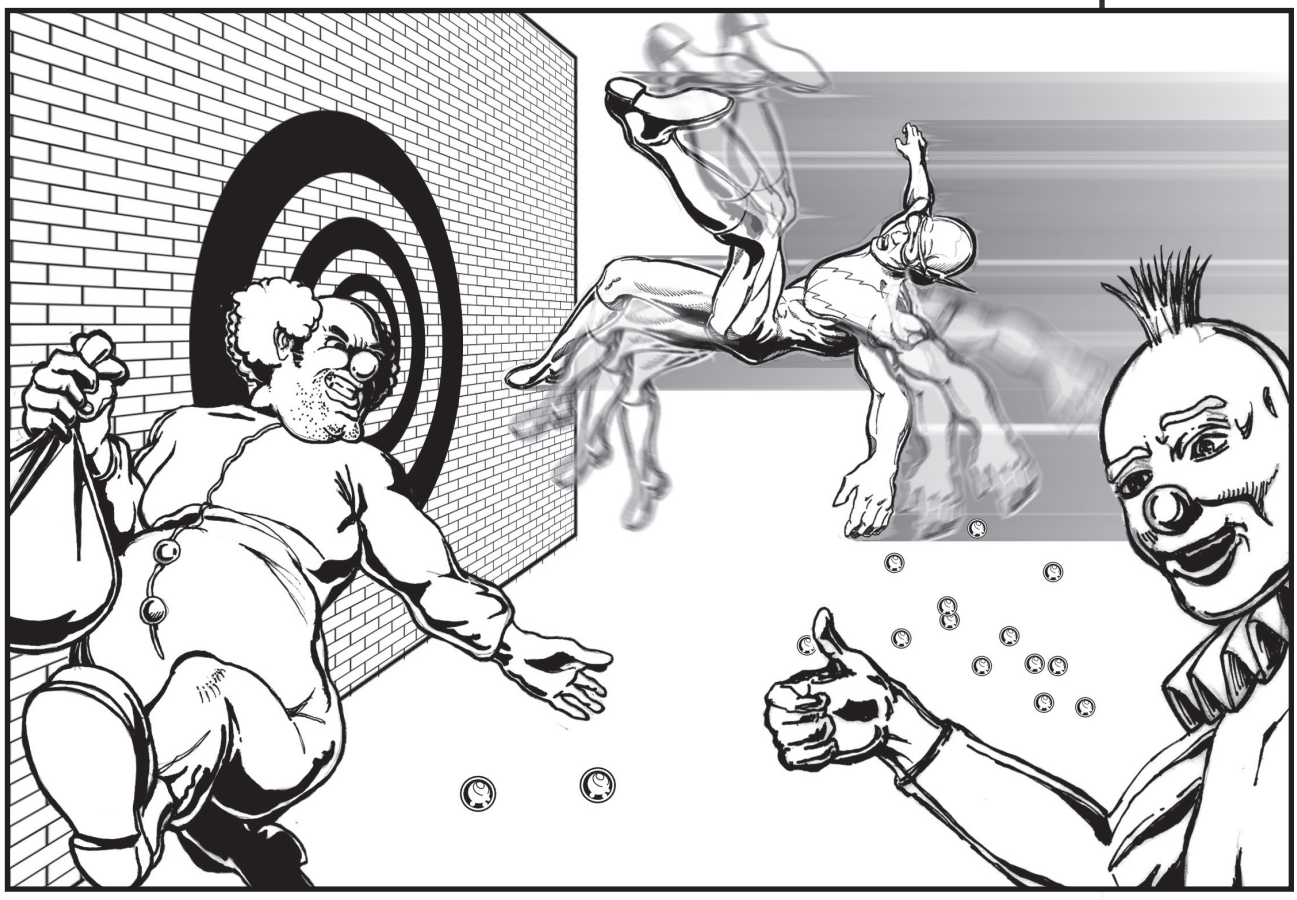
When a character throws Dropped Marbles onto the ground, he rolls versus DCV 3 to hit his target Area. When a target walks into the Area filled with Marbles, the attacking player (or GM) rolls the 14- Activation Roll; if it succeeds, the target has to succeed with a DEX Roll at -3 or fall down. Dropped marbles are bought as IAFs because they're supposed to be inconspicuous when dropped — but depending on the situation, they might be highly visible.

A character who fails his DEX Roll and falls down may, at the GM's judgment, take 1-2d6 Normal Damage from the fall (or more, or Killing Damage, depending on the surface involved). If a character enters a Dropped Marble field at high speed and fails his roll, he may lose control of his movement and slam into a large object (taking velocity/6 in d6 of Normal Damage, to a maximum of the PD + BODY of the object he collides with) or skid along the ground (taking velocity/10 in d6 of Normal Damage, possibly more or less depending on the surface).

Fang: The *fang,* a Chinese weapon developed from an Indian elephant goad, is a heavy iron rod about 2' long with a point at one end. About one-third of the way from the top a curved blade projects to one side, similar to the blade of a *kama* (see below). The fighter can use the blunt portion of the rod to stun his foes as a *Club Weapon* Maneuver, or the point or blade to injure and kill them.

Fo: A weighted cloak hem, used as a weapon by some fencers. At the appropriate moment, the fencer flicks his cloak at his opponent, causing the weight sewn into the hem to strike him.

Garrote: This is a strangling cord or wire. It comes in two varieties: the Strangling garrote, which may be any strong rope, scarf, or cord; and the Wire garrote, a piece of strong, sharp wire with a handle tied to either end. The attacker loops either kind around the victim's neck and applies pressure; therefore the garrote is usually used from surprise — it's an assassin's weapon. The Strangling garrote chokes the victim to death, and is no good against any Hit Location except the Head. The Wire garrote can slice through flesh, and can therefore cut a throat or cut a head entirely off; it harms any body part the attacker can loop it around. Any chain weapon described in this section can be used as a Strangling Garrote; the *manriki-gusari* is especially appropriate.



Strangling Garrote: *HA +3d6, NND (defense is rigid Resistant PD on the neck or not needing to breathe; +1), Constant (+½) (37 Active Points); OAF (-1), Hand-To-Hand Attack (-¼), Must Follow Grab (-½), Must Be Aimed At Head (-1), Real Weapon (-¼), STR Minimum (5; -¼), Two-Handed (-½). Total cost: 8 points.*

Wire Garrote: *HKA ½d6, Constant (+½) (22 Active Points); OAF (-1), Must Follow Grab (-½), Must Be Aimed At Extremities (-½), Real Weapon (-¼), STR Minimum (5; -¼), No STR Bonus (-½), Two-Handed (-½). Total cost: 5 points.*

Kanzashi: The kanzashi is a wooden or metal hair needle, about 12-20 cm long, with two tines running parallel. It could be used as a weapon, and was a favorite of the *kunoichi* (female ninja).

Kiseru: This weapon is a metal smoking pipe about 1' long. It's easily concealed and can actually be used for smoking.

Lajatang: A weapon used in the Indonesian fighting style of Kuntao, consisting of a short wooden staff with a crescent moon-shaped blade set perpendicular to it at each end.

Lance: The *lance* is a large, heavy, spear-like weapon with a long wooden shaft and a large double-edged blade on the end. It's designed for use on horseback (only mounted persons can use it, a -½ Limitation), and primarily only when charging (*i.e.,* performing a Move By or Move Through); if a character tries to use one in other ways, the GM may reduce the damage slightly (and should keep in mind the weapon length rules on 6E2 202). It requires WF: Lance, which encompasses all forms of the weapon. With the force of a charging horse behind it, the lance is a powerful weapon indeed!

Mourn Staff: Known as a Thorn Staff or, in Chinese, as a *san men barn,* this weapon actually resembles a sword more than it does a staff. It consists of a 3-4' wooden or metal shaft, with three-quarters of its length studded with metal "teeth."

Net: See *Toami.*

Nunchaku: This weapon, one of the principal weapons of Karate (the others are bo, eiku, kama, sai, tekko, timbe and rochin, and tonfa), is an Okinawan wooden flail. It consists of two pieces of wood (each 12" to 14" long) connected by short chain or cord (itself 1" to 5" long). Nunchaku are often used in pairs.

Pendjepit: A weapon used in Prisai Sakti Pentjak-Silat. It's a metal Pincher with sharp, tiny teeth in the ends that are used to tear at the flesh grabbed.

Petjat: A 4-6' whip used in some parts of Indonesia. You can also use this weapon's statistics for the *chemeti,* another type of Indonesian whip with a 1-2' wooden handle, and a 2-3' buffalo-hide or human hair whip.

Cost	Power
10	**Rings:** Multipower, 15-point reserve, all OAF (-1), Real Weapon (-¼), STR Minimum (7; -¼)
1f	**1) HTH:** HA +2d6, Reduced Endurance (0 END; +½); OAF (-1), Hand-To-Hand Attack (-¼), STR Minimum (7; -¼), Real Weapon (-¼)
1f	**2) Thrown:** Blast 2d6; OAF (-1), STR Minimum (5; -¼), Lockout (can't use HA until Charge is recovered; -½), Range Based On STR (-¼), Real Weapon (-¼), 1 Recoverable Charge (-1¼)

Rings: Steel rings about 8" in diameter, used as bludgeoning weapons or missiles.

Sai: This Japanese weapon, known as *gen* or *cha* in China and as a *tjabang* or *titjio* in Indonesia, is one of the principal weapons of Karate (the others are bo, eiku, kama, nunchaku, tekko, timbe and rochin, and tonfa). It's is trident-shaped truncheon, some 15-20" long, made of metal. The point is blunted; it's not a stabbing implement. Due to its trident shape, the Sai receives an additional +2 OCV when performing Maneuvers which include the Bind, Block, and Disarm Bases (thus receiving a total of +3 OCV with these Maneuvers).

These statistics are also used for the *jutte* and *nunte* weapons. The jutte (or jitte) looks like the sai but with one tine missing; this makes it easier to conceal, and thus popular among ninja. The nunte looks like the sai but with one tine bent backwards. The sai, jutte and nunte can be thrown; the three weapons share an identical Weapon Familiarity.

Sai, Cinematic: Though historical sai appear never to have been sharpened, sai in movies are sometimes stabbing weapons. The statistics for this weapon can also be used for the Chinese *char,* or trident dagger, and for the *siangkam,* a Kuntao weapon resembling a metal arrow about 1-2' long.

Shinobi-zue: This ninja weapon is a bamboo staff. One end is loaded with lead for a harder impact when it hits. The other is capped with a metal plug; when removed, this releases a concealed 6' chain. The staff is used as a bo; the chain is used like a kusari but cannot be thrown. This weapon is also known as a *shikomi-zue.* You can also use the shinobi-zue's statistics for the *chigiriki,* a staff or spear with a 3-10'-long chain with a weighted end attached to it (use the *yari*'s statistics for the spearhead).

Tetsubishi: These are caltrops — four-pointed spikes which, when dropped on the ground, always land with one spike pointed up. When the character throws his tetsubishi onto the ground, he rolls versus DCV 3 to hit his target Area. When a target walks into the Area where tetsubishi have been thrown, the attacking player (or GM) rolls the 14- Activation Roll; if it succeeds, the target takes damage. In campaigns which use Hit Locations, this damage is always to the character's feet (Hit Location 18). A character who sees the caltrops ahead of time may move through the Area without stepping on them if he succeeds with

a DEX Roll. Tetsubishi do not require a Weapon Familiarity.

RKA 1d6, Area Of Effect (2m Radius Surface; +¼), Constant (+½), Uncontrolled (removable by spending a Full Phase to sweep them aside; +½) (34 Active Points); IAF (see text; -½), Activation Roll 14- (-¼), Only On Horizontal Surfaces (-0), DEX Roll Cancels Effect (-¼), Range Based On STR (-¼), Automatically Targets Hit Location 18 (-0), 1 Recoverable Charge (-1¼). Total cost: 10 points.

Tetsubishi are bought at IAFs because they're generally inconspicuous when dropped; depending upon circumstances, this may not be the case. In a pinch, tetsubishi can be used as an improvised missile weapon, doing 1d6 to all targets in a 2m radius.

Tetsubishi statistics can also be used for *arare* when they're used as tetsubishi, *igadama* (spiked iron balls similar to arare), *hishi* (dried water chestnuts with spiky shells), and *dokubari* (spiked balls of plant matter).

Three-Section Staff: A Kung Fu weapon, known as *shan gieh kun* in Chinese. It consists of three wooden rods connected by rings; each rod is 18"-20" long. Fighters use it like a flail for long strikes, or like a jo for close-in attacks.It's very useful for Maneuvers containing the Bind, Block, and Disarm Bases: it grants a +2 OCV with them. The Three-Section staff uses special weapon length rules: other weapons attack against the Three-Section Staff as if the staff were a Long weapon, but the wielder of the Staff is never at an OCV penalty when the attacker gets inside his guard and strikes him.

The Indonesian equivalent of the Three-Section Staff, used in Kuntao, is the *sa tjat koen.* You can also use these statistics for the "Sweeper," or *shao-tzu,* a weapon consisting of a short staff with an even shorter length of wood attached to one end by a chain (a two-section staff, if you will). The Sweeper was most often used to attack a horse's legs.

Timbe: A 1-2' shaft with a small spearhead on one end. It's used in combination with a tortoiseshell shield called a *rochin* and is one of the principal weapons of Kobujutsu.

Tonfa: This is one of the traditional weapons of Karate (the others are the bo, eiku, kama, nunchaku, sai, tekko, and timbe and rochin). It consists of a truncheon with handle protruding at 90 degrees near one end. It's often used in pairs. Unlike clubs, it requires a Weapon Familiarity (it's part of the WF for Karate Weapons). However, ordinary people can pick up a tonfa and use it as ordinary club, keeping the normal weapon damage but losing the OCV bonus.

The Indonesian counterparts to the tonfa are the *segu,* which is used in Tapak Sutji Pentjak-Silat, and the *kwai,* which is used in Kuntao.

Umebi: A form of primitive land mine used by the ninja:

RKA 1½d6, Area Of Effect (1m Radius; +¼), Trigger (when stepped on; +¼) (44 Active Points); IAF (-½), 1 Charge (-2). Total cost: 12 points.

War Fan: This weapon, known in Japanese as a *tessen* or *gunsen* and in Chinese as a *san,* looks like a normal hand-fan, but is larger than purely decorative fans and is made of hardier materials. It's used two ways: closed, it's a punching weapon; open, it's effective at blocking attacks (+2 OCV with Block Maneuvers). Special War Fans come with an additional blade option. The blade may be a razor edge on the vanes of the fan used in a slicing motion when the fan is open, or it may be a spike at the base of the fan, used when the fan is closed. Both types are shown on the Melee Weapons Table. War Fans are sometimes made with small darts hidden in the vanes; if a character uses them, treat these darts identically to Bo Shuriken.

Cost	Power
9	**War Fan, Edged:** Multipower, 22-point reserve; all OAF (-1), STR Minimum (6; -¼), Real Weapon (-¼)
1f	**1) Folded Fan Attack:** HA +3d6, Reduced Endurance (0 END; +½); OAF (-1), HTH Attack (-½), STR Minimum (6; -¼), Real Weapon (-¼)
1f	**2) Spread Fan Attack:** HKA ½d6 (plus STR), Reduced Endurance (0 END; +½); OAF (-1), STR Minimum (6; -¼), Real Weapon (-¼)
2	**War Fan Blocking:** +2 OCV with Block (4 Active Points); OAF (-1)

Whip: The *whip* is a long, braided length of leather, sometimes studded with bits of metal and having a metal tip. By flicking it forcefully at a target within 6m, the wielder can inflict painful wounds and welts. Wielders can also use it to grab objects, or even swing across small gaps. It does relatively little damage to armored foes (in fact, it has the *Reduced Penetration* Limitation), but against exposed flesh is a vicious weapon (one often favored by Evil characters).

Cost	Power
7	**Whip:** Multipower, 15-point reserve; all OAF (-1)
1f	**1) Whip Slash:** RKA ½d6; OAF (-1), Limited Range (6m; -¼), Reduced Penetration (-¼), Real Weapon (-¼), Strength Minimum (5; STR Minimum Doesn't Add To Damage; -¾)
1f	**2) Whip Grab:** Stretching 6m, Reduced Endurance (0 END; +½); OAF (-1), Always Direct (-¼), No Noncombat Stretching (-¼), Cannot Do Damage (-½)

Total cost: 9 points.

Wind and Fire Wheels: These are Chinese weapons. They consist of broad metal hoops a foot or two in diameter. Some feature protruding spikes and handles; other are plain hoops. Fighters use them to punch and slash, and receive a +2 OCV bonus when used with Maneuvers with the Bind, Block, and Disarm Bases. The statistics for

this weapon also apply to the *lun* (which is similar in function but shaped more like a coin), the *yue* (which is eye-shaped), and the *zi-wu* (Shaolin "deer-horn knives," made of two overlapping crescent-shaped metal bars).

RANGED WEAPONS

Most Fantasy-era Ranged weapons are well-known to the average gamer and require no explanation. The text below provides information on some of the more obscure or unusual ones, as well as other useful data. Readers interested in learning more should consult some of the books in the Bibliography.

General Information

CHARGES

The number of Charges listed for each weapon reflect the number of arrows (or the like) easily carried, the number commonly issued to soldiers, the standard unit packaged for sale, or similar considerations. Since characters in a Heroic-level game like Fantasy Hero don't pay Character Points for their weapons, the number of Charges doesn't really matter too much; an archer with enough money can buy and carry 50 arrows if he wants — he's not restricted to 10 simply because that's what the table says.

RANGED WEAPONS AND FOCUS

Bows, crossbows, and slings are all OAFs, but they use the multiple Focus rules on 6E1 380 because they require two objects to work: the projecting device (bow, crossbow, sling); and the projectile (arrow, bolt, sling stone). They don't receive any extra Limitation for this.

Because the component Foci are separate, characters can affect them separately. It's possible, for example, to fire an enchanted arrow with a mundane bow, or a normal arrow with a magic bow... or to have a magic bow *and* magic arrows whose mystic effects add together. (See See *Fantasy Hero,* pages 327-28.) Similarly, if you apply an Advantage to the attack (such as Armor Piercing to reflect particularly sharp arrows), it only affects one part (the arrow/bolt), even though it applies to the overall attack. There's no such thing as an "armor-piercing bow" that makes every arrow it fires Armor Piercing; effects like that depend on the ammunition used, not the firing mechanism.

A more complex, but more technically "correct," way to build a bow or crossbow is as two different Foci, each providing a different ability: the arrow/bolt (an HKA) and the bow/crossbow (a naked *Ranged* Advantage allowing the user to use the arrow/bolt against targets at range, plus bonus HKA dice for "heavier" bows to increase the damage the arrow/bolt does). The naked *Ranged* Advantage would have to be bought to cover enough Active Points to deal with armor-piercing arrows and the like.

Similarly, you could define a sling as a bullet/stone (an object with defined PD + BODY that a character can throw with his STR) plus the sling itself (extra STR, only to increase throwing damage and distance). Again, that's far more complex than necessary for most game purposes.

SILENT WEAPONS

None of the Ranged weapons in this section are bought with the Advantage *Invisible Power Effects* (Hearing Group) to make them silent, so they're still noisy enough to attract attention. But at the GM's option, a skillful character can make some weapons — bows, thrown blades and darts, and blowguns — harder to hear. (Some weapons, including crossbows, gunpowder weapons, and thrown clubs, all make too much noise to overcome this way.) The character makes a DEX Roll at -1 for each DC in the attack (including any DCs added by STR, Combat Skill Levels, or other means), or a Fighting Tricks roll at half that penalty. If he fails, the attack is as audible as normal. If he succeeds exactly, attempts to hear the weapon in use are at -1 to PER Rolls; for each 1 point by which the roll succeeds beyond that, increase the penalty by -1.

Blown Weapons

A few types of Ranged weapons use the wielder's breath to power the missile:

Blowguns: The blowgun, a weapon common to many early cultures, consists of a long, hollow tube and darts. The user fires the darts by inserting them in the back end of the tube, aiming, and then blowing into the tube. The darts themselves do little damage, but the user normally tips them with a poison or disease-causing agent.

ARMOR PIERCING AND BLUNT ARROWS

Some arrows are built with sharp, chisel- or needle-like points so that they penetrate armor more easily. In *HERO System* terms, they have the *Armor Piercing* Advantage.

If you want to figure the Active and Real Point cost of a bow with armor piercing arrows, you can simply apply Armor Piercing to the weapon as a whole. For example, a Medium Longbow with armor piercing arrows would cost 38 Active Points, 10 Real Points. If you want to derive the cost difference for the armor piercing arrows, just subtract the Active and Real Point costs listed in the Ranged Weapons Table from these numbers (thus, the arrows alone "cost" 5 Active Points, 2 Real Points).

On the other hand, some arrows have blunted heads so they're less likely to cause serious injury. In *HERO System* terms, these do the same number of DCs of Normal Damage as the arrow normally does of Killing Damage; the Character Point cost is typically identical.

However, since Fantasy Hero is a Heroic genre where characters buy equipment with money rather than Character Points, what really matters is not the difference in points, but the difference in *cost.* That way a character could, for example, buy a quiver of normal arrows, but then pay extra for three armor piercing arrows to use in emergencies.

See also *Japanese Arrows* on page 31 for information about some specialized types of arrows developed in medieval Japan.

Loading and firing a blowgun takes a Full Phase. At the GM's option, a character who succeeds with a Fast Draw (Blowguns) roll can load the weapon as a Zero Phase Action, and then fire it as an Attack Action. Characters may use and reload blowguns while riding mounts.

The *fukiya* is a small Japanese blowgun. Unlike a standard blowgun it can be held in one hand. You can also use its statistics for the Filipino blowgun, or *sumpit.*

Fukimi-bari: Tiny darts a character holds concealed in his hand (to throw at an enemy) or in his mouth (to blow into an enemy's face). The attack has No Range (-½), since the character can only throw/blow the darts a few feet at most. (This weapon doesn't grant an automatic head shot, but most users who place fukimi-bari in their mouths try to achieve a surprise result and take a Placed Shot at the head). This is a ninja weapon. You can also use this weapon's statistics for the Chinese *mei far chen* (Plum Flower Needles).

Bows

Bows are curved lengths of wood (and/or other materials) that use tensile strength to fire arrows (long shafts of wood with a sharp stone or metal arrowhead on the front, and feathers or other materials on the back to provide balance, stability, and accuracy in flight). A bowstring connects the two ends of the bowshaft, and the archer nocks an arrow to the string, draws it back (bending the bow in the process), and then releases it. The bowshaft, as it returns to its normal "shape," propels the arrow toward the target with great force.

The stiffer (stronger) the material(s) used to make the bow, the more strength the archer needs to draw it into firing position, and the greater force the bow fires the arrow with (and hence the more damage it does). The weapon's STR Minimum reflects this; a weak man lacks the muscles to use the heavier bows effectively.

Bows come in numerous shapes, including curved, recurved, double-curved, asymmetric, and B-shaped. The simplest are made just of wood, but more advanced versions ("composite" or "compound" bows) are made of two or more materials (typically wood [in one or more layers], horn, bone, and sinew). Composite bows are sturdier and stronger than simple bows; at the GM's option, they add +20m to a weapon's maximum range.

Archers normally carry their bows unstrung, since keeping a bow strung for a long time stretches and weakens the string. Stringing a bow requires a Full Phase Action, though a character with Fast Draw (Bows) can reduce this to a Half Phase Action if he succeeds with a roll. At the GM's option, for each full hour a character keeps a bow strung, reduce the damage it does by 1 point (-1 point after one hour, -2 points after two hours, and so forth until damage reaches 0 and the bowstring becomes useless).

FIRING A BOW

Loading a bow — drawing an arrow (from a quiver or other container) and nocking it to the string — requires a Half Phase Action (unless the character succeeds with a Fast Draw (Bows) roll, in which case it becomes a Zero Phase Action). Firing a bow — pulling the string back, aiming quickly, and releasing the arrow — is an Attack Action.

If a character has (and uses) 5 or more points of STR above the STR Minimum of a bow, he may load and fire a bow as an Attack Action (without the need for a Fast Draw roll) if he accepts a -2 OCV penalty for rushing. This allows him to move and then fire his bow, but does not eliminate the half DCV penalty described below. Fast Draw cannot reduce the time required for this.

Firing an arrow accurately requires an archer to stand still and focus on what he's doing. This halves his DCV until his next Phase. (In game terms, bows have the Limitation *Concentration* (½ DCV; -¼).) At the GM's option, a character who has the capacity to move (*i.e.,* who's not using up his entire Phase loading, pulling, and firing his bow) may fire his bow defensively. This eliminates the half DCV modifier, but imposes a -4 OCV penalty on his arrow shot (reflecting the fact that he's dodging around and not fully concentrating on accurate archery).

At the GM's option, an archer can use the *Multiple Attack* Combat Maneuver with a bow to fire a maximum of two shots. Normal rules for Multiple Attack apply (but remember that a character's DCV can only be halved once, and it's already halved due to the bow's *Concentration* Limitation).

Characters can use normal bows (sometimes called shortbows) from horseback without difficulty. Longbows, on the other hand, are too large for mounted archers to use; they take a -¼ Limitation to reflect this. Firing from horseback incurs the normal -2 OCV penalty (see 6E2 31), though characters may buy the *Mounted Warrior* Talent from Chapter Two to counteract this.

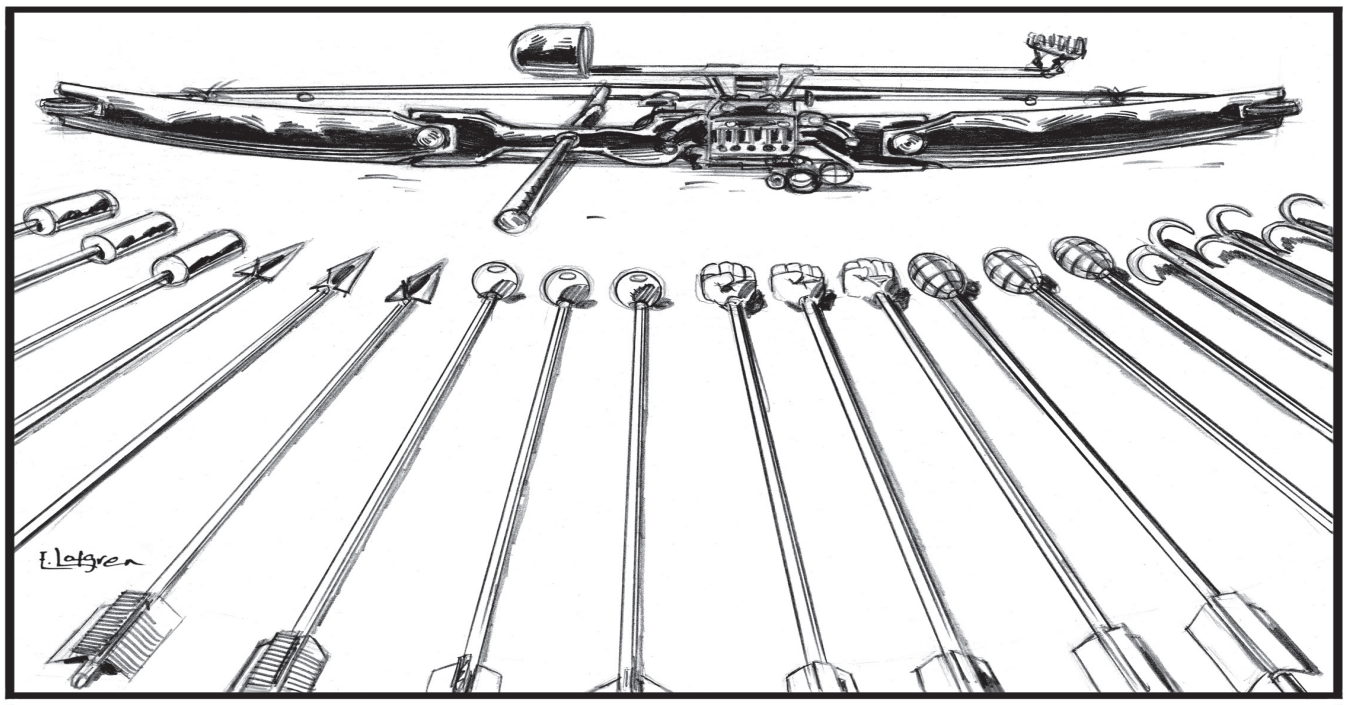
JAPANESE BOWS

The Japanese used two primary types of bows. The first is the *hankyu,* a short, comparatively weak, easily-carried bow favored by ninja. One variant, the *tabiumi,* was collapsible and hence easily hidden when necessary; hidden arrows could be carried as the ribs of a straw hat or in many other ways. The other, favored by the samurai and archers, was the *yumi,* also known as a *daikyu.* It can be anywhere from five to eight feet long, and, unlike Western bows, isn't held in the middle; the handle is about one-third of the way from the bottom. Therefore it's easily used by horsemen. The "One-Man, Two-Man, Three-Man" designations on the Ranged Fantasy Weapons Table indicate how many men it theoretically takes to string the bow; for *HERO System* purposes, the STR Min of the weapon is also the STR Min it takes to string the bow.

FANTASY RANGED WEAPONS TABLE

Weapon	OCV	RMod	Dam	STUNx	Shots	STR Min	BODY	Def	Mass	Max Range	A/R Cost	Origin	Notes
Blown Weapons													
Blowgun	+0	+0	1 point	-1	10 RC	2	2	2	0.1	60m	6/1	Various	2H, Conc, ‡
Fukimi-bari	+0	+0	1 point	+0	1 RC	1	1	1	0.01	50m	6/2	Japan	AP, No Range, Ninja Weapon
Fukiya	+0	+0	1 point	-1	2 RC	—	2	2	0.1	50m	5/1	Japan	Conc
Bows													
Bow, Very Light	+0	+0	1d6-1	+0	10 RC	5	2	3	0.9	120m	15/4	Various	2H, Conc
Bow, Light	+0	+0	1d6	+0	10 RC	8	2	3	1.0	150m	19/5	Various	2H, Conc
Bow, Medium	+0	+0	1d6+1	+0	10 RC	9	2	3	1.0	200m	25/6	Various	2H, Conc
Bow, Heavy	+0	+0	1½d6	+0	10 RC	10	2	3	1.1	250m	31/7	Various	2H, Conc
Bow, Very Heavy	+0	+0	2d6	+0	10 RC	13	2	3	1.2	300m	37/9	Various	2H, Conc
Hankyu	+0	+0	1d6	+0	24 RC	7	2	3	1.0	150m	26/8	Japan	2H, Conc
Longbow, Light	+0	+1	1d6+1	+0	10 RC	10	3	3	1.1	200m	26/7	Various	2H, Conc, no horse
Longbow, Medium	+0	+1	1½d6	+0	10 RC	12	3	3	1.2	250m	32/8	Various	2H, Conc, no horse
Longbow, Heavy	+0	+1	2d6	+0	10 RC	15	3	3	1.3	300m	38/9	Various	2H, Conc, no horse
Longbow, Very Heavy	+0	+1	2d6+1	+0	10 RC	18	3	3	1.4	350m	45/11	Various	2H, Conc, no horse
Sling Bow	+0	+0	1d6	+0	12 RC	9	2	3	0.9	150m	19/5	China	2H, Conc
Yumi, One-Man	+0	+1	1d6+1	+0	24 RC	10	3	3	1.1	200m	36/10	Japan	2H, Conc
Two-Man	+0	+1	1½d6	+0	24 RC	13	3	3	1.2	250m	44/13	Japan	2H, Conc
Three-Man	+0	+1	2d6	+0	24 RC	16	3	3	1.3	300m	53/14	Japan	2H, Conc
Four-Man	+0	+1	2d6+1	+0	24 RC	18	3	3	1.4	350m	62/16	Japan	2H, Conc
Seven-Man	+0	+1	2½d6	+0	24 RC	21	3	3	1.5	400m	71/17	Japan	2H, Conc
Crossbows													
Arbalest	+0	+2	2d6	+0	4 RC	16	6	4	8.0	300m	32/7	Europe	2H, Conc, ‡2
Chu-ko-nu	+0	+0	1d6+1	+0	10 RC	10	6	4	5.0	200m	25/7	China	2H
Crossbow, Light	+0	+1	1d6+1	+0	10 RC	12	4	4	1.6	200m	26/6	Europe	2H, Conc, ‡1
Crossbow, Heavy	+0	+1	1½d6	+0	10 RC	14	5	4	6.4	250m	32/7	Europe	2H, Conc, ‡1
Crossbow, Pistol	+0	+0	1d6-1	+0	10 RC	8	2	2	0.5	100m	15/4	Various	‡1
Crossbow, Wrist	+0	+0	1d6-1	+0	6 RC	8	2	2	0.4	60m	12/3	Various	‡1
Slings													
Sling	+0	-1	1d6+1	+1	10 RC	8	2	2	0.3	200m	30/7	Various	2H, Conc
Sling, Small	+0	-1	1d6-1	+1	10 RC	6	1	2	0.1	120m	18/4	Various	2H, Conc
Staff Sling (Fustibal)	+0	+0	1½d6	+1	10 RC	10	3	2	0.4	250m	37/9	Various	2H, Conc
Thrown Weapons													
Arare													
Joarare	+0	+0	1d6+1	+0	1 RC	5	3	5	0.5	RBS	25/7	Japan	
Chuarare	+0	+0	1d6-1	+0	9 RC	5	2	5	0.3	RBS	18/7	Japan	AF5
Koarare	+0	+0	½d6	+0	9 RC	5	1	5	0.2	RBS	15/6	Japan	AF5
Comet Star Hammer	+0	+0	1d6+1	+0	1 RC	10	4	5	1.0	RBS	45/10	China	Also Entangle 2d6, 2 PD/2 ED
Dart	+0	+0	1d6-1	+0	9 RC	5	1	5	0.4	RBS	24/10	Various	Autofire (5 shots)

Weapon	OCV	RMod	Dam	STUNx	Shots	STR Min	BODY	Def	Mass	Max Range	A/R Cost	Origin	Notes
Grenade, Smoke	+0	+0	—	—	8	—	2	3	0.4	RBS	10/4	Japan	Darkness to Normal Sight 2m, NWF
Iron Mandarin Duck	+0	+0	½d6	+0	1 RC	6	3	5	1.0	RBS	12/3	China	
Kapak	+0	+0	½d6	+0	1 RC	6	3	4	0.5	RBS	12/3	Indo-nesia	
Metsubishi													
Grenade	+0	+0	—	—	8	—	2	3	0.4	RBS	12/4	Japan	Sight Group Flash 4d6, see text
Blown powder	+0	+0	—	—	1	—	1	0	0.01	0m	10/2	Japan	Sight Group Flash 4d6, see text
Nagedeppo	+0	+0	1d6	+0	9	2	2	3	0.6	RBS	19/7	Japan	Area Of Effect (2m Radius), NWF
Shuriken													
Bo Shuriken	+0	+0	1d6-1	+0	9 RC	5	1	5	0.3	RBS	24/10	Japan	AF5
Endokuken	+0	+0	1d6	+0	9 RC	5	2	5	0.5	RBS	71/31	Japan	Plus poison smoke
Large Star	+0	+0	1d6+1	+0	9 RC	5	2	5	0.5	RBS	40/16	Japan	AF5
Small Star	+0	+0	1d6-1	+0	9 RC	5	1	5	0.4	RBS	24/10	Japan	AF5
Tsubute	+0	+0	3d6 N	—	9 RC	5	2	5	0.5	RBS	30/12	Japan	AF5
Steel Olive	+0	+0	½d6	+0	12 RC	6	2	5	0.7	RBS	12/4	China	
Steel Toad	+0	+0	½d6	+0	1 RC	6	3	5	1.0	RBS	12/3	China	
Throwing Club	+0	+0	3d6 N	—	Text	8	3	3	0.4	RBS	Text	Various	See text
Throwing Knife	+0	+0	1d6	+0	4 RC	7	2	5	0.5	RBS	19/6	Various	
Toami													
Small	+0	+0	—	—	1 RC	4	4	2	2.0	RBS	50/14	Japan	See text
Normal	+0	+0	—	—	1 RC	6	5	2	4.0	RBS	60/17	Japan	See text
Large	+0	+0	—	—	1 RC	9	6	2	6.0	RBS	60/17	Japan	See text
Wishful Steel Ball	+0	+0	1 point	+0	12 RC	3	2	5	0.7	RBS	6/2	China	



FANTASY RANGED WEAPONS KEY

2H: Two-Handed Weapon

Act: Activation Roll

Conc: Concentration (½ DCV "throughout" the loading and/or firing process, see text; -½)

N: Normal Damage (all other weapons do Killing Damage)

No horse: Characters cannot fire this weapon while mounted (a -¼ Limitation)

RBS: Range Based On STR

RC: Recoverable Charge

‡: Extra Time (Full Phase to use; -½)

‡1: Extra Time (1 Phase to reload between shots; -¾)

‡2: Extra Time (2 Phases to reload between shots; -¾)

‡T: Extra Time (1 Turn; -1¼)

Ranged weapons are built as RKAs with some or all of the following Limitations: Focus (OAF; -1), STR Minimum, Required Hands, Real Weapon, Beam, and Charges (indicating the number of rounds of ammunition the average user carries).

OCV: This is applied as a bonus or penalty against all attacks made with the weapon. OCV bonuses are bought as a 2-point Combat Skill Level with the Limitations *OAF, Required Hands,* and *Real Weapon.* OCV penalties are a minor Side Effect (automatically occurs; -½) for the weapon. Until the penalties on a weapon reach the 30 Active Point level (which is highly unlikely to ever occur), the Side Effect remains at this value. Even if a weapon has both OCV and RMod penalties, it takes only one Side Effect until the penalties exceed 30 points.

RMod: This represents a modifier to the weapon's accuracy at Range. Positive values (bought as 1-point Penalty Skill Levels versus the Range Group with the *Focus* and *Required Hands* Limitations) help to offset the standard Range Modifier; negative values (a minor Side Effect (automatically occurs; -½)) add to it. RMod can never raise a character's base OCV, it can only negate penalties.

Damage: The amount of damage the weapon does. An "N" indicates Normal Damage; otherwise the listed damage is Killing.

STUNx: This is the STUN Multiplier for Killing Damage weapons (a +0 means "no modification"; use the standard ½d6 STUN Multiplier). Apply the STUNx modifier to the STUN Multiplier roll (or to the STUNx for the Hit Location struck, if the campaign uses Hit Location rules). For example, if a character with a Sling (STUNx +1) hits an opponent in the Head, the total STUNx would be 6.

Shots: The standard amount of ammunition carried by a user of the weapon. Typically a character can only fire/throw/shoot one round of ammunition in a Phase; thereafter he must reload his weapon (or ready a new one). Reloading/readying may or may not take time; see the text.

STR Min: The STR Min necessary to use the weapon effectively; see 6E2 199 for rules. Remember that, except for thrown weapons (which are built as HKA with Range Based On STR), Ranged weapons (which are built as RKAs or Blasts) don't get bonus damage or other benefits from exceeding the STR Minimum. The STR Minimum simply indicates the STR needed to effectively use the weapon — to hold, draw, and/or cock it.

BODY: The weapon's BODY.

Def: The weapon's PD and ED.

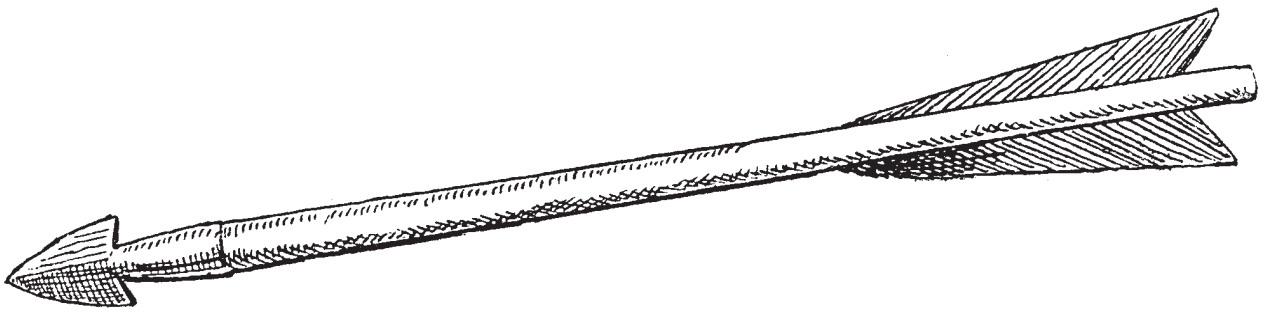
Mass: The weight of the weapon in kilograms.

Max Range: The weapon's maximum Range in meters according to the *HERO System* rules. (Of course, its effective range — the range over which it's likely to hit a target — is much less, thanks to the Range Modifier.) Typically this means Base Points x 10 meters, but Advantages or Limitations may change that. "NR" means No Range; "RBS" means Range Based On STR.

A/R Cost: The Active Point/Real Point Cost of the weapon, in Character Points. For greater variation, these costs use the expanded Killing Attack costs on APG 56 (thus, an RKA 1d6-1 costs 12 Character Points).

Origin: The nation, culture, or civilization the weapon comes from. "Various" indicates that the same or similar weapons were developed in many times and places throughout the world.

Notes: This catch-all category includes any information not listed elsewhere. All notes and abbreviations are explained at the end of the tables.



JAPANESE ARROWS

The Japanese created many unusual types of arrowheads for their arrows (*ya*). Several of the more interesting ones are listed in the Ranged Weapons Table; they add damage to the damage from a standard arrow (which is listed as the damage for the Bow used). Each of these arrows is more expensive and rarer than the average arrow.

The Dragon's Tongue arrow is finely-crafted, with a slightly rounded point that penetrates armor easily. (In game terms it does +1 point of Killing Damage.)

The Frog Crotch arrow is shaped roughly like a V, with a sharpened inner edge; it's especially useful for cutting cords and similar objects. (In game terms it does +1 point of Killing Damage.)

The Hikime is an arrow with a wooden ball, not an arrowhead, on the tip. It's used to stun, not kill, an opponent. (In game terms, it does 3d6 Normal Damage to the target.)

The Skinsplitter is an extremely wide, heavy arrowhead. (In game terms it does +2 points of Killing Damage, but the GM should consider adding +1 to the STR Min of the Bow whenever a character uses one.)

The Willow Leaf is a long, straight arrowhead which can slip easily between armor plates and the like. (In game terms it does +1 point of Killing Damage.)

These are just a few of the many different types of Oriental arrowheads available; with a little research you can uncover many others.

The *yazuka*, or standard length, of an arrow (without arrowhead) is from the top of the archer's sternum to the tip of his middle finger. This allows him to achieve extra power, since he has to draw the bow back as far as he possibly can to shoot.

SLING BOW

The sling bow is a bow designed to fire small iron balls — sort of a cross between a bow and a slingshot. In Chinese it's known as a *dan kurn*.

Crossbows

The crossbow, a more technologically advanced weapon than the bow, consists of a rifle-like stock with a bow mounted horizontally on the front. The bow is made of wood, composite materials, or even steel; it's thick and strong, and its string likewise, allowing for high tension and thus excellent range and penetration capabilities. The crossbowman fires it from the shoulder, similar to a modern rifle, making it quite accurate. An *arbalest* is a large, heavy crossbow requiring a mechanical wheel-crank or like mechanism to pull because of its extremely high tension.

A crossbow fires a missile called a *bolt,* or sometimes a *quarrel.* Bolts are similar to arrows, though usually shorter and often a bit thicker of shaft. Some hunting crossbows fire small pellets instead (these typically do ½d6 Killing Damage).

RANGED ATTACKS QUICK REFERENCE TABLE

Action	Time Required	OCV*	DCV
Bow, firing normally	Full Phase	—	½
Drawing/nocking arrow	Half Phase	—	½
Pulling/firing arrow	Attack Action	—	½
Bow, firing with Fast Draw roll	Half Phase	—	½
Drawing/nocking arrow	Zero Phase	—	½
Pulling/firing arrow	Attack Action	—	½
Bow, loading and firing with +5 STR	Attack Action	-2	½
Bow, firing defensively*	Full Phase	-4	—
Drawing/nocking arrow	Half Phase	—	—
Pulling/firing arrow	Attack Action	-4	—
Bow, firing with Multiple Attack*	Full Phase	-2	½
Drawing/nocking arrows	Half Phase	—	½
Pulling/firing arrows	Attack Action	-2	½
Bow, firing from horseback	Full Phase	-2	½
Drawing/nocking arrow	Half Phase	—	½
Pulling/firing arrow	Attack Action	-2	½
Bow, stringing	Full Phase	—	—
Bow, stringing with Fast Draw roll	Half Phase	—	—
Crossbow, loading	Full Phase	—	½
Crossbow, loading with +5 STR*#	Half Phase	—	—
Crossbow, loading with Fast Draw*	Half Phase	—	—
Arbalest, loading	Two Full Phases	—	½
Arbalest, loading with +5 STR*#	Full Phase	—	½
Arbalest, loading with Fast Draw*	Full Phase	—	½
Crossbow or arbalest, firing loaded	Attack Action	—	—
Crossbow or arbalest, firing from horseback	Attack Action	-2	—
Sling, loading	Half Phase	—	½
Sling, loading with Fast Draw	Zero Phase	—	½
Sling, firing	Attack Action	—	½
Sling, firing from horseback	Attack Action	-2	½
Thrown weapon, throwing	Attack Action	—	—
Gunpowder weapon, loading and firing	1 Turn	—	½
Gunpowder weapon, loading and firing with Fast Draw	2 Full Phases	—	½
Gunpowder weapon, firing loaded	Attack Action	—	½
Gunpowder weapon, firing loaded from horseback	Attack Action	-2	½
Blowgun, loading and firing	Full Phase	—	½
Blowgun, loading with Fast Draw	Zero Phase	—	½
Blowgun, firing loaded	Attack Action	—	½
Blowgun, loading and firing from horseback	Full Phase	—	½

***:** This rule is used only at the GM's option.

#: Also requires a DEX Roll.

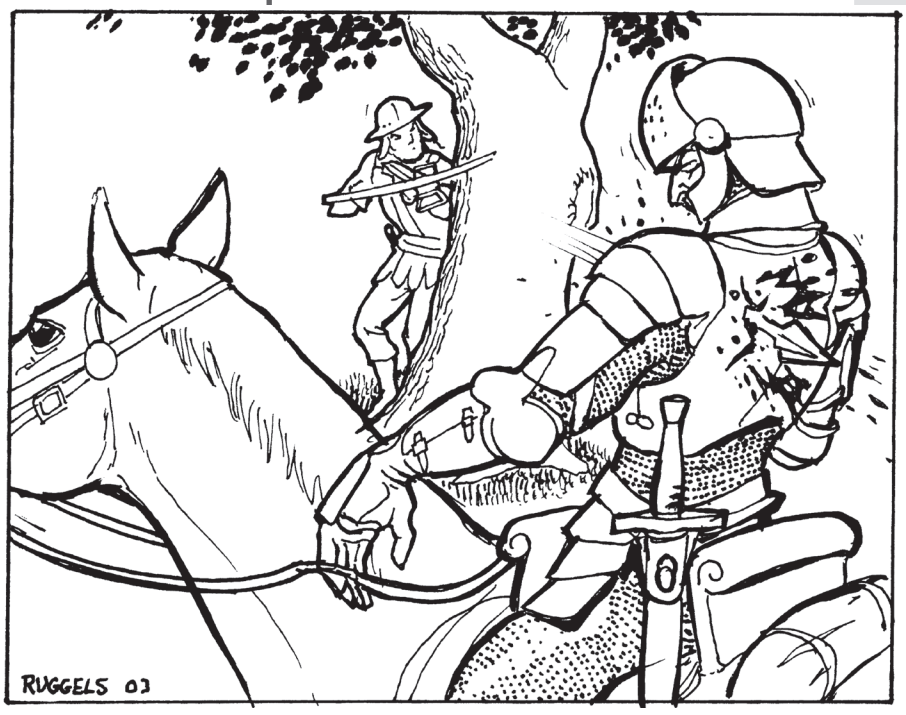
A crossbow is always strung, but it's normally not carried already drawn and loaded with a bolt — it's too easy for the bolt to fall out of the groove that holds it in place, or for the weapon to discharge accidentally. (Carrying a crossbow readied for long periods of time can also warp the weapon, ruining its accuracy; permanently reduce its RMod by -1 for every hour it's carried loaded.) If a character carries a loaded crossbow, the GM should have him make a DEX Roll whenever he experiences any unusual or drastic physical action, including moving at Noncombat speeds, trying to mount a horse, getting hit by an attack, making an attack with another weapon, Dodging, Blocking, or falling. The roll has a penalty of -0 to -5, depending on how drastic and violent the action is. If the roll succeeds, the crossbow remains loaded and ready to fire. If the roll fails by 1-3, the bolt falls out, but the crossbow remains cocked. If the roll fails by 4 or more, the crossbow discharges; if necessary, have the character make a roll at 0 OCV to see if he hit anyone in front of the weapon.

CHU-KO-NU

The *chu-ko-nu* is the famous Chinese repeating crossbow. It resembles an ordinary crossbow, except that it has a box on top of it holding ten bolts. The shooter works a lever to reload the crossbow by cocking it and dropping one of the quarrels into place. The chu-ko-nu is heavier and has a shorter range than a standard crossbow, but can be fired much more quickly: the STR Min listed is the minimum to use the weapon, not to reload it, and a character can load the weapon in a half Phase and fire the weapon in a half Phase.

PISTOL AND WRIST CROSSBOWS

Some campaigns and settings — such as many Post-Apocalyptic campaigns and a few Fantasy campaigns — feature some other unusual crossbows.



BOWS VERSUS CROSSBOWS

The *HERO System* statistics for bows and crossbows tend to reflect the "dramatic reality" common to genre adventure fiction, which usually emphasizes and favors bows. They also reflect standard *HERO System* rules about calculating range and so forth. However, this doesn't necessarily simulate "reality" as well as it might for gamers who prefer a high degree of "historical accuracy." Although scholars differ and quibble about various aspects of bows and crossbows and how they measure up (especially given the wide range of types of the various weapons), you can generally accept the following as historically correct.

The crossbow has, on the average, a longer range than the English longbow. A heavy steel-bowed crossbow's maximum range was around 380 yards (360 meters), while that of the longbow was around 280 yards (255 meters). Of course, both weapons' effective ranges were much shorter than this, and variations in equipment could affect these results.

The greater range of the crossbow implies greater force of impact at effective ranges (meaning, in game terms, that crossbows should do at least a little more damage than bows).

The longbow requires more training to learn to use effectively than a crossbow. An English saying states that to train an archer, you begin by training his grandfather. On the other hand, training someone to use a crossbow is relatively quick and simple.

The longbow has a greater rate of fire. A trained archer could fire, on the average, about six aimed arrows per minute, or twelve without significant aiming. A crossbowman, on the other hand, could fire one bolt per minute if he had to cock his crossbow by hand, or up to four per minute if he had a mechanical aid such as a belt-and-claw.

To represent these differences in game terms:

1. Alter the damage ranges on the weapons so that an arbalest does RKA 2½d6, and the other weapons scale down from there.

2. After determining a bow's or crossbow's range using the standard rules (Base Points x 10m), use *Increased Maximum Range* and *Limited Range* to adjust the weapons' ranges to the proper maxima.

3. Add Extra Time (Extra Phase; -¾) to all bows, and Extra Time (1 Minute; -1½) to all crossbows. You can then define mechanical aids like goat's-foot levers as buying the Extra Time for crossbows down to 1 Turn.

4. Make "Bows" a 2-point Weapon Familiarity of its own, separate from Common Missile Weapons, but keep Crossbows as a 1-point WF.

The *pistol crossbow* is a crossbow small enough for a character to hold and fire easily with one hand. Loading it takes time but doesn't require the focused effort that loading an ordinary crossbow does (*i.e.,* it doesn't have the *Concentration* Limitation). Some models include special locking devices that hold the bolt in place even if the crossbow is turned on its side or upside down; pulling the trigger automatically disengages the lock.

A *wrist crossbow* is a pistol crossbow mounted on a large bracer worn on the character's lower arm. It's basically the same as a pistol crossbow, though it has a shorter range and always has a bolt-locking device so the wearer can load it and then wave his arm around freely if necessary.

FIRING A CROSSBOW

Loading a crossbow — pulling back and cocking the bowstring, and then putting a bolt in the groove in front of it — requires a Full Phase, or two Full Phases for an arbalest (the weapon has the *Extra Time* Limitation to reflect this). A crossbow's STR Minimum represents the STR needed to pull the string back. This involves putting the crossbow on the ground bow-first, holding it in place with one foot, and drawing the string up with the hands. If a character has a mechanical aid (belt-and-claw, goat's-foot lever, cranequin, or the like), reduce the STR needed to ready the crossbow by 3. (Arbalests *require* mechanical aids, and do not benefit from this rule; the STR Minimum represents the STR needed to operate the mechanism quickly and use the heavy weapon properly.) A character can fire a loaded crossbow properly with a STR 3 less than the listed STR Minimum.

While drawing and loading a crossbow, a character is at half DCV. However, this penalty does not apply to a character firing a loaded crossbow. This is simulated with the *Concentration* Limitation (½ DCV, but reduced by¼ because the penalty doesn't apply once the weapon is loaded; -0).

At the GM's option, if a character has (and uses) 5 STR more than the STR Minimum of a crossbow, he may load it as a Half Phase Action if he succeeds with a DEX Roll (if the roll fails, he has wasted a Half Phase). This also eliminates the half DCV penalty described above. A character with Fast Draw (Crossbows) who succeeds with a roll can load a crossbow as a Half Phase Action with no DCV penalty, but must have a STR of at least the STR Minimum -5 to do so (or STR Minimum -8 if he has a cocking mechanism). (For an arbalest, a successful Fast Draw (Crossbows) roll lets a character load it as a Full Phase Action, but does not eliminate the DCV penalty.)

Firing a loaded crossbow requires an Attack Action. Characters cannot Multiple Attack with crossbows. Characters can fire crossbows from horseback (at the usual -2 OCV penalty), but cannot draw and load them while mounted.

Slings

A sling is a simple but effective method of increasing throwing power and distance to the point where small, round missiles become potentially lethal. It consists of a small leather pouch with two strings attached, one of which has a loop on the end. The user places the missile in the pouch, whirls the sling around to build up force, then releases the unlooped string to "throw" the missile. To improve power, accuracy, and range, the slinger could attach his sling to a rigid handle, creating a staff-sling (a *fustibal*).

The missiles "fired" by a sling are called *bullets;* they're made of lead and are ovoid-shaped. If necessary, a slinger can substitute appropriately-shaped stones instead. The damage listed for slings assumes bullets; if a character uses sling stones instead, reduce the damage by 1 DC.

Loading a sling requires two hands, but whirling and firing it only one. Loading it requires a Half Phase Action (or a Zero Phase Action, if the slinger succeeds with a Fast Draw (Slings) roll; this does not eliminate the DCV penalty). Firing a sling counts as an Attack Action. The slinger has to stand still and concentrate on what he's doing, so he has only half of his DCV until his next Phase. A character cannot use a sling to make a Multiple Attack, but can load and fire one from horseback.

Thrown Weapons

Not all ranged weapons rely on the power of a mechanical device like a bow or a sling. Some are propelled solely by the strength of the user, who throws them at the target. These weapons include:

Arare: "Hailstones," a Japanese missile weapon in the form of a spiked ball. They come in three sizes: *joarare* (large, thrown one at a time); *chuarare* (medium, thrown like shuriken, can be used as *tetsubishi* as well [see below]); and *koarare* (similar to chuarare, but smaller).

Comet Star Hammer: This missile weapon, called *lieu shen chuai* in Chinese and also known as a Shooting Star Hammer or Wolf's Teeth Hammer, consisted of a chain linking two spiked metal balls. It was typically thrown at the legs of horses or soldiers to snare and injure them. Some versions of this weapon had only one spiked ball; the damage and other effects are the same.

Endokuken: A type of shuriken that emits a 2m radius cloud of poisonous smoke when it contacts its target:

RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Area Of Effect (2m Radius; +¼) (49 Active Points); OAF (-1), 9 Charges (-¼). Total cost: 22 points.

Grenades, Smoke: Some warriors (especially ninja) use these grenades to blind and confound an opponent, or to cloak their next action — such as hiding or preparing a new attack. Smoke grenades do not require a Weapon Familiarity.

THROWING AIDS

Several cultures that relied on javelins and thrown spears developed devices to improve their warrior's ability to throw. Examples include the *atlatl* of the Aztecs, the *woomera* of the Australian Aborigines, and the *amentum,* a cord tied to the spear-shaft by the Romans. All of these devices had the effect of "lengthening" the thrower's arm so he could throw his weapon further.

In *HERO System* terms, you can build one of these devices this way: +5 STR (5 Active Points); OAF (-1), Only To Increase Throwing Distance (-1) (total cost: 2 points).

Darkness to Sight Group 2m radius (10 Active Points); OAF (-1), Limited Effect (Normal Sight only; -¼), Range Based On STR (-¼), 8 Continuing Charges lasting 6 Segments each (removed by winds or rain; -0). Total cost: 4 points.

Iron Mandarin Duck: A throwing weapon made out of iron and shaped like a mandarin duck. Thanks to the duck's weight and sharp points (feathers, wings, beak, and so forth), it's a lethal weapon.

Kapak: A small throwing hatchet used by the Batak people of Indonesia. You can also use this for any number of small, hatchet-like throwing weapons used by many different cultures.

Metsubishi: Small grenades which can momentarily blind an opponent. Grenades do not require a Weapon Familiarity. Alternatively, a "flash grenade" could be one use's worth of eye-irritating dust, either thrown at a foe or blown through an open-ended sword sheath, a small pillbox, or a similar device. This type of metsubishi has No Range, since it can only be used effectively within a few feet.

Metsubishi (Thrown): *Sight Group Flash 2d6, Area of Effect Nonselective (2m Radius; +¼) (12 Active Points); OAF (-1), Range Based On STR (-¼), 8 Charges (-½). Total cost: 4 points.*

Metsubishi (Blown Powder): *Sight Group Flash 2d6 (10 Active Points); OAF (-1), No Range (-½), 1 Charge (-2). Total cost: 2 points.*

Chinese *du sar*, "poison sand," uses the same statistics as the blown metsubishi.

Nagedeppo: A type of primitive explosive grenade. Its explosion covers a 2m radius. In feudal Japanese campaigns, the bang and flash from this grenade are as disorienting as its damaging effects, since such weapons were extremely uncommon in that period.

Net: See *Toami.*

Shuriken: Commonly called throwing stars and throwing spikes, these are ranged weapons used by ninja and by modern martial artist heroes and villains. They come in three basic types:

Bo Shuriken are sharply-pointed metal spikes a few inches long. One to five bo shuriken may be thrown at a time.

Large (Star) Shuriken are star-shaped metal disks several inches across, about half an inch thick, and possessing three to eight sharp points.

Small (Star) Shuriken are shaped the same as Large Star Shuriken, but are only about an eighth of an inch thick and a couple of inches across. One to five small star shuriken may be thrown at a time.

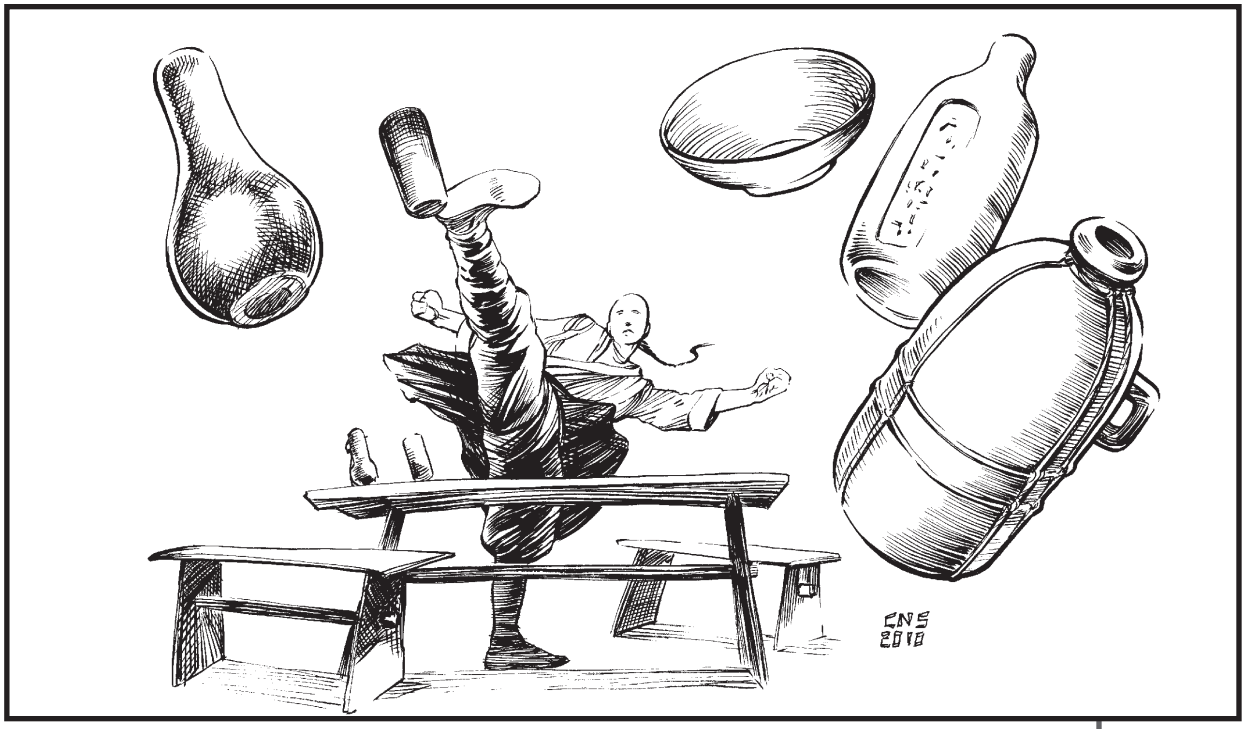
Star shuriken are called *hira shuriken* in Japanese. The four-pointed star, the most popular type, is called a *senban shuriken.* Shuriken made out of flat metal bars with sharpened ends are *itaken.*

The Chinese have a weapon called a Sleeve Dart (*shouu gen,* darts easily concealed in a sleeve or in various spring-loaded tubes hidden in one's clothes) which has the same statistics as bo shuriken. The Chinese also created razor-edged coins (*lo han chain* [Japanese, *nasare en*]) and oddly-shaped Dart Knives (*biau dau*) which have the same statistics as small star shuriken, as does the *piau,* an Indonesian throwing blade vaguely shaped like a hatchet-head. The Indian *chakram* or *cher-khi,* a razor-edged throwing ring also called a quoit, uses the statistics for a large shuriken. The *paku,* a sort of sharpened throwing stick weapon used in Indonesia, uses the bo shuriken's statistics. Many dart weapons, including specially-thrown nails or the narrow darts sometimes slipped into war fans, correspond to bo shuriken.

THROWING NORMAL WEAPONS

Characters may sometimes want to throw ordinary melee weapons, such as clubs, battle axes, and greatswords. With the GM's permission, they may do so, but at a -3 OCV penalty. The range is based on throwing STR, and the character *also* suffers the -4 unbalanced, non-aerodynamic addition to the Range Modifier.

If a character takes a 1-point Weapon Familiarity with throwing a specific type of melee weapon — WF: Thrown Swords, WF: Thrown Axes, WF: Thrown Polearms, and so forth — he can eliminate the -3 OCV penalty. He still suffers from the Range Modifier penalty and balance/aerodynamic penalty, however.



The Fantasy Ranged Weapons Chart shows a load of 9 to 12 shuriken. Ninja traditionally carried nine, because that number has special significance to them.

Steel Olive: An olive-shaped throwing weapon. The ends taper down to sharp points, giving the weapon an eye-shaped profile.

Steel Toad: A throwing weapon in the shape of a toad! The toad's head tapers to slightly more of a point that a normal toad's does, so the weapon can do more damage than it would if it were blunt.

Throwing Clubs: Throwing clubs include war boomerangs and similar weapons — clubs designed for throwing as much as for HTH Combat. They're built as a Multipower:

In the case of boomerangs and other throwing clubs that are aerodynamically shaped to return to the thrower in the event of a miss, the user can make this happen either by devoting one Combat Skill Level applicable to the weapon to making it return, or by succeeding with a DEX Roll at -2 when throwing it.

Cost	Power
5	**Throwing Club:** Multipower, 15-point reserve; all OAF (-1), Real Weapon (-¼), STR Minimum (8; -½)
1f	1) **HTH Club:** HA 3d6 (add damage via STR Minimum); OAF (-1), Hand-To-Hand Attack (-¼), STR Minimum (8; -½), Real Weapon (-¼),
1f	2) **Thrown Club:** Blast 3d6; OAF (-1), Range Based On STR (-¼), STR Minimum (8; -½), Real Weapon (-¼), 1 Recoverable Charge (-1¼), Lockout (cannot use either slot until Charge is recovered; -½)

Total cost: 7 points.

Throwing Knives: Throwing knives are knives forged and shaped for throwing rather than HTH Combat (unlike daggers, which are meant for melee fighting but can easily be thrown). They have a sharp front point, but dull edges and little (if any) hilt. They're built with RKA, but at the GM's option characters can use them in HTH combat to do ½d6 Killing Damage at a -1 OCV penalty.

Toami: A net. Its statistics depend upon its size:

Small Toami: *Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼) (50 Active Points); OAF (-1), Range Based On STR (-¼), 1 Recoverable Charge (-1¼). Total cost: 14 points.*

Normal Toami: *Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼), Area Of Effect (2m Radius; +¼) (60 Active Points); OAF (-1), Range Based On STR (-¼), 1 1 Recoverable Charge (-1¼). Total cost: 17 points.*

Large Toami: *Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼), Area of Effect (4m Radius; +¼) (60 Active Points); OAF (-1), Range Based On STR (-¼), 1 1 Recoverable Charge (-1¼). Total cost: 21 points.*

Tsubute: A "blunt shuriken," used to knock an enemy unconscious. The same statistics apply to blunt Chinese throwing coins, *shouu chuan,* or the Sleeve Ring (a blunt metal ring hidden in the sleeve and thrown at an enemy's face).

Wishful Steel Ball: A small steel ball similar to a modern ball-bearing, used as a weapon by flicking it at high speed at the target.

MAKING WEAPONS

Players often like to create special weapons for their PCs, and some GMs want to expand the weapon lists, build enchanted weapons to give PCs, and the like. The basic rules for this are on 6E2 198-206. This section includes some expanded and optional rules for building weapons using the *HERO System* rules.

BALANCING WEAPONS AND ARMOR

When creating weapons and/or deciding what weapons PCs can take in the campaign, the GM should consider the balance between "offense" and "defense," along with related issues like how fast he wants combats to run.

Unless you want combats to end quickly, with lots of wounds delivered in just a few Phases, some parity should exist between the average DCs of damage done by weapons (including bonuses obtained via the Adding Damage rules) and the defense provided by armor. An attack that does roughly average damage should inflict a slight wound, or even no wound, on a character with average defenses. For example, if the average Resistant Defense in the game is 5 (based on characters wearing mostly leather and chain armors), then the average weapon should probably do about 5-7 DCs of damage. That means an average of about 5-7 BODY damage per attack from a Killing Damage weapon, or 0-2 points of BODY actually inflicted on the average target.

If you prefer a quicker game, restrict the types of armor available, or boost the damage of weapons. If the average PD/ED is 5, but the average weapon does 7-9 DCs, the average Killing Damage hit inflicts 2-4 BODY, with the potential to do significantly more. That brings fights to an end much more quickly. On the other hand, if you want to favor defense over offense, decrease the damage weapons do, or make heavier armors (chain and plate, or magical enhancements of lesser armors) more readily available.

DIFFERENT BLADES

In a Fantasy or Science Fiction setting, it's possible for races or cultures to develop their own unique versions or variants of the standard weapons described in this section. Most of these "different" weapons are simply varieties of standard weapons with spiky bits for added coolness. There are some principles to keep in mind, however. One is that size matters — a race uses weapons appropriate to its members' average size and strength (see 6E2 203). Anatomy also factors in. Long-limbed races go for swinging weapons like axes and broadswords; short-limbed species may prefer thrusting weapons. It's also worth considering the anatomy of what the race usually fights. Races with natural body armor may develop armor-piercing hand weapons like rapiers and daggers, or whips and garrotes to entangle and strangle.

See also *Alien Blades* on page 189.

COMBAT VALUE AND RANGE MODIFIERS

Most weapons do not provide any sort of bonus to, or impose a penalty on, the wielder's OCV or Range Modifier. However, some weapons allow for great flexibility of use or striking power (reflected by an OCV bonus), or have greater than normal accuracy over range (reflected by a bonus that counteracts Range Modifier penalties). On the other hand, some weapons are awkward to use, or not as accurate as normal, leading to OCV and RMod penalties.

Fantasy weapons that provide a bonus to OCV rarely, if ever, have more than a +1 OCV bonus. OCV bonuses are bought as 2-point Combat Skill Levels with the Limitations *OAF, Required Hands,* and *Real Weapon.* OCV penalties are a minor Side Effect (automatically occurs; -½) for the weapon.

Fantasy weapons that provide a bonus to RMod rarely, if ever, have more than a +2 RMod bonus. You can build this bonus as 1-point Penalty Skill Levels versus the Range Group with the *Focus* and *Required Hands* Limitations.

OCV and RMod penalties are defined as a *Side Effect* Limitation on the weapon. This is a minor or trivial effect worth a base of -¼, doubled because it automatically occurs when anyone uses the weapon, for a total of -½. This same value applies until the total penalties on a weapon reach the 30 Active Point level (calculate the cost using negative Combat Skill Levels and Penalty Skill Levels) — something that's highly unlikely to ever occur.

Gamemasters should be wary of building Fantasy weapons with too many OCV or RMod bonuses, for several reasons. First, they're not appropriate if you want to stress even the slightest amount of "realism." If one weapon were inherently much more accurate than any other, everyone would have long ago adopted it and abandoned all others — and history shows that never happened. Second, too many positive modifiers can unbalance the game. If characters can hit their foes too easily, combat loses a lot of its suspense and becomes a simple bloodbath, with the outcome determined mainly by who attacks first.

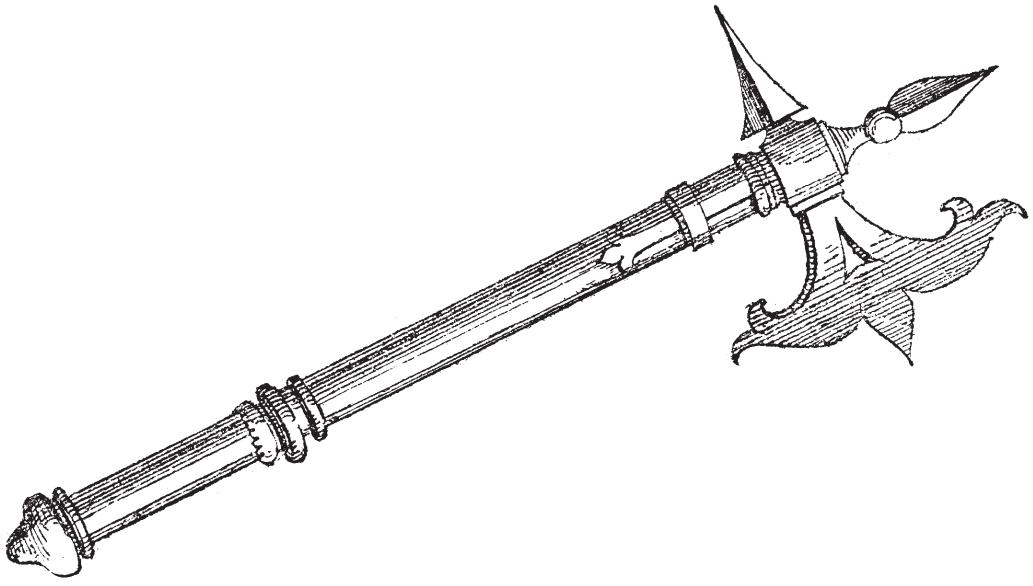
Similarly, don't impose too many penalties on weapons — if a weapon is too badly hindered, no one wants to use it. While fairly heavy RMod penalties are appropriate for some weapons (like early firearms), in most cases you should keep the OCV penalties at no more than -1, and the RMod penalties at no more than -4.

DAMAGE

There's no specific formula for establishing the Damage Class rating for a weapon. Some of the factors that affect the calculation include: size of the striking part of the weapon; the momentum the wielder can develop while delivering a blow; speed of use; and dramatic interpretation of the weapon's effects. The lists in this book attempt to reasonably balance all these factors, but some GMs may prefer different approaches. (See also the text box on 6E2 200.) Some possibilities include:

OPTIONAL EQUAL DAMAGE HAND-TO-HAND WEAPONS TABLE

Weapon	OCV	Damage	STUNx	STR Min	Length	Notes
Axes						
Axe, Battle	+1	1½d6	+0	13	M	1½H
Axe, Great	+0	2d6	+1	18	M	2H
Axe, Hand (Hatchet)	+0	1d6+1	+0	8	S	Can Be Thrown
Axe, Small	+0	1d6+1	+0	8	M	
Hammers And Maces						
Hammer, War	+1	1½d6	+0	13	M	1½H
Mace	+0	1d6+1	+0	8	M	
Mace, Great	+0	2d6	+1	18	M	2H
Clubs						
Club	+0	4d6 N	—	8	M	
Club, Great	+0	6d6 N	—	18	M	2H
Club, War	+0	5d6 N	—	13	M	1½H
Swords And Knives						
Dagger/Dirk	+0	1d6+1	+0	8	S	Can Be Thrown
Falchion	+0	1½d6	+0	13	M	
Rapier	+0	1d6+1	+0	8	M	
Sword, Bastard	+1	1½d6	+0	13	M	1½H
Sword, Broad/Long	+0	1d6+1	+0	8	M	
Sword, Great	+0	2d6	+1	18	M	2H
Sword, Short	+0	1d6+1	+0	8	M	
Polearms						
Halberd	+0	2d6	+0	18	L	2H, Set, Unhorse
Javelin	+0	1d6	+0	10	L	Can Be Thrown
Spear, Medium	+0	1½d6	+0	13	L	1½H, Set, Can Be Thrown
Spear, Short	+0	1d6	+0	10	L	Set, Can Be Thrown
Unusual Melee Weapons						
Lance	+0	1½d6	+0	13 †	EL	Only On Horseback
Morningstar	-1	1½d6	+0	13	M	Flail
Quarterstaff	+0	4d6 N	—	8	M	2H, +1 DCV



OPTIONAL EQUAL DAMAGE HAND-TO-HAND WEAPONS

This system of weapons damage is based on the default premise that all weapons are organized into three size categories: Light (STR Min 8), Average (STR Min 13), and Heavy (STR Min 18). All weapons in each category do 1d6+1, 1½d6, and 2d6 Killing Damage, respectively (or the equivalent amount of Normal Damage). That way a character with 18-20 STR inflicts the exact same damage with all weapons.

However, once that basic pattern is set down, various weapons are adjusted slightly to take into account their special advantages or drawbacks. For instance, weapons that provide more reach, can be thrown, or allow the user to perform special Maneuvers or attacks may do slightly less damage or have slightly higher STR Minima to compensate.

For example, look at the Light weapons. The Hand Axe and Small Axe are virtually identical 1H weapons, except that the former is Small and can be thrown, and the latter is Medium (+1m Reach). These are regarded as being roughly equivalent choices, so both do 1d6+1 damage with an 8 STR Minimum. The Mace, Club, Dagger/Dirk, Rapier, Broad/Long Sword, and Short Sword all fit into this same category; most are similar to the Small Axe, with the Dagger/Dirk being like the Hand Axe.

On the other hand, the Javelin and Short Spear do 1d6+1, but they're Long weapons and can be thrown — two significant advantages compared to the "typical" Light weapon. To balance that out a bit, their damage is reduced to 1d6 and their STR Minimum increased to 10. The Quarterstaff is a typical Light weapon but requires two hands (a drawback compared to 1H Light weapons, which allow their users to also use a shield). To compensate, the Quarterstaff provides its wielder with +1 DCV, representing the ease of blocking attacks with the versatile weapon.

In the Average weapon category, the default is 1½d6 damage, 1H use, and Medium length. Weapons that deviate from that default in good or bad ways are adjusted unless their drawbacks and advantages balance out. The Battle Axe, War Hammer, and Bastard Sword all require 1½H use, so they get +1 OCV in exchange. The Medium Spear is Long, can be thrown, and can be used to perform the Set Versus Charge maneuver, making it a better than average Medium weapon. To compensate, it's changed to a 1½H weapon; if the GM doesn't think that's enough, he could impose a -1 OCV penalty as well. The Lance is even longer — Extra Long — but it can only be used on horseback (and at full effectiveness only in certain situations), and thus is considered reasonably balanced as-is. The Morningstar is a Medium weapon but can perform the Flail maneuver; to compensate it's given a -1 OCV penalty.

The Heavy weapons — the Great Axe, Great Mace, Great Sword, and Halberd — are all 2H weapons, which poses a problem because in a system where the damage is all the same, sword-and-shield or two-weapon fighting styles are better than using a single two-handed weapon. To compensate, the first three all get a +1 STUN Multiplier. (For purposes of this weapon system, this Advantage doesn't affect the rate at which STR adds damage to the weapon.) However, the Halberd is Long and can perform the *Set Versus Charge* and *Unhorse* Combat Maneuvers, which are considered to balance out its two-handedness.

REALISTIC DAMAGE

Some GMs may want more "realistic" weapon damage numbers. Since there's no defined, objective way to measure the cutting, smashing, and piercing effects of Fantasy weapons, any attempt to alter the tables for pure "realism" is likely to prove frustrating and ultimately fruitless. If you want "realistic" weapons damage, the best way to achieve this is to do a lot of research on the subject yourself, then come up with a set of weapon write-ups that suit your own informed opinions and beliefs on the subject. The Bibliography lists many good books you can start with.

EQUAL DAMAGE

Gamemasters who are concerned about characters choosing weapons based solely on their perceived game benefits can eliminate the problem by making all weapons virtually the same in most respects. For example, perhaps every weapon, regardless of size or configuration, does 1d6 Killing Damage (or 3d6 Normal Damage) and has a STR Minimum of 10. Or, perhaps the GM groups weapons into three size categories — Light (STR Min 8), Average (STR Min 13), and Heavy (STR Min 18) — with all weapons in each category doing 1d6+1, 1½d6, and 2d6 Killing Damage, respectively (or the equivalent amount of Normal Damage).

The rationale behind this approach is simple: it's just as easy for a character to die when stabbed to death with a dagger as it is when he's jabbed with a spear or slashed in two by a greatsword. Fantasy roleplaying games tend to assume that the larger the weapon, the bigger the wound it inflicts and thus the greater chance of death. While there's some logic to that, the fact remains that a small dagger wound can kill a man as quickly and easily as a massive sword-thrust. What really matters is *the skill with which the character wields the weapon,* not its size or configuration.

Under this system, characters who want to inflict more than the weapon's base damage have several options. First, there's STR; the more powerful a character's muscles, the more powerful the blows he can deliver. Second, characters can buy Skills like *Martial Arts* (to create a weapon-based style, like Swordfighting) or Talents like *Deadly Blow* and *Weaponmaster,* or construct similar abilities of his own. These abilities reflect a character's weapon skills with a damage bonus. Third, they can take other abilities that represent their skill with weapons. For example, a few Targeting Skill Levels makes a seemingly puny dagger-wielding rogue deadly dangerous — because he can target the Vitals or Head with ease.

See the accompanying text box for one possible weapons system using equal damage, including an explanation of the balancing choices made where variations occur. Many other such weapons systems are possible; it all depends on what the GM wants to emphasize in his campaign's HTH Combat and his own personal preferences about the way melee combat should work.

BASHING, SLASHING, AND PIERCING DAMAGE

To add a little variety to the weapons chart, some GMs like to group weapons into three categories, based on the way they inflict damage: Bashing; Slashing; and Piercing.

Bashing weapons inflict damage by crushing and mashing flesh and bone with a more or less blunt surface. They include hammers, maces, and clubs.

Slashing weapons inflict damage by slicing, chopping, or cutting through the target's body with a sharp edge. Many swords and daggers (particularly curved-bladed ones) are designed to do Slashing damage, as are axes.

Piercing weapons inflict injury by piercing and penetrating the target's body with a sharp point. Arrows, picks, and spears do damage this way, as do swords and daggers when used to thrust rather than cut.

It's possible for some types of weapons to do more than one type of damage. Many swords can both Slash and Pierce, for example, and some battle axes and war hammers have a sharp spike on the back side that lets them do Piercing damage (though perhaps less than their full DCs with Slashing and Bashing damage, respectively).

To make these classes of damage meaningful, the GM needs to distinguish between them in some way. Here are some suggestions:

- Bashing damage weapons: weapon automatically has +1 STUN Multiplier (or an additional +1) if the wielder succeeds with a STR (or DEX) Roll when he attacks; leather and plate armors only provide half PD against Bashing weapons
- Slashing damage weapons: weapon gains +1 DC (which counts as base damage) against targets with no Resistant Defense (or when it hits a Hit Location with no Resistant Defense) if the wielder succeeds with a STR (or DEX) Roll when he attacks; leather armors only provide half PD against Slashing weapons
- Piercing damage weapons: weapon is automatically Armor Piercing if the wielder succeeds with a STR (or DEX) Roll when he attacks (if weapon is already Armor Piercing, it becomes double AP); chainmail and like armors only provide half PD against Piercing weapons

Similarly, characters can buy some forms of defense as more effective against one or two types of damage. Some of the undead creatures in *The HERO System Bestiary* have greater resistance to certain categories of damage, for example. A defense that only protects against two types of damage generally gets a -½ Limitation; a defense that only protects against one type of damage generally gets a -1 Limitation.

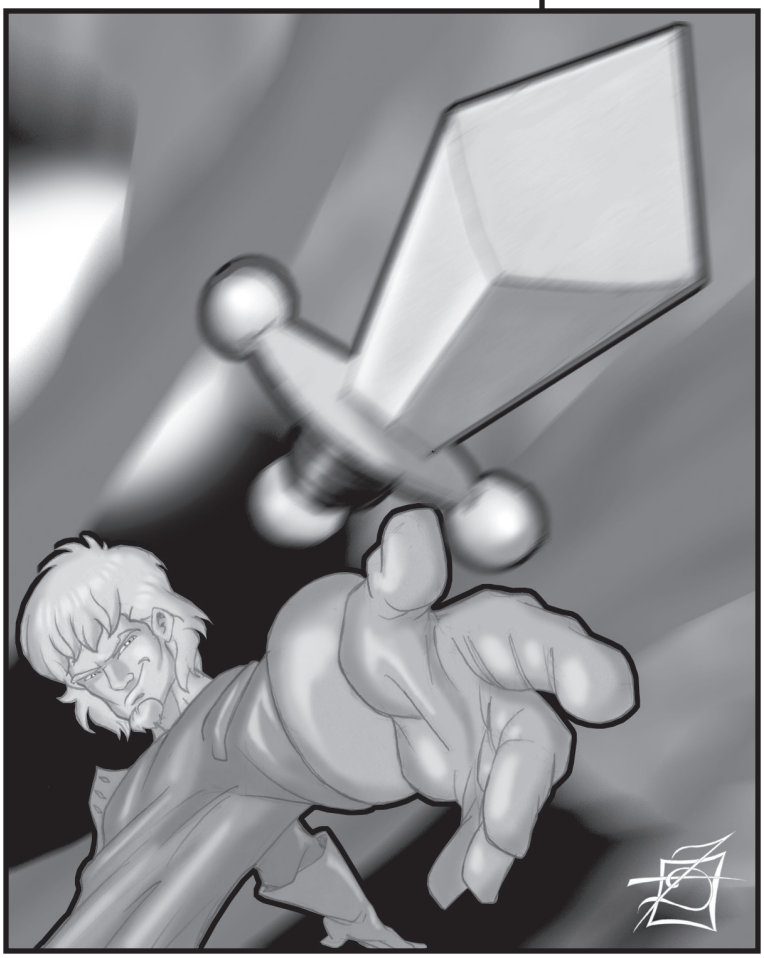
STUN MULTIPLIER

Killing Damage weapons have a STUN Multiplier. Most use the standard STUN Multiplier — ½d6 — which is indicated in the weapons tables as "+0" (meaning no modification). However, a few take the *Increased STUN Multiplier* Advantage and add +1 to the STUN Multiplier. This usually represents a very heavy, solid weapon, or one that strikes with a particularly forceful impact. Gamemasters should be wary of adding more than a +1, or at most +2, STUN Multiplier to a weapon. A weapon can take the *Decreased STUN Multiplier* Limitation.

STRENGTH MINIMUM

The STR Minimum defines the amount of STR required to wield a weapon effectively, as defined by the rules on 6E2 199-200. Most Ranged weapons, and even a few HTH weapons, also apply the *STR Minimum Cannot Add/Subtract Damage* additional Complication, signifying that the nature, construction, or use of the weapon prevents wielders from doing any extra damage because of high STR.

Setting the STR Minimum on a weapon is an art more than it is a science, requiring careful thought and an awareness on the GM's part of how he wants to simulate various weapons. While common sense and an appreciation for game balance dictate that high-damage weapons generally shouldn't have low STR Minima, and low-damage ones generally shouldn't have high STR Minima, even that guideline doesn't always apply. There's no one particular factor that defines what a weapon's STR Minimum is or should be. Besides the considerations discussed in the text box on 6E2 200, some of the things you should think about when setting a STR Minimum include:



WEIGHT AND CONFIGURATION

The first thing most gamers think about when it comes to establishing a STR Minimum is a weapon's weight. Most medieval weapons weighed roughly two to five pounds (approximately 1 to 2.3 kg) (some were lighter, some heavier, of course). That's enough to provide significant striking power, but not enough to tire the wielder out too quickly. After all, some battles lasted for hours, so a warrior had to keep swinging his weapon again and again, and if it were too heavy, he'd soon lack the strength to do that!

However, while a weapon's weight should definitely influence its STR Minimum, it's far from the only consideration. The weapon's size, shape, and materials — its configuration, in other words — are also important. A weapon with its center of mass on one end (such as with most hammers, maces, and battle axes) is often harder to hold up and wield than one that distributes its mass more evenly throughout (such as some swords and spears). An oddly-configured weapon may not actually weigh more than an evenly-configured weapon... but it often *feels* like it does.

GAME BALANCE

Since the STR Minimum rules are part of a game system, you should keep game balance in mind when using them. If you set the STR Minimum too low on a high-damage weapon, it becomes too attractive to power-gamer type players, and they'll have their characters use that weapon regardless of whether that makes sense (common or dramatic). On the other hand, if you set the STR Minimum on a weapon too high, it may discourage players from having their characters use that weapon even when it would make sense for the character to do so.

The Light/Medium/Heavy system described above under "Equal Damage" provides an example of a game balance-influenced system of STR Minima. The STR Minima for the different types of weapons are set so that a character tends to do the same amount of damage with a weapon no matter what his STR. For example, a STR 18 character does 2d6 Killing Damage with any weapon. Thus, while fair in a game balance sense, this system (and others like it) also tends to be bland.

Game balance should *never* be the sole consideration for establishing a STR Minimum. It's not possible to mathematically model reality that precisely, and it defies common sense and one's sense of "realism" to give a light-weight weapon a high STR Minimum solely to balance it against other weapons. Setting STR Minima based on some sort of "formula" (such as some percentage of the Active Points in the weapon) is also likely to result in ridiculous outcomes such as some weapons with such high STR Minima that almost no character can wield them properly. Game balance should guide the STR Minimum decision, but never dictate it.

STANDARD MODIFIERS

All weapons are built with several Power Modifiers.

REDUCED ENDURANCE

All weapons without Charges take the Advantage *Reduced Endurance* (0 END), because the END to wield them depends on the character's STR, not on the Active Points in the Attack Power(s) used to build the weapon. However, the GM can change this if he wants to make weapons cost more or less END to wield.

To make a weapon cost more END to wield, take Reduced Endurance only at the half END (+¼) level, or don't apply it at all. To wield a weapon like this, the character has to pay *both* the END for the STR to wield it and the END for the Power(s) used to build it. This would be appropriate for some large, heavy, and/or awkward weapons, such as a troll's maul (when wielded by a human).

To make a weapon cost less END to wield, you can build into the weapon a naked *Reduced Endurance* Advantage for the STR used to wield it. For example: Reduced Endurance (½ END; +¼) for up to 25 STR (6 Active Points); OAF (-1) (total cost: 3 points) (plus Required Hands, if appropriate). A weapon like this only costs half as much STR-based END to wield, as long as the character uses no more than 25 STR with it. Any STR used over 25 would cost END at the standard rate (1 END per 5 STR, in a Heroic campaign). A weapon could even be bought to cost 0 END to wield, though that could cause significant game balance problems.

REAL WEAPON

Weapons require constant maintenance, or else they lose their effectiveness. Characters must clean and sharpen their swords and knives, lest they become too dull and rusty to cut through anything harder than butter; and they must keep bowstaves and bowstrings in good working order. Similarly, some weapons just can't damage some things (or only damage with difficulty) — for example, it's not normally possible to cut through a brick wall with a knife. The *Real Weapon* (-¼) Limitation reflects these sometimes unpleasant realities. Here are some guidelines to help GMs adjudicate the effects of the Limitation in addition to the ones on 6E2 200-01.

First, a character must devote time to maintaining his weapons, or else they'll become fouled, rusty, and hard to use. Any time a character uses a weapon in battle, he must spend at least 1 Minute cleaning the weapon. He can wait until the end of the day and clean it once after multiple uses, but this may take longer. For every two days that pass without a character cleaning his weapon, either (a) reduce its OCV by 1; or (b) reduce the damage it inflicts by 1 point. If the weapon ever reaches -10 OCV, or has so many damage penalties it could never inflict damage, it falls apart or is otherwise useless, and cannot be repaired. Repairing lesser OCV or damage penalties requires an appropriate Weaponsmith roll and at least 5 Minutes per -1.

Second, edged weapons (such as axes and swords) become dull over time if not sharpened. For each full hour of combat, the weapon does -1 point of damage (thus, -1 after one full hour, -2 after two full hours, and so forth). The GM should interpret what constitutes "an hour" of combat in a narrative/dramatic sense; it doesn't literally mean 3,600 Phases in which a character strikes a blow with the weapon. Returning the weapon to fighting sharpness requires the use of a whetstone (or like sharpening device) and 1 Minute per full hour of use.

Third, as noted above, some weapons just can't accomplish some tasks. "Cutting" through a stone wall or the iron bars of a jail cell with a dagger or sword is pretty much impossible in a "realistic" sense, for example, regardless of what the *HERO System* rules say. Hours of picking at the mortar or sawing at the bars might do the trick, assuming a character had the time and could repeatedly re-sharpen his weapon, but few adventures allow for such activity. As a general guideline, when characters use weapons to attack inanimate objects like statues, compare the weapon's Damage Classes to the PD of the object. If the DCs are less than the PD, the weapon cannot inflict significant damage on the object — at most, perhaps 1 BODY damage per full Turn of hacking at it. If the DCs equal the PD, the weapon can inflict at most 1 BODY per Phase with a successful attack (roll the damage normally, and reduce it to 1 BODY if the weapon does more than that). If the DCs exceed the PD, the weapon can damage the object normally.

At the GM's option, If a character uses a weapon to strike a firm blow against a hard, unyielding object — such as a stone wall, or the iron bars of a jail cell — he may damage his weapon. If the object's PD exceeds the weapon's DCs, the weapon takes 1 BODY damage. When it takes all its BODY in damage, it breaks, snaps, cracks, or otherwise becomes useless until repaired.

Real Weapon may also affect how much damage a character can add to a weapon; see 6E2 201.

Gamemasters should also take the shape/configuration of both weapons and objects into account when characters use them to attack inanimate objects. Chopping through a wooden door with an axe is easy, given their comparative shapes; slashing through one with a sword is more difficult. See *Fantasy Hero,* page 419, for more information.

Advanced Weapon Creation Rules And Guidelines

Once you have the basics of a weapon in place, you can think about adding to or improving it.

ADVANTAGES

One common way to improve a weapon, or differentiate it from similar weapons, is to apply an Advantage to it. Most Advantages aren't appropriate for weapons, but some of the ones that are include:

Armor Piercing, Penetrating: Both of these Advantages represent weapons that have an improved ability to penetrate the target's armor. Typically this indicates that the weapon has an especially sharp edge or point, as with stilettos, awl pikes, and armor piercing arrows. However, it can also indicate that the weapon smashes the target with such force that a substantial portion of the impact effects the target even though the weapon doesn't actually cut through or puncture armor. Many enchanted blades also take one of these Advantages to represent their ability to pierce mundane armor with ease.

Increased Maximum Range: Ranged weapons that have the ability to travel further than indicated by the standard *HERO System* rules take this Advantage. In some cases it's bought as a naked Advantage for the weapon with Limitations like *Concentration* or *Extra Time,* reflecting the effort needed to prepare and fire the weapon to attain the best range possible.

Increased STUN Multiplier: Another way to represent weapons that have a particularly forceful impact is to give them an Increased STUN Multiplier. See above for more information.

Indirect: Flexible weapons, such as flails and morningstars, take Indirect at the +¼ level to simulate their ability to perform the Flail Maneuver (page 8). Characters designing other weapons that incorporate chains or ropes may want to apply it as well.

Range Based On STR: The Advantage form of this Power Modifier simulates HTH Combat weapons characters can easily throw if necessary — spears, daggers, small axes, and the like.

LIMITATIONS

One Limitation — Focus — is required for weapons, which are objects and thus can be taken from their owners. Many other Limitations aren't appropriate for weapons, but a few crop up frequently. In addition to Charges for Ranged weapons, and Required Hands, they include:

Activation Roll: A weapon with this Limitation is unreliable — it doesn't always work. Early firearms take it; so should any other relatively complicated weapon and weapons based on new technologies that haven't yet been perfected.

Concentration: This represents a weapon that requires the character to focus on using it to the

exclusion of other actions, such as dodging or moving around. It's used for most Ranged weapons.

Extra Time: Many Fantasy-era Ranged weapons take time to prepare. The user must prepare them, load them, carefully aim them, and then finally fire. Extra Time simulates this perfectly; it's often grouped with Concentration.

Increased Endurance Cost: A heavy or awkward weapon might take this Limitation to increase the END cost the character must pay when using STR to wield the weapon. This is allowed even though the weapon also takes Reduced Endurance.

Limited Range: The standard *HERO System* rules give some Ranged weapons too much range. If so, you can apply this Limitation to decrease a weapon's range back to reasonable levels.

Mounted Limitations: Being on horseback (or other types of mounts, in High Fantasy games) affects the use of some weapons. A few weapons, such as lances, only work when the wielder is mounted (a -½ Limitation). On the other hand, characters cannot use many weapons, such as longbows, while on horseback (a -¼ Limitation). Some weapons, like crossbows, can't be drawn, prepared, or loaded by a character who's mounted, but can be fired from horseback if already loaded; they don't take a Limitation because of this.

Reduced Penetration: Some weapon designers use this Limitation to represent a weapon with multiple tines or striking areas that hit the target simultaneously, such as tridents and military forks. It's not required, but helps to differentiate such weapons from spears and the like.

Side Effects: In addition to the Side Effect of OCV or RMod penalties (see above), a weapon might inflict other penalties on the user. For example, a heavy, awkward weapon might also decrease the wielder's DCV by 1-2 — representing the fact that he can't dodge or move quickly while holding it, or bring it into position quickly enough to parry many attacks. If the weapon already has an OCV and/or RMod penalty Side Effect, the GM must decide whether to fold other Side Effects into its -½ value or to apply a second Side Effect with its own value.

UNUSUAL MATERIALS

Except for a few all-wooden weapons (like clubs), most weapons are made at least partly of metal. Even if they have wooden hafts, the striking part of the weapon — the blade, point, or head — is metal. In most Fantasy settings, that metal is steel.

However, some settings — such as games taking place during the Bronze Age, or in bizarre worlds like M.A.R. Barker's *Tékumel*, where iron and steel are extremely rare — that's not necessarily the case. Even in worlds that have steel, not everyone may make weapons out of it. Some people may lack Iron Age technology, not have a supply of iron and charcoal to turn into steel, or have some other reasons (religious restrictions, magic, personal comfort) for preferring non-steel weapons.

WEAPON MATERIALS

Material	PD/ED
Steel	PD/ED 5
Bronze	-1
Copper	-2
Coral (magical)	-2
Crystal (magical)	+0
Dwarven steel	+2
Elven-silver	+1
Glass (magical)	-1
Horn	-2
Iron	-1
Ivory	-3
Leather (magical)	-2
Stone	-1
Wood (magical)	-1
Wood (normal)	-2

"Magical" refers to ordinary substances created or augmented by mystical or alchemical processes that make them strong enough to hold an edge and stand up to the wear and tear of being used as a weapon. Ordinary glass, crystal, leather, and the like are generally useless for making feasible weapons.

Additionally, many Fantasy settings feature unusual, exotic, and even mystical metals and substances that characters can craft weapons with. The *mithril* of J.R.R. Tolkien's Middle-earth is perhaps the best known example; other possibilities include star-iron (meteoric iron), dwarven steel, glasses and crystals with the strength of metal, and so on.

The substance used to make a weapon does not affect the damage it does, but may alter its PD/ED. This generally only matters if you're using the weapon breakage rules (see page 47), but may also be a part of the *Real Weapon* Limitation. For example, some substances, even when characters can forge them into workable weapons, may be so soft that they dull easily (-1 point of damage per 10 minutes instead of per hour). Or, the GM may reduce the weapon's DCs for purposes of determining what substances it can cut through when the character uses it to try to hack through a wall, door, or the like.

The accompanying table provides suggested PD/ED values for substances other than steel. A steel weapon has PD/ED 5 (for Fantasy Hero weapon purposes, do not use the Focus rule that determines PD/ED as Active Points divided by 5). Other substances' PD/ED is represented as an increase or decrease of that PD/ED— for example, "+1 PD/ED" means to add 1 to 5, for a total of PD/ED 6. In game terms, a weapon with greater PD/ED has the *Durable* (+0) modifier to Focus,

while one with less PD/ED has a -0 version of the *Fragile* modifier. Note that these rules assume that it's steel-made striking part of the weapon that's being replaced; adding, say, bronze to the wooden haft of a weapon with a steel head will probably *strengthen* that weapon (at least in some situations), not make it worse, since bronze is tougher than wood.

Example: *A war hammer has a steel head, giving it PD/ED 5. If it were made of ordinary iron, it would have -1 PD, or 4.*

A dagger made of steel has PD/ED 5. One made of elven-silver (+1 PD) has PD/ED 6 instead, while a Greek hoplite's bronze (-2 PD/ED) dagger has only PD/ED 3.

HIGH- AND POOR-QUALITY WEAPONS

Not every blade that comes out of the weaponsmith's forge is an average weapon. Some are made by master craftsmen with great skill and precision, turning them into weapons far better than normal ones. Others are legendary blades with qualities befitting a hero's weapon. But some are badly made, or have suffered such wear and ill-use that they're no longer as good as they once were.

In game terms, characters can have *fine* (also called "masterwork") and *poor* weapons. The weapons listed in the tables earlier in this chapter are "average" versions — they have the same Damage Classes, OCV modifiers, and STR Minima for typical weapons of their type. But PCs are heroes, and sometimes an "average" weapon isn't enough for an above-average PC... or his greatest enemy!

At the GM's option, characters can use the following rules and guidelines to create exceptional weapons, or to represent below-average versions of weapons. Gamemasters are, of course, free to change the Character Point costs of these improvements (or drawbacks) to suit their campaigns, or even to give them to characters' weapons for free to represent events that occur during game play. Additionally, where the rules provide Character Point totals for unusual abilities (such as the "reroll" ability) that aren't built using the standard *HERO System* rules, *those abilities apply only to weapons.* Characters may *not* buy them as personal abilities.

These abilities do *not* represent enchantment or magical enhancement, but rather improved quality of materials, crafting, or the like. Additionally, these abilities sometimes represent "legendary" attributes possessed by famous or noteworthy weapons. They're a great way to distinguish a special or wondrous weapon from typical weapons without having to resort to the catch-all explanation of "magic." But of course, they can also represent enchantments (minor or otherwise) placed on a weapon if you want them to.

BUYING FINE AND POOR WEAPONS

When designing a fine or poor weapon, you should use the Character Point costs listed below to re-calculate the overall Active and Real Point costs of the weapon. Since Fantasy Hero characters don't pay Character Points for their weapons, making a weapon "fine" or "poor" generally only affects the weapon's monetary cost. The Active and Real Point costs usually just help the GM evaluate whether the weapon is balanced for the campaign. However, to prevent fine weapons from becoming too common in the game, the GM may require characters to pay Character Points for them, using one of two methods:

- the cost of improvements themselves, calculated as (improved weapon's Real Point cost) - (normal weapon's Real Point cost), with some predefined minimum cost (such as 3 Character Points)
- a flat cost, such as 5 Character Points

In either case, if the character loses the weapon, he permanently loses the points spent on it... though the GM may allow him to go on a quest to regain the weapon, reforge it, or have another one made, and spend the "lost" points on that.

Example: *Wendell is running a Fantasy Hero game and wants to create a special (but not magical) longsword to place in a dragon's treasure-hoard — an important reward for the PCs after a long and grueling quest! Furthermore, he wants to use the sword as inspiration for another adventure or two. So he decides to create Marclave, a famous blade once wielded by the hero Argandus Morgenstern. The inscription on the blade — "Two Hands, One Heart" — refers to an ancient prophecy the PCs must learn about, and which will involve them in another quest. To make Marclave special, Wendell decides it has +1 OCV, that it does 1½d6 damage instead of the normal 1d6+1 of a longsword, and that its heroic qualities inspire the wielder, allowing him to strike more quickly than normal. A normal longsword costs 31 Active Points, 12 Real Points; here's what Marclave costs:*

HKA 1½d6, Reduced Endurance (0 END; +½) (37 Active Points); OAF (-1), Real Weapon (-¼), STR Minimum (13; -½) (total cost: 13 points) ***plus*** *Reach +1m (1 Active Point; total cost 1 point) plus +1 OCV (5 Active Points); OAF (-1), Real Weapon (-¼) (total cost: 2 points)* ***plus*** *+1 Lightning Reflexes with Marclave (1 Active Point); OAF (-1), Real Weapon (-¼) (total cost: 1 point). Total cost: 44 Active Points; 17 Real Points.*

Since a normal longsword costs 12 points, Marclave would cost (17-12) 5 Character Points if a character built it for himself, or if Wendell made characters pay for all fine weapons to maintain game balance. However, since Wendell's giving the weapon out as treasure, he won't charge the lucky character any points at all.

FINE WEAPONS

Fine weapons may have one or more of the following abilities, or any other the GM sees fit to allow. The GM should evaluate any improvements

a character wants to apply to a weapon carefully, to ensure they're balanced for the campaign.

Accurate: The weapon may grant a +1 OCV bonus to the wielder (or, rarely, +2 or more), or for a Ranged weapon, bonuses to counteract the Range Modifier. See page 30.

Advantaged: The weapon is so potent that it has some Advantage most weapons of its type lack — such as Armor Piercing or Penetrating, or even Indirect (allowing it to perform the Flail Maneuver as a way of simulating its ability to slip past a target's shield, even if it's not a flexible weapon).

Biting: Some weapons do more damage than normal. Typically, a fine weapon gets a +1 point of damage bonus (this costs 5 Character Points for a Killing Damage weapon, 2 Character Points for a Normal Damage weapon). Some truly exceptional weapons may get an entire +1 DC bonus (recalculate the weapon's overall cost accordingly).

Alternately, some truly wondrous weapons may allow a character to reroll poor damage rolls. The character may reroll all results of "1" that come up on the damage dice. That means he always does at least 2 BODY per die when he rolls damage. This costs 20 Character Points.

Heroic Strike: A few weapons have such great accuracy that the wielder can reroll any Attack Roll made with them that misses by only 1. This costs 10 Character Points.

Alternately, some weapons may allow a character to reroll any one failed Attack Roll per day, no matter how much it missed by. This costs 3 Character Points.

Marvelously Light I: The weapon costs the wielder less END for the STR used to wield it. See page 40 regarding the Character Point cost for this ability.

Marvelously Light II: The weapon somehow doesn't seem to weigh as much as ordinary weapons — perhaps it inspires strength in the wielder, or it's made of some unknown metal. This lets a character strike harder with it, thus inflicting more damage in many cases. You can buy this by decreasing the weapon's STR Minimum.

Noble Appearance: The blade inspires loyalty and bravery in the wielder's allies, fear and dread in his foes. You can buy this as +5 PRE (sometimes more) (5 Active Points); OAF (-1), Real Weapon (-¼), Only For Making Presence Attacks While The Weapon Is Drawn (-1½) (total cost: 1 point).

Silvered: The weapon's striking surfaces are covered with silver so it can affect lycanthropes and similar creatures. This does not cost Character Points, but should cost a lot of money in-game.

Stunning Blow: Some Killing Damage weapons strike with a mightier impact, thus doing more STUN damage. Buy this as a +1 (or greater) Increased STUN Multiplier (+¼ Advantage per +1).

Sturdy: The weapon is harder to break or damage. It has +1 (or more) PD/ED or BODY, and perhaps some Power Defense to resist Dispels and Drains. Each +1 PD/+1 ED costs 3 Character Points, each +1 BODY costs 1 Character Point; and each point of Power Defense costs 1 Character Point.

Swift-Striking: The weapon is so light and easily-handled that it lets the character attack more swiftly. This is bought as Lightning Reflexes for this one attack; most weapons grant no more than a +3 DEX bonus.

Throwable: The weapon is balanced for throwing (even if it's not normally a hurled weapon). You can buy this as Penalty Skill Levels to cancel balance and/or aerodynamicity penalties.

Unreal Weapon: The weapon doesn't have the *Real Weapon* Limitation, meaning it always stays sharp, clean, and ready for action without any effort on the wielder's part. It may also, in the GM's discretion, cut through walls and doors more easily than a normal blade.

Other Improvements: Some other possible improvements, that cost no Character Points but help to make a blade distinctive, include:

- **Ornamentation:** gilding or silvering; gems in the pommel, hilt, or along the length, carved designs or incised runes on the blade; and so forth
- **Unwavering:** when stuck in the ground, a tree, or the like, the blade doesn't wobble or shake; it's as still as a mountain
- **Unrustable:** regardless of how much moisture it's exposed to, the weapon never rusts (magical rusting attacks can still affect it, though)
- **Distinctive ring:** when drawn from the sheath or struck against metal or stone, the weapon emits a distinctive ring or tone if the wielder wants it to

POOR WEAPONS

Poor weapons may have one or more of the following drawbacks (most of which are just the reverse of Fine weapon qualities), or any other the GM sees fit to impose.

Some of these Poor attributes are represented as Side Effects. If the weapon already has an OCV or RMod penalty Side Effect, the GM must decide whether to fold other Side Effects into its -½ value or to apply a second Side Effect with its own value.

Awkward/Heavy: The weapon is unusually heavy, awkward to wield, bulky, or otherwise difficult to handle. You can represent this in one or more of several ways: increase the weapon's STR Minimum; change Reduced Endurance (0 END) to (½ END) (see page 40); apply Increased Endurance Cost to increase the END needed for the STR to wield the weapon (a Side Effect; if not folded into a negative OCV Side Effect, it's a -¼, always occurs, for a total of -½); and/or add the *Bulky* Modifier to its *Focus* Limitation.

Fragile: The weapon is easier to break or damage. It has -1 (or more) PD/ED or BODY than normal. You can represent this with the *Fragile* Modifier to the *Focus* Limitation (worth -0, unless it reduces the weapon to 1 PD/ED, in which case it's worth -¼).

Inaccurate: The weapon is not as accurate as most of its kind. You can simulate this with a Side Effect (see page 15).

Restricted: The weapon is so weak or difficult to use that it has some Limitation most weapons of its type lack — such as Limited Range for a bow, or Activation Roll for a sword (representing that sometimes even an accurate blow does no damage).

Slow-Striking: The weapon is so difficult to wield that it slows down the character's combat reflexes. This is a -1 (or greater) penalty to DEX only for purposes of determining who acts first in a Segment. You can buy this as a Side Effect (if not folded into a negative OCV Side Effect, it's a -¼, always occurs, for a total of -½).

Weak Strike: The weapon's blows are weak, and thus far less likely to hurt those it strikes. You can simulate this in one or both of two ways: first, decrease the Damage Classes the weapon has; second, apply the *Decreased STUN Multiplier* Limitation.

Other Drawbacks: Some other possible negative qualities, which save no Character Points but still make a blade less enjoyable to wield, include:

- **Poor appearance:** the weapon is rusty or notched; has numerous visible repairs; it looks as badly-made as it is.
- **Ill repute:** The weapon has a poor reputation. Perhaps an evil man once committed foul deeds with it, or it supposedly carries a curse that makes its wielder accidentally slay innocent people, or the like.

USING WEAPONS

After a character has made a weapon, he needs to know how to wield it. Basic weapon-use Skills and rules (Weapon Familiarity, Combat Skill Levels, how to attack, and so forth) are described in detail in 6E1 and 2. This section provides some expanded and optional rules for weapon use. See also the *Combat Modifiers* and *Combat Maneuvers* sections earlier in this chapter.

One benefit to using most weapons is that they extend a character's Reach. See 6E2 201-02 for rules about weapon length.

Choosing The Right Weapon

The first thing to consider about weapons use is: what weapon should my character use? There are several things you should consider when making this decision.

First and foremost, consider the nature of your character and what weapons are most dramatically appropriate for him. Fantasy Hero is a *roleplaying* game, not a wargame, so choosing a weapon solely for its game benefits — because it does the most damage, for example — often isn't the best approach. Instead, think about your character's experiences in life, his appearance, his Skills and abilities, the type of tasks he performs as a member of an adventuring party, and the role he usually takes in combat. If it "makes sense" for your character to wield a short sword, then he should have a short sword — don't choose the longsword simply because it does more damage, or the morningstar because the character can perform that nifty Flail Maneuver with it. If you're concerned about your character's ability to hold up his end of the battle, buy some abilities to go with the weapon, such as Martial Arts, Weaponmaster, or Targeting Skill Levels.

Think of this approach as similar to planning a novel or movie. When creating a protagonist, the writer of a Fantasy story doesn't sit down and think, "Hmmm, which weapon does the most damage? I'd better take that one!" Instead, he considers what weapon works best *for the story,* looks best for the character visually, and generally seems most appropriate. At least at first, leave the game considerations aside and focus on drama and adventure.

That being said, it's usually appropriate and worthwhile to give *some* consideration to a weapon's good points and bad points as defined by the *HERO System* rules, particularly when two or more weapons seem equally well-suited to your character. Think about whether it might help your character to do a little less damage but avoid a -1 OCV penalty, what sort of Combat Skill Levels the character has, whether the character can use his STR to best effect with a low STR Minimum weapon, whether the character needs a weapon that's lightweight and/or easily concealed, and what sort of Combat Maneuvers the character wants to perform with the weapon.

FIGHTING METHODS

When deciding what weapon to use, you should also consider the four primary methods of fighting with weapons: one weapon; two weapons; weapon and shield; and unarmed. Each has its benefits and drawbacks in *HERO System* terms, and so may influence your choice of weapon.

ONE WEAPON

A character who fights with one weapon and no shield usually has several drawbacks to overcome. First, he lacks the protection of a shield, so he's likely to get hurt more. Second, if he loses or breaks his weapon, he may find himself unable to fight effectively. Third, he may have difficulty performing some types of Combat Maneuvers.

On the other hand, using one weapon represents the "pure offense" end of the combat spectrum well — it allows the character to concentrate solely on using that one weapon. He can invest in cheap Combat Skill Levels to improve his accuracy and damage. If it's a Two-Handed (which it usually is, at least for PCs), he can inflict significant damage with it. If he can do enough damage, and has a high DEX so he usually strikes first, the lack of a shield may not cause him too many problems.

TWO WEAPONS

Fighting with two weapons includes literally using one weapon in each hand (such as a rapier in the right, and a main-gauche in the left), fighting with a weapon that allows for a flurry of attacks (such as a quarterstaff), and even some forms of weapon-and-shield fighting in which the character uses his shield as much as a bashing weapon as a form of defense.

Fighting with a weapon in each hand has several benefits. First, if the character buys Off-Hand Defense, he gets bonuses to his DCV and to Blocking (see *Fantasy Hero,* page 184). Second, if the character buys an appropriate ability or Skill — such as Two-Weapon Fighting (and possibly Rapid Attack and Defensive Attack) — he can make more than one attack in a Phase without suffering significant difficulty. (He can, of course, make a Multiple Attack normally, suffering the penalties for doing so.)

However, to get the benefit of using two weapons, the character definitely has to spend some Character Points on related abilities; the *HERO System* has no specific "fight with two weapons" Combat Maneuver that all characters can use for free. And some of those benefits — such as the +1 DCV from Off-Hand Defense — aren't necessarily as worthwhile as having a shield, or wielding a single large weapon. Two-weapon fighting methods also tend to halve the character's DCV, take a Full Phase, and/or reduce his OCV, all of which may cause problems. But for some light fighters and rogues, the two-weapon fighting method "fits" perfectly, so they're willing to spend the points to overcome those problems.

See 6E2 38 for some suggestions about building two-weapon fighting abilities.

WEAPON AND SHIELD

For many warriors and other characters, the weapon and shield method of fighting strikes the perfect compromise between offense and defense. It leaves one hand free to wield weapons such as most swords, spears, axes, and maces, while giving the character a higher DCV, a better chance to Block attacks, and even the chance to shield-bash a foe (see *Fantasy Hero,* page 226). It's a method well-suited to many different character conceptions.

However, as a compromise, it lacks a little bit on both the offense and defense ends of the spectrum. The character usually doesn't do quite as much damage as he would with the one- or two-weapon methods (unless he buys abilities to compensate, like CSLs, Martial Arts, or Weaponmaster), and may have difficulty performing some Combat Maneuvers. Furthermore, the extra weight of the shield may cause Encumbrance problems.

UNARMED

A few Fantasy warriors, particularly those from Asian-like cultures, opt to fight without any weapons at all. Instead, they buy an unarmed Martial Arts style and rely on their speed, skill, and agility to keep them safe in combat.

The unarmed method of fighting definitely has a few benefits. Unburdened by weapons and a shield, and usually not by heavy armor either, the character can take full advantage of his DEX, SPD, and movement. Points other characters spend on weapons-oriented abilities he can spend on personal abilities — things that enemies cannot take away from him. He does high STUN damage, which can be particularly effective in Fantasy Hero games.

However, in the long run, the significant disadvantages of unarmed fighting in a world of armed and armored warriors often outweigh the advantages. Without heavy armor, the unarmed warrior is vulnerable to high-damage attacks — and a high DCV can only protect a character for so long (and not at all against Area Of Effect attacks and the like). Unless the character spends a lot of points on Extra Damage classes, he may not have enough dice to inflict significant STUN or BODY damage on his foes. He may also have problems striking unusual foes (dragons, demons, fire elementals, and so on), and suffers a penalty for Blocking armed attacks.

Special Maneuvers For Weapons

Sometimes all the Fantasy Hero weapons tend to seem a little too similar — each of them does a certain amount of damage in the same way, and there's not much to differentiate them. If you'd like to make the different types of weapons more distinct, consider granting a special ability or maneuver to each one — a "trick" that characters can only take advantage of when wielding that weapon.

Generally, special weapon maneuvers don't cost any Character Points (either for the weapon itself, or the character wielding it); they're just an extra benefit assigned by the GM. The weapon maneuvers listed below are just suggestions; you could easily develop others.

Axes: Thanks to their shape and momentum, axes can penetrate deep into a target's body if swung forcefully enough. When a character performs a Haymaker with an axe, he adds +5 Damage Classes, instead of the usual +4.

Flails: Flails can perform the Flail Maneuver (page 8). (This is built into their cost because characters can do it even in campaigns that don't use special weapon maneuvers.)

Hammers and Maces: Even when they don't actually pierce armor, hammers and maces strike with such power that they can still break bones and inflict other serious injuries. If the wielder's Attack Roll succeeds by 3 or more, these weapons have a Penetrating effect.

Picks: The configuration of a pick allows it to pierce armor with great efficiency, yet still inflict deadly blows. If the wielder's Attack Roll succeeds by 3 or more, he adds damage from STR as if the weapon did not have the *Armor Piercing* Advantage.

Polearms: Polearms have several possible special maneuvers. First, their length gives them advantages other weapons lack. Second, many of them are the only weapons with which characters can perform the optional *Set Versus Charge* and *Unhorse* Combat Maneuvers.

Quarterstaff: A staff is a dangerous weapon because the person wielding it can quickly strike multiple blows, while also having an excellent tool for blocking. If the character makes a DEX Roll as a Half Phase Action, he may do one of two things. First, he can choose to gain +2 to Block (the bonus lasts until his next Phase if not used immediately). Second, he can choose to make two staff attacks against one foe, or one each against two foes who are both engaging him in HTH Combat with Short or Medium weapons. This counts as a Multiple Attack that only takes a Half Phase and has no OCV penalty (the halving of DCV still applies).

Swords And Daggers: Blade weapons are excellent all-around combat tools; in addition to slashing, stabbing, or thrusting with them, the wielder can also use the flat or pommel to perform a Club Weapon maneuver. Short bladed weapons provide +1 Lightning Reflexes for themselves only; Medium bladed weapons receive a +2 OCV bonus for Disarms.

Weapon And Shield Breakage

Gamers who play in some Low Fantasy campaigns, and other games stressing "realistic" combat, often have to worry about breaking their weapons and shields. Combat places a lot of stress and strain on a warrior's equipment, and eventually blades and shields can break — particularly when they block powerful attacks, or attack something hard and unyielding.

When a character uses a weapon or shield to Block, compare the weapon's or shield's PD to the base (un-Advantaged) Damage Classes of the attack (not the damage done, the Damage Classes as a number). If the DCs exceed the blocking object's PD, the object takes 1 BODY damage (it's been "dinged," notched, or had part of it cut off). (At the GM's option, a particularly powerful attack may do more BODY, perhaps even as much as 1 BODY per point of difference between the DCs and the PD .) When the object takes BODY damage equal to its BODY, it's useless — either broken in pieces, or with so little of its essential parts left that it can't function as it's supposed to.

If a character doesn't specifically use his shield to perform the *Block* Combat Maneuver, but an attack misses him by equal to or less than the shield's DCV bonus, the shield "blocked" the attack (that's why it missed), and the shield may take damage as described above. At the GM's option, every 2 BODY damage done to a shield reduces its DCV bonus by 1. This represents the reduction in "cover" it provides as attacks shear away sections of it.

Sometimes a character deliberately attacks another person's weapon, rather than the person himself, in the hope of breaking it. A typical weapon has PD 3-5 (based on what it's made from; see page 42 for specifics), and targeting it specifically entails an OCV penalty of -4 to -6 (similar to attacking the Hand). If a character attacks the wooden haft or handle of a weapon, use PD 3 or the weapon's PD , whichever is lower. The GM may impose a small OCV penalty (-1 or -2) in addition to the penalty for attacking the weapon itself, since the character's trying to hit a specific part of a small object. On the other hand, if a character deliberately attacks another character's shield, the GM may grant him an OCV bonus equal to the shield's DCV bonus (or some fraction thereof), since the defender normally makes at least some effort to use his shield to protect himself.

For weapon attacks against inanimate objects, see pages 40-41.

HISTORICAL FIREARMS

1

While guns are most closely associated with modern-day adventuring and gear, they've actually been around, in one form or another, for centuries. For purposes of this section, "historical" firearms refers to guns from their invention up through the Pulp Era (*i.e.,* until 1939). Guns developed in 1940 and later years are in the *Modern Firearms* section beginning on page 68.

For general information on creating firearms in the *HERO System,* see *Modern Firearms* on page 68.

Early Gunpowder Weapons

In the real world, crude gunpowder weapons first began appearing in the early to mid-1300s, and by the late 1500s had largely replaced bows and crossbows. But of course, in a *HERO System* campaign setting, the commonality of gunpowder weapons, and the extent to which people know about them, is up to the GM. In some games they may not exist at all; in others they're rare (the equivalent of, and regarded as magical as, any wand or enchanted blade); in still others, gunpowder weapons are as common as crossbows.

The earliest firearms were all smoothbore (non-rifled), muzzle-loaded firearms. (As time went on, gunsmiths developed rifling as a way of helping to keep the barrel clean longer, and soon discovered that it imparted some improvements in accuracy.) The long arms are typically referred to as *muskets* (since, lacking rifling, they're not rifles strictly speaking). A *musketoon* was a shorter-barreled, carbine-like musket; a *blunderbuss* was an even shorter weapon with a widened mouth (to facilitate loading) that fired groups of shot much like a modern shotgun. All of them were slow and difficult to load and fire, prone to failure, and inaccurate. (In game terms, they take Extra Time and Concentration to use, and have an Activation Roll and Side Effects.) They suffered from numerous other difficulties, such as not working if the powder got wet, and "cook-offs" of powder if the weapon got too hot from repeated firing (making the weapon explode in the user's hands, a GM-imposed Side Effect).

Most early firearms were rifles. Handcannons begin appearing around the mid-1400s, with true pistols developed in the late 1400s-early 1500s. When used against low-tech (*i.e.,* Fantasy-era) armors early firearms are considered Armor Piercing, but against other targets they don't have an AP effect. (This could be bought as a naked *Armor Piercing* (+¼) Advantage for them if desired, but for ease of presentation is assumed to be a campaign ground rule.)

FIRING MECHANISMS

Early firearms are primarily classified by their firing mechanisms.

MATCHLOCK (MID-1400S TO EARLY 1700S)

A *matchlock* weapon uses a smoldering length of matchcord (a small twist of hemp cord or thick string soaked in potassium nitrate), attached to a device called a serpentine; pulling the trigger lowers the matchcord into a pan of priming powder. The need to keep the match lit makes the weapon difficult or impossible to use in rainy or windy weather, as well as slow to fire when first used. Additionally, the shooter has to constantly adjust the matchcord to the right length, the light of it can give away his position at night, and the presence of a lit match isn't always safe around large amounts of gunpowder. However, matchlocks are relatively cheap and easy to make, so they remained in use by some European armies until the early 1700s (and by the Indians, Chinese, and Koreans as late as the mid-1800s).

Matchlock weapons are heavy, so heavy that the shooter often carries a stick with a forked rest on top to serve as a sort of primitive tripod. A typical matchlock musket was about a .75-.80 caliber weapon and could weigh as much as 9k (20 pounds). Next smallest was the bastard musket or caliver, with about a .70 caliber barrel; similar to it was the arquebus (also called a harquebus or hackbut), which was lighter in weight. The petronel was much like the arquebus but only about .58 caliber.

In *HERO System* terms, matchlocks have Extra Time (1 Minute or longer; -1½) due to their lengthy reloading time. They also have Activation Roll 11-, Jammed (-1), Concentration (½ DCV throughout loading and firing; -½), and the Limitation *Cannot Be Used In High Winds Or Heavy Rains* (-¼), since that makes keeping the match lit and powder dry very difficult.

WHEELLOCK (1500 TO THE MID-1600S)

The *wheellock* was first developed around 1500. It generates a spark for the priming powder by striking pyrite against a serrated steel wheel (vaguely similar to the way some modern cigarette lighters strike flame). The shooter locks the wheel into position using a small, key-like tool called a spanner; pulling the trigger releases the wheel and allows the pyrite to strike it as it rotates. It's a more technologically advanced, easier to use, and costlier weapon than a matchlock, and unlike the matchlock it could be loaded and then carried (even concealed on one's person) until the owner needed to use it (though keeping it wound too long could ruin the spring). However, its complexity made it expensive and nearly impossible to repair in the field. As a result it soon fell out of favor and was replaced by better firing mechanisms — the snaphaunce (a sort of early flintlock mechanism developed circa 1560) and the flintlock — by the mid-1600s in most places, though some very well-made versions were still manufactured and used in Europe as late as the early 1800s.

In *HERO System* terms, wheellocks have Extra Time (1 Minute or longer; -1½) due to their lengthy reloading time. They also have Activation Roll 12-, Jammed (-1), Concentration (½ DCV throughout loading and firing; -½), and the Limitation *Cannot Be Used In Heavy Rains* (-¼), which wet the powder and prevent ignition.

FLINTLOCK (1600 TO MID-1800S)

The *flintlock,* first developed in France in the early 1600s, improved significantly on the wheellock and soon replaced it throughout Europe, remaining the standard for all firearms until replaced by percussion firing systems (see *Cap-And-Ball (Percussion) Firearms,* page 58) in the mid-1800s. A flintlock mechanism has a hammer with a piece of flint attached to it. The shooter cocks the hammer back. When he pulls the trigger, the hammer falls, striking the flint against a piece of steel called the frizzen. The falling hammer simultaneously pushes the frizzen back so the sparks fall into a pan, igniting the powder in the pan and firing the gun.

Particularly in the early part of the nineteenth century, but often continuing until late into the 1800s and beyond in less advanced areas of the world, flintlock firearms of the type used in the American Revolution and the Napoleonic era remain common. Typically these are smoothbore (unrifled) guns with flintlock firing systems. They're muzzle-loaders — to load one, the shooter puts a charge of gunpowder and a lead ball bullet into the gun via the muzzle, then tamps them down with a ramrod. Ideally he reloads using a pre-prepared greased paper cartridge containing both ball and powder. This takes roughly twelve seconds for an experienced user, 20-30 seconds for a less adept one. If he has to use a loose ball and a powder-flask instead, reloading a black powder firearm takes 3 Turns, but a shooter can reduce this to 2 Turns if he succeeds with a Fast Draw roll.

According to contemporary accounts, in the Napoleonic era a trained shooter firing a black powder musket could hit a man-sized target at 100 meters roughly half the time; at 150m succeeding with that shot was nearly impossible, and at 200m he "may as well fire at the moon and have the same hope of hitting [his] object." By the 1840s a trained soldier under ideal conditions (which of course are rare on the battlefield) was said to be able to hit his target at 200m about 25-30% of the time, and at 300m about 20-25% of the time. Contemporary analysis claimed that killing a man in battle with musket fire required seven times his own weight in shot. A study of the Battle of Vitoria (1813) that compared bullets used to casualties caused arrived at the figure of one hit per 459 shots.

Despite these shortcomings, the flintlock musket was a weapon to be feared. Its lead ball flattened on impact and could inflict horrific injuries (though at extreme range, a "spent ball" might just bruise the target, if it hit at all). In the nineteenth century the typical British ball was of approximately .71 caliber, the French of .70 caliber (making it possible to use French ammunition in British flintlocks, but not vice-versa); the Russians are said to have had 28 different calibers of ammunition in 1812. Where bullets weren't available, all sorts of other projectiles could be rammed into the musket: stones, buttons, coins, anything small enough to fit. Military records indicate fatalities inflicted by wooden rulers, razors, and even a plug of chewed tobacco. (See also *Buck And Ball Ammunition,* page 58.)

In *HERO System* terms, black powder guns have Extra Time (1 Turn or longer; -1¼) due to the need to reload. They also have Activation Roll (13- or 14-), Jammed; according to some historical estimates the misfire rate was as high as 1 in 6. A failed roll means a misfire (a "flash in the pan" or "hanging fire") and requires the shooter to clear the gun out and reload it from scratch. They also have the Limitation *Cannot Be Used In Heavy Rains* (-¼), since water in the priming-pan and cartridges renders them useless. If a character substitutes pebbles or other such things for actual lead bullets, reduce the weapon's damage by 1-2 DC, and if appropriate impose a Reduced By Range and/or Reduced Penetration effect.

Black powder weapons (of any type, not just flintlocks) have such strong recoil that repeated use during a battle might incapacitate a shooter due to bruises and injuries to his right shoulder. This isn't severe enough to qualify as a Side Effect, but the GM should keep it in mind if he's interested in "realism."

LOADING AND FIRING

As indicated above, firing early firearms tended to take a long time. At the GM's option, a character who succeeds with a Fast Draw (Early Firearms) roll can reduce the time required to load and fire a gunpowder weapon by up to half. Firing the weapon constitutes an Attack Action. Characters can fire black powder weapons from horseback (though the noise may spook the animal), but cannot load them while mounted.

HISTORICAL FIREARMS — EARLY FIREARMS

Name	Caliber	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Handcannons													
Handcannon, Large	Various	+0	-4	1½d6	+0	1	14	5.6	250m	25/3	Europe	1380	2H, Act 9- J, Conc, ‡M
Handcannon, Small	Various	+0	-6	1d6	+0	1	13	3.5	150m	15/1	Europe	1430	2H, Act 8- J, Conc, ‡M
Matchlocks													
Musket	.75	+0	-3	4d6-1	+1	1	13	5.2	250m	71/8	Europe	1450	2H, Act 11- J, Conc, ‡M, NHWR
Bastard Musket	.70	+0	-3	4d6-1	+1	1	13	4.9	250m	71/8	Europe	1450	2H, Act 11- J, Conc, ‡M, NHWR
Arquebus	.70	+0	-3	4d6-1	+1	1	13	4.3	250m	71/8	Europe	1450	2H, Act 11- J, Conc, ‡M, NHWR
Petronel	.58	+0	-3	3d6+1	+1	1	13	4.1	250m	62/7	Europe	1450	2H, Act 11- J, Conc, ‡M, NHWR
Teppo	.45	+0	-3	2d6-1	+1	1	12	2.8	250m	34/4	Japan	1700	2H, Act 11- J, Conc, ‡M, NHWR
Toradar	.60	+0	-3	3½d6	+1	1	13	4.0	250m	69/7	India	1750	2H, Act 11- J, Conc, ‡M, NHWR
Pistol	.70	+0	-4	4d6-1	+1	1	12	3.9	150m	71/8	Europe	1460	Act 11- J, Conc, ‡M, NHWR
Wheellocks													
Musket	.60	+0	-3	3½d6	+1	1	12	3.6	250m	69/7	Europe	1500	2H, Act 12- J, Conc, ‡M, NHR
Pistol	.60	+0	-4	3½d6	+1	1	11	1.3	150m	69/7	Europe	1520	Act 12- J, Conc, ‡M, NHR
Puffer/Dag	.50	+0	-4	2d6+1	+1	1	11	1.8	150m	44/5	Germany	1590	Act 12- J, Conc, ‡M, NHR
Flintlocks													
Musket, Early	.75	+0	-2	4d6-1	+1	1	12	4.7	250m	71/8	Europe	1620	2H, Act 13- J, Conc, ‡T, NHR
Pistol, Early	.60	+0	-3	3½d6	+1	1	11	1.4	150m	69/9	Europe	1650	Act 13- J, Conc, ‡T, NHR
Musket	.75	+0	-2	4d6-1	+1	1	12	3.6	250m	71/8	Europe	1720	2H, Act 14- J, Conc, ‡T, NHR
Musketoon	.75	+0	-2	4d6-1	+1	1	12	3.3	250m	71/8	Europe	1720	2H, Act 14- J, Conc, ‡T, NHR
Pistol	.57	+0	-3	3d6+1	+1	1	11	1.2	150m	62/8	Europe	1750	Act 14- J, Conc, ‡T, NHR
Blunderbuss	.69	+0	-2	2d6	+1	1	12	2.4	20m	45/15	Europe	1750	AE1, Act 13- J, Conc, ‡T, NHR, LR (20m), RR, RP
Brown Bess Rifle	.75	+0	-2	4d6-1	+1	1	11	4.8	400m	71/8	Britain	1722	2H, Act 14-, Conc, ‡T, NHR
M1777 Rifle	.70	+0	-2	4d6-1	+1	1	11	4.6	400m	71/8	France	1777	2H, Act 14-, Conc, ‡T, NHR
Kentucky Rifle	.44	+0	-2	2d6-1	+1	1	11	4.2	270m	34/4	USA	1775	2H, Act 14-, Conc, ‡T, NHR
Double-Barrel Pistol	.50	+0	-3	2d6+1	+1	2	11	1.4	350m	44/6	Britain	1700	Act 14- J, Conc, ‡T, NHR
Duckfoot Pistol	.45	+0	-3	2d6-1	+1	4	12	1.8	270m	47/7	Europe	1780	AF4 Only, Act 14-, Conc, ‡T, NHR
Dueling Pistol	.45	+0	-1	2d6-1	+1	1	12	1.8	270m	34/4	Europe	1790	Act 14- J, Conc, ‡T, NHR

Nineteenth Century Firearms

This section, and the accompanying table, covers firearms of the 1800s. It focuses primarily on weapons from the latter half of the nineteenth century in the United States, since that's what would commonly be used in Western Hero games, but it has a few guns from the continent as well.

The firearms of the 1800s were of course quite effective at killing, but compared to modern (or even Pulp-era) guns they're relatively primitive. They're not as accurate or as reliable, and they often use inferior firing mechanisms and/or types of ammunition (see below).

SINGLE-ACTION AND DOUBLE-ACTION

One important distinction, particularly with regard to nineteenth century revolvers, is between single-action and double-action firing mechanisms. Simply put, a *single-action* revolver's trigger can only make the hammer fall, not cock it back. To fire the gun, the user must first cock the hammer back by hand, usually using his thumb (hence the Wild West slang term "thumb-buster" for a revolver). A *double-action* revolver's trigger both pulls the hammer back and then makes it fall (though the hammer can still be cocked by hand, perhaps as a threat).

In games where the GM wants to emphasize "realism," or distinguish between the two types of revolvers, cocking the hammer on a single-action revolver is a Half Phase Action, then firing it is an Attack Action (thus, shooting the gun requires a Full Phase). At the GM's option, a shooter who succeeds with a Fast Draw or Power: Shooting Tricks roll by 2 or more can cock a single-action revolver as a Zero Phase Action.

FANNING

On the other hand, a single-action revolver can be *fanned.* This means that the shooter holds the trigger down and then rapidly hits the hammer repeatedly, allowing for a sort of crude automatic fire. Double-action revolvers cannot be fanned. Fanning has the risk of damaging the revolver's cylinder stop mechanism.

There are two ways to represent fanning in *HERO System* terms. The first, and most reliable, is for a character to buy a naked Autofire (5 shots; +½) Advantage for firearms of up to 37 Active Points (the most expensive single-action revolver on the table), with the Limitations *Only Works With Single-Action Revolvers* (-¼) and *Requires A Shooting Tricks Roll* (-½). He may also take Side Effects (damages the cylinder stop, requiring 1 Hour's repair work to fix; -¼), but this isn't required. The second is for a character who has a single-action revolver and wants to fan to make a Shooting Tricks roll. If he succeeds, he fires one bullet, and for each 2 points by which he succeeds beyond that, he fires another; treat this as Autofire. However, if the roll fails, or if the character fires more than 4 bullets in a single fan, the cylinder stop is damaged, as above.

A similar trick to fanning is *sliding,* in which the shooter cocks the hammer back with his thumb just enough to pull it down and release it to fire, but not enough to lock it back into position.

Some Wild West gunslingers liked to fan so much that they used modified revolvers called *slip guns* that could only be fanned because the trigger and hammer were disconnected.

LEVER-ACTION GUNS

Some nineteenth-century firearms, particularly rifles and shotguns, use a *lever-action* to load a new bullet into the chamber. The various Volcanic arms and the Winchester rifles were particularly known for being lever-action. The lever is usually located somewhere near the trigger guard, and in fact often incorporates the guard. This in theory could allow for a higher rate of fire in the hands of a trained individual, but made it difficult to fire the gun if the shooter's lying prone on the ground.

In games where the GM wants to emphasize "realism," operating the lever on a lever-action firearm is a Half Phase Action, then firing it is an Attack Action (thus, shooting the gun requires a Full Phase). At the GM's option, a shooter who succeeds with a Power: Shooting Tricks roll by 2 or more can work the lever as a Zero Phase Action.

Holding a lever-action gun and operating the lever requires two hands unless the shooter wants to try a maneuver called the "rifle spin" where he works the lever by spinning the rifle around in one hand. To do this a character must take a Half Phase Action and succeed with a Fast Draw roll at -1 (or a DEX Roll at -2). If the character's Fast Draw roll succeeds by 2 or more (*i.e.,* by a total of 3 or more, accounting for the -1 penalty), the rifle spin only takes a Zero Phase Action to perform.

Additionally, a character can fire a lever-action firearm rapidly, using the rules for fanning (see above), but can only fire a maximum of three shots this way.

NINETEENTH CENTURY AMMUNITION

Unlike Pulp and modern characters, characters in the Wild West and Victorian times may encounter a wide variety of different types of ammunition. This may make it difficult (or impossible) for them to replenish their supply of bullets in certain circumstances.

THE EVOLUTION OF BULLETS

Early bullets were spherical, and thus not very accurate. Pointed bullets similar in shape to the ones used in modern times were first invented in the 1820s, but were consistently rejected by the British military for various reasons, including difficulty of manufacture. The first such round to achieve widespread acceptance was the *Minié bullet,* invented by a French Army captain in 1847 (though it was basically the same as one created by William Greener of England eleven years previously). The Minié bullet had a hollow in the back filled with an iron plug; this caused it to expand and grip the barrel's rifling when fired, leading to more accurate shots. The British adopted it for the Enfield rifle in 1855. It saw wide use during the American Civil War, when according to some

NINETEENTH-CENTURY SINGLE-ACTION REVOLVERS

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Adams Revolver	.50	+0	+0	2d6	+1	5	9	1.3	300m	37/9	Britain	1851	C&B
Army Pistol	.44	+0	+0	2d6-1	+1	6	8	1.2	270m	34/10	USA	1860	
Augusta Revolver	.36	+0	+0	1d6	+0	6	8	1.1	150m	15/4	USA	1862	C&B
Colt Army	.44	+0	+0	2d6-1	+1	6	8	1.2	270m	34/8	USA	1860	C&B
Colt Army — Thuer	.44	+0	+0	2d6-1	+1	6	8	1.2	270m	34/10	USA	1869	
Colt Buntline Special	.45	+0	+0	2d6-1	+1	6	9	1.4	270m	34/10	USA	1870	1
Colt Dragoon	.44	+0	+0	2d6-1	+1	6	10	1.77	270m	34/8	USA	1848	C&B
Colt Dragoon No. 3½	.44	+0	+0	2d6-1	+1	6	10	2.77	270m	34/8	USA	1858	C&B, 2
Colt Navy Revolver	.36	+0	+0	1d6	+0	6	8	1.2	150m	15/4	USA	1851	C&B
Colt New Line	.30	+0	+0	1d6	+0	5	8	1.1	150m	15/4	USA	1874	
Colt New Line	.38	+0	+0	1d6	+0	5	8	1.1	150m	15/4	USA	1874	
Colt Old-Line	.22	+0	+0	1d6-1	+0	7	8	1.2	120m	12/3	USA	1860	
Colt Open Top	.44	+0	+0	2d6-1	+1	6	8	1.1	270m	34/10	USA	1871	
Colt Open Top Pocket	.22	+0	+0	1d6-1	+0	7	7	1.0	120m	12/3	USA	1870	
Colt Paterson Belt Model	.31	+0	+0	1d6	+0	5	8	1.16	150m	15/4	USA	1837	C&B
Colt Peacemaker	.45	+0	+0	2d6-1	+1	6	10	1.05	270m	34/9	USA	1873	
Colt Pocket	.31	+0	+0	1d6	+0	5	6	0.65	150m	15/4	USA	1849	C&B
Colt Police	.36	+0	+0	1d6	+0	5	8	1.2	150m	15/4	USA	1861	C&B
Colt Walker	.44	+0	+0	2d6-1	+1	6	11	2.0	270m	34/8	USA	1847	C&B
Forehand & Wadsworth .44	.44 R	+0	+0	2d6-1	+1	6	11	1.8	270m	34/9	USA	1875	
Freeman Army Revolver	.44	+0	+0	2d6-1	+1	6	9	1.3	270m	34/8	USA	1863	C&B
Joslyn Army Revolver	.44	+0	+0	2d6-1	+1	5	9	1.3	270m	34/8	USA	1861	C&B
Kerr's Patent Revolver	.38	+0	+0	1d6	+0	5	8	1.2	150m	15/4	USA	1857	C&B
Leech & Rigdon Revolver	.36	+0	+0	1d6	+0	6	8	1.2	150m	15/4	USA	1863	C&B
Lebel Mle 1892	8mm Rev	+0	+0	1d6	+0	6	9	0.84	150m	15/4	France	1892	
LeMat Grapeshot Pistol													
Pistol	.40	+0	+0	1d6+1	+0	9	10	1.45	200m	Text	USA	1876	
Shotgun	16ga	+0	+0	2d6+1	+1	1			NR		USA	1876	AE1, LR(40m), RR, RP
LeMat Revolver													
Pistol	.42	+0	+0	1d6+1	+0	9	10	1.45	200m	Text	USA	1860	C&B, 4
Shotgun	16ga	+0	+0	2d6+1	+1	1			NR		USA	1860	AE1, LR(40m), RR, RP
Merwin Hulbert Army	.44-40	+0	+0	2d6	+1	6	8	1.2	300m	37/10	USA	1876	

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Nagant M1895	7.62 mm Rev	+0	+0	1d6+1	+0	7	9	0.75	200m	20/6	USSR	1895	
Nambu Type 26	9mm J	+0	+0	1d6	+0	6	9	0.93	150m	15/4	Japan	1893	
Navy Pistol	.36	+0	+0	1d6	+0	6	8	1.2	150m	15/4	USA	1851	
Remington Army	.44	+0	+0	2d6-1	+1	6	8	1.1	270m	34/10	USA	1863	C&B
Remington-Beals Pocket	.31	+0	+0	1d6	+0	5	7	1.0	150m	15/4	USA	1857	C&B
Remington Navy	.50	+0	+0	2d6+1	+1	1	9	1.3	350m	44/8	USA	1867	C&B
Remington New Model	.46	+0	+0	2d6	+1	6	9	1.4	300m	37/10	USA	1870	
Remington Single-Action	.44	+0	+0	2d6-1	+1	6	9	1.3	270m	34/10	USA	1875	
Roger & Spencer Army	.44	+0	+0	2d6-1	+1	6	9	1.4	270m	34/8	USA	1863	C&B
Savage & North Navy	.36	+0	+0	1d6	+0	6	8	1.1	150m	15/4	USA	1861	C&B
Smith & Wesson No. 1	.22	+0	+0	1d6-1	+0	7	6	0.4	120m	12/3	USA	1857	
Smith & Wesson No. 2	.32	+0	+0	1d6	+0	6	6	0.7	150m	15/4	USA	1861	
Smith & Wesson No. 3	.44	+0	+0	2d6-1	+1	6	8	1.2	270m	34/10	USA	1870	
Smith & Wesson No. 3	.45	+0	+0	2d6-1	+1	6	8	1.2	270m	34/10	USA	1876	
S & W Baby Russian	.38	+0	+0	1d6	+0	5	6	0.6	150m	15/4	USA	1876	
Smith & Wesson Russian	.44 R	+0	+0	2d6	+1	6	9	1.3	270m	37/10	USA	1870	5
Smith & Wesson Schofield	.45	+0	+0	2d6-1	+1	6	8	1.16	270m	34/10	USA	1876	6
Volcanic Pistol	.31	+0	+0	1d6	+0	6	8	1.2	150m	15/4	USA	1854	LA, 7
Volcanic Pistol-Carbine	.38	+0	+0	1d6	+0	10	9	1.4	150m	15/5	USA	1854	LA, 7
Volcanic Pistol	.41	+0	+0	1d6+1	+0	8	8	1.2	200m	20/6	USA	1854	LA, 7
Volcanic Repeating Pistol	.38	+0	+0	1d6	+0	6	8	1.2	150m	15/4	USA	1857	LA, 7
Webley Mk III	.38	+0	+0	1d6	+0	6	8	1.10	150m	15/4	Britain	1897	
Webley Mk IV	.455	+0	-1	2d6-1	+1	6	8	1.10	270m	34/8	Britain	1899	
Wesson & Leavitt Pocket	.31	+0	+0	1d6	+0	6	7	1.0	150m	15/4	USA	1851	MCR
W. Irving Knuckle-Duster	.32	+0	+0	1d6	+0	5	7	1.0	150m	15/4	USA	1870	

NINETEENTH-CENTURY DOUBLE-ACTION REVOLVERS

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Colt Frontier	.32-20	+0	+0	1d6	+0	6	8	1.1	150m	15/4	USA	1877	
Colt Frontier	.44-40	+0	+0	2d6	+1	6	8	1.1	300m	20/6	USA	1877	
Colt Lightning	.38	+0	+0	1d6	+0	6	10	1.05	150m	15/4	USA	1877	8 (Activation Roll 14-)
Colt Peacemaker	.44	+0	+0	2d6-1	+1	6	10	1.05	270m	34/9	USA	1873	
Colt Thunderer	.41	+0	+0	1d6+1	+0	6	10	1.05	200m	20/5	USA	1877	
Cooper Navy	.36	+0	+0	1d6	+0	5	7	1.0	150m	15/4	USA	1873	
Kerr's Patent Revolver	.38	+0	+0	1d6	+0	5	8	1.2	150m	15/4	Britain	1863	C&B
Merwin Hulbert Pocket	.32	+0	+0	1d6	+0	6	8	1.1	150m	15/4	USA	1877	9
Pettengill Army	.44	+0	+0	2d6-1	+1	6	7	0.7	270m	34/10	USA	1861	10
Smith & Wesson DA	.38	+0	+0	1d6	+0	5	7	1.0	150m	15/4	USA	1880	
Smith & Wesson Frontier	.44 R	+0	+0	2d6-1	+1	6	9	1.4	270m	34/10	USA	1881	
Starr Revolver	.44	+0	+0	2d6-1	+1	6	9	1.45	270m	34/8	USA	1860	C&B

NINETEENTH-CENTURY DERRINGERS

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Derringer	.38	-2	-2	1d6	+0	2	4	0.45	150m	15/3	USA	1800s	11
Derringer	.44	-2	-2	2d6-1	+1	2	4	0.4	270m	34/7	USA	1850	DA
American Pepperbox	.34	-2	-2	1d6	+0	18	4	0.5	150m	19/5	USA	1858	C&B
Chuchu Pistol	.22	-2	-2	1d6-1	+0	4	4	0.3	120m	12/3	USA	1870	DA
Colt Derringer	.41	-2	-2	1d6+1	+0	1	4	0.3	200m	20/4	USA	1870	SA
English 1840 Model	.36	-2	-2	1d6	+0	8	4	0.5	150m	Text	Britain	1840	C&B, 12
Marston Pistol	.32	-2	-2	1d6	+0	3	4	0.3	150m	15/3	USA	1864	DA
Palm Pistol	.32	-2	-2	1d6	+0	7	4	0.4	150m	15/4	USA	1883	DA, 13
Remington Double Derringer	.41	-2	-2	1d6+1	+0	2	4	0.4	200m	20/4	USA	1865	SA, 14
Remington-Eliot Derringer	.32	-2	-2	1d6	+0	4	4	0.35	150m	15/3	USA	1863	DA
Remington Rider	.32	-2	-2	1d6	+0	5	4	0.4	150m	15/4	USA	1871	SA
Robbins & Lawrence Pepperbox	.31	-2	-2	1d6	+0	5	4	0.4	150m	15/3	USA	1849	C&B
Rupertus Pepperbox	.22	-2	-2	1d6-1	+0	8	4	0.5	120m	12/3	USA	1860	SA
Sharps Derringer	.30	-2	-2	1d6	+0	4	4	0.3	150m	15/3	USA	1859	DA
Wesson Dagger-Pistol	.41	-2	-2	1d6+1	+0	2	4	0.4	200m	Text	USA	1868	12
Williamson Single-Shot	.41	-2	-2	1d6+1	+0	1	4	0.3	200m	20/4	USA	1866	SA

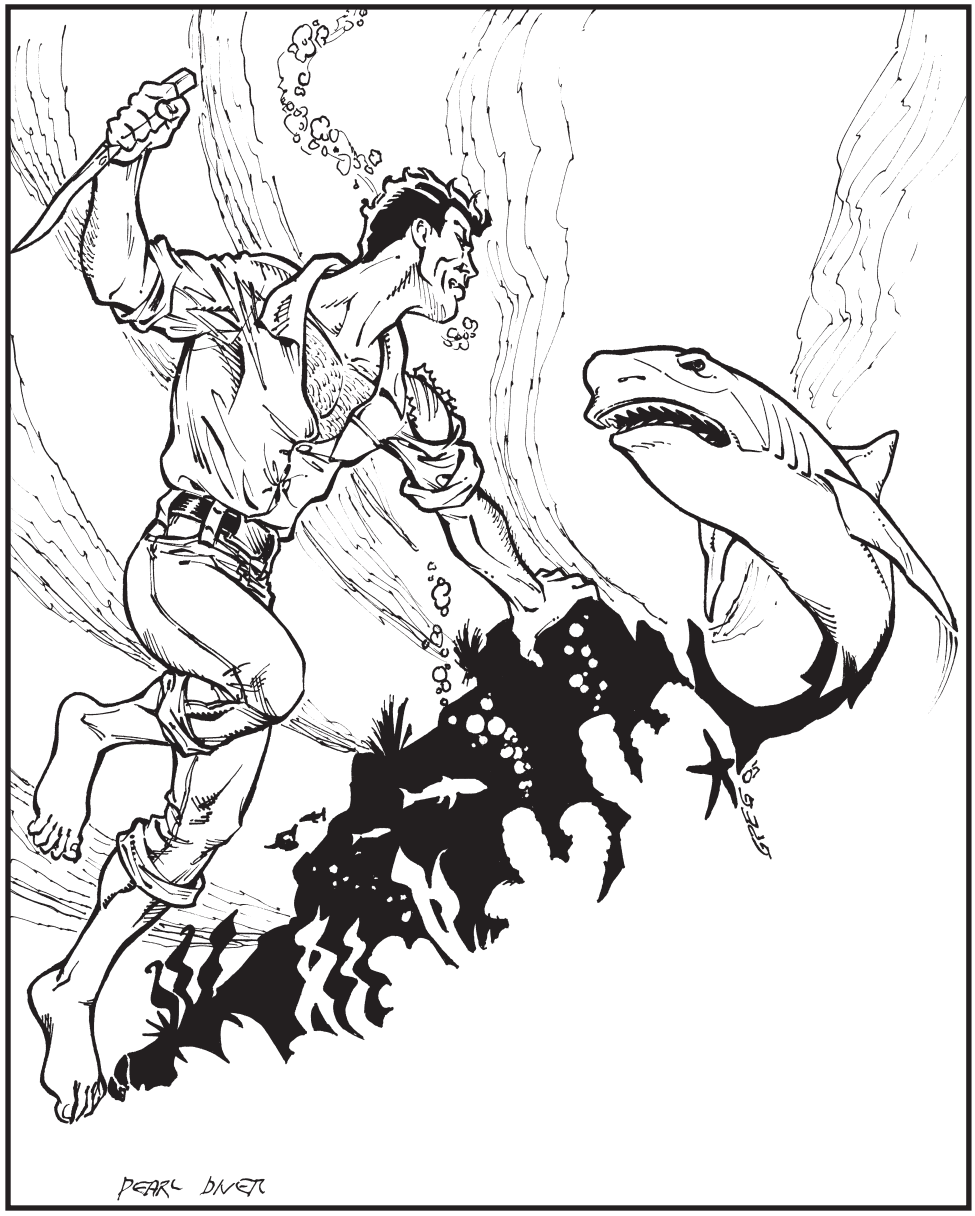
NINETEENTH-CENTURY RIFLES

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Ballard '72	.56	+0	+0	3d6+1	+1	1	14	4.0	500m	62/10	USA	1872	2H, C&B
Bullard Express	.50	+0	+0	2d6+1	+1	11	16	4.5	350m	44/11	USA	1872	2H
Colt Lightning Repeater	.44-40	+0	+0	2d6	+1	7	13	3.2	300m	37/9	USA	1885	2H, 15
Colt Paterson Model 1836	.69	+0	+0	3½d6	+1	7	14	4.0	550m	69/14	USA	1836	2H, C&B, 16
Colt Revolving Rifle	.56	+0	+0	3d6+1	+1	5	14	4.0	500m	62/12	USA	1855	2H, C&B, 16
Enfield Rifle Musket	.58	+1	+1	3d6+1	+1	1	15	4.3	500m	65/12	Britain	1853	2H, C&B, 17
Evans Old Model Sporter	.44 E	+0	+0	2d6	+1	34	15	4.3	300m	52/14	USA	1875	2H, 18
FN Model 1889	7.65x 53mm	+0	+0	2d6+1	+1	5	14	4.01	350m	44/10	Belg	1889	2H
Henry Repeating Rifle	.44	+0	+0	2d6-1	+1	16	14	4.0	270m	34/9	USA	1860	2H, LA
Hotchkiss Repeating Rifle	.45-70	+0	+0	2d6	+1	1	13	3.6	300m	37/7	USA	1878	2H, bolt-action
Lebel Model 1886	8mm Lebel	+0	+1	2½d6	+1	8	14	4.28	400m	51/13	France	1886	2H
LeMat Carbine													
Rifle	.42	+0	+0	1d6+1	+0	9	14	4.0	200m	Text	USA	1860	2H, C&B, 4
Shotgun	16ga	+0	+0	2d6+1	+1	1			NR				AE1, LR(40m), RR, RP
Mannlicher Carcano M1891	6.5mm	+0	+1	2d6	+1	6	13	3.00	300m	38/10	Italy	1891	2H, 19
Mauser Gewehr 98	7.92mm Maus	+0	+1	2½d6	+1	5	14	4.10	400m	51/12	Germany	1898	2H
Remington Model 1871	.50-70	+0	+0	2d6+1	+1	1	14	4.2	350m	44/8	USA	1871	2H
Sharps 1855 Carbine	.57	+0	+0	3d6+1	+1	2	13	3.3	500m	62/11	USA	1855	2H, C&B
Sharps 1859 Rifle	.52	+1	+1	2d6+1	+1	1	14	3.9	350m	47/9	USA	1859	2H, C&B, 20
Sharps 1869 Rifle	.60	+0	+0	3d6+1	+1	1	13	3.6	550m	69/11	USA	1869	2H
Sharps 1874 Rifle	.45-70	+0	+0	2d6	+1	1	15	4.8	270m	37/6	USA	1874	2H
Sharps Big 50	.50	+0	+0	2d6+1	+1	1	16	5.0	350m	44/8	USA	1877	2H
Spanish Model 1893	7x57mm Maus	+0	+1	2d6	+0	5	14	3.95	300m	31/8	Spain	1893	2H
Spencer Carbine	.52	+0	+0	2d6+1	+1	1	14	3.7	350m	44/8	USA	1865	2H
Spencer Carbine	.56-50	+0	+0	3d6+1	+1	7	14	3.8	500m	62/14	USA	1865	2H
Springfield .58	.58	+0	+0	3d6+1	+1	1	14	4.0	500m	62/10	USA	1873	2H, C&B
Springfield 1873	.45-70	+0	+0	2d6+1	+1	1	14	3.8	350m	44/8	USA	1873	2H
US Model 1822	.69	+0	+0	3½d6	+1	1	15	4.2	550m	69/12	USA	1822	2H, B&B
US Model 1842	.69	+0	+0	3½d6	+1	1	14	4.1	550m	69/12	USA	1842	2H, B&B
US Model 1855	.58	+0	+0	3d6+1	+1	1	14	4.1	500m	62/10	USA	1855	2H, MCR or C&B
Volcanic Carbine	.38 or .41	+0	+0	1d6+1	+0	30	13	3.6	200m	25/7	USA	1855	2H, LA, C&B, 7

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Whitworth	.45	+1	+1	2d6-1	+1	1	15	4.2	270m	37/7	Britain	1857	2H, C&B, 21
Winchester '66 "Yellow Boy"	.44	+0	+0	2d6-1	+1	6	13	3.5	270m	34/8	USA	1866	2H, LA
Winchester '73	.44-40	+0	+0	2d6	+1	15	13	3.3	300m	37/10	USA	1873	2H, LA
Winchester '76	.45-47	+0	+0	2d6	+1	15	13	3.5	300m	37/10	USA	1876	2H, LA

NINETEENTH-CENTURY HEAVY WEAPONS

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Gatling Gun	.45	+1	+1	2d6-1	+1	400	18	30.0	540m	97/27	USA	1861	AF10, IMR2, Crew3, 22
Maxim Gun	.303 British	+1	+1	2½d6	+1	250	18	27.2	400m	143/39	Britain	1884	AF10, IMR2, Crew4, 23



KEY

2H: Two-Handed (a -½ Limitation)

Act: Activation Roll (a "J" indicates "Jammed" as well).

AE: Area Of Effect (Radius); the number following indicates the size of the Radius in meters.

AEC: Area Of Effect (Cone)

AF Only: Autofire only, no single shots (a -0 Limitation)

B&B: This is a smoothbore firearm that may use buck and ball ammunition

C&B: This is a "percussion" firearm that uses cap-and-ball ammunition (which means an Activation Roll 13-, Jammed (-½); see page 58)

Conc: Concentration (½ DCV "throughout" the loading and/or firing process, see text; -½)

Crew: Requires Multiple Users (number indicates standard size of crew)

DA: Double-action (see page 51)

DB: Double-barrelled

E: Evans, a type of ammunition manufactured by the Evans Co.

J: Japanese

LA: Lever-action (see page 51)

LR(Xm): Limited Range (number indicates range in meters)

Maus: Mauser

MCR: Maynard cap ribbon (which means an Activation Roll 12-, Jammed (-¾); see page 59)

mm: millimeter

NHR: Cannot Be Used In Heavy Rains (-¼)

NHWR: Cannot Be Used In High Winds Or Heavy Rains (-¼)

NR: No Range

R: Russian, a type of ammunition manufactured by Smith & Wesson

Rev: Revolver

RP: Reduced Penetration

RR: Reduced By Range

SA: Single-action (see page 51)

S&W: Smith & Wesson (an American gun manufacturer)

‡T: Extra Time (1 Turn; -1¼)

‡M: Extra Time (1 Minute; -1½)

Firearms are RKAs bought with the following Limitations: Focus (OAF; -1), STR Minimum, Beam, Real Weapon, Required Hands (for rifles, shotguns, and the like), and Charges. See page 68 for more information.

Name: The name of the weapon. This may include a manufacturer and/or model number.

Caliber: The weapon's caliber (for shotguns, this becomes "Gauge"). This is given in fractions of an inch or in millimeters (mm).

Many models of guns comes in multiple calibers, not just the one listed (this is particularly true for semi-automatic handguns), and a gunsmith can often rechamber a weapon to accept a different size cartridge. So if you like the look of a gun but not the caliber, feel free to change it to fire the type of bullet you want. Upgrading a gun to a larger caliber may diminish the number of rounds it can hold in a magazine, while downgrading to a smaller caliber may increase the weapon's ammo capacity.

OCV: This is applied as a bonus or penalty against all attacks made with the weapon. OCV bonuses are bought as a 2-point Combat Skill Level with the Limitations *OAF, Required Hands*, and *Real Weapon.* OCV penalties are a minor Side Effect (automatically occurs; -½) for the weapon. Until the penalties on a weapon reach the 30 Active Point level (which is highly unlikely to ever occur), the Side Effect remains at this value. Even if a weapon has both OCV and RMod penalties, it takes only one Side Effect until the penalties exceed 30 points.

RMod: This represents a modifier to the weapon's accuracy at Range. Positive values (bought as 1-point Penalty Skill Levels versus the Range Group with the *Focus* and *Required Hands* Limitations) help to offset the standard Range Modifier; negative values (a minor Side Effect (automatically occurs; -½)) add to it. RMod can never raise a character's base OCV, it can only negate penalties.

Damage: The damage the weapon does. An "N" indicates Normal Damage; otherwise the listed damage is Killing. Note that Fantasy-era armors are considered to have only half effect against firearms; this could be bought as a naked Armor Piercing (+¼) Advantate for these firearms, but for ease of presentation is assumed to be a campaign ground rule.

STUNx: This is the STUN Multiplier for Killing Damage weapons (a +0 means "no modification"; use the standard ½d6 STUN Multiplier). Apply the STUNx modifier to the STUN Multiplier roll (or to the STUNx for the Hit Location struck, if the campaign uses Hit Location rules). For example, if a character with a .44 caliber firearm (STUNx +1) hits an opponent in the Head, the total STUNx would be 6.

Shots: The number of shots in the gun's cylinder or magazine (in game terms, how many Charges the gun has). Each gun comes with one "clip" of ammunition unless noted otherwise. If a gun can use more than one size clip, the largest or most common clip is listed. Guns with a "clip" of 1 shot are single-shot guns (often for target shooting) that the user must reload after each shot.

The listed number of Charges for semi-automatic firearms doesn't include having one round "in the pipe" (i.e., chambering one round, then removing the magazine and replacing that round, so that the gun carries +1 round).

STR Min: The STR Min necessary to use the weapon effectively; see 6E2 199 for rules. Remember that firearms and related weapons (which are built as RKAs or Blasts) don't get bonus damage or other benefits from exceeding the STR Minimum. The STR Minimum simply indicates the STR needed to effectively use the weapon — to hold, draw, and/or cock it.

Mass: The weight of the gun, in kilograms. Typically this is the unloaded weight; inserting ammunition adds a few grams.

Max Range: The weapon's maximum Range in meters according to the *HERO System* rules. (Of course, its effective range — the range over which it's likely to hit a target — is much less, thanks to the Range Modifier.) Typically this means Base Points x 10 meters, but Advantages or Limitations may change that. "NR" means No Range; "RBS" means Range Based On STR.

A/R Cost: The Active Point/Real Point Cost of the weapon, in Character Points. For greater variation, these costs use the expanded Killing Attack costs on APG 56 (thus, an RKA 1d6-1 costs 12 Character Points).

Origin: The country where the device was created/is manufactured. Some gun manufacturers may have factories in multiple nations. The modern-day firearms table doesn't provide this information, but it's usually easy to look up if you need it.

Year: The year the weapon was first available. The modern-day firearms table doesn't provide this information, but it's usually easy to look up if you need it.

Notes: This catch-all category includes any information not listed elsewhere. All notes and abbreviations are explained at the end of the tables.

THE BODY AND DEFENSE OF FIREARMS

While the Fantasy-era weapons tables list the BODY and Defenses for each weapon, the firearms tables do not. Compared to Fantasy-era weapons, which often varied in composition, firearms of a given type tend to be relatively uniform in terms of their BODY and Defenses. Rather than listing their BODY and Defenses in the tables, they're provided here.

Early Firearms: As modern firearms, but -1 BODY and -1 Defenses.

Revolvers: 3-4 BODY, 4-5 Defenses

Semi-Automatic Handguns: 3-4 BODY, 4-5 Defenses

Submachine Guns: 4-5 BODY, 4-5 Defenses

Rifles: 5-7 BODY, 4-5 Defenses

Assault Rifles: 5-8 BODY, 4-5 Defenses

Machine Guns: 6-8 BODY, 4-5 Defenses

Shotguns: 5-7 BODY, 4-5 Defenses

estimates as much as ninety percent of battlefield gunfire casualties were caused by Minié bullets.

Metal-jacketed bullets were invented during the nineteenth century, beginning in the 1830s. Early metal cartridges were made of brass and saw use in the American Civil War and after (alongside older-style, paper-jacketed bullets). By the 1870s metal cartridges were the standard in the United States, thanks in part to companies like Smith & Wesson developing revolvers to use the new technology. The modern full metal jacket bullet was invented in 1882 by Major Eduard Rubin of Switzerland. Another advance, coming into play in 1898, was the *spitzer bullet,* a rifle bullet with a sharply pointed (rather than simply rounded or slightly pointed) nose. This allows the bullet to travel more accurately for greater distances with more energy, and remains in common use to the present day.

OTHER FIRING METHODS

Since metal-jacketed bullets aren't uniformly (or reliably) available in all places and times where heroes might adventure during the 1800s, they may encounter guns using other firing mechanisms and rounds, such as:

Buck And Ball Ammunition: When using black powder weapons, some shooters try to improve the odds in their favor by using *buck and ball ammunition.* This is a pre-rolled paper cartridge containing a .69 Minie ball with three large buckshot rounds bound on top, which in effect converts the rifle into a sort of shotgun. When a character fires buck and ball ammunition, treat the shot as coming from a 12 gauge shotgun firing shot, but remove the *Reduced Penetration* (-¼) Limitation. On the downside, buck and ball ammunition has an Activation Roll 13-, Jammed; if the roll fails by 3 or more, the rifle explodes, as outlined below for cap-and-ball guns.

Cap-And-Ball (Percussion) Firearms: Cap-and-ball firearms, also called percussion or caplock firearms, were invented around 1830. They were common during the American Civil War, and could still be found in many places long after that conflict. Many gunmen were more comfortable with this more familiar technology, it was cheaper and easier for a shooter to resupply himself with cap-and-ball ammunition (or even to make his own). Additionally, early metallic cartridge bullets were weaker than cap-and-ball rounds (if you want to reflect this in game terms, reduce the damage done by nineteenth century guns using metallic cartridges by -1 point until Rubin's full metal jacket bullets are available).

In a cap-and-ball gun, the shooter loads the bullet (a lead ball) and gunpowder by hand into the gun's chamber. He then fits a small percussion cap containing mercury fulminate onto a nipple on the outside of the chamber. Pulling the trigger causes the hammer to hit the cap, which detonates, igniting the powder in the chamber and firing the bullet.

In *HERO System* terms, cap-and-ball ammunition works as follows. First, it takes an Extra Phase to load each chamber; a successful Fast Draw roll can halve this time. The reloader typically has to stand up to do the work, which may expose him to enemy fire. With a revolver, it's often quicker to remove the cylinder with empty chambers and replace it with one that was loaded in advance; this takes a Full Phase (or a Half Phase with a successful Fast Draw roll).

Second, cap-and-ball firearms have reliability problems. They're built with a Required Roll (Activation Roll) 13-, Jammed (-½). A failed roll usually means that a percussion cap fell off its nipple and into the firing mechanism. This takes a Full Phase Action to clear (or a Half Phase with a successful Fast Draw roll). Alternately, in the case of a rifle or musket failure by 2-3 may mean that the nipple's become fouled with cap residue, or the barrel with powder residue. This means it cannot be fired until cleaned (which takes a minimum of 1 Turn, and often longer), though in some cases the barrel can quickly be cleaned out by pouring water down it.

In the case of *really* bad failure (by 4 or more) with any type of gun, a failed Activation Roll indicates an even worse consequence: the shot touches off the other chambers, causing the gun to explode! This is sometimes known as a "chain fire." For a revolver, the shooter takes 2 DCs of Killing Damage for each bullet left in the gun (other than the one he fired, which goes off successfully). Typically this damage is to his hand and arm, but it all depends on how he's holding the pistol. For a rifle, which doesn't have chambers of bullets, the shot does not go off successfully — the shooter takes the shot's damage instead because of the explosion. (Alternately, he may have forgotten to remove his ramrod and accidentally shot it instead, making the rifle useless until he finds another one.)

A character can convert a cap-and-ball weapon to fire metallic cartridges by making a successful Weaponsmith (Firearms) roll; this requires one day and the proper tools, and has a cost equal to the cost of the gun itself when new.

Maynard Cap Ribbons: The Maynard cap ribbon firing system, patented in 1845, involves a ribbon containing tiny pellets of primer — similar to the type used in childrens' "cap gun" toys in the twentieth century, but more powerful. When the shooter cocks the gun's hammer, the gun's mechanism feeds the ribbon over a nipple. The hammer then strikes the nipple, and the exploding primer forces the bullet down the barrel.

Maynard caps weapons are almost as difficult to reload as black powder weapons, and like cap-and-ball guns have reliability issues reflected with an Activation Roll 12-, Jammed (-¾). A failed roll usually means ribbon misalignment, which the shooter can fix as a Half Phase Action. A bad failure (by 3-4) means the ribbon has torn; the character has to remove the torn part and thread the rest of the ribbon into place; this takes a Full Phase Action (or a Half Phase with a successful Fast Draw roll). A *really* bad failure (by 5 or more) means the ribbon became tangled and all the primer pellets ignite at once. This causes an explosion with the same results as outlined for cap-and-ball guns, above.

A character can convert a Maynard cap ribbon gun to cap-and-ball or metallic cartridges using the same rules as converting cap-and-ball to metallic cartridges, above.

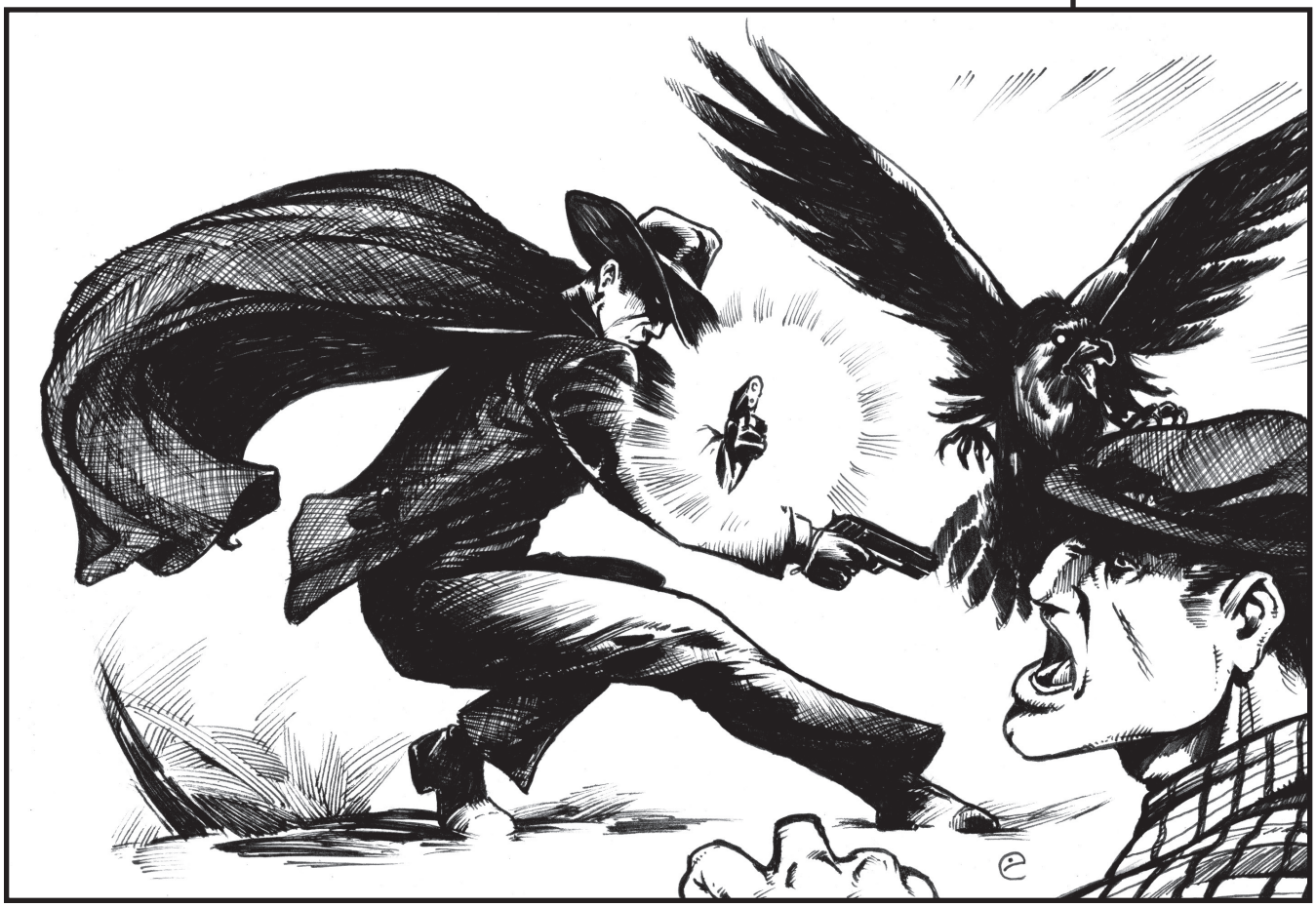
NOTES

1) According to Wild West legend, reporter Ned Buntline had the Colt Buntline Special pistol (a variant of the Colt Army) made to give as a gift to several well-known Western lawmen, including Wyatt Earp and Bat Masterson. It features a 16 inch-long barrel (which some owners are said to have cut down to standard length) and a detachable shoulder stock.

Characters can't buy Buntlines; they have to special order them from the Colt factory in New Jersey (at a cost of $500), and they need a special holster to carry one in as well. Fast Draw rolls to get the gun out of its holster quickly are at a -1 penalty. When it has its stock attached (which takes 1 Turn to do) and is used in a rifle-like fashion, increase its Maximum Range to 350m.

2) A character can convert the Colt Dragoon No. 3½ into a sort of short rifle with an attachable shoulder butt. (Attaching the butt requires 1 Turn.) In this case, increase its Maximum Range to 350m.

3) The Colt Peacemaker is one of the most common and powerful revolvers in the Wild West; it comes in single- and double-action versions. It's also known as the Single Action Army, the Six-Shooter, the Frontier, and by various other names depending on the specifics of its manufacture. (particularly barrel length).



4) The LeMat weapons — Grapeshot Pistol, Revolver, and Carbine — are among the most unusual and colorful in the nineteenth century. They were used by the South during the American Civil War. Developed in New Orleans by Dr. Jean LeMat, and also manufactured in France, they feature a 16-gauge scattergun barrel under the pistol's (or rifle's) ordinary, rifled, barrel. This means the revolver's cylinder has to be larger than normal, allowing it to carry nine bullets rather than six. The shooter switches the hammer between the two barrels with a switch (this is a Zero Phase Action). As indicated in the table it's a cap-and-ball weapon, but it was often adapted to metallic cartridges later on.

In game terms the LeMats are built as Multipowers with 52-point reserves and two slots, with a final cost of 21 points.

5) The term "Smith & Wesson Russian" actually refers to a group of three different pistols that are all the same in *HERO System* terms. Smith & Wesson manufactured them under a Russian Army contract, but also sells them to other customers. They fire the special S&W .44 Russian cartridge — a heavier, slightly wider, more powerful bullet a typical .44 round. S&W Russians can fire normal .44 bullets, but a normal .44 pistol cannot fire .44 Russians.

One type of Russian, the Model 3, comes with a detachable shoulder butt; see note #2 above for the effects of this.

6) The Smith & Wesson Schofield has a mechanism that allows the shooter to to eject all six spent cartridges at once, making it quicker to reload — it takes less than half the time to reload as the Colt Army. If the GM uses the optional expanded rules for reloading in *Dark Champions,* reloading the Schofield takes only a Full Phase normally (instead of the typical Extra Phase for a revolver), and a Fast Draw roll reduces this to a Half Phase Action.

The downside to this mechanism is that a shooter may catch the latch when he draws the pistol and accidentally eject all the shells, fired or not. This happens if he tries a Fast Draw roll and fails by 2 or more.

7) The Volcanic guns, first manufactured in 1854, used metallic cartridge bullets held in a tubular magazine beneath the barrel. In both pistol and rifle form they're lever-action (see page 51).

8) The Colt Lightning's spring and hammer are fragile, so it tends to malfunction. In game terms it has an Activation Roll 14-.

9) The Merwin Hulbert Pocket is sold with two barrels — one 7.5" long (PER Mod +4), and a shorter one about four inches long (PER Mod +3). A character can switch the two with a Full Phase Action (or a Half Phase Action if he succeeds with a Fast Draw roll).

10) The distinctive-looking Pettengill Army has no hammer, so it's easier than normal to conceal (PER Mod +2).

11) A *pepperbox* pistol has multiple barrels which the shooter rotates to bring them in line with the hammer. Most of them are relatively small and usually easy to conceal, though some of the larger ones are rather awkward-sized (PER Mod +1 to +3).

A *derringer* is a roughly hand-sized pistol with one or two shots. If multi-barrelled, its barrels are fixed; the hammer rotates to strike each chamber in turn. Derringers typically hae +0 PER Mod, but some larger ones have +1.

12) The English 1840 pepperbox has a large knife blade projecting between its barrels; it's bought as a Multipower with an HKA ½d6 slot. The Wesson Dagger-Pistol also has this feature.

13) The Palm Pistol is a tiny gun that the shooter holds in his closed fist; the barrel projects between two fingers. He fires it by squeezing it.

14) Some versions of the Remington Double Derringer have a small knifeblade attached under the barrel (this is bought as a Multipower, as with the English 1840).

15) The Colt Lightning Repeater features a slide-action mechanism that the shooter works to feed bullets into the chamber. It can be "fanned" using the same rules for lever-action firearms (see page 51).

16) The Colt Paterson Model 1836 and Colt Revolving Rifle have revolving cylinders and are reloaded like a revolver.

17) The Enfield Rifle Musket was heavily used by both sides in the American Civil War due to its heavy caliber and extreme accuracy.

18) The Evans Old Model Sporter has a four-column magazine in its stock. However, it requires a special .44 caliber bullet made by the manufacturer; ordinary .44 rounds can't be used with it (nor can ordinary .44 guns use .44 E rounds).

19) The Mannlicher-Carcano, developed by the Italians following German designs, has an integral bayonet that folds under the front of the barrel.

20) A favorite of Yankee snipers during the American Civil War, the Sharps 1859 Rifle uses a percussion cap but is a breechloader, so it can be loaded and fired at the same rate as a metallic-cartridge rifle and without having to stand up.

21) The Whitworth, an extremely accurate rifle made in Britain, was often used by Confederate snipers.

22) The Gatling gun is the first reliable "automatic" fire weapon, though it's not truly automatic because it requires the user to continuously turn a crank to rotate the barrels and feed ammunition (which is kept in a gravity hopper). A single man can fire it, but due to its weight a Gatling gun's usually mounted on a small cannon carriage and required multiple men to move and maintain (hence the *Requires Multiple Users* Limitation). Before the invention of smokeless powder, the weapon's high rate of fire creates a large cloud of

smoke that draws attention to it and can blind the operator (a -0 Side Effect).

23) The Maxim gun is the first true automatic fire machine gun. A single person can fire it, but due to its weight it's usually mounted on a small cannon carriage; multiple men are needed to move it, maintain it, and keep it water-cooled (hence the *Requires Multiple Users* Limitation).

Pulp-Era Firearms

This section covers the firearms of the Pulp Era (*i.e.,* the 1920s and '30s, though some firearms commonly used by Pulp characters were developed during the 1900-19 period). Compared to earlier firearms they're significantly more reliable and standardized. On the other hand, the types of ammunition used for Pulp-era firearms aren't nearly as standardized as those for Modern guns. This may make it more difficult for characters to replenish their supply of ammo during a long adventure away from civilization.

See Chapter Five of *Pulp Hero* for more information about technology in the Pulp Era.

NOTES

1) The Bergmann Simplex fires a special type of 9mm bullet. These bullets don't work in other 9mm firearms, and standard sizes of 9mm ammunition don't work in the Simplex.

2) Compared to modern submachine guns, Pulp era submachine guns tend to be heavier and more rifle-like. They're usually fired using two hands, but since movies and fiction often show characters firing them one-handed, they don't have the *Two-Handed* (-½) Limitation. Gamemasters interested in "realism" should add that Limitation.

3) The Thompson M1928 is heavy, can jam easily when it gets dirty, and can be noisy when carried. In game terms, reduce all Activation Rolls for Malfunction by 1.

4) Pulp-era machine guns fall into two categories: Light and Heavy. Light machine guns (LMGs) realistically usually have a two-man firing team, but they don't necessarily have to, so they don't get the *Requires Multiple Users* Limitation (nor do they take *Two-Handed* as a Limitation, since they're almost always fired from a bipod or other mount). They do, however, qualify as Bulky Foci. Heavy machine guns (HMGs) take the *Requires Multiple Users* (3 men; -½) Limitation in addition to Bulky; they have to be mounted on a tripod or vehicle. Most machine guns are belt-fed, though some LMGs can mount small boxes of about 30 rounds if necessary.

5) All Pulp-era grenades have Activation Roll 14- (-¼) — there's a chance they won't explode when they're supposed to (or, if the GM is fiendish, will explode too soon, injuring the wielder). Earlier types of grenades, such as the Mills Bomb and others from the Great War period, typically have Activation Roll 11- (-1).

6) The smoke grenade is built as follows:

Change Environment, -3 to Sight Group PER Rolls, Area Of Effect (4m Radius; +¼) (11 Active Points); OAF (-1), Activation Roll 14- (-¼), Range Based On STR (-¼), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (-1). ***Total cost: 3 points.***

7) Here's the effect of the tear gas hand grenade:

Sight Group Flash 4d6, Area Of Effect (8m Radius; +½), Constant (+½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (90 Active Points); OAF (-1), Activation Roll 14- (-¼), Range Based On STR (-¼), Real Weapon (-¼), 1 Continuing Charge lasting 1 Turn (-1¼). ***Total cost: 22 points.***

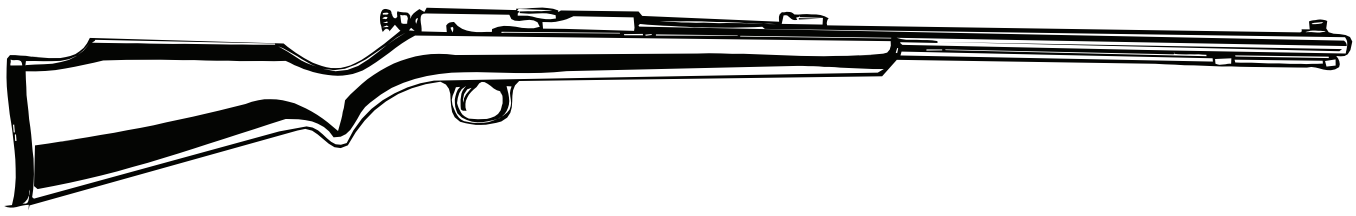
PULP ERA REVOLVERS

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Colt Detective	.38	+0	+0	1d6	+0	6	9	0.59	150m	15/4	USA	1926	
Colt New Service	.455	+0	+0	2d6-1	+1	6	10	1.10	120m	34/9	USA	1909	
Colt Police Positive	.32	+0	+0	1d6	+0	6	9	0.70	150m	15/4	USA	1907	
Enfield No. 2 Mk I	.38	+0	+0	1d6	+0	6	9	0.80	150m	15/4	Britain	1927	
H&R Model 6	.22 LR	+0	+0	1d6	+0	7	8	0.70	150m	15/5	USA	1906	
S&W Model 10	.38	+0	+0	1d6	+0	6	7	0.86	150m	15/4	USA	1902	
S&W Model 27	.357 M	+0	+0	1½d6	+0	6	8	0.80	250m	25/7	USA	1927	
S&W Model 1917	.45 ACP	+0	+0	2d6-1	+1	6	8	1.00	270m	34/10	USA	1917	
Trocaola British Army.455	+0	+0	2d6-1	+1	6	9	1.10	270m	34/9	Britain	1915		
Webley No. 1 Mk VI	.455	+1	+0	2d6-1	+1	6	10	1.10	270m	36/10	Britain	1915	
Webley-Fosbery	.38 ACP	+0	+0	1d6	+0	8	8	1.10	150m	15/5	Britain	1901	
Webley-Fosbery	.455	+0	+0	2d6-1	+1	6	8	1.10	120m	34/10	Britain	1901	

PULP ERA SEMI-AUTOMATIC PISTOLS

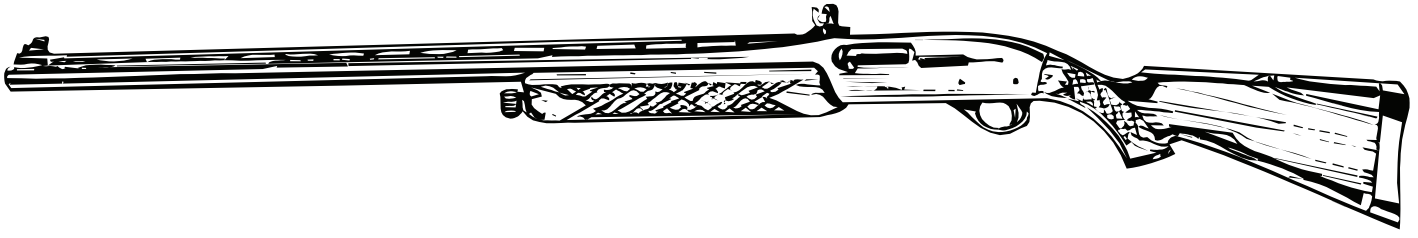
Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Astra Model 400	9mm Largo	+0	+0	1d6+1	+0	8	8	1.10	200m	20/6	Spain	1921	
Astra Model 900	.32	+0	+0	1d6	+0	10	9	1.20	150m	15/5	Spain	1927	
Bayard 1923	.380 Auto	+0	+0	1d6	+0	6	8	0.50	150m	15/4	Belg	1923	
Beretta 1915	9mm Glisenti	+0	+0	1d6+1	+0	7	8	0.78	200m	20/6	Italy	1915	
Beretta 1934	.380 Auto	+0	+0	1d6	+0	7	8	0.73	150m	15/5	Italy	1934	
Beretta 1935	7.65mm Auto	+0	+0	1d6	+0	7	8	0.70	150m	15/5	Italy	1935	
Bergmann Simplex	9mm	+0	+0	1d6+1	+0	15	9	1.00	200m	20/7	Germany	1901	1
Browning 1910	.38	+0	+0	1d6	+0	7	8	0.60	150m	15/5	USA	1910	
Browning 1922	.32	+0	+0	1d6	+0	9	8	0.70	150m	15/5	USA	1922	
Browning Baby	.25 ACP	+0	-1	1d6	+0	6	6	0.35	150m	15/4	USA	1922	
Browning HP M-1935	9x19mm	+0	+0	1d6+1	+0	13	9	1.00	200m	20/7	USA	1935	
Colt M1911/M1911A1	.45 ACP	+1	+0	2d6-1	+1	7	9	1.10	270m	36/11	USA	1911	
Colt Service	.380 Auto	+0	+0	1d6	+0	9	9	1.20	150m	15/5	USA	1929	
Colt Woodsman	.22 LR	+1	+0	1d6	+0	10	9	0.70	150m	17/6	USA	1915	
Czech Model 22	9mm Short	+0	+0	1d6	+0	8	7	0.70	150m	15/5	Czech	1922	
Czech Model 24	.380 Auto	+0	+0	1d6	+0	8	7	0.67	150m	15/5	Czech	1925	
Czech Model 27	.32	+0	+0	1d6	+0	9	7	0.67	150m	15/5	Czech	1927	
Frommer Baby	6.35mm	+0	-1	1d6	+0	6	7	0.40	150m	15/4	Hungary	1912	
Frommer M29	9x19mm	+0	+0	1d6+1	+0	7	8	0.72	200m	20/6	Hungary	1929	
Frommer M37	7.65mm Luger	+0	+0	1d6+1	+0	7	8	0.80	200m	20/6	Hungary	1937	

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Frommer Stop	.32	+0	+0	1d6	+0	7	8	0.60	150m	15/5	Hungary	1919	
Glisenti Model 1910	9mm Glisenti	+0	+0	1d6+1	+0	7	8	0.80	200m	20/6	Italy	1910	
Kolibri Auto	2.7mm	-1	-2	1 point	-1	7	5	.007	50m	5/1	Austria	1914	+0 PER Mod
Llama Model 11	9x19mm	+0	+0	1d6+1	+0	8	8	0.90	200m	20/6	Spain	1936	
Luger P-08	.30 Luger	+1	+0	1d6+1	+0	8	8	0.87	200m	22/7	Germany	1902	32-shot clip available
MAB Model A	.25	+0	+0	1d6	+0	6	8	0.80	150m	15/4	France	1921	
MAB Model D	7.65mm Auto	+0	+0	1d6	+0	9	9	0.70	150m	15/5	France	1933	
Mannlicher 1901	7.65mm Mann	+0	+0	1d6+1	+0	8	10	0.90	200m	20/6	Germany	1901	
MAS Model 1935	7.65mm Long	+0	+0	1d6+1	+0	8	9	0.70	200m	20/6	France	1935	
Mauser C96 "Broomhandle"	7.63mm Maus	+0	+0	1d6+1	+0	10	10	1.18	200m	20/6	Germany	1896	
Mauser Model 1910/14	7.65mm Auto	+0	+0	1d6+1	+0	8	8	0.65	200m	20/6	Germany	1910	
Mauser Model 1934	6.35mm	+0	+0	1d6	+0	9	8	0.45	150m	15/5	Germany	1934	
Nambu Baby	7mm J	+0	-1	1d6	+0	7	8	0.60	150m	15/4	Japan	1920	
Nambu Model 94	8mm J	+0	+0	1d6	+0	6	8	0.80	150m	15/4	Japan	1934	
Nambu Type 14	8mm J	+0	+0	1d6	+0	8	8	0.90	150m	15/5	Japan	1925	
Radom Vis Wz-35	9x19mm	+0	+0	1d6+1	+0	8	8	1.10	200m	20/6	Poland	1935	
Sauer Behorden Model	7.65mm Auto	+0	+0	1d6	+0	7	8	0.60	150m	15/5	Ger	1930	
Sauer Model 38H	.32	+0	+0	1d6	+0	8	8	0.70	150m	15/5	Germany	1938	
Savage 1907	.32	+0	-1	1d6	+0	10	8	0.60	150m	15/4	USA	1907	
Star Model B	9x19mm	+0	+0	1d6+1	+0	8	9	1.00	200m	20/6	Spain	1928	
Steyr-Hahn	9mm Steyr	+0	+0	1d6+1	+0	8	8	1.00	200m	20/6	Austria	1911	
Tokarev TT-33	7.62x26 mm R	+0	+0	1d6+1	+0	8	9	0.80	200m	20/6	USSR	1933	
Type 80	7.62x26 mm R	+0	+0	1d6+1	+0	20	10	1.10	200m	25/8	USSR	1936	
Walther Model 8	6.35mm	+0	+0	1d6	+0	8	7	0.36	150m	15/5	Ger	1921	
Walther P38	9x19mm	+0	+0	1d6+1	+0	8	8	1.00	200m	20/6	Germany	1937	
Walther PP	.32	+0	+0	1d6	+0	8	6	0.70	150m	15/5	Germany	1929	
Walther PPK	.32	+0	+0	1d6	+0	7	6	0.60	150m	17/5	Germany	1930	
Webley & Scott M1904	.455	+0	+0	2d6-1	+1	7	9	1.40	270m	34/10	Britain	1904	
Webley & Scott Police	.32 ACP	+0	+0	1d6	+0	8	8	0.60	150m	15/5	Britain	1906	



PULP ERA SUBMACHINE GUNS

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Astra Model 902	7.63mm Mauser	-1	+0	1d6+1	+0	20	9	1.20	200m	30/8	Spain	1928	AF3, 2
Beretta Model 1918	9mm Glisenti	+0	+0	1d6+1	+0	25	13	3.26	200m	35/12	Italy	1918	AF5
Beretta Model 1938A	9x19mm	+0	+0	1d6+1	+0	40	14	5.00	200m	40/12	Italy	1938	AF5
Bergman MP18.I	9x19mm	+0	+0	1d6+1	+0	32	14	4.90	200m	35/11	Germany	1918	AF4
Bergman MP28.II	9x19mm	+0	+0	1d6+1	+0	50	13	4.00	200m	40/13	Germany	1928	AF5
Bergman MP35/1	9x19mm	+0	+0	1d6+1	+0	30	13	4.30	200m	35/12	Germany	1934	AF5
Czech ZK 383	9x19mm	+0	+0	1d6+1	+0	30	13	4.25	200m	35/12	Czech	1938	AF5
Erma MPE or MP38	9x19mm	+0	+0	1d6+1	+0	32	13	4.14	200m	35/12	Germany	1932/37	AF5
Fusil MAS M38	7.65mm French	+0	+0	1d6	+0	32	12	2.83	150m	26/9	France	1938	AF5
Mauser M30/M32 “Broomhandle”	7.63mm Mauser	+0	+0	1d6+1	+0	20	14	2.50	200m	35/11	Germany	1930	AF5
Moschetto OVP	9mm Glisenti	+0	+0	1d6+1	+0	25	13	3.67	200m	35/12	Italy	1916	AF5
PPD M-1934	7.62mm R	+0	+0	1d6+1	+0	71	13	3.70	200m	45/15	USSR	1934	AF5
Star Si35	9mm Largo	+0	+0	1d6+1	+0	40	13	3.80	200m	40/13	Spain	1936	AF5
Steyr-Slothurn S100	9x19mm	+0	+0	1d6+1	+0	32	13	3.90	200m	35/12	Austria	1934	AF5
Suomi M31	9x19mm	+0	+1	1d6+1	+0	71	14	4.70	200m	46/15	Finland	1930	AF5
Thompson M1-A1	.45 ACP	+0	+0	2d6-1	+1	50	13	4.70	270m	61/19	USA	1921	AF5
Thompson M-1928	.45 ACP	+0	+0	2d6-1	+1	50	14	4.90	270m	61/19	USA	1928	AF5, 3



PULP ERA RIFLES

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Hunting													
H&H African	.450 M	+0	+2	2½d6	+1	2	16	4.60	400m	52/11	Britain	1927	2H
H&H Royal	.300 M	+0	+2	2d6+1	+1	2	16	3.40	350m	46/10	Britain	1925	2H
H&H #2 Hammerless	.600 NE	+0	+2	3d6	+1	2	17	3.40	450m	58/13	Britain	1903	2H
Krieghoff	11.2mm	+0	+2	2d6	+1	2	15	4.00	300m	39/9	Germany	1922	2H
Mauser Special	9.3mm	+0	+1	1½d6	+0	5	14	3.90	250m	26/7	Germany	1918	2H
Remington Model 30	.25	+0	+1	1d6	+0	5	14	2.50	150m	16/4	USA	1921	2H
Remington Model 34	.22 LR	+0	+1	1d6	+0	15	15	2.70	150m	16/5	USA	1932	2H
Winchester Model 70	.375 M	+1	+2	2½d6	+1	3	12	3.90	150m	54/13	USA	1936	2H
Military													
Arisaka Type 44	6.5mm Arisaka	+1	+1	2d6	+0	5	14	4.00	300m	33/9	Japan	1912	2H
Arisaka Type 99	7.7mm Arisaka	+1	+1	2½d6	+1	5	14	4.19	400m	53/14	Japan	1939	2H
Czech ZH29	7.92mm Mauser	+1	+1	2½d6	+1	25	15	4.54	400m	63/18	Czech	1922	2H
Enfield M1917	.30-06	+0	+0	2d6+1	+1	5	14	4.36	350m	44/10	Britain	1917	2H
Frommer M35	8mm	+0	+1	2½d6	+1	5	14	4.04	400m	51/12	Hungary	1935	2H
Fusil MAS 1936	7.5mm French	+1	+1	2d6+1	+1	5	13	3.80	350m	47/12	France	1936	2H
Lebel Model 1916	8mm Lebel	+0	+1	2½d6	+1	5	14	4.15	400m	51/12	France	1916	2H
Lee-Enfield SMLE Mk III .303 British	+1	+1	2½d6	+1	10	13	3.70	400m	53/15	Britain	1907	2H	
M-1 Garand	.30-06	+0	+1	2d6+1	+1	8	15	4.40	350m	45/11	USA	1938	2H
Mosin-Nagant M10 Carbine	7.62x54 mm R	+0	+0	2d6+1	+1	5	13	3.40	350m	44/10	USSR	1910	2H
Mosin-Nagant M1938 Carbine	7.62x54 mm R	+0	+0	2d6	+1	5	13	3.50	300m	37/9	USSR	1938	2H
Schmidt-Rubin 1931	7.5x53 mm	+0	+1	2d6+1	+1	6	14	4.00	350m	45/11	Switz	1931	2H
Simonov Model 36	7.62x54 mm R	+0	+0	2d6+1	+1	15	15	4.40	350m	46/13	USSR	1936	2H, RC1
Springfield M1903	.30-06	+1	+1	2d6+1	+1	5	13	3.94	350m	47/12	USA	1903	2H
Tokarev SVT-38	7.62x54 mm R	+0	+0	2d6+1	+1	10	14	3.95	350m	44/11	USSR	1938	2H

PULP ERA MACHINE GUNS

Name	Cal	OCV	RMod	Dam	STUNx	Shots	STR Min	Mass	Max Range	A/R Cost	Origin	Year	Notes
Automatic Rifles And Light Machine Guns													4
BAR M1918A2	.30-06	+0	+0	2d6+1	+1	20	15	8.90	350m	87/26	USA	1918	AF5, Bulky, FS, AF Only
Breda M30	6.5mm	+0	+0	2d6	+0	20	16	10.30	300m	52/14	Italy	1930	AF5, Bulky
Bren Mk I	.303 British	+0	+0	2½d6	+1	30	16	10.20	400m	80/21	Britain	1937	AF5, Bulky
Chatellerault 1924/29	7.5mm French	+0	+0	2d6+1	+1	25	15	9.10	350m	70/19	France	1924	AF5, Bulky
Czech ZB26	7.92mm Mauser	+0	+0	2½d6	+1	30	16	10.20	400m	80/21	Czech	1924	AF5, Bulky
Degtyarev DP	7.62x54 mm R	+0	+0	2d6+1	+1	47	15	9.30	350m	79/21	USSR	1928	AF5, Bulky
Hotchkiss Mk 1	.303 British	+0	+0	2½d6	+1	30	17	12.20	400m	80/21	France	1916	AF5, Bulky
Hotchkiss 1922	6.5mm M-S	+0	+0	2d6	+1	25	15	9.50	300m	60/16	France	1922	AF5, Bulky
Lahti Saloranta M26	7.62x54 mm R	+0	+0	2d6+1	+1	75	16	8.60	350m	87/23	Finland	1926	AF5, Bulky
Lewis Mk I	.303 British	+0	+0	2½d6	+1	47	17	12.30	400m	90/24	Britain	1914	AF5, Bulky
MG08/15 Light Maxim	7.92mm Mauser	+0	+0	2½d6	+1	250	18	17.70	400m	137/41	Britain	1915	AF5, Bulky, FS
Nambu Type 11	6.5mm Arisaka	+0	+0	2d6	+0	30	17	10.20	300m	52/14	Japan	1922	AF5, Bulky
Nambu Type 92	7.7mm Arisaka	+0	+0	2½d6	+1	30	17	55.30	400m	80/21	Japan	1932	AF5, Bulky
Heavy Machine Guns													4
Breda M37	8mm	+0	+0	2½d6	+1	20	19	19.90	400m	80/18	Italy	1937	AF5, Bulky
Browning M2	.50	+0	+0	3d6	+1	250	20	38.10	450m	146/32	USA	1933	AF8, Bulky
Browning M1917	.30-06	+0	+0	2d6+1	+1	250	18	15.00	350m	114/27	USA	1917	AF8, Bulky
Maxim MG08	7.92mm Mauser	+0	+0	2½d6	+1	500	23	26.50	400m	140/31	Germany	1908	AF8, Bulky
MG34	7.92mm Mauser	+0	+0	2½d6	+1	500	17	12.10	400m	140/31	Germany	1933	AF8, Bulky
Vickers Mk I	.303 British	+0	+0	2½d6	+1	500	18	15.00	400m	140/31	Britain	1912	AF8, Bulky

PULP ERA GRENADES

Name	Cal	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Year	Notes
Grenade Rounds												
Rifle-Fired	—	—	—	2½d6X	+1	1	—	0.60	400m	70/15	c. 1936	Activation Roll 14-
Hand-Thrown												***5***
Fragmentation	—	+0	+0	2d6X	+0	1	—	0.60	RBS	45/9	c. 1936	Activation Roll 14-
Smoke	—	+0	+0	CE 8m	—	1	—	0.35	RBS	11/3		-3 Sight PER for 3 Turns, 6
Tear Gas	—	+0	+0	Tear gas	—	1	—	0.35	RBS	90/22		7

KEY

2H: Two-Handed (a -½ Limitation)

AE: Area Of Effect (Radius); the number following indicates the size of the Radius in meters.

AEC: Area Of Effect (Cone)

AF: Autofire; the number after the letters indicates the maximum number of shots

ACP: Automatic Colt Pistol

AP: Armor Piercing

Auto: Automatic

Cz: Czech

DB: Double-barrelled

FS: Flash suppressor

J: Japanese

LR: Long Rifle

LR(Xm): Limited Range (number indicates range in meters)

M: Magnum

Mann: Mannlicher

Maus: Mauser

mm: millimeter

N: Normal Damage

NE: Nitro Express

NR: No Range

Only: Autofire only, no single shots (a -0 Limitation)

R: Russian

RBS: Range Based On STR

RC1: Recoil Compensator type 1

Rev: Revolver

RL: Russian Long

RP: Reduced Penetration

RR: Reduced By Range

S&W: Smith & Wesson (an American gun manufacturer)

X: Area Of Effect (Radius Explosion, assumed to be of a size to give the Advantage a final value of +½)

Firearms are RKAs bought with the following Limitations: Focus (OAF; -1), STR Minimum, Beam, Real Weapon, Required Hands (for rifles, shotguns, and the like), and Charges. See page 68 for more information.

Name: The name of the weapon. This may include a manufacturer and/or model number.

Caliber: The weapon's caliber (for shotguns, this becomes "Gauge"). This is given in fractions of an inch or in millimeters (mm).

Many models of guns comes in multiple calibers, not just the one listed (this is particularly true for semi-automatic handguns), and a gunsmith can often rechamber a weapon to accept a different size cartridge. So if you like the look of a gun but not the caliber, feel free to change it to fire the type of bullet you want. Upgrading a gun to a larger caliber may diminish the number of rounds it can hold in a magazine, while downgrading to a smaller caliber may increase the weapon's ammo capacity.

OCV: This is applied as a bonus or penalty against all attacks made with the weapon. OCV bonuses are bought as a 2-point Combat Skill Level with the Limitations *OAF, Required Hands,* and *Real Weapon.* OCV penalties are a minor Side Effect (automatically occurs; -½) for the weapon. Until the penalties on a weapon reach the 30 Active Point level (which is highly unlikely to ever occur), the Side Effect remains at this value. Even if a weapon has both OCV and RMod penalties, it takes only one Side Effect until the penalties exceed 30 points.

RMod: This represents a modifier to the weapon's accuracy at Range. Positive values (bought as 1-point Penalty Skill Levels versus the Range Group with the *Focus* and *Required Hands* Limitations) help to offset the standard Range Modifier; negative values (a minor Side Effect (automatically occurs; -½)) add to it. RMod can never raise a character's base OCV, it can only negate penalties.

Damage: The damage the weapon does. An "N" indicates Normal Damage; otherwise the listed damage is Killing.

STUNx: This is the STUN Multiplier for Killing Damage weapons (a +0 means "no modification"; use the standard ½d6 STUN Multiplier). Apply the STUNx modifier to the STUN Multiplier roll (or to the STUNx for the Hit Location struck, if the campaign uses Hit Location rules). For example, if a character with a .44 caliber firearm (STUNx +1) hits an opponent in the Head, the total STUNx would be 6.

Shots: The number of shots in the gun's cylinder or magazine (in game terms, how many Charges the gun has). Each gun comes with one "clip" of ammunition unless noted otherwise. If a gun can use more than one size clip, the largest or most common clip is listed. Guns with a "clip" of 1 shot are single-shot guns (often for target shooting) that the user must reload after each shot.

The listed number of Charges for semi-automatic firearms doesn't include having one round "in the pipe" (i.e., chambering one round, then removing the magazine and replacing that round, so that the gun carries +1 round).

STR Min: The STR Min necessary to use the weapon effectively; see 6E2 199 for rules. Remember that firearms and related weapons (which are built as RKAs or Blasts) don't get bonus damage or other benefits from exceeding the STR Minimum. The STR Minimum simply indicates the STR needed to effectively use the weapon — to hold, draw, and/or cock it.

Mass: The weight of the weapon in kilograms. Typically this is the unloaded weight; inserting a clip of ammunition adds a few grams.

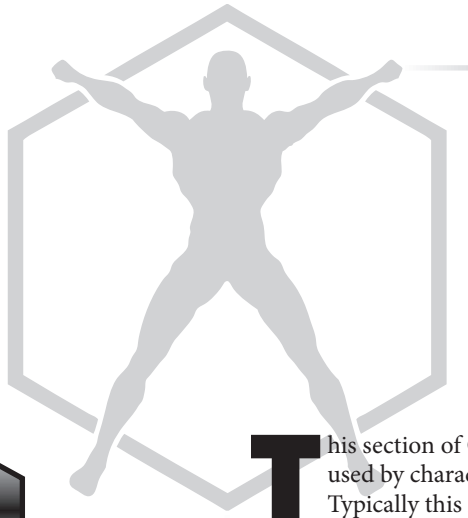
Max Range: The weapon's maximum Range in meters according to the *HERO System* rules. (Of course, its effective range — the range over which it's likely to hit a target — is much less, thanks to the Range Modifier.) Typically this means Base Points x 10 meters, but Advantages or Limitations may change that. "NR" means No Range; "RBS" means Range Based On STR.

A/R Cost: The Active Point/Real Point Cost of the weapon, in Character Points. For greater variation, these costs use the expanded Killing Attack costs on APG 56 (thus, an RKA 1d6-1 costs 12 Character Points).

Origin: The country where the device was created/is manufactured. Some gun manufacturers may have factories in multiple nations. The modern-day firearms table doesn't provide this information, but it's usually easy to look up if you need it.

Year: The year the weapon was first available. The modern-day firearms table doesn't provide this information, but it's usually easy to look up if you need it.

Notes: This catch-all category includes any information not listed elsewhere. All notes and abbreviations are explained at the end of the tables.



MODERN WEAPONS

1

This section of Chapter One covers weapons used by characters in "modern" campaigns. Typically this refers to campaigns that take place in the late twentieth and early twenty-first centuries — for organizational purposes, from 1940 until the present day. For firearms from earlier periods (including the Pulp Era), see *Historical Firearms* beginning on page 48.

The accompanying weapons tables — one for modern firearms, and on page 115 one for modern HTH Combat weapons — provide *HERO System* statistics, write-ups, and notes for these weapons. The text below provides additional information about specific weapons or types of weapons when necessary.

To see which weapons require which Weapon Familiarities, refer to the Weapon Familiarity Table on 6E1 94 or APG 43.

MODERN FIREARMS

Creating any type of gun using the *HERO System* rules is a fairly simple matter. After you establish the basics using the *Ranged Killing Attack* Power and certain Limitations, you can add other Power Modifiers and capabilities with specialized ammunition, gun attachments, and gun modifications.

This book doesn't discuss most aspects of modern gun and bullet design — types of actions, rimfire versus centerfire cartridges, blowback versus recoil operation, and so forth — because that information has no bearing on game play or on gun design using the *HERO System* rules. Readers who are interested in learning more about real-world gunsmithing and firearms technology should consult reference materials, including some of the books listed in the Bibliography.

Firearms Basics

In the *HERO System,* most firearms are built with the following Limitations:

- **Focus:** Firearms are OAFs. They're Universal Foci (anyone can use them) unless they have personalization features (page 110).
- **STR Minimum:** Guns have STR Minima, though since they're built as RKAs, characters cannot use extra STR to increase the damage they do — the STR Minimum indicates the STR needed to hold, properly aim, and fire the weapon.
- **Beam:** Bullets can't be Spread, and only make relatively small "punctures" in barriers such as walls and doors.
- **Real Weapon:** See below for more information.
- **Charges:** Guns fire bullets, which you represent with Charges. Characters don't necessarily have to wait a day to get back the Charges for (*i.e.,* reload) a firearm — they can reload if they have access to more ammunition (such as by going to their heaquarters or the local gun store and picking up another box of bullets).

ADDITIONAL MODIFIERS

Long arms such as rifles and shotguns have the *Two-Handed* (-½) Limitation. If the campaign uses the Knockback rules, guns should also have the *No Knockback* (-¼) Limitation.

Weapons capable of automatic fire, such as submachine guns and assault rifles, have the *Autofire* Advantage. Usually they take it at the +½ level, meaning they can fire up to five shots with a single squeeze of the trigger.

See *Shotgun Ammunition,* page 97, for more information about shotguns and how they're built in *HERO System* terms.

REAL WEAPON

As noted on 6E2 200-01, the *Real Weapon* Limitation signifies that a gun functions "realistically" — if it's not cleaned or maintained, it won't work properly. In game terms, this usually means the weapon becomes subject to the Optional Firearms Malfunction rules on 6E2 207. Some possible occurrences that may cause the GM to invoke the Malfunction rules include:

- the gun becomes wet (if it's not designed to resist this; see *Watertight,* page 110)
- the gun becomes dirty (*e.g.,* the character drops it in mud or sand)
- the character uses the gun for a day without cleaning it

If one of these circumstances occurs, the GM imposes a temporary Activation Roll on the gun. Typically the Activation Roll starts at 15-, but the GM can set it lower if he feels that's appropriate to represent the circumstances. Whenever the character fires the gun after that, the GM rolls the Activation Roll. If the roll ever fails, the gun experiences a Malfunction. For every day that passes without the character taking the time to thoroughly clean his gun (which requires proper equipment and at least 20 Minutes, if not longer), the GM lowers the Activation Roll by 1. The GM can also lower the roll for any other appropriate reason (such as if the character drops his gun in the mud multiple times, or gets it dirty after having not cleaned it for a while).

At the GM's option, a character can increase the value of the *Real Weapon* Limitation if a gun has a lower starting Activation Roll. For each step up the Activation Roll Table (14-, 12-, 11-, and so on), increase the value of Real Weapon by an additional ¼ Limitation. Of course, the GM should only allow this if there's a significant chance that it actually restricts the use of the gun. For example, gun-toting urban vigilantes typically have lots of opportunities to clean their guns, so the GM might not allow them to take this expanded Limitation. On the other hand, soldiers who spend weeks in the field might have trouble keeping their firearms clean, and therefore get to take it.

MODIFIERS TO OCV AND THE RANGE MODIFIER

Some firearms have bonuses to the user's OCV, either overall or just to counteract the Range Modifier. This represents guns that are inherently more accurate or easy to aim than average, which are designed for long-distance shooting, or the like. On the other hand, some guns suffer an OCV penalty or an increased Range Modifier; these firearms are not as well made, have features that make them difficult to use, and so forth.

An OCV bonus for a firearm is bought as a 2-point Combat Skill Level with the Limitations *OAF, Required Hands,* and *Real Weapon.* Thus, each +1 OCV adds 2 Active Points, 1 Real Point to the cost of a firearm.

A Range Modifier (RMod) bonus for a firearm is bought as 1-point Penalty Skill Levels versus the Range Group with the *Focus, Required Hands,* and *Real Weapon* Limitations. Thus, each +1 RMod adds 1 Active Point, 1 Real Point to the cost of a firearm. An RMod bonus never raises a character's base OCV, it can only offset Range Modifier penalties.

An OCV and/or RMod penalty for a firearm is bought as a minor Side Effect (automatically occurs; -½) for the weapon. (This same value applies until the total penalties on a weapon reach the 30 Active Point level — something that's highly unlikely to ever occur.) If a gun has both OCV and RMod penalties, it only gets a single *Side Effect* Limitation.

In most cases, OCV and RMod modifiers for a modern gun shouldn't exceed +/-2 in either category (and in fact most guns don't have more than +/-1, though as noted earlier in this chapter historical firearms often have much higher penalties). The GM has the final say on what combat modifiers are appropriate for a gun.

FIREARMS AND "REALISM"

Few subjects in gaming cause as much debate and discussion as how to "correctly" or "realistically" simulate firearms and other weapons in the game. Gamers with an interest in the subject argue endlessly about bullet caliber, muzzle velocity, the relationship of barrel length to accuracy, which rounds have the greatest "stopping power," and a thousand other topics — and how they all relate to, or "should" work within, a given game system.

As if this mixture of highly technical and potentially complex topics weren't enough, gun experts (be they gamers or not) often don't agree on particular facts regarding the use and effects of firearms. People who carry guns every day in their jobs, and whose lives often depend on them, argue vociferously and endlessly about these exact same subjects... and often reach very different conclusions. In the process they keep an entire publishing industry of gun magazines and books alive and active.

All of this discussion and debate can be both fascinating and informative, but it's not appropriate for this book, for several reasons. First, this is a gaming supplement, not a technical manual on firearms. There's a limit to how much information a roleplaying game book can and should provide on subjects such as this. Second, and perhaps more importantly, the *HERO System* is about *dramatic realism,* not true "realism" (whatever that might be). The only thing that adhering to some elaborate set of ballistics data is likely to accomplish is diminishing gamers' enjoyment of the game. While many games have to at least nod in the direction of "realism" to maintain verisimilitude, ultimately they focus on the dramatic realism of action movies, comic books, and spy novels, not the absolute realities (whatever they are) of modern-day combat.

The information in this chapter is based on extensive research, but where necessary decisions have been made in the interest of enjoyable game play, not "realism." The text sometimes includes information about more "realistic" or "cinematic" options and alternatives, but the goal of this chapter is not to offer a précis of ongoing debates about the performance of firearms and related technologies — it's to provide fun, easily-used source material for your campaigns. Readers whose opinions about these topics differ from what's presented in this book are welcome to revise the information in this chapter to suit themselves.

FIREARMS AS MULTIPOWERS

Technically speaking, it would be more "accurate" in game terms to buy firearms as Multipowers, with one slot for each type of ammunition the firearm could fire and a Limitation on the reserve reflecting the fact that the slots available at any given time are restricted by the type of rounds loaded in the gun. (Another possibility would be giving all guns the *Variable Advantage* Advantage.) However, that's also cumbersome in game terms, and usually pointless. The approach taken by this book is to buy firearms as shooting Standard ammunition (or Standard Shot, for shotguns). If a character wants to shoot some other type of ammunition, he may do so regardless of the fact that he hasn't "paid for it" with the firearm as constructed.

If you want to know the Character Point cost of having clips of different types of ammunition for the same gun, calculate the cost of the gun with the type of bullets a character expects to fire in it normally (typically this means Standard ammo). The re-calculate the cost with the new type of bullet. Then subtract the first number from the second number, and that tells you the cost of the single clip in Character Points. (If the cost is 0 or a negative number, the single clip costs 1 Character Point.)

The Modern Ranged Weapons Tables

The accompanying tables list many guns and other weapons that *HERO System* characters might use. The weapons are listed alphabetically by category, in these categories:

- Revolvers
- Semi-Automatic Pistols
- Submachine Guns
- Rifles
- Assault Rifles
- Machine Guns
- Shotguns
- Grenades
- Heavy Weapons

Several categories of information are given for these weapons. Some information (caliber, number of shots, weight) derives from real-world data, while some (OCV, damage) depends on the application of the *HERO System* rules and can be changed to suit individual campaigns and tastes. The weapons listed were chosen for a variety of reasons: commonality (either in real life or in action-adventure movies and stories); interesting technology; intriguing appearance; and the like.

The *Historical Firearms* section earlier in this chapter provides similar tables for guns from those eras. However, there are no separate Nineteenth-Century or Pulp-Era tables for shotguns; simply use the "Generic Shotguns" section of the Modern Shotguns table for Nineteenth-Century and Pulp-era shotguns.

NOTES

1) The H&K MK23 SOCOM (more formally, the Mark 23 Mod 0) was developed by the U.S. Special Operations Command for America's special forces soldiers. It comes with a Small, High-Quality silencer that also functions as a flash suppressor, and an underbarrel laser sight. It typically fires Subsonic ammunition (this is accounted for in its damage).

2) The H&K P-11 is a five-shot pistol designed specifically for underwater firing. Its fires a silent, caseless dart (for which you can use the Flechette and Silent round rules). The rounds come pre-loaded in a cylinder that can only be reloaded at the factory. It has an electronic trigger and is waterproofed. Above water its effective range is about thirty meters (30m); its effective range underwater is about half that.

3) The O'Dwyer Smartgun is an experimental (as of 2010) creation of the MetalStorm company. (Most attributes of the pistol are speculative.) It uses MetalStorm's patented technology, which fits multiple bullets into a barrel and fires them one at a time with an electrical charge. Since it fires electronically, it has few moving parts, which minimizes recoil and increases accuracy. (In game terms, it has the equivalent of a Type 2 recoil compensator and an electronic trigger.) Additionally, the gun only works for its owner (who wears a special ring); others cannot fire it (*i.e.,* it's a Personal Focus).

The Smartgun has four barrels arranged in a square pattern, each holding six 9mm bullets. Alternately, the user can fill some barrels with other rounds (typically non-lethal ones), then select which barrel to use with a selector switch. (In game terms, you could build this as a Multipower; the gun in the weapon list is assumed to fire Standard ammunition only.) It can fire up to three bullets with a single pull of the trigger, propelling them so fast that they all leave the barrel before the recoil has time to throw off the shooter's aim. Thus, all three bullets strike the target in nearly the same spot.

4) The S&W Mark 22 Model 0 "Hush Puppy" is the standard suppressed pistol for U.S. Navy SEAL teams. With special plugs, the user can carry it underwater without damaging it (in game terms, it's bought as Watertight).

5) The Ares FMG is a folding submachine gun. The weapon folds up into a 26.2 x 8.4 x 3.5 cm box, and the user can unfold and fire it in less than two seconds (in game terms, it has the -¼ Limitation *Extra Time* (Full Phase to activate). When it's folded, it only has a PER Mod of +2, instead of its usual +3.

6) The Parker-Hale PDW is built with a low cyclic rate and other features that help to minimize "climb" and make the gun easy to control. In game

MODERN REVOLVERS

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
ADC Derringer	10mm	-1	-2	1½d6	+0	2	6	0.45	250m	25/5	+0 PER Mod
Casull Fieldgrade	.454	+1	+0	2d6+1	+1	5	12	1.46	350m	46/13	
Colt Anaconda	.44 M	+0	+0	2d6	+1	6	11	1.67	300m	37/10	
Colt Detective	.38	+0	+0	1d6	+0	6	9	0.59	150m	15/4	
Colt King Cobra	.357 M	+0	+0	1½d6	+0	6	10	1.30	250m	25/7	
Colt Police Positive	.38	+0	+0	1d6	+0	6	9	0.45	150m	15/4	
Colt Python	.357 M	+1	+0	1½d6	+0	6	10	1.36	250m	27/8	
Freedom Arms M83	.50 AE	+0	+0	2d6+1	+1	6	10	1.53	350m	44/12	
Korth Stainless	9mm	+1	+0	1d6+1	+0	6	9	1.24	200m	22/6	
Linebaugh 475	.475	+0	+0	2d6+1	+1	5	10	1.12	350m	44/12	
Llama Comanche	.38	+0	+0	1d6	+0	6	9	1.03	150m	15/4	
Llama Super Comanche	.44 M	-1	+0	2d6	+1	6	12	1.42	300m	37/9	
Remington XP-100R	.350	+1	+2	1½d6	+0	4	11	2.00	250m	29/9	
Rossi M851	.38	+0	+0	1d6	+0	6	8	0.85	150m	15/4	
Ruger Redhawk	.44 M	+0	+0	2d6	+1	6	11	1.49	300m	37/10	
Ruger Security Six	.357 M	+0	+0	1½d6	+0	6	10	0.95	250m	25/7	
S&W Model 19	.357 M	+0	+0	1½d6	+0	6	9	0.86	250m	25/7	
S&W Model 27	.357 M	+0	+0	1½d6	+0	6	10	1.29	250m	25/7	
S&W 29 Silhouette	.44 M	+0	+0	2d6	+1	6	10	1.53	300m	37/10	
S&W Model 36	.38	+0	+0	1d6	+0	5	7	0.69	150m	15/4	
S&W Model 57	.41 M	+0	+0	1½d6	+0	6	10	1.36	250m	25/7	
S&W .500 Magnum	.50 S&W M	+0	+0	2d6+1	+1	5	13	2.06	350m	44/12	
S&W 586/686	.357 M	+0	+0	1½d6	+0	6	10	1.39	250m	25/7	
S&W 625	.45 ACP	+0	+0	2d6-1	+1	6	10	1.28	270m	34/9	
S&W Model 640-1	.357 M	+0	+0	1½d6	+0	6	10	0.59	250m	25/7	
Taurus 454	.454	+1	+0	2d6+1	+1	5	12	1.65	350m	46/13	
Taurus 669/669VR	.357 M	+0	+0	1½d6	+0	6	10	1.05	250m	25/7	
Weatherby Mark V	.308	+1	+2	2d6+1	+1	1	13	2.00	350m	48/15	
Wesson Supermag	.357 M	+0	+0	1½d6	+0	5	12	1.84	250m	25/7	

MODERN SEMI-AUTOMATIC PISTOLS

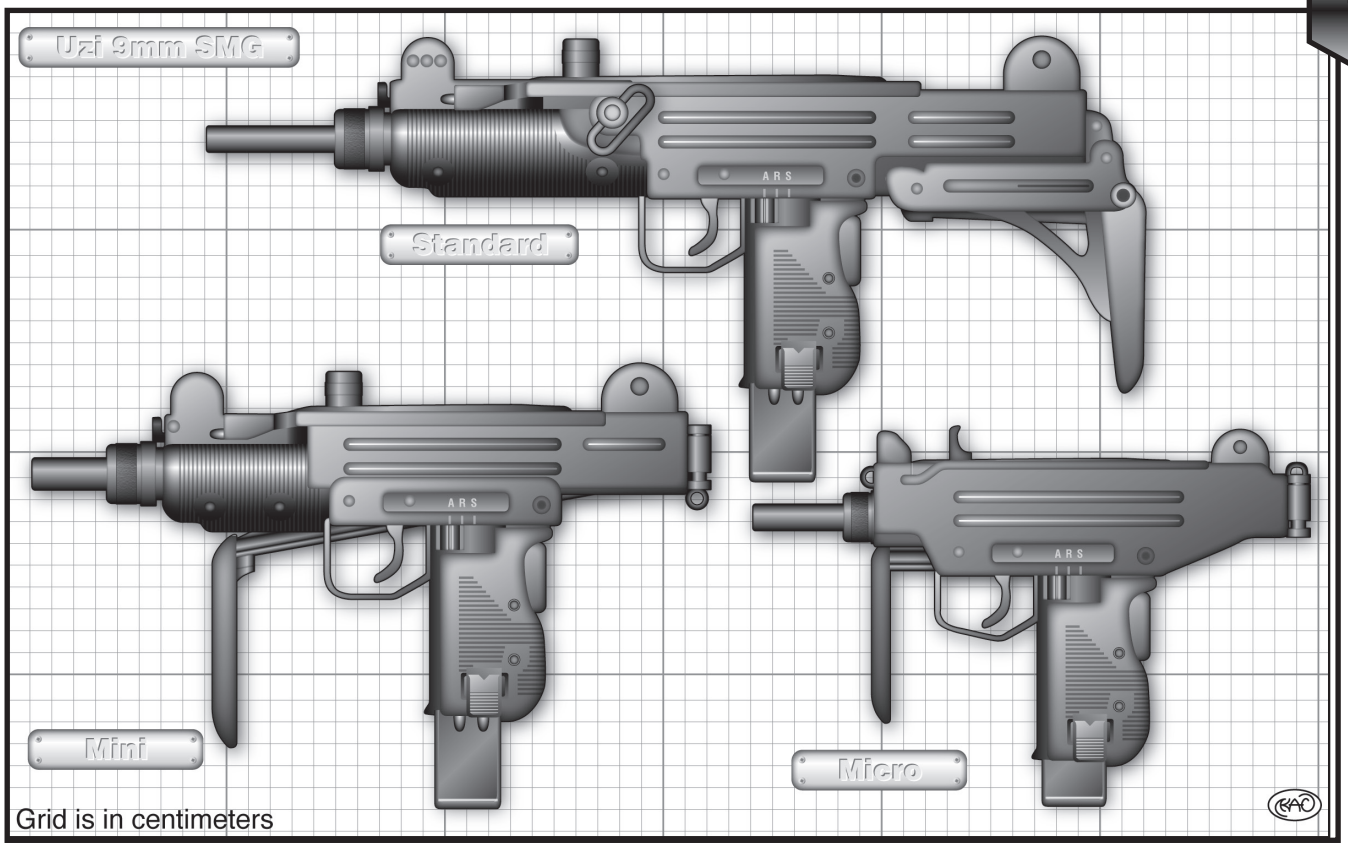
Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
AA Arms AP9	9mm	+0	+0	1d6+1	+0	20	11	1.59	200m	25/8	
Accu-Tek HC-380	.380	+0	+0	1d6	+0	10	7	0.74	150m	15/4	
American C.O.P.	.357 M	-2	-2	1½d6	+0	4	6	0.79	250m	25/6	+0 PER Mod
AMT Automag IV	.45 Win Mag	+0	+1	2d6	+1	7	10	1.30	300m	38/11	
AMT Automag V	.50 AE	+1	+0	2d6+1	+1	7	13	1.30	350m	46/13	
AMT Backup	.380	+1	-1	1d6	+0	5	10	0.51	150m	17/4	
AMT Javelina	10mm	+0	+1	1½d6	+0	8	12	1.10	250m	26/8	
Australian SAP	.223	+1	+1	2d6	+1	30	10	1.80	300m	48/17	
.44 Automag	.44 M	+0	+0	2d6	+1	7	14	1.50	300m	37/10	
Beretta Model 84F	.380	+0	+0	1d6	+0	13	10	0.69	150m	15/5	
Beretta Model 92/92FS	9x19mm	+0	+0	1d6+1	+0	15	9	1.00	200m	20/7	
Beretta Model 8000	9x19mm	+1	+0	1d6+1	+0	15	9	0.95	200m	22/8	
Bren Ten	10mm	+1	+0	1½d6	+0	11	9	0.94	250m	27/9	
Browning BDA 9C	9x19mm	+1	+0	1d6+1	+0	14	10	0.91	200m	22/8	
Browning Hi Power	9x19mm	+0	+0	1d6+1	+0	20	7	0.93	200m	25/9	
Calico M-110	.22 LR	+1	+0	1d6	+0	100	11	1.70	150m	30/11	RC1
Calico M-950/Liberty III	9x19mm	+1	+0	1d6+1	+0	100	12	2.10	200m	39/14	RC1
Claridge Hi-Tec	9x19mm	+1	+1	1d6+1	+0	30	10	1.70	200m	28/10	
Colt 2000	9x19mm	+1	+1	1d6+1	+0	15	10	0.81	200m	23/9	
Colt Double Eagle	10mm	+1	+0	1½d6	+0	8	10	1.09	250m	27/8	
Colt Govt. Mk. IV	9x19mm	+1	+0	1d6+1	+0	9	9	1.16	200m	24/10	RC1
Colt M1911/M1911A1	.45 ACP	+1	+0	2d6-1	+1	7	9	1.10	270m	36/11	
CZ 75/CZ 85	9x19mm	+0	+0	1d6+1	+0	15	9	0.98	200m	20/7	
CZ100	.40	+1	+1	1d6+1	+0	10	9	0.64	200m	23/8	
Desert Eagle .41	.41 M	+1	+0	1½d6	+0	9	13	1.90	250m	27/9	
Desert Eagle .50	.50 AE	+1	+0	2d6+1	+1	9	13	1.90	350m	46/14	+4 PER Mod
D Max Model 100P	10mm	+1	+1	1½d6	+0	30	11	2.00	250m	34/12	
FN Five SeveN	5.7x28mm	+1	+0	1d6	+0	20	8	0.62	150m	21/8	
Glock 17L	9x19mm	+1	+1	1d6+2	+0	19	9	0.66	230m	32/12	PR
Glock 20	10mm	+0	+0	2d6-1	+0	15	9	0.64	270m	27/9	PR
Glock 21	.45 ACP	+0	+0	2d6	+1	13	9	0.83	300m	37/12	PR
Glock 27	.40	+1	+0	1d6+2	+0	9	9	0.62	230m	25/8	PR
Göncz GA-9	9x19mm	+1	+2	1d6+1	+0	30	11	1.80	200m	29/11	+4 PER Mod
Grendel P-12	.380	+0	+0	1d6	+0	11	10	0.71	150m	15/5	
Grendel P-31	.22	+0	+0	1d6-1	+0	30	10	1.50	120m	15/5	
Gyurza P-9/SR-1 Vektor	9x21mm	+0	+0	1d6+1	+0	18	10	1.18	200m	25/8	
Hammerli 232	.22	+1	+1	1d6	+0	6	9	1.15	150m	48/13	Micr, RC1
Hammerli 280/SP20	.32	+1	+2	1d6	+0	6	9	1.20	150m	49/ 14	Micr, RC1
H&K HK4	.32 ACP	+1	+1	1d6	+0	8	8	0.48	150m	18/7	
H&K MK 23 SOCOM	.458	+1	+1	2d6-1	+1	12	10	1.20	270m	82/29	Sil (-3), FS, Laser, PR, 1
H&K P7K3	.380	+1	+0	1d6+1	+0	13	9	0.75	200m	22/8	PR
H&K P7M13	9x19mm	+1	+0	1d6+2	+0	13	9	0.80	230m	25/9	PR
H&K P9/P9S	9x19mm	+1	-1	1d6+2	+0	9	9	0.88	230m	25/7	PR

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
H&K P-11	7.62x36mm Fle	+0	+0	1½d6	+0	5	8	1.20	250m	43/12	AP, LR(30m), Sil(-3), watertight, 2
H&K USP Compact	.45	+1	+0	2d6	+1	8	10	0.79	300m	39/11	PR
High Standard Trophy	.22 LR	+1	+1	1d6-1	+0	10	6	1.25	120m	15/6	
Jericho 941	.41	+1	+1	1½d6	+0	11	10	1.00	250m	28/10	
Kahr K9	9x19mm	+1	+0	1d6+1	+0	7	8	0.71	200m	22/7	
L.A.R. Grizzly .45	.45 Win Mag	+1	+0	2d6	+1	7	13	1.49	300m	39/11	
L.A.R. Grizzly 10mm	10mm	+1	+0	1½d6	+1	7	12	1.49	250m	33/10	
Lorcin L-25	.25 ACP	+0	+0	1d6	+0	7	8	0.41	150m	15/5	
MBA Gyrojet Pistol	13x36mm Gy	+2	+1	2d6-1	+0	6	5	0.50	270m	44/13	IMR2, IPE
Makarov P6	9x18mm R	+0	+0	1d6+1	+0	8	10	0.70	200m	26/8	Sil (-2)
Makarov PM	9x18mm R	+0	-1	1d6+1	+0	8	6	0.68	200m	20/5	
Norinco Model 77B	9x19mm	+0	+0	1d6+1	+0	9	9	1.00	200m	20/6	
O'Dwyer VLe	9x19mm Ca	+1	+1	1d6+1	+0	24	8	0.75	200m	40/15	NP, AF3, 3
Para-Ordinance P13/ P14	.45 ACP	+1	+0	2d6-1	+1	13	10	1.07	270m	36/12	
Pardini/Fiocchi S&W	.32	+1	+1	1d6	+0	5	10	1.10	150m	46/13	Micr
Pardini/Fiocchi SPE	.22 LR	+1	+2	1d6	+0	5	10	1.05	150m	47/14	Micr
Ruger Mark II	.22 LR	+1	+1	1d6	+0	10	10	2.1	150m	47/15	Micr
Ruger Model P90DC	.45 ACP	+1	+0	2d6-1	+1	7	10	0.90	270m	36/11	
Ruger P94	9x19mm	+0	+0	1d6+1	+0	15	8	0.93	200m	46/17	Laser
SIG P210-6	7.65x17mm	+1	-1	1d6	+0	8	7	0.98	150m	17/5	
SIG/SAUER P226	9x19mm	+1	+0	1d6+1	+0	15	8	0.70	200m	22/8	
SIG/SAUER P229	.40	+0	-1	1d6+1	+0	12	8	0.83	200m	20/6	
S&W ASP	9x19mm	+1	+0	1d6+1	+0	7	10	0.62	200m	22/7	Clear grips/magazine
S&W Mark 22 Model 0	9x19mm	+0	+0	1d6+1	+0	8	10	0.74	200m	26/8	Sil (-2), 4
S&W Model 41	.22 LR	+1	+2	1d6	+0	10	8	1.20	150m	19/8	
S&W Model 1006	10mm	+1	+0	1½d6	+0	9	8	0.80	250m	27/9	
S&W Model 4506	.45 ACP	+1	+0	2d6-1	+1	8	8	1.15	270m	36/11	
S&W Model 5904/5906	9x19mm	+1	+0	1d6+1	+0	15	8	1.06	200m	22/8	
S&W SIGMA	.40	+1	+1	1d6+1	+0	15	10	0.74	200m	23/9	
Sphinx AT-2000	.40	+1	+1	1d6+1	+0	10	9	1.03	200m	23/8	
Sphinx 3000	9x19mm	+1	+1	1d6+1	+0	16	10	1.04	200m	23/9	
Steyr GB	9x19mm	+1	+0	1d6+1	+0	18	9	0.84	200m	27/9	
Steyr M40	.40	+1	+0	1d6+1	+0	10	9	0.78	200m	22/7	
Steyr SPP	9x19mm	+1	+1	1d6+1	+0	30	11	1.30	200m	28/10	
Tokarev TT-33	7.62x26mm R	+0	+0	1d6+1	+0	8	9	0.80	200m	20/6	
Walther OSP/GSP	.32	+1	+1	1d6	+0	5	10	1.20	150m	18/6	
Walther P5/P38	9x19mm	+0	+0	1d6+1	+0	8	8	0.80	200m	20/6	
Walther P99	9x19mm	+1	+0	1d6+1	+0	16	10	0.72	200m	22/8	
Walther PPK/S	.380 Auto	+1	-1	1d6	+0	7	6	0.59	150m	17/5	
Wildey Magnum	.45 Win Mag	+0	+0	2d6	+1	7	13	1.98	300m	37/10	

MODERN SUBMACHINE GUNS

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Agram 2000	9x19mm	+0	-1	1d6+1	+0	32	12	1.90	200m	35/10	AF5
Ares FMG	9x19mm	+0	+0	1d6+1	+0	32	10	2.25	200m	35/11	AF5, ET(FP), 5
Baretta Model 93R	9x19mm	+0	+0	1d6+1	+0	20	11	1.12	200m	32/11	AF3, RC1, +2 PER Mod
Beretta M12/ PM-12S	9x19mm	+1	+0	1d6+1	+0	40	10	3.00	200m	42/14	AF5
Bison	9x18mm R	+0	+0	1d6+1	+0	64	11	2.10	200m	40/13	AF5, clear magazine
Bushman IDW	.41	+1	+1	1½d6	+0	32	10	3.46	250m	47/17	AF5
Bushmaster	.223	+1	+1	2d6	+1	30	12	2.38	300m	63/22	AF5
BXP	9x19mm	+1	+0	1d6+1	+0	32	10	2.50	200m	37/13	AF5
Calico 960A	9x19mm	+0	+0	1d6+1	+0	100	10	2.17	200m	45/15	AF5
Colt CAR-15	9x19mm	+0	+0	1d6+1	+0	30	12	2.78	200m	45/16	AF5, FS
Colt M733 Commando	5.56x45mm N	+1	+0	2d6	+1	30	12	3.20	300m	74/26	AF5, FS
Colt M635 Commando	9x19mm	+1	+0	1d6+1	+0	32	12	2.59	200m	47/17	AF5, FS
CZ Model 61 Skorpion	.32 Cz	+1	-1	1d6	+0	20	8	1.59	150m	28/9	AF5
FN P90	5.7x28mm	+1	+0	2d6	+0	50	10	2.50	300m	62/18	AF5, Tum, clear magazine
Glock 18C	9x19mm	+1	+1	1d6+2	+0	19	9	0.59	230m	40/15	AF3, PR, RC1
H&K MP5 or 54	9x19mm	+1	+0	1d6+1	+0	30	12	2.60	200m	37/13	AF5
H&K MP5/10A3	10mm	+1	+0	1½d6	+0	30	12	2.67	250m	46/16	AF5, clear magazine
H&K MP53	5.56x45mm N	+1	+0	2d6	+1	25	12	3.05	300m	62/21	AF5
H&K MP5K/SP89	9x19mm	+1	+0	1d6+1	+0	30	12	2.00	200m	37/13	AF5
H&K MP5K-PDW	9x19mm	+1	+0	1d6+1	+0	15	12	2.79	200m	32/11	AF5
H&K MP5SD3	9x19mm	+1	+0	1d6	+0	30	12	2.52	150m	47/17	AF5, FS, Sil (-4)
H&K MP7	4.6x30mm	+1	+1	2d6	+0	40	12	1.20	300m	63/22	AF5
H&K MP2000	9x19mm	+1	+1	1d6+1	+0	30	10	2.78	200m	53/19	AF5, Sil (-5)
H&K UMP	.45 ACP	+1	+1	2d6-1	+1	25	11	2.08	270m	57/20	AF5
H&K VP70 Z	9x19mm	+0	+0	1d6+1	+0	18	9	0.82	200m	34/11	AF3, RC2, +2 PER Mod
Ilarco 180 SR/SB	.22 M	+1	+2	1d6	+0	165	12	2.60	150m	49/18	AF8
Ingram MAC-10	.45 ACP	+1	+0	2d6-1	+1	32	12	2.84	270m	56/19	AF5
Ingram MAC-11	.380 Auto	+1	+0	1d6	+0	32	12	1.59	150m	28/10	AF5
Intratec TEC-9	9x19mm	+0	-1	1d6+1	+0	32	12	1.40	200m	35/10	AF5
Intratec TEC-22	.22 LR	+0	+0	1d6	+0	30	12	1.50	150m	26/9	AF5
JATI MATIC	9x19mm	+0	+0	1d6+1	+0	40	10	1.65	200m	40/13	AF5
KFAMP Assault MP	9x19mm	+1	+0	1d6+1	+0	108	12	2.65	200m	47/16	AF5
M3A1 “Grease Gun”	.45 ACP	+0	+0	2d6-1	+1	30	12	3.47	270m	54/18	AF5 Only
Parker-Hale PDW	9x19mm	+1	+0	1d6+1	+0	32	10	2.10	200m	39/12	AF3, RC1, 6
PPsh-41	7.62x25mm R	+1	-1	1d6+1	+0	35	8	3.60	200m	42/13	AF5
Ruger MP9	9x19mm	+1	+0	1d6+1	+0	32	12	3.00	200m	37/13	AF5
Sidewinder SS-1	9x19mm	+1	+0	1d6+1	+0	45	12	2.49	200m	42/14	AF5
SITES Spectre M4	9x19mm	+1	+1	1d6+1	+0	50	13	2.90	200m	43/15	AF5, 7
S&W M-76	9x19mm	+0	+1	1d6+1	+0	36	12	3.29	200m	41/14	AF5
Stechkin APS	9x18mm R	+1	+0	1d6+1	+0	20	12	0.76	200m	37/13	AF5
STEN Mark II	9x19mm	+1	+1	1d6+1	+0	32	12	2.80	200m	38/14	AF5
Sterling L2A3	9x19mm	+2	+0	1d6+1	+0	34	13	2.72	200m	44/15	AF5, 8

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Sterling L34A1	9x19mm	+2	-1	1d6	+0	34	10	3.50	150m	43/13	AF5, Sil (-3)
Steyr MPi69/MPi81	9x19mm	+0	+0	1d6+1	+0	32	10	3.10	200m	35/12	AF5
Steyr TMP	.41	+1	+0	1½d6	+0	30	10	1.30	250m	46/16	AF5
Uzi	9x19mm	+1	+0	1d6+1	+0	40	12	3.60	200m	42/14	AF5
Mini-Uzi	9x19mm	+0	+0	1d6+1	+0	20	12	2.65	200m	35/12	AF5
Micro-Uzi	9x19mm	+0	-1	1d6+1	+0	15	12	1.95	200m	30/8	AF5, +2 PER Mod
Viking	9x19mm	+1	+0	1d6+1	+0	36	12	2.72	200m	42/14	AF5
Walther MPK/MPL	9x19mm	+1	+1	1d6+1	+0	32	12	2.80	200m	38/14	AF5
Weaver PKS9 Ultralite	9x19mm	+1	+1	1d6+1	+0	42	13	2.77	200m	43/15	AF5

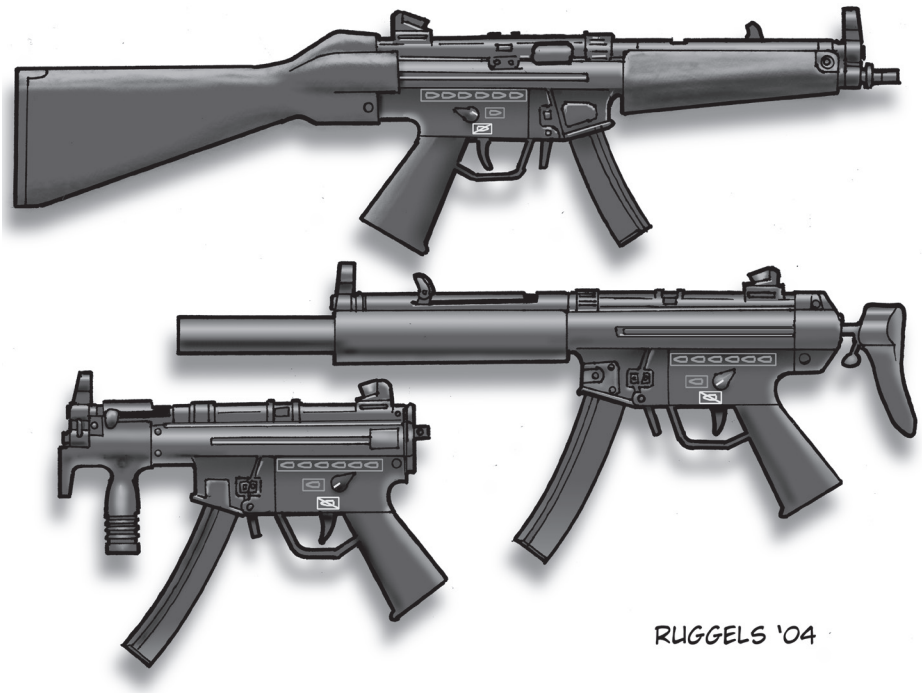


MODERN RIFLES

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
AA Beowulf	.50	+1	+2	3d6	+1	7	15	4.00	450m	62/17	2H, RC1
Anschutz Model 1913	.22 LR	+1	+2	1d6	+0	1	10	7.00	150m	19/6	2H
Armalite AR-50	.50 B	+1	+2	3d6	+1	1	16	15.45	450m	64/14	2H, RC2
Barrett Model 82A1	.50 B	+1	+4	3d6	+1	11	15	12.9	450m	66/20	2H, RC2
Barrett M468	6.8x43mm	+1	+2	2d6	+1	28	12	3.31	300m	53/17	2H, RC2
Barrett M99-1	.50 B	+1	+3	3d6	+1	1	14	9.54	450m	65/20	2H, RC2
Calico M-105	.22 LR	+1	+1	1d6	+0	100	12	2.59	150m	29/9	2H
Calico M951 Carbine	9x19mm	+1	+1	1d6+1	+0	100	12	2.16	200m	40/13	2H, RC1
Colt Sporter HBAR	.223	+1	+2	2d6	+1	30	12	3.40	300m	49/16	2H
Daewoo DR 200	.223	+1	+1	2d6	+1	20	13	4.10	300m	48/15	2H
D Max Carbine	10mm	+1	+0	1½d6	+0	30	11	3.00	250m	33/10	2H
DPMS Panther	.308 Win	+1	+0	2d6+1	+1	10	14	5.45	350m	46/12	2H
FN Model 30-11	7.62x51mm N	+1	+2	2d6+1	+1	10	14	4.85	350m	49/14	2H
Galil Sniper	7.62x51mm N	+1	+1	2d6+1	+1	25	13	6.40	350m	55/19	2H
Galil SASR	.308	+1	+1	2d6	+1	25	13	6.40	300m	48/15	2H
Grendel S-16	7.62x36mm	+1	+2	2d6-1	+1	20	14	4.80	270m	59/19	2H, Sil (-5)
H&K G3SG/1	7.62x51mm N	+1	+1	2d6+1	+1	20	10	5.54	350m	70/24	2H, FS
H&K HK94SG1	9x19mm	+1	+1	1d6+1	+0	30	14	3.26	200m	28/9	2H
H&K PSG-1	7.62x51mm N	+1	+2	2d6+1	+1	20	15	8.10	350m	56/17	2H
H&K SR-9	.308	+1	+1	2d6+1	+1	5	13	4.95	350m	48/13	2H
L96A1	.300 Win Mag	+1	+2	2½d6	+1	10	15	6.00	400m	54/15	2H
M21 Sniper	7.62x51mm N	+1	+2	2d6+1	+1	20	15	5.04	350m	56/17	2H
M40A3	7.62x51mm N	+1	+2	2d6+1	+1	5	15	4.10	350m	48/13	2H
MBA Gyrojet Carbine	13mm Gy	+1	+2	2d6-1	+0	6	8	2.50	270m	44/13	2H, IMR2, IPE
McMillan M-87	.50 B	+1	+3	3d6	+1	5	17	9.52	450m	61/16	2H
McMillan M-89	.308	+1	+3	2d6+1	+1	20	13	7.00	350m	61/24	2H, Sil (-5)
McMillan M-93	12.7x99mm	+1	+3	3d6	+1	20	15	9.52	450m	76/23	2H, RC2
RAI Model 500	12.7x99mm	+1	+3	3d6	+1	1	15	15.15	450m	61/14	2H
Remington M24	7.62x51mm N	+1	+2	2d6+1	+1	10	13	4.00	350m	48/14	2H
Remington M700	7.62x51mm N	+1	+2	2d6+1	+1	5	10	3.41	350m	48/13	2H
Ruger Mini-14	7.62x51mm N	+1	+1	2d6	+1	30	10	3.10	300m	48/15	2H
SAR-4800	.308	+1	+1	2d6+1	+1	20	12	4.30	350m	55/17	2H
SSG 3000	7.62x51mm N	+1	+2	2d6+1	+1	5	14	5.40	350m	62/19	2H, FS, RC1
SKS Carbine	7.62x54mm R	+1	+2	2d6+1	+1	10	10	3.90	350m	48/15	2H
Springfield SAR-8	.308 Win	+1	+0	2d6+1	+1	20	14	4.00	350m	54/15	2H
Steyr AMR IWS 2000	15.2mm Fle	+1	+3	3½d6	+1	5	20	18.00	550m	117/28	2H, AP, IMR2, IPE, RC1
Steyr SSG-69/69 PII	7.62x51mm N	+1	+3	2d6+1	+1	10	15	4.37	350m	49/15	2H
SVD Dragunov	7.62x54mm R	+1	+2	2d6+1	+1	10	15	4.30	350m	48/14	2H, FS
Technika Destroyer	14.5x114mm R	+1	+2	3d6+1	+1	5	16	26.00	500m	66/17	2H
VSS Silent Sniper	9x39mm R	+1	+1	1d6+1	+0	20	13	2.60	200m	45/14	2H, AP, Sil (-4)
Walther WA-2000	7.62x66mm	+1	+4	2½d6	+1	6	13	7.91	400m	74/24	2H, FS, RC3
Winchester Model 70	.300 Win Mag	+1	+2	2½d6	+1	3	12	3.90	400m	54/13	2H

MODERN MACHINE GUNS

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Light Machine Guns											***13***
Ares 5.56 LMG	5.56x45mm N	+1	+1	2d6	+1	200	14	4.91	300m	85/25	AF5, Bulky
H&K Model 13	5.56x45mm N	+1	+1	2d6	+1	100	14	5.40	300m	78/23	AF5, Bulky
H&K Model 21	7.62x51mm N	+1	+2	2d6+1	+1	250	15	7.30	350m	118/33	AF10, Bulky
IMI Negev	5.56x45mm N	+1	+1	2d6	+1	250	14	7.60	300m	118/35	AF10, Bulky
L7A2	7.62x51mm N	+1	+2	2d6+1	+1	250	15	10.90	350m	118/33	AF10, Bulky
M60	7.62x51mm N	+1	+1	2d6+1	+1	250	16	10.51	350m	137/41	AF10, Bulky, FS
M60E3	7.62x51mm N	+1	+2	2d6+1	+1	250	16	8.60	350m	154/46	AF10, Bulky, FS
M249 SAW/FN Minimi	5.56x45mm N	+1	+1	2d6	+1	200	15	6.85	300m	100/28	AF10, Bulky
PK	7.62x39mm R	+1	+2	2d6	+1	250	14	10.00	300m	100/31	AF10, Bulky
RPD	7.62x39mm R	+1	+2	2d6	+1	100	14	7.10	300m	94/29	AF10, Bulky
Stoner M207/Mk 23	5.56x45mm N	+1	+1	2d6	+1	250	14	5.65	300m	118/35	AF10, Bulky
Ultimax 100 Mk III	5.56x45mm N	+1	+1	2d6	+1	100	14	5.50	300m	98/32	AF5, Bulky, FS
Heavy Machine Guns	13										
EX-34 Chain Gun	7.62x51mm N	+1	+1	2d6+1	+1	1500	18	13.70	350m	117/29	AF10, Bulky, Crew3
FN-MAG/MAG-58	7.62x51mm N	+1	+1	2d6+1	+1	250	16	11.00	350m	117/29	AF10, Bulky, Crew3
GAU 19/A	.50 B	+1	+1	3d6	+1	1000	20	33.60	450m	149/34	AF10, Bulky, Crew3
KPV	14.5x114mm	+1	+4	3d6+1	+1	1000	23	49.25	500m	168/41	AF10, Bulky, Crew3
M2HB Heavy Barrel	.50 B	+1	+4	3d6	+1	110	20	38.00	450m	141/35	AF10, Bulky, Crew3
M134 Minigun	7.62x51mm N	+1	+4	2d6+1	+1	1500	18	16.30	350m	155/40	AF20, Bulky, Crew3
XM-214 Six-Pac Minigun	5.56x45mm N	+1	+4	2d6	+1	1000	20	15.00	300m	133/33	AF20, Bulky, Crew3



MODERN ASSAULT RIFLES

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
AIWS	5x54mm	+1	+0	2d6	+0	60	13	3.14	300m	62/18	2H, AF5, NP
AK-47/AKM-47	7.62x39mm R	+1	+1	2d6	+1	30	14	4.30	300m	63/18	2H, AF5
AK-74/AKS-74	5.45x39.5mm R	+1	+1	2d6	+1	30	14	3.60	300m	65/19	2H, AF5, RC1
AR-18	5.56x45mm N	+0	+0	2d6	+1	40	10	3.17	300m	84/26	2H, AF5, FS
Beretta AR 70/223	5.56x45mm N	+0	+0	2d6	+1	30	13	3.54	300m	75/24	2H, AF5, FS
CETME C3	7.62x51mm N	+1	+0	2d6+1	+1	20	12	4.20	350m	72/21	2H, AF5
Colt M4/M4A1 Carbine	5.56x45mm N	+1	+1	2d6	+1	30	12	2.54	300m	78/26	2H, AF5, FS
Colt M16/M16A1	5.56x45mm N	+1	+1	2d6	+1	30	13	3.18	300m	78/26	2H, AF5, FS
Colt M16A2/A4	5.56x45mm N	+2	+1	2d6	+1	30	13	5.78	300m	80/27	2H, AF5, FS
Enfield L85A1/ SA80	5.56x45mm N	+1	+0	2d6	+1	30	13	4.60	300m	77/25	2H, AF5, FS
FA-MAS	5.56x45mm N	+1	+2	2d6	+1	25	10	3.70	300m	79/27	2H, AF5, FS
FN-CAL	5.56x45mm N	+1	+1	2d6	+1	30	15	3.00	300m	78/25	2H, AF5, FS
FN-F2000	5.56x45mm N	+1	+2	2d6	+1	30	15	3.60	300m	79/26	2H, AF5, FS
FN-FAL	7.62x51mm N	+1	+2	2d6+1	+1	20	16	4.25	350m	74/22	2H, AF5, FS
FN-FNC	5.56x45mm N	+1	+1	2d6	+1	30	15	3.80	300m	78/25	2H, AF5, FS
Galil MAR	5.56x45mm N	+1	+1	2d6	+1	35	13	2.98	300m	87/28	2H, AF5, FS
Galil SAR	5.56x45mm N	+1	+2	2d6+1	+1	25	13	4.30	350m	91/30	2H, AF5, FS
H&K 33A2	5.56x45mm N	+1	+1	2d6	+1	40	15	3.65	300m	87/27	2H, AF5, FS
H&K G3	7.62x51mm N	+1	+3	2d6+1	+1	30	15	4.25	350m	75/23	2H, AF5
H&K G11	4.73x33mm Ca	+2	+1	2d6	+0	50	15	3.65	300m	76/22	2H, AF5, IPE, RC2, NP, 10
H&K G33E/G41E	5.56x45mm N	+1	+2	2d6	+1	25	15	3.65	300m	79/26	2H, AF5, FS
H&K G36	5.56x45mm N	+1	+1	2d6	+1	30	15	3.43	300m	78/25	2H, AF5, FS
M-2 Carbine	.30	+0	+1	1½d6	+0	30	14	2.36	250m	45/13	2H, AF5
M-14/M-14A1	7.62x51mm N	+1	+2	2d6+1	+1	20	12	4.12	350m	81/21	2H, AF5
M-19 SPIW	Fle	+1	+0	1½d6	+0	50	11	2.68	500m	71/21	2H, AF5, AP, IMR2, IPE, NP
OICW (M29)	5.56x45mm N	+3	+11	2d6	+1	30	15	5.50	300m	Text	2H, AF5, FS, NP, 11
Ruger AC556F	5.56x45mm N	+1	+1	2d6	+1	30	12	3.15	300m	78/26	2H, AF5, FS
SATS-G3	7.62x51mm N	+1	+1	2d6+1	+1	20	15	3.63	350m	73/21	2H, AF5
SIG 550/551	5.56x45mm N	+1	+1	2d6	+1	30	13	4.10	300m	78/26	2H, AF5, FS, clear magazine
SR88A	5.56x45mm N	+1	+1	2d6	+1	30	13	3.66	300m	78/26	2H, AF5, FS
Stoner M22 or M23	5.56x45mm N	+1	+1	2d6	+1	30	12	3.70	300m	63/19	2H, AF5
Steyr ACR	Fle	+1	+2	1½d6	+0	30	12	3.23	500m	66/21	2H, AF5, AP, IMR2, IPE, NP
Steyr AUG	5.56x45mm N	+1	+2	2d6	+1	30	12	3.60	300m	79/27	2H, AF5, FS, 12
Valmet 90	7.62x51mm N	+1	+1	2d6+1	+1	20	14	3.90	350m	90/29	2H, AF5, FS
Vektor CR-21	5.56x45mm N	+1	+1	2d6	+1	35	12	3.80	300m	87/28	2H, AF5, FS

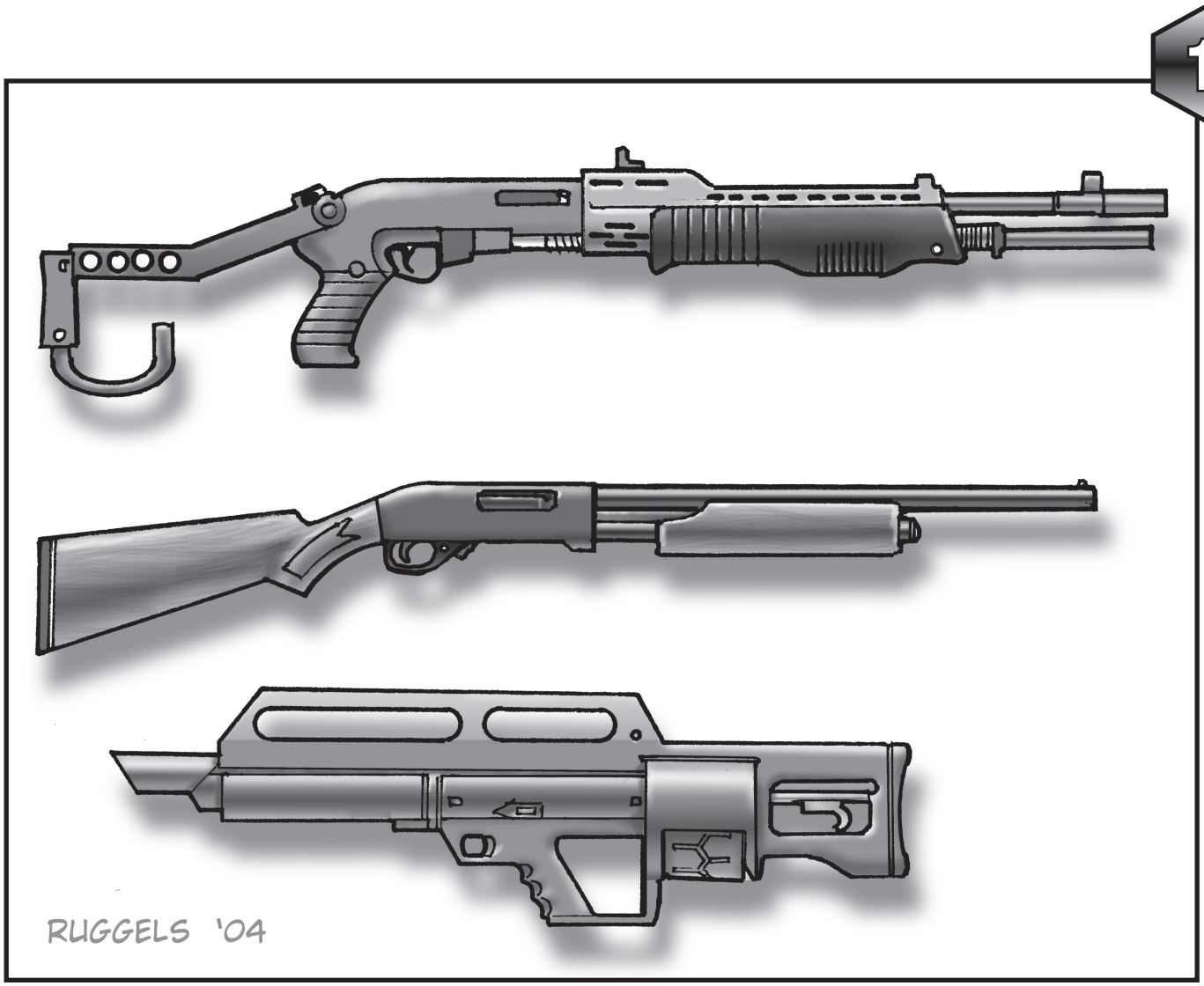
MODERN GRENADES

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Grenade Launchers											***16***
Armscor Multishot GL	40mm	+0	+1	130 STR	6	12	5.30	—		131/24	MR(20m)
Arwen 37	37mm	+1	+1	8d6 N	—	5	10	3.10	60m	43/12	Beam, LR(60m), 17
BG15	40mm	+0	+0	110 STR	+1	8	0.90	—		110/16	MR(30m), underslung
H&K 69A1/79	40mm	+0	+0	110 STR	+1	8	1.80	—		110/16	MR(14m)
Mk 19 Model 3	40mm	+1	+1	2½d6X	+1	100	13	32.90	400m	163/51	AF5, MGL
M79	40mm	+0	+1	100 STR	+1	8	2.70	—		101/16	MR(20m)
M203/PIM203	40mm	+0	+1	110 STR	+1	8	1.40	—		111/17	MR(30m), underslung
MM-1	40mm	+0	+0	8d6 NX	—	12	10	6.00	400m	60/18	MR(12m)
Talon	40mm	+0	+1	110 STR	+1	8	1.40	—		111/17	MR(30m)
Grenade Rounds											
20/22mm Fragmentation	20 or 22mm	—	—	1½d6X	+1	1	—	0.40	RBS	44/10	
24mm Fragmentation	24mm	—	—	2d6X	+1	1	—	0.40	RBS	52/12	
30mm Fragmentation	30mm	—	—	2d6+1X	+1	1	—	0.40	RBS	61/13	
40mm Fragmentation	40mm	—	—	2½d6X	+1	1	—	0.40	RBS	70/15	
52mm Fragmentation	52mm	—	—	3d6X	+1	1	—	0.40	RBS	79/17	
20/22mm Concussive	20 or 22mm	—	—	5d6 NX	—	1	—	0.40	RBS	37/9	
24mm Concussive	24mm	—	—	6d6 NX	—	1	—	0.40	RBS	45/10	
30mm Concussive	30mm	—	—	7d6 NX	—	1	—	0.40	RBS	52/11	
40mm Concussive	40mm	—	—	8d6 NX	—	1	—	0.40	RBS	60/13	
52mm Concussive	52mm	—	—	9d6 NX	—	1	—	0.40	RBS	67/15	
FERRET	40mm	—	—	Tear gas	—	1	—	0.40	RBS	200/53	Indirect, 18
M397A1 Airburst	40mm	—	—	3d6X	+1	1	—	0.40	RBS	79/17	19
M433 HEDP	40mm	—	—	2½d6X	+1	1	—	0.40	RBS	80/18	AP
Rubber Impact	40mm	—	—	8d6 N	—	1	—	0.40	RBS	40/9	
Hand Grenades											
Fragmentation	—	+0	+0	1d6X	+1	1	—	0.40	RBS	26/6	
Fragmentation	—	+0	+0	1d6+1X	+1	1	—	0.40	RBS	35/8	
Fragmentation	—	+0	+0	1½d6X	+1	1	—	0.40	RBS	44/810	
Fragmentation	—	+0	+0	2d6X	+1	1	—	0.40	RBS	52/11	
Concussive	—	+0	+0	5d6 NX	—	1	—	0.40	RBS	22/5	
Concussive	—	+0	+0	6d6 NX	—	1	—	0.40	RBS	30/7	
Concussive	—	+0	+0	7d6 NX	—	1	—	0.40	RBS	37/8	
Concussive	—	+0	+0	8d6 NX	—	1	—	0.40	RBS	45/10	
Smoke	—	+0	+0	CE 8m	—	1	—	0.25	RBS	13/4	-3 Sight PER for 3 Turns, 20
Stun Grenade	—	+0	+0	See text	—	1	—	0.40	RBS	44/19	21
Tear Gas	—	+0	+0	Tear gas	—	1	—	0.25	RBS	190/51	22
M460/M465	—	+0	+0	6d6 N	—	1	—	0.40	NR	37/8	AE1, NR, 23

MODERN SHOTGUNS

Name	Gauge	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Generic Shotguns											
.410 Shot	.410	+0	+0	1½d6	+1	5	8	3.00	40m	37/8	2H, AE1, LR(40m), RR, RP
.410 Shot, DB	.410	+0	+0	1½d6	+1	2	8	3.00	40m	69/13	2H, AE1, AF2, LR(40m), RR, RP
.410 Shot, Sawed-Off	.410	+0	+0	1½d6	+1	2	8	2.25	NR	75/15	AEC, AF2, NR, RR, RP
.410 Slug	.410	+0	+0	1½d6	+1	5	8	3.00	100m	31/6	2H, LR(100m), Beam
28, 24 Shot	28, 24	+0	+0	2d6	+1	5	10	3.00	40m	45/9	2H, AE1, LR(40m), RR, RP
28, 24 Shot, DB	28, 24	+0	+0	2d6	+1	2	10	3.00	40m	82/15	2H, AE1, AF2, LR(40m), RR, RP
28, 24 Shot, Sawed-Off	28, 24	+0	+0	2d6	+1	2	10	2.25	NR	90/17	AEC, AF2, NR, RR, RP
28, 24 Slug	28, 24	+0	+0	2d6	+1	5	10	3.00	100m	37/7	2H, LR(100m), Beam
20, 16 Shot	20, 16	+0	+0	2d6+1	+1	5	11	3.00	40m	52/11	2H, AE1, LR(40m), RR, RP
20, 16 Shot, DB	20, 16	+0	+0	2d6+1	+1	2	11	3.00	40m	96/17	2H, AE1, AF2, LR(40m), RR, RP
20, 16 Shot, Sawed-Off	20, 16	+0	+0	2d6+1	+1	2	11	2.25	NR	105/20	AEC, AF2, NR, RR, RP
20, 16 Slug	20, 16	+0	+0	2d6+1	+1	5	11	3.00	100m	44/10	2H, LR(100m), Beam
12 Shot	12	+0	+0	2½d6	+1	5	12	3.00	40m	60/13	2H, AE1, LR(40m), RR, RP
12 Shot, DB	12	+0	+0	2½d6	+1	2	12	3.00	40m	110/20	2H, AE1, AF2, LR(40m), RR, RP
12 Shot, Sawed-Off	12	+0	+0	2½d6	+1	2	12	2.25	NR	120/23	AEC, AF2, NR, RR, RP
12 Slug	12	+0	+0	2½d6	+1	5	12	3.00	100m	50/11	2H, LR(100m), Beam
10 Shot	10	+0	+0	3d6	+1	5	12	3.00	40m	67/14	2H, AE1, LR(40m), RR, RP
10 Shot, DB	10	+0	+0	3d6	+1	2	12	3.00	40m	124/22	2H, AE1, AF2, LR(40m), RR, RP
10 Shot, Sawed-Off	10	+0	+0	3d6	+1	2	12	2.25	NR	135/26	AEC, AF2, NR, RR, RP
10 Slug	10	+0	+0	3d6	+1	5	12	3.00	100m	56/12	2H, LR(100m), Beam
4 Shot	4	+0	+0	3d6+1	+1	5	13	3.00	40m	75/16	2H, AE1, LR(40m), RR, RP
4 Shot, DB	4	+0	+0	3d6+1	+1	2	13	3.00	40m	137/25	2H, AE1, AF2, LR(40m), RR, RP
4 Shot, Sawed-Off	4	+0	+0	3d6+1	+1	2	13	2.25	NR	150/28	AEC, AF2, NR, RR, RP
4 Slug	4	+0	+0	3d6+1	+1	5	13	3.00	100m	62/14	2H, LR(100m), Beam
Specific Shotguns											
AAI CAWS	Fle	+1	+0	3d6	+1	12	12	4.08	100m	138/34	2H, AE1, AF3, Beam, IPE, LR(100m), NP, RC1
Atchisson Assault	12	+0	+0	2½d6	+1	20	13	5.20	100m	80/21	2H, AF5, LR(100m)
Benelli 121-M1	12	+1	+0	2½d6	+1	8	12	3.30	40m	62/14	2H, AE1, LR(40m), RR, RP
Benelli M4/M1014	12	+1	+0	2½d6	+1	6	12	3.80	40m	62/14	2H, AE1, LR(40m), RR, RP
Bernardelli B4	12	+0	+0	2½d6	+1	8	12	3.45	40m	60/13	2H, AE1, LR(40m), RR, RP
Daewoo USAS-12	12	+0	+0	2½d6	+1	28	13	5.50	100m	80/21	2H, AF5, Beam, LR(100m)
Entry Team Striker	12	+0	+0	2½d6	+1	12	10	4.20	40m	120/28	2H, AE1, AF3, LR(40m), RR, RP
Franchi PA3/215	12	+0	+0	2½d6	+1	3	12	2.27	100m	50/10	2H, Beam, LR(100m)
Franchi SPAS-12	12	+0	+0	2½d6	+1	8	12	4.35	40m	60/13	2H, AE1, LR(40m), RR, RP
Franchi SPAS-15	12	+0	+0	2½d6	+1	6	12	3.80	40m	60/13	2H, AE1, LR(40m), RR, RP, 14
Ithaca MAG-10	10	+0	+0	3d6	+1	2	12	4.87	100m	56/11	2H, Beam, LR(100m)
Ithaca Stakeout	20	+1	+0	2d6+1	+1	4	11	1.59	40m	54/11	2H, AE1, LR(40m), RR, RP

Name	Gauge	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Jackhammer Mk 3A-2	12	+0	+0	2½d6	+1	10	13	4.57	100m	Text	2H, AF5, Beam, LR(100m), NP, 15
KS-23M	4	+0	+0	3d6+1	+1	3	14	3.20	40m	75/14	2H, AE1, LR(40m), RR, RP
Mossberg M500 ATP8	12	+0	+0	2½d6	+1	8	12	3.10	40m	60/13	2H, AE1, LR(40m), RR, RP
Mossberg 590	12	+0	+0	2½d6	+1	9	12	3.10	40m	60/14	2H, AE1, LR(40m), RR, RP
Olin/H&K CAWS	12	+1	+0	2½d6	+1	10	12	4.32	100m	62/16	2H, AF3, Beam, LR(100m), NP
Remington 870 P	12	+0	+0	2½d6	+1	8	12	3.40	40m	60/13	2H, AE1, LR(40m), RR, RP
Winchester 1300	12	+0	+0	2½d6	+1	7	12	3.10	40m	60/13	2H, AE1, LR(40m), RR, RP



MODERN HEAVY WEAPONS

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Armbrust 300	67mm	+0	+0	6½d6	+1	1	12	6.30	1000m	200/24	2H, AE4, AP, ET(1T), IPE, SFW, 24, 25
ASP 30mm	30mm	+1	+1	3d6+1	+1	100	14	47.6	500m	140/36	2H, AF5, AP, Beam, Crew2
FIM-92A Stinger SAM	—	+2	+0	5d6X	+1	1	12	15.7	750m	191/27	2H, Crew2, ET(1T), IMR2, NRM, SFW, 24
Flamethrower	—	+0	+0	Text	—	10	—	22.7	NR	Text	AE Line or Cone (see text), 26
Kovrov RPG-7V	85mm	+0	+0	7d6+1X	+1	1	12	9.25	1100m	192/24	2H, ET(EP), MR(10m), SFW
M18 Recoilless Rifle	57mm	-1	+3	6d6+1	+1	1	15	21.0	950m	145/25	2H, AP, Crew2, 27
M47 Dragon	140mm	-1	+0	9d6	+1	1	12	17.0	1350m	202/21	2H, AP, Beam, Crew2, ET(1T), MR(70m), SFW
M67 Recoilless Rifle	90mm	+0	+3	6d6+1	+1	1	15	15.9	1100m	145/25	AP, Crew2, 27
M72A3 LAW Rocket	66mm	+0	+1	6½d6X	+1	1	12	2.13	1000m	201/34	2H, AP, ET(EP), SFW
M202A1 Flash	66mm	+0	+0	6½d6X	+1	4	13	12.1	1000m	200/30	2H, ET(1T), SFW, 28
MDHC Mk 153 SMAW	83mm	+0	+0	7d6+1X	+1	1	12	16.6	1100m	220/25	2H, AP, Crew2, ET(1T), SFW
Metal Storm Cannon	7.62mm	+1	+1	2d6+1	+1	540	12	50.0	350m	230/62	AF40, AP, Crew5, NP, 29
SA-7B Grail	70mm	+1	+0	7d6X	+1	1	12	4.71	1050m	264/31	2H, ET(1T), IMR2, MR(500m), NRM, SFW, 24
Wire Guided Missile	—	+0	+0	8d6X	+1	1	12	64.0	2400m	420/62	AP (x2), Crew4, ET(1T), IMR2, NRM

MODERN WEAPONS KEY

2H: Two-Handed (a -½ Limitation)

AE: Area Of Effect (Radius); the number following indicates the size of the Radius in meters.

AEC: Area Of Effect (16m Cone; +½)

AF: Autofire; the number after the letters indicates the maximum number of shots

ACP: Automatic Colt Pistol

AP: Armor Piercing

Auto: Automatic

B: Browning

Ca: Caseless

CAWS: Close Assault Weapon System

Coll: Collimating/reflex site

Crew: Requires Multiple Users (number indicates standard size of crew)

Cz: Czech

DB: Double-barrelled

ET: Extra Time (1T means 1 Turn; EP means Extra Phase, FP means Full Phase)

Fle: Flechette

FS: Flash Suppressor

Gy: Gyrojet

FS: Flash Suppressor

H&K: Heckler & Koch, a German gun manufacturer

IMR: Increased Maximum Range (the number indicates the multiplier)

IPE: Invisible Power Effects

Laser: weapon has a laser sight

LAW: Light Anti-tank Weapon

LR: Long Rifle

LR(Xm): Limited Range (number indicates range)

M: Magnum

MGL: Mounted Grenade Launcher. These must be mounted on a tripod or vehicle to be fired, and two or three men of ordinary strength are needed to lift them (i.e., they're Bulky).

Micr: micrometer sights

mm: millimeter

MR: Minimum Range (a -1/4 Limitation indicating the weapon can't affect targets nearer than the indicated distance)

N: NATO round

NP: Not produced (a weapon that was or is experimental, was cancelled before it entered production, or the like)

NR: No Range

NRM: No Range Modifier

Only: Autofire only, no single shots (a -0 Limitation)

PR: Polygonal rifling (the effect of this is already listed in the table's damage figure)

KEY

R: Russian

RBS: Range Based On STR

RC1, 2, or 3: Recoil Compensator (1, 2, or 3 indicates type)

RL: Russian Long

RP: Reduced Penetration

RR: Reduced By Range

SAM: Surface-to-Air Missile

SFW: Shoulder-fired weapon (characters need WF: Shoulder-Fired Weapons to use one of these properly, and they typically have the Bulky and Extra Time Limitations)

Sil: Silenced (number in parentheses indicates penalty to Hearing PER Rolls)

S&W: Smith & Wesson (an American gun manufacturer)

Tum: Tumbler (bullets have the tumbling effect; see page 94; the extra die of damage is already listed on the chart)

Underslung: A grenade launcher meant to be attached underneath the barrel of an assault rifle or like weapon; it can't be used if not so attached.

WinMag: Winchester Magnum

X: Area Of Effect (Radius Explosion, assumed to be of a size to give the Advantage a final value of +½)

Firearms are RKAs bought with the following Limitations: Focus (OAF; -1), STR Minimum, Beam, Real Weapon, Required Hands (for rifles, shotguns, and the like), and Charges. See page 68 for more information.

Name: The name of the weapon. This may include a manufacturer and/or model number.

Caliber: The weapon's caliber (for shotguns, this becomes "Gauge"). This is given in fractions of an inch or in millimeters (mm).

Many models of guns comes in multiple calibers, not just the one listed (this is particularly true for semi-automatic handguns), and a gunsmith can often rechamber a weapon to accept a different size cartridge. So if you like the look of a gun but not the caliber, feel free to change it to fire the type of bullet you want. Upgrading a gun to a larger caliber may diminish the number of rounds it can hold in a magazine, while downgrading to a smaller caliber may increase the weapon's ammo capacity.

OCV: The weapon's OCV modifier, bought as described on page 69.

RMod: The weapon's Range Modifier, bought as described on page 69.

Damage: The damage the weapon does. An "N" indicates Normal Damage; otherwise the listed damage is Killing.

STUNx: This is the STUN Multiplier for Killing Damage weapons (a +0 means "no modification"; use the standard ½d6 STUN Multiplier). Apply the STUNx modifier to the STUN Multiplier roll (or to the STUNx for the Hit Location struck, if the campaign uses Hit Location rules). For example, if a character with a .45 ACP caliber firearm (STUNx +1) hits an opponent in the Head, the total STUNx would be 6.

Shots: The number of shots in the gun's cylinder or magazine (in game terms, how many Charges the gun has). Each gun comes with one "clip" of ammunition unless noted otherwise. If a gun can use more than one size clip, the largest or most common clip is listed. Guns with a "clip" of 1 shot are single-shot guns (often for target shooting) that the user must reload after each shot.

The listed number of Charges for semi-automatic firearms doesn't include having one round "in the pipe" (*i.e.,* chambering one round, then removing the magazine and replacing that round, so that the gun carries +1 round).

STR Min: The STR Min necessary to use the weapon effectively; see 6E2 199 for rules. Remember that firearms and related weapons (which are built as RKAs or Blasts) don't get bonus damage or other benefits from exceeding the STR Minimum. The STR Minimum simply indicates the STR needed to effectively use the weapon — to hold, draw, and/or cock it.

Mass: The weight of the gun, in kilograms. Typically this is the unloaded weight; inserting a clip of ammunition adds a few grams.

Max Range: The weapon's maximum Range in meters according to the *HERO System* rules. (Of course, its effective range — the range over which it's likely to hit a target — is much less, thanks to the Range Modifier.) Typically this means Base Points x 10 meters, but Advantages or Limitations may change that. "NR" means No Range; "RBS" means Range Based On STR.

A/R Cost: The Active Point/Real Point Cost of the weapon, in Character Points. For greater variation, these costs use the expanded Killing Attack costs on APG 56 (thus, an RKA 1d6-1 costs 12 Character Points).

Notes: This catch-all category includes any information not listed elsewhere. All notes and abbreviations are explained at the end of the tables.

terms, this makes it function as if equipped with a Type 1 recoil compensator.

7) The Spectre M-4 commonly comes with a four-column clip "file system," thus allowing the firer to carry 200 rounds of ammunition. This counts as a "rapid reloading" device (see *Dark Champions*).

8) There is special "compact" version of the Sterling L2A3 known as the Sterling Mark 7. In game terms, it's the same as the L2A3, but has only a +3 PER Modifier.

9) The Thompson M1928 is heavy, can jam easily when it gets dirty, and can be noisy when carried. In game terms, reduce all Activation Rolls for Malfunction by 1.

10) The H&K G11 is an experimental rifle using Caseless ammunition and many other advances that kept weight and recoil to a minimum. Its magazines had clips on the sides so the user can carry two extra magazines attached to the one in the rifle (this counts as a "rapid reloading" device; see *Dark Champions*). Although it attracted great interest in many quarters, the reunification of Germany resulted in its never being manufactured; only about 100 were produced. A squad automatic weapon (SAW) version with 300 rounds was in design when the program was cancelled.

Cost	Power
17	**OICW:** Multipower, 60-point reserve; all OAF (-1), STR Minimum (15; -¾), Real Weapon (-¼), Two-Handed (-½)
2f	**1) 5.56x45mm Rounds:** RKA 2d6, Autofire (5 shots; +½), +1 Increased STUN Multiplier (+¼), 30 Charges (+¼); OAF (-1), STR Minimum (15; -¾), Beam (-¼), Real Weapon (-¼), Two-Handed (-½)
1f	**2) 20mm "Smart" Grenade Launcher:** RKA 1½d6, Area Of Effect (12m Radius Explosion; +¼), Increased Maximum Range (500m; +¼); OAF (-1), Minimum Range (50m; -¼), STR Minimum (15; -¾), Real Weapon (-¼), Two-Handed (-½), 6 Charges (-¾)
1	**Inherent Accuracy:** +1 OCV; OAF (-1), Real Weapon (-¼), Two-Handed (-½)
1	**Inherent Accuracy:** +1 versus Range Modifier; OAF (-1), Real Weapon (-¼), Two-Handed (-½)
21	**Targeting Computer:** See page 104
7	**Flash Suppressor:** Invisible to Normal Sight (+¼) for up to a 60 Active Point firearm; OAF (-1), Real Weapon (-¼)
1	**Camera:** Adjacent (up to 1m away) for Sight Group; OAF (-1), 1 Continuing Fuel Charge (easily recharged, 3 Hours; -0)
1	**Thermal Sight:** Infrared Perception (Sight Group); OAF (-1), Extra Time (2 Minutes to activate; -¾), Real Weapon (-¼), Only When Shooter Braces And/Or Sets (-1), 1 Continuing Fuel Charge lasting 5 Hours (-0)
5	**GPS Tracker:** Detect Exact Position On Earth 16- (Radio Group); OAF (-1)
1	**Compass:** Bump Of Direction; OAF (-1)

Total cost: 58 points.

11) The OICW (Objective Individual Combat Weapon) was a weapons system the US Army worked on in the late Nineties and early 2000s to replace the M16A2/M203 assault rifle/grenade launcher weapon issued to American soldiers. Unfortunately the project was unable to meet the desired specifications and was discontinued in 2004, though some aspects of it have become a part of other weapon development programs.

The OICW incorporated a 5.56mm assault rifle with an under-mounted launcher for 20mm "smart" grenades. Its enhancements and electronics included a targeting computer, infrared/laser aiming device, laser range finder/digital compass/GPS tracking device, and a thermal weapon sight. The targeting computer used the rangefinder and other electronics to "program" the smart grenades to explode at a predesignated range, in theory significantly increasing the chance of killing the target even if there's no direct hit. The grenades have a minimum range of about 50m and a maximum range of about 1000m.

12) The Steyr AUG can convert into a carbine, rifle, or light machine gun by switching barrels and other attachments. If desired, characters could build this weapon as a Multipower with the Limitation *Extra Time* (Full Phase to change slots; -½) on the reserve.

13) Machine guns fall into two categories, Light and Heavy. Light machine guns (LMGs) realistically usually have a two-man firing team, but they don't necessarily have to, so they don't get the *Requires Multiple Users* Limitation. Since they're usually mounted on a tripod or some other support they don't take the *Two-Handed* (-½) Limitation, but if used without a support do require two hands to hold and fire. They qualify as Bulky Foci. Heavy machine guns (HMGs) take the *Requires Multiple Users* (3 men; -½) Limitation in addition to Bulky; they have to be mounted on a tripod or vehicle. Most machine guns are belt-fed, though some LMGs can mount small boxes of about 30 rounds if necessary.

14) The Franchi SPAS-15 is a semi-automatic military shotgun that fires an especially powerful 12-gauge shell. These shells are too powerful for most shotguns (they will not allow the breech to close if used in them).

15) The Jackhammer Mark 3A-2, an experimental weapon designed (but never manufactured) by Pancor, has a casing made primarily of fiberglass and plastic, though the inner workings are still steel. It uses a cylindrical magazine that holds 10 shells (in this example, it's filled with slugs). If necessary, the user can detach the magazine and use it as a landmine! The magazine casing is designed to withstand the blast so it can be reused.

Cost	Power
42	**Pancor Jackhammer Mark 3A-2:** Multipower, 106 Active Points; all OAF (-1), Real Weapon (-¼), 10 Charges for entire Multipower (-¼)
2f	**1) Shotgun with Slugs:** RKA 2½d6, Autofire (5 shots; +½), +1 Increased STUN Multiplier (+¼); OAF (-1), Beam (-¼), Limited Range (100m; -¼), STR Minimum (13; -½), Real Weapon (-¼), Two-Handed (-½)
3f	**2) Magazine As Landmine:** RKA 5½d6, Trigger (putting sufficient pressure on it; +¼); OAF (-1), Lockout (placing landmine prevents use of Slot #1; -½), No Range (character must place landmine; -½), Real Weapon (-¼), Requires Multiple Charges (1 Charge for base 2½d6 damage, +1 DC per additional Charge; -0)
Total cost: 47 points.	

A special silencer, with a life of 10 shots, can be attached to the Jackhammer.

16) Grenade launchers are devices used to launch grenade rounds. In game terms, most are bought as STR with the Limitations *OAF* (-1), *Real Weapon* (-¼), and *Only To Make Standing Or Prone Throws Of Grenades* (-2). Charges applies as an Advantage or Limitation, as appropriate. The STR does *not* add to the character's STR for throwing purposes, it substitutes for his STR. A launcher may also provide a RMod bonus or penalty. Some of the multi-shot grenade launchers are described as standard weapons, with one type of grenade chosen as a default, for ease of presentation.

Grenade rounds are the grenades fired from a grenade launcher. They can't be thrown like hand grenades. Their Maximum Range is listed as "RBS" because it depends on the STR of the launcher used to fire them.

Hand grenades are hand-thrown explosive weapons; they can't be launched from grenade launchers. The character pulls the pin and throws the grenade, which detonates after a short amount of time. In game terms, it's usually easiest to assume that grenades explode in the Phase in which they're thrown; in campaigns emphasizing realism, the GM may want to delay the explosion by 1-3 Segments.

17) The Arwen 37 is a British grenade launcher that fires different types of 37mm grenades (for game purposes, these have the same effect as 40mm grenades). The one in the table is loaded with "impact" rounds, but any other grenade type could be substituted.

18) The FERRET grenade round is a tear gas grenade, built as follows. It has an armor-piercing capability that allows it to penetrate walls and barriers before releasing the tear gas.

Sight Group Flash 8d6, Area Of Effect (8m Radius; +½), Constant (+½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2), Indirect (Path can "alter" to penetrate walls and similar barriers within 60m of shooter; +½) (200 Active Points); OAF (-1), Limited Range (100m; -¼), Real Weapon (-¼), 1 Continuing Charge lasting 1 Turn (-1¼). ***Total cost: 53 points.***

19) The M397A1 is an "airburst" grenade. It contains a miniature fuse that "bounces" the grenade into the air when it hits the ground, causing it to explode at head level rather than at ground level. When it's used against a standing opponent, all shots with this grenade should be considered High Shots and the Hit Location rolled accordingly.

20) The smoke grenade is built as follows:

Change Environment (create smoke), -3 to Sight Group PER Rolls, Area Of Effect (8m Radius; +½) (13 Active Points); OAF (-1), Range Based On STR (-¼), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (-1). ***Total cost: 4 points.***

21) This is a generic stun grenade, built as follows:

Blast 3d6, NND (defense is any rPD; +0), Area Of Effect (8m Radius Explosion; +¼) (19 Active Points); OAF (-1), Range Based On STR (-¼), Real Weapon (-¼), 1 Charge (-2) (total cost: 4 points) ***plus*** *Sight and Hearing Group Flash 3d6, Area Of Effect (8m Radius Explosion; +¼) (25 Active Points); OAF (-1), Linked (-¼), Range Based On STR (-¼), Real Weapon (-¼), 1 Charge (-2) (total cost: 5 points).* ***Total cost: 9 points.***

22) Here's the effect of the tear gas hand grenade:

Sight Group Flash 8d6, Area Of Effect (12m Radius; +¾), Constant (+½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (190 Active Points); OAF (-1), Range Based On STR (-¼), Real Weapon (-¼), 1 Continuing Charge lasting 1 Turn (-1¼). ***Total cost: 51 points.***

23) The M460 is known as a "Thunderstrip." It's 30.5 x 7.6 x 2.5 cm and is made to slip underneath doors or through open windows. The M465 is the "Thunder Rod," a cylinder 35.5 cm long with a 1.7 cm diameter designed to slip through holes made by a 12-gauge shotgun slug.

24) These are one-shot weapons — the rocket tube is discarded after the rocket is fired. This is bought as Charges which Never Recover (an additional -2 Limitation).

25) The Armbrust 300 is a one-shot rocket launcher designed to destroy tanks. It is smokeless, flashless, virtually noiseless, and uses a counterweight system to eliminate most of the recoil and backblast. This is bought as Invisible Power Effects (makes use of power Inobvious, but source of power is still perceivable; +¼). The blast covers a 4m radius.

26) Flamethrowers are devices for projecting flame. They consist of a bulky, heavy backpack which holds the fuel (either ordinary liquid fuel,

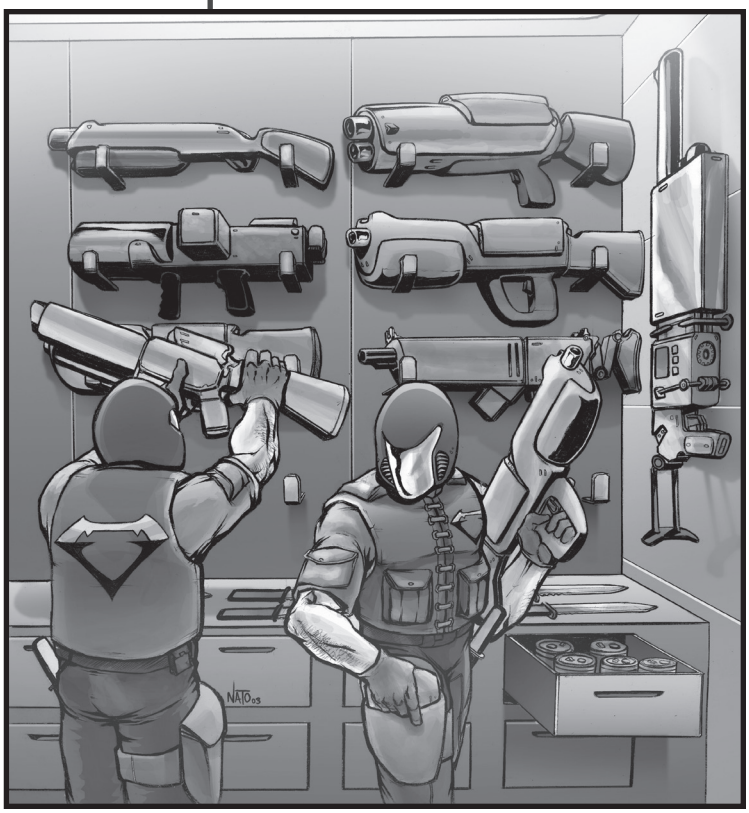
thickened fuel, or various incendiary chemicals). Thickened fuels (such as napalm) tend to burn the best and have the greatest range.

In *HERO System* terms, flamethrowers are bought as Multipowers. Each slot is a Killing Attack. The first slot creates a Line of fire, the second a Cone. Both are Constant (since the user can simply hold down the trigger and keep filling the area with flame) and Mobile (since the character can "wave" the area of flame back and forth slowly). However, both of these slots also have a -0 Side Effect: if the flamethrower is fired at a target which is too close (closer than 6m) or is fired into the wind, there's an 11- chance that fuel will splash on the firer, inflicting 1½d6 Killing Damage.

Some flamethrowers have a third slot — an Area of Effect (Any Shape) that simulates the flamethrower's capacity to make "cold shots." A cold shot involves spraying unlit fuel onto an area, then lighting it.

A flamethrower has an overall number of Charges indicating how many seconds' worth of fuel it has. However, the fires set by the flamethrower may continue to burn long after the user is out of fuel, and flammable objects that come into contact with them may also catch fire (if the GM prefers, he can charge Character Points for this, using the same effect as for Incendiary Ammunition on page 93).

Some sample flamethrowers include: the M2A1 and M9A1-7, American models with ten seconds' worth of fuel; the LPO-50, a Soviet flamethrower with nine seconds' worth of fuel; and the HAFLA-35L, a one-shot German flamethrower "pistol" with enough fuel to ignite an 16 x 4 meter area. The one in the list, and described below, is typical of the American flamethrowers.



Cost	Power
34	**Flamethrower:** Multipower, 135-point base; all OAF Bulky (-1½), Real Weapon (-¼), STR Minimum (10; -½), Two-Handed (-½); 10 Charges for entire Multipower (-¼)
3f	**1) Firebolt:** RKA 3d6, Area of Effect (50m Line; +¾), Armor Piercing (+¼), Constant (+½), Mobile (character can move Line 12m per Phase, but starting point of Line must always remain immediately in front of him; +½); OAF Bulky (-1½), No Range (-½), Real Weapon (-¼), STR Minimum (10; -½), Side Effect (see text; -0), Two-Handed (-½)
3f	**2) Wide-Angle Firebolt:** RKA 3d6, Area of Effect (30m Cone; +½), Armor Piercing (+¼), Constant (+½), Mobile (character can move Cone 12m per Phase, but starting point of Line must always remain immediately in front of him; +½); OAF Bulky (-1½), No Range (-½), Real Weapon (-¼), STR Minimum (10; -½), Side Effect (see text; -0), Two-Handed (-½)
3f	**3) Cold Shot:** RKA 3d6, Area of Effect (up to 10m Radius' worth of Surface area, Conforming [Liquid]; +1½), Armor Piercing (+¼); OAF Bulky (-1½), Extra Time (a minimum of an Extra Phase between spraying the fuel and lighting it; -¾), No Range (-½), Real Weapon (-¼), STR Minimum (10; -½), Two-Handed (-½)
Total cost: 43 points.	

27) The M18 57mm and M67 90mm Recoilless Rifles are single-shot, reloadable weapons fired from the shoulder or from a tripod (they use WF: Shoulder-Fired Weapons). The typical ammunition is an AP round, but high explosive and others are available. They are Bulky Foci, and have the same "backblast" Side Effect as the M202A1.

28) The M202A1 Flash is a four-shot napalm rocket launcher firing the M74 napalm rocket. It's built as follows:

RKA 6½d6, Area Of Effect (40m Radius Explosion; +¾), +1 Increased STUN Multiplier (+¼) (200 Active Points); OAF Bulky (-1½), Extra Time (1 Turn; -1¼), Real Weapon (-¼), Side Effect (has a backblast of an RKA 1d6, Area Of Effect (8m Cone) behind it, always occurs; -½), STR Minimum (14; -¾), Two-Handed (-½), 4 Charges (-1). ***Total cost: 30 points.***

Additionally, the napalm can of course set things on fire, which may cause even more damage, spread to nearby flammable objects, and so forth.

29) The MetalStorm Cannon is a putative heavy weapon that would take full advantage of the MetalStorm firing technology described above for the O'Dwyer VLe "smart gun." In theory the MetalStorm system of stacking bullets in the barrel of a gun and then firing the bullets electronically could allow for a cyclic rate of fire (*i.e.,* an ideal, theoretical maximum assuming no need to reload or other problems) of a million rounds per minute, given a gun with about 36 barrels.

FIREARMS OF THE FUTURE

The material in this chapter focuses on the modern day — the late twentieth and early twenty-first centuries. However, some campaigns and characters might involve the more advanced firearms of the near future. Some possible developments for future personal firearms include:

Liquid Propellants: Instead of using powder in a bullet casing, guns will mix two inert chemicals in the barrel behind the bullet. When mixed, the two chemicals become a powerful propellant. This system allows for larger bullets fired at a higher, and also steadier-increasing, pressure, resulting in greater damage to the target.

Electrothermal-Chemical Propellant: "ETC" propellant systems use electricity to enhance the energy from chemical propellants. The electricity creates a high-density plasma that ignites the propellant in a way that controls the release of the chemical energy so the bullet accelerates all the way down the barrel (not just in the firing chamber). That means the bullet flies faster and strikes harder (and thus inflicts greater wounds).

Rail Guns: Instead of chemical and/or electrical energy, a gun could use magnetic energy to propel a steel bullet. Assuming a sufficiently robust power source, this could result in personal arms with extremely high muzzle velocities (and thus damage potential), virtually no recoil or noise, and a high rate of fire. These weapons are also known as "gauss guns" or "electromagnetic propellant guns," and are a staple of some Science Fiction settings (see page 192 *et seq.* for more information and write-ups).

Homing Bullets: These rounds have tiny fins, onboard sensors, and a built-in guidance chip to keep them flying straight. A dedicated targeting computer built into the weapon even allows the shooter to direct the bullets to fire around walls and other obstacles! (In *HERO System* terms they'd have Indirect to alter their Path, and possibly a small OCV bonus.)

Shaped-Charge Bullets: These rounds contain a tiny shaped-charge warhead for better armor penetration — in *HERO System* terms, they have high damage (+2 DCs or more over the standard for the round) plus Armor Piercing (maybe even AP x2).

Antimatter Bullets: The ultimate in handheld firepower, these cinematic rounds carry a microscopic fragment of antimatter magnetically contained in the tip. On impact the antimatter contacts matter and annihilates itself in a tremendous bang. Should only be used at long ranges, due to blast effects. (In *HERO System* terms, this would be a 20+ DC Blast or RKA with Area Of Effect (a large Radius Explosion).)

AMMUNITION

The most important factor for determining how much damage a firearm can do, and how to represent its effects in *HERO System* terms, is the type of ammunition it fires.

Standard Firearms Ammunition

Standard firearms fire bullets — lead projectiles contained in a casing (usually made of brass or steel) that also holds an explosive propellant. When a shooter pulls the trigger, the trigger draws back the hammer of the gun and then pulls it forward. When the hammer causes the firing pin to strike the primer in the back of the bullet case, it ignites the propellant, which propels the lead projectile down the barrel and toward the target at tremendous velocity. In an automatic or semi-automatic firearm, the force of the shot is then channeled to eject the empty bullet casing and insert a new round into the chamber; in a revolver, the empty casing remains in the cylinder until the cylinder's emptied by hand.

In game terms, the amount of damage done by a bullet depends first and foremost on the bullet's size (defined primarily by *caliber,* or roughly speaking the bullet's "width," and the bullet's length). The Standard Ammunition Damage Table lists the damage for various calibers of bullets (some expressed in traditional English measurements, some in metric, and some in both).

AMMUNITION TYPES

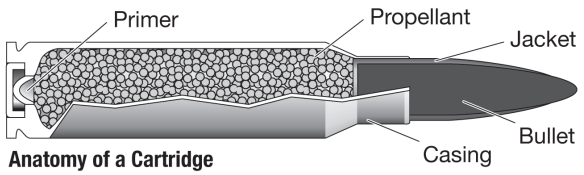
Here are descriptions of the many types of ammunition available to characters. See page 96 for a summary table describing how much damage each round does by caliber.

STANDARD

Standard ammunition, also known as "ball" ammunition, is the default type of ammunition used in guns in *HERO System* terms. It's the common plain lead projectile described above, and does the amount of damage indicated in the Standard Ammunition Damage Table.

In game terms, Standard rounds do straightforward RKA damage — the larger the caliber, the more damage. Large calibers also have +1 Increased STUN Multiplier (this applies to all other rounds of those sizes, unless their descriptions indicate otherwise).

Common Ammunition



Anatomy of a Cartridge

.22 LR | 9x19mm Parabellum | .45 ACP | .50 AE | 5.56x45mm NATO | 7.62x51mm NATO | 30-06 Springfield

All ammunition shown actual size

STANDARD AMMUNITION DAMAGE TABLE

CALIBER, ENGLISH	CALIBER, METRIC	BASIC DAMAGE	NOTES
.177		½d6	
	4.6x30mm	2d6	
	4.73x33mm Caseless	2d6	
	4.85mm	1½d6	
.22	5.56x29mm	1d6-1	
	5mm	2d6	
.22 LR	5.7x17mm R, 5.7x28mm	1d6	
.221		1½d6	
.223 Remington	5.56x45mm N, 5.45x39mm R	2d6	+1 STUN Multiplier
.25 ACP	6.35mm	1d6	
.270	6.8x43mm	2d6	
.30	7.62x25mm R, 7.62x33mm	1d6+1	
.30-06	7.62x63mm	2d6+1	+1 STUN Multiplier
.308 Winchester	7.62x51mm N, 7.62x54mm R	2d6+1	+1 STUN Multiplier
.300 Winchester Magnum, .300 Remington SAUM	7.62x66mm	2½d6	+1 STUN Multiplier
.310	7.62x39mm R, 7.62x36mm	2d6	+1 STUN Multiplier
.32 ACP, .32 S&W	7.65x17mm	1d6	
.303 British	7.7x58mm	2½d6	+1 STUN Multiplier
	7.92x57mm	2½d6	+1 STUN Multiplier
.350		1½d6	
.357 Magnum, .350 Magnum	9x33mm R	1½d6	
.38, .380 Automatic	9x17mm, 9x29mm R	1d6	
	9x19mm N P (Luger), 9x18mmR	1d6+1	
.40, .41, .42	10.11x21.6mm	1d6+1	

CALIBER, ENGLISH	CALIBER, METRIC	BASIC DAMAGE	NOTES
.41 Magnum, .41 Action Express	10.41x32.76mm, 10.41x22mm, 10x25mm	1½d6	
.44		2d6-1	+1 STUN Multiplier
.44 Magnum, .44-40	10.97x33mm R	2d6	+1 STUN Multiplier
	11mm	2d6-1	+1 STUN Multiplier
.45 ACP, .458	11.43x23mm, 11.56x33mm	2d6-1	+1 STUN Multiplier
.45 Winchester Magnum, .45-47, .45-70, .46		2d6	+1 STUN Multiplier
.454 Casull, .475 Linebaugh		2d6+1	+1 STUN Multiplier
.50 Action Express. .52	12.7x32.64mm	2d6+1	+1 STUN Multiplier
.50 Browning	12.7x99mm, 12.7x107mm R	3d6	+1 STUN Multiplier
	13x64mm	3d6	+1 STUN Multiplier
.56, .57, .58	14.5x114mm	3d6+1	+1 STUN Multiplier
.60	15.2mm	3½d6	+1 STUN Multiplier
.69, .70, .75		4d6-1	+1 STUN Multiplier
*	20x80mm, 20x99mm, 20x128mm	4d6	+1 STUN Multiplier
*	25x184mm	4d6+1	+1 STUN Multiplier
*	30x113mm, 30x170mm	4½d6	+1 STUN Multiplier
*	35x228mm	5d6	+1 STUN Multiplier
*	40mm	5d6+1	+1 STUN Multiplier
*	45mm	5½d6	+1 STUN Multiplier
*	50x330mm	6d6	+1 STUN Multiplier
*	57mm	6d6+1	+1 STUN Multiplier
*	60mm, 66mm, 67mm	6½d6	+1 STUN Multiplier
*	76mm	7d6	+1 STUN Multiplier
*	83mm, 85mm, 88mm, 90mm	7d6+1	+1 STUN Multiplier
*	105mm	7½d6	+1 STUN Multiplier
*	120mm	8d6	+1 STUN Multiplier
*	127mm	8d6+1	+1 STUN Multiplier
*	140mm, 155mm	9d6	+1 STUN Multiplier

AMMUNITION KEY

ACP: Automatic Colt Pistol

LR: Long Rifle

N: NATO

P: Parabellum

R: Russian

SAUM: Short Action Ultra Magnum

S&W: Smith & Wesson

***:** Cannon rounds and larger ammunition; generally cannot be fired from small arms

AET

AET (accelerated energy transfer) bullets are high-tech rounds designed to dump as much of their energy into their target as quickly as possible. Standard AET rounds expand very quickly, similar to Hollow Points, but this in turn makes it difficult for them to penetrate armor or barriers. An example of an AET round is the Equalloy, a British bullet made of an aluminum alloy with a nylon coating. The Equalloy, which is about twice as long as a standard round and is intended primarily for use in revolvers, achieves high velocities but still expands very quickly when it hits a target and remains in the target's body.

In game terms, AET rounds do a little extra damage (from +1 point to +1 DC, depending on caliber) and have the Limitations *Reduced Penetration* (-¼) and *Cannot Be Bounced* (-¼).

AET COMPOSITE

AET Composite rounds were designed to overcome the penetration problems of the basic AET round. Typically they have a steel pin or other substance pressed into the center of the hollow in the bullet to allow for better penetration without affecting the wounding capabilities of the round. An example of an AET Composite round is the Geco BAT, a hollow copper alloy bullet with a plastic core and cap. The plastic parts fall away from the bullet after it is fired, leaving a "hollow" bullet to chew large wound channels through flesh without losing penetration capability. (The Geco is also designed to tumble, and may be bought as a Tumbler round (*q.v.*) intead if the character prefers.)

In game terms, AET Composite rounds do a little extra damage (from +1 point to +1 DC, depending on caliber) and have the Limitation *Cannot Be Bounced* (-¼).

ARMOR PIERCING

Armor Piercing ("AP") bullets are designed to penetrate armor more easily than conventional rounds. The downside to this is that they travel through targets easily, imparting less energy to them (thus possibly causing less damage); this also means they're more likely to pass through a target and cause collateral damage.

AP rounds are usually built with a hard core or tip and softer jacket. Modern AP bullets often have steel tips or cores, and are coated with Teflon so the hard metal can travel down the barrel with no loss of energy (or damage to the gun) and thus achieve high velocities.

In game terms, AP rounds do slightly less damage than Standard bullets (-1 point or -1 DC, depending on caliber) and have the *Armor Piercing* Advantage. See the variant AP, Improved AP, and Semi-AP rounds listed below for similar types of bullets.

ARMOR PIERCING DEPLETED URANIUM

Armor Piercing Depleted Uranium (APDU) are made with depleted (non-radioactive) uranium instead of other heavy metals. They resemble APHC (see below) in most ways, with one difference: when they penetrate metal Resistant Protection (such as on tanks and some automobiles), they strike sparks, and thus can start a fire.

Both the United States and Russia have manufactured APDU rounds for small arms, but have not introduced them for general service. Characters probably need high-level military Contacts, similar resources, or the ability and materials to manufacture their own if they want to use APDU ammo.

In game terms, APDU rounds do slightly less damage than Standard bullets (-1 point or -1 DC, depending on caliber), but have the *Armor Piercing* Advantage and 1 point of Piercing (Resistant Defenses) (see APG 113; if the GM doesn't allow Piercing in the campaign, treat APDU ammunition as if it were ordinary AP ammo). Additionally, they're bought with the following additional ability:

RKA 1 point, Constant (+½), Reduced Endurance (0 END to enable Uncontrolled effect; +½), Sticky (only affects flammables; +¼), Uncontrolled (effect ends when it runs out of fuel or oxygen, or someone extinguishes the flames; +½) (14 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Activation Roll 13- (-¼), Linked (-½), Only If APDU's RKA Does BODY Through Metal Resistant Protection (-1), Real Weapon (-¼), other Limitations vary based on firearm. Total cost: varies.

ARMOR PIERCING EXPLOSIVE

Armor Piercing Explosive (APEX) bullets combine armor piercing features with a small explosive charge, creating a round that penetrates armor well and then causes tremendous damage to the target. Realistically, they're available only in calibers of 10mm and larger (since smaller rounds can't pack enough explosive to matter), but in many campaigns it's possible to make any size round APEX.

In game terms, APEX rounds do slightly more damage than Standard bullets (from +1 point to +1 DC, depending on caliber) and have the *Armor Piercing* Advantage and the Limitation *Cannot Be Bounced* (-¼).

ARMOR PIERCING HARDCORE

Armor Piercing Hardcore (APHC) rounds are basically the same as AP rounds, but use tungsten (or other heavy metals) as their cores. In game terms, they do slightly less damage than Standard bullets (-1 point or -1 DC, depending on caliber), but have the *Armor Piercing* Advantage and 1 point of Piercing (Resistant) (see APG 113; if the GM doesn't allow Piercing in the campaign, treat APHC ammunition as if it were ordinary AP ammo).

ARMOR PIERCING HARDCORE EXPLOSIVE

Armor Piercing Hardcore Explosive (APHEX) bullets combine the features of APEX and APHC rounds. Realistically, they're available only in calibers of 10mm and larger (since smaller rounds

can't pack enough explosive to matter), but in many campaigns it's possible to make any size round APHEX.

In game terms, APHEX rounds do slightly more damage than Standard bullets (from +1 point to +1 DC, depending on caliber), have 1 point of Piercing (Resistant), and have the *Armor Piercing* Advantage (see APG 113; if the GM doesn't allow Piercing in the campaign, treat APHEX ammunition as if it were ordinary AP ammo).

ARMOR PIERCING INCENDIARY

Armor Piercing Incendiary (API) bullets are AP rounds with an incendiary charge. In game terms, they combine the features of AP rounds (slightly less damage and the *Armor Piercing* Advantage) with those of Incendiary rounds (firestarting).

ARMOR PIERCING SABOTED

As mentioned under AP rounds, the harder metal with which AP bullets are made can cause damage to gun barrels (which would also slow the bullet down and decrease its damage). Teflon coating overcomes this problem; so does putting the AP round in a sabot — a plastic container that falls apart as it exits the gun barrel. This means the round is a little smaller than other AP rounds of the same caliber (since the projectile has to be small enough to fit into the sabot), but the round's increased velocity makes it do just as much damage to the target. The projectile itself won't bear any rifling marks, making it impossible to match to the barrel forensically.

Because of the sabot, APS rounds can't be used in combat aircraft (the bits of plastic pose many hazards). The US Army refers to APS rounds as SLAP (Saboted Light Armor Piercing).

In game terms, APS rounds are like normal AP rounds, but also have the Advantage *Invisible Power Effects* (no rifling marks on bullet; +¼).

CASED TELESCOPED (CTA)

Cased Telescoped Ammunition, or CTA, rounds don't have conventional casings. Instead, the bullet is "telescoped" down into a cylindrical case. The case allows for a slightly larger bullet and a powerful propellant, resulting in a bullet that does more damage than others of the same caliber. The shape of round also makes it less likely to jam or cause similar problems. Depending on the casing, a CTA round may weigh as much as 30% less than a Standard round. However, because CTA rounds are slightly larger, a clip can't hold as many of them as it can of Standard rounds of the same caliber (and revolvers typically can't use them at all).

In game terms, CTA rounds do a little extra damage (from +1 point to +1 DC, depending on caliber). If subjected to the Optional Firearms Malfunction rules, CTA rounds have an Activation Roll 1 point higher than normal, to a maximum of 18- (for example, if a gun would normally have a Malfunction on a 13-, with CTA rounds it Malfunctions on a 14-). If characters keep track of the weight of their gear right down to bullets, CTA rounds weigh 70% of Standard rounds. However, characters must reduce the number of Charges of CTA they can fit into a magazine by 20% (round in the character's favor, but a minimum of -1 Charge).

CASELESS

A Caseless round does not have a metal jacket. Instead, its "case" is a block of propellant. This allows for a high rate of fire (since there are no shell casings to be ejected) and decreased chance of malfunction, and reduces the weight of the loaded weapon. As a side benefit for many vigilantes and criminals, the lack of case eliminates the possibility of shell casings being used as evidence.

In game terms, Caseless rounds do the same damage as Standard bullets and are bought as the Advantage *Invisible Power Effects* (no shell casings as evidence; +¼). They weigh about 30% less than Standard rounds. If subjected to the Optional Firearms Malfunction rules, Caseless rounds have an Activation Roll 2 points higher than normal, to a maximum of 18- (for example, if a gun would normally have a Malfunction on a 13-, with Caseless rounds it Malfunctions on a 15-).

DUPLEX

A Duplex bullet looks like a single bullet but contains two smaller, lighter projectiles in one casing. The two rounds separate in flight. (Some Triplex bullets, with three projectiles, have also been made.)

In game terms, a Duplex (or Triplex) bullet does slightly increased damage (from +1 point to +1 DC, depending on caliber) and has the *Reduced Penetration* (-¼) Limitation.

ELECTRIC

Electric rounds (still experimental as of mid-2010) are designed to incapacitate rather than kill. They have a disk of piezoelectric material that releases a 50,000-volt electrical charge on contact — enough to stop nearly anyone.

Electric rounds can be Standard or Rubber. In game terms, the Electric bullet is an NND attack Linked to the RKA or Blast of the bullet:

For firearms whose base attack is less than 80 Active Points: *Blast 8d6, NND (defense is insulated rED; +1) (80 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Beam (-¼), Linked (-¼), Real Weapon (-¼), other Limitations vary based on firearm. Total cost: varies.*

For firearms whose base attack is greater than than 80 Active Points: *Blast 8d6, NND (defense is insulated rED; +1) (80 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Beam (-¼), Linked (-½), Real Weapon (-¼), other Limitations vary based on firearm. Total cost: varies.*

EXPLOSIVE

Explosive bullets come in two types, each with the same effect in game terms. The first, more properly referred to as a "liquid-filled" bullet, has a hollow tip containing mercury, oil, grease, wax, or some other liquid or semi-liquid substance. Firing the bullet compresses the liquid to the back of the hollow. Upon impact, the substance vaporizes and "explodes" outward, causing large wounds. The other type actually contains an explosive substance, such as lead azide, which explodes upon impact (though it may fail to explode; an explosion is more likely if the bullet impacts bone).

In game terms, Explosive bullets do extra damage (from +1 point to +1 DC, depending on caliber). (For greater "realism," buy the +1 DC separately with an Activation Roll 11-.)

FIBERGLASS/PLASTIC

Fiberglass/Plastic bullets do the same damage as normal lead bullets. However, they're much harder to detect on an x-ray or during an autopsy.

In game terms, Fiberglass/Plastic rounds are like Standard rounds, but also have the Advantage *Invisible Power Effects* (hide cause of death, imposes a -3 penalty to Forensic Medicine or PS: Read X-Rays rolls; +¼).

FLECHETTE

Flechettes are small metal darts. While they're most often used in specialized shotgun shells (see below) or grenades, some bullets containing a single flechette have been manufactured. Typically they're fired in sabots which peel away after firing. Because of its light weight, a flechette can travel much further than ordinary bullets. Because of its shape, it pierces armor with ease (and after impact it often bends like a fishhook, causing the fins to hit the target and inflict another wound). Additionally, Flechettes can easily be Poisoned (see below).

In game terms, Flechettes do a little extra damage (from +1 point to +1 DC, depending on caliber) and have the Advantages *Armor Piercing* (+¼), *Invisible Power Effects* (no rifling marks on projectiles; +¼), and *Increased Maximum Range* (x2 normal range; +¼).

FRANGIBLE

Frangible bullets are bullets that either (a) contain multiple projectiles which are released upon impact, or (b) fragment upon impact with the target. Either variety causes tremendous damage to the target. However, because they "break" upon impact this way, Frangible bullets can easily be deflected by glass, windshields, wallboard, and many other substances. This makes them popular with some law enforcement units because of the low possibility of collateral damage from ricochets.

Examples of Frangible bullets include: the Glaser Blue Safety Slug (containing 300-500 pellets of No. 12 birdshot); the MagSafe SWAT round; Razor-Ammo (a bullet using both a fragmenting space-age polymer and No. 4 birdshot pellets); the Spartan (which is composed of polymer and lead dust molded into the shape of a bullet); and the Thunderzap (a plastic frangible round). The Beehive/Core-Shot bullet is a slightly less effective Frangible round (subtract 1 DC).

Frangible bullet statistics can also be used for some flechette-based pistol rounds, such as bullets which contain multiple semi-stabilized flechettes that are released from the bullet at the point of impact.

In game terms, Frangible bullets do extra damage (typically +2 DCs), but take several Limitations: Cannot Be Bounced (-¼), Reduced Penetration (-¼), and No Effect Through Barriers (-¼).

GYROJET

Gyrojet rounds are essentially miniature rockets: they contain a load of fuel that propels the bullet once ignited. However, a character needs a special gun to fire Gyrojets; they can't be used in standard firearms. The gun ignites the bullet and then recocks itself as the bullet leaves the chamber. The entire bullet leaves the gun; there's no case to be ejected. Gyrojets travel further than standard bullets, and stabilize firing due to the lack of recoil. Because they're self-contained, they can be fired underwater.

In game terms, Gyrojet rounds do standard damage, but have the Advantages *Invisible Power Effects* (no shell casings as evidence; +¼) and *Increased Maximum Range* (x2 normal range; +¼). If subjected to the Optional Firearms Malfunction rules, Gyrojet rounds have an Activation Roll 2 points higher than normal, to a maximum of 18- (for example, if a gun would normally have a Malfunction on a 13-, with Gyrojet rounds it Malfunctions on a 15-). If the GM uses the optional Recoil rules (*Dark Champions*), Gyrojet guns do not suffer any Recoil penalties for taking multiple shots.

HOLLOW POINT

Hollow Point ("HP" or Dum Dum) bullets have the tip of the metal jacket cut away, exposing the lead core beneath. This causes the bullet to "mushroom," or expand quickly, when it hits the target, creating large wounds. The lead core inside may be shaped or notched so as to improve the bullet's expansion. Examples of Hollow Points include the Winchester Silvertip, Federal Hydra-Shok, the Starfire, the Remington Golden Saber, and the CCI-Speer Gold Dot.

An interesting variation on the standard HP is a bullet in which the jacket is also used to injure the target. With these bullets, such as the Winchester Black Talon, the jacket of the Hollow Point bullet is designed to peel back into sharp edges which cut flesh as the bullet expands. In game terms, these typically function the same as standard HP rounds, but the GM may add +1 pip of damage if desired.

Characters can make crude HP rounds by cutting notches in the noses of ordinary bullets. These bullets gain +1 pip of damage (at most) instead of the +1 DC most HPs get.

In game terms, HP rounds do a little extra damage (from +1 point to +1 DC, depending on caliber) and have a +1 Increased STUN Multiplier (in addition to any from caliber).

HYBRID FRANGIBLE/HOLLOW POINT

Hybrid Frangible/Hollow Point bullets combine the best features of the HP and Penetrating Frangible rounds. As the bullet expands, it breaks apart into deadly fragments, inflicting terrible wounds. Examples include the Triton Quik-Shok (which breaks apart into three large fragments) and the Omega Star (which contains a solid rear core, and a front core composed of Nos. 2 and 4 birdshot).

In game terms, Hybrid Frangible/HP rounds do extra damage (as much as +2 DCs) and have the Advantages *Penetrating* (+½) and *+1 Increased STUN Multiplier* (+¼) (in addition to any from caliber) and the Limitation *Cannot Be Bounced* (-¼).

IMPROVED ARMOR PIERCING

Improved Armor Piercing rounds have even greater armor-penetrating effect than normal AP rounds, but this causes them to impart even less energy to their target and hence do less damage as well.

In game terms, Improved AP rounds do less damage than Standard bullets (as much as -2 DCs, depending on caliber) and have the *Armor Piercing* (x2; +1) Advantage.

INCENDIARY

Incendiary rounds contain a small incendiary charge which ignites upon impact. Any flammable materials struck by the bullet are set on fire. A living victim may take fire damage in the Segment after being shot (and nothing more after that), or he may take no additional damage at all (the GM decides). Flammable objects the victim wears or carries may catch fire, causing him to take further damage in later Segments.

In game terms, Incendiary bullets do the same damage as Standard rounds, but have the following additional effect:

RKA 1 point, Constant (+½), Reduced Endurance (0 END to enable Uncontrolled effect; +½), Sticky (only affects flammables; +¼), Uncontrolled (effect ends when it runs out of fuel or oxygen, or someone extinguishes the flames; +½) (14 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Activation Roll 13- (-¼), Linked (-½), Real Weapon (-¼), other Limitations vary based on firearm. Total cost: varies.

PENETRATING FRANGIBLE

Penetrating Frangible bullets are designed to overcome the Frangible bullet's inability to shoot through barriers. They penetrate further into the target before releasing their load or fragmenting. Examples of Penetrating Frangible rounds include: the Glaser Silver Safety Slug (containing No. 6 birdshot); the LeMas Ltd. "Blended Metal Technology" bullet (which supposedly penetrate hard materials like armor easily, but fragment rapidly and very destructively when they hit soft materials like flesh or drywall); and the MagSafe Defender and MAX rounds (containing No. 2, 3, or 4 birdshot embedded in epoxy).

In game terms, Penetrating Frangible bullets do extra damage (typically +2 DCs) and have the Advantage *Penetrating* (+½). They do not take the three Limitations imposed upon standard Frangible rounds.

REVERSED OGIVE

Reversed Ogive bullets (also called THV ammunition) have a special concave cutting edge. This not only allows the bullet to achieve very high velocities, it imparts an armor-piercing effect *and* allows the bullet to transfer more of its energy to the target via increased hydrostatic shock.

In game terms, Reversed Ogive bullets bullets do +2 DCs damage and have the Advantages *Armor Piercing* (+¼) and *+1 Increased STUN Multiplier* (+¼) (in addition to any from caliber).

RUBBER

Rubber bullets are non-lethal rounds intended for use against rioters, prisoners, and other targets the shooter wishes to disable but not kill. However, note that the term "non-lethal" does not mean harmless — Rubber bullets can break bones and cause other serious injuries, depending on where they hit.

In game terms, Rubber bullets do Normal Damage instead of Killing Damage, with the same DCs as the RKA for their caliber.

SEMI-ARMOR PIERCING

A Semi-AP round is better than Standard ammunition, but worse than true AP rounds, when it comes to penetrating armor. Typically they have a steel insert, or a specially-shaped nose, to achieve the semi-AP effect.

In game terms, Semi-AP rounds do the same damage as Standard rounds and have 2 points of Piercing (Resistant) (see APG 113; if the GM doesn't allow Piercing in the campaign, treat Semi-AP as if it were Standard ammo).

SILENT

These unusual bullets have an internal piston that traps the expanding gases from the exploding propellant and propels the bullet. As a result, noise, muzzle flash, and smoke are all considerably reduced, making it much more difficult than normal to perceive the shooter.

In game terms, Silent bullets do the same damage as Standard, but have the following additional power:

Change Environment, -3 to Hearing Group PER Rolls and -1 to Sight Group PER Rolls to perceive (12 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Linked (-½), No Range (-½), Real Weapon (-¼), Self Only (-½), other Limitations vary based on firearm. Total cost: varies.

FICTIONAL BULLETS

Don't feel that you have to limit yourself to real-world forms of ammunition if your campaign welcomes a touch of the fantastic. Some fictional bullets that might be appropriate for some games include:

Anti-Vampire Bullets, which are like liquid-filled Explosive bullets, except that the liquid is holy water or garlic juice. The holy water version's also good for use against demons and similar entities that can't stand the touch of holy things.

Blessed Bullets, bullets specially blessed by a priest so that they have "holy" properties.

Silver Bullets, just the thing for taking down werewolves or pretending to be the Lone Ranger.

Tranq Bullets, high-tech tranquilizer darts in a sabot so they can be fired from a regular firearm. They could contain poison, various drugs, or the like instead of knockout juice.

Wooden Bullets, whose projectiles are made from hardened wood instead of lead so that they affect vampires just as if they were wooden stakes... provided the character shoots the vampire through the heart, of course.

SPENT URANIUM

Spent Uranium bullets are made from depleted (non-radioactive) uranium, which is heavier than lead. As such, the same amount of powder that would be used with a lead bullet makes an SU bullet move more slowly — but it has greater momentum, meaning better armor penetration and more energy transference when it hits the target.

In game terms, Spent Uranium rounds do the same damage as Standard bullets, but have the Advantages *Armor Piercing* (+¼) and *+1 Increased STUN Multiplier* (+¼) (in addition to any from caliber).

TUMBLER

Unlike other bullets, which are designed to spin along their long axis and hence fly straight, Tumbler bullets tumble end-over-end towards the target. This makes the round tear into the target and ricochet around inside him, causing grievous internal wounds.

The "tumbling" effect is most easily achieved with high-velocity Standard rounds (*i.e.,* rifle rounds, not handgun rounds), and is created by decreasing the barrel-twist rate (to, *e.g.,* 1-in-14, meaning one twist to 14 inches of barrel). This is a function of gun design, not ammunition design; Tumbler is listed here because it involves changing the flight of the bullet and requires a choice of ammunition.

One drawback to Tumbler rounds is that they're less accurate than normal bullets, particularly in cold weather (-1 OCV). This is a -0 Side Effect.

In game terms, the Tumbler does the same damage as Standard bullets, but with the "Tumbler effect" added in:

RKA +1d6 (15 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Activation Roll 11- (-½), Does Not Work If Bullet Is Bounced (-0), Only Applies If Bullet's Ordinary Damage Does BODY Damage (-½), Real Weapon (-¼), Side Effects (-1 OCV in cold weather, always occurs; -0), other Limitations vary based on firearm. Total cost: varies.

Of course, the target does not get to apply his defenses to this +1d6, since the initial attack has already penetrated his defenses.

BULLET MODIFICATIONS

There are several ways to modify existing bullets. In some cases these modifications only work with certain types of bullets; others work with all types. The examples given in the Ammunition Summary Table assume a Standard round.

IMPROVED PROPELLANT

Improved Propellants rounds are bullets made with improved powders. Improving the powders and propellants makes a bullet travel faster — sometimes as much as 200-300 fps (feet per second) faster.

In game terms, bullets with Improved Propellant add +1 Damage Class of damage to a bullet.

MAGNUM

Magnum is a trademarked name for certain kinds of bullets which contain more gunpowder, and thus have greater pressure and energy than normal rounds. This causes them to do more damage than an ordinary bullet of the same size. However, this means the weapons which fire them have to be heavier, to contain the force they generate when fired — a magnum gun can fire ordinary bullets, but an ordinary gun cannot fire magnum rounds without risk of an explosion or similar problems (decrease the chances for a Malfunction by 1; for example, if the Activation Roll for a Malfunction were normally 15-, in this case it becomes 14-).

In game terms, some of the ammunition listed on the Standard Ammunition Damage Table is Magnum, and this is reflected in the damage done. Magnum rounds cannot be made +P or +P+.

MATCH-GRADE

A character can increase the accuracy of a particular gun through careful experimentation to determine the optimum round (in terms of projectile and propellant mix) for it. This requires the *Weaponsmith* Skill; characters can't buy Match-Grade ammunition "off the shelf."

In game terms, only Standard rounds and the various forms of Armor Piercing ammunition can be made Match-Grade, which is bought as a +1 OCV bonus for a firearm.

+P AND +P+

+P and +P+ rounds are made by increasing the charge and pressure in a bullet while typically making the bullet somewhat smaller than normal. This results in a projectile which flies faster than normal and hits with greater energy. Furthermore, the lighter projectile stops more quickly when it hits its target, thus transferring more of its energy into the target.

In game terms, only Standard and Hollow Point rounds can be made +P or +P+. Either adds +1 point of damage to the gun's RKA. Magnum rounds cannot be made +P or +P+.

POISONED

Poisoned bullets are simply normal bullets coated with cyanide, arsenic, or some other type of poison. Even the smallest bullet can carry enough of a potent poison to kill someone, and even an otherwise trivial flesh wound is enough to introduce it into the target's system.

Thus, even if they only cause a small wound, the victim can still die. These bullets are purchased by buying an appropriate poison with the Limitation *Bullet Must Do BODY* (-½). For example:

RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (five increments, one per Minute for 5 Minutes, defense only applies once; +1½) (67 Active Points [the addition of other Advantages, such as Charges, may change this]); Bullet's RKA Must Do BODY (-½), Extra Time (onset time begins 1 Minute after victim is shot; -1½), other Limitations vary based on firearm. Total cost: varies.

SUBSONIC

Subsonic rounds are designed for use in silenced weapons; they are not, by themselves, silent. They travel slower than the speed of sound, so they do not create the distinctive "crack" typical bullets do when they break the sound barrier. They do approximately 75% of the damage of regular bullets of the same type. The example given in the chart is a Standard bullet; other types of bullets can also be made Subsonic.

In game terms, the typical Subsonic bullet does slightly less damage than a Standard round (-1 point or -1 DC, depending on caliber).

TRACER

Tracer rounds contain chemicals which ignite when the bullet is fired, causing the bullet to glow and "trace" a path to the target, making it easier to correct aim to hit that target. They work best at night or in the dark, but are bright enough for daytime use. Similar to the Tracer is the Observation bullet, which emits a puff of smoke and a flash when it hits.

One drawback to Tracers is that they give away the shooter's position. Two variants correct that problem. The first is *dark ignition tracers,* which don't "light up" until they've traveled a hundred yards or more. The second is *dim tracers,* which glow in infrared and thus are only visible to personnel wearing nightvision goggles or the like.

In game terms, the Tracer effect can be combined with most other bullet types (though not with any type of Frangible round). It's bought as a +1 OCV bonus with the standard Limitations, plus *Cannot Apply To First Shot Against A Target* (-½). This means the shooter can't use the Level for his first shot against a given target, or to any subsequent shots that he takes in Phases after Phases in which he didn't fire at that target (in other words, he has to maintain a continuous "stream" of fire at the chosen target, firing at least once per Phase, to keep using the Level). The shooter only gets +1 OCV no matter how many bullets he fires, not +1 OCV per bullet.

WADCUTTER

Wadcutter rounds are regular bullets with flat noses instead of the usual rounded nose. They tend to cut larger holes in the target. However, the flat nose may cause feed problems with automatic or semi-automatic guns (reduce Activation Roll to jam by 1).

In game terms, only Standard, CTA, Caseless, Gyrojet, Incendiary, and Spent Uranium rounds can be Wadcutters; Wadcutter can be combined with Subsonic or Tracer. A Wadcutter round does

AMMUNITION SUMMARY TABLE

Ammunition Type	.32, .22	.40, .38	.41 M, 9mm	.45 ACP, 10mm	.44 M, 11mm*	.223, .45 WM*	.50 AE, 5.56mmN*	7.62mmN*	Notes
Standard	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	
AET	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	RP, CBB
AET Composite	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	CBB
Armor Piercing	½d6	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	AP
AP Depleted Uranium	½d6	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	AP, Piercing 1, firestarting
AP Explosive	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	AP
AP Hardcore	½d6	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	AP, Piercing 1
AP Hardcore Explosive	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	AP, Piercing 1
AP Incendiary	½d6	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	AP, firestarting
AP Saboted	½d6	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	AP, IPE (no rifling marks)
Cased Telescoped Ammunition	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	Slightly larger than normal
Caseless	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	IPE (no shell casings)
Duplex	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	RP
Electric	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	Linked Blast 8d6, NND
Explosive	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	
Fiberglass/ Plastic	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	IPE (-3 to Forensic Medicine)
Flechette	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	AP, IPE (no rifling marks), IMR2
Frangible	1d6+1	1½d6	2d6	2d6+1	2d6+1	2½d6	2½d6	3d6	RP, CBB, Not Through Barriers
Gyrojet	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	IPE (no shell casings), IMR2
Hollow Point	1d6	1d6+1	1½d6	2d6	2d6	2d6+1	2d6+1	2½d6	+1 STUN Multiplier
Hybrid Frangible/Hollow Point	1d6+1	1½d6	2d6	2d6+1	2d6+1	2½d6	2½d6	3d6	+1 STUN Multiplier, Penetrating, CBB
Improved Armor Piercing	½d6	½d6	1d6-1	1d6-1	1d6	1d6	1½d6	2d6-1	AP(x2)
Improved Propellant	1d6+1	1d6+1	1½d6	2d6-1	2d6	2d6+1	2d6+1	2½d6	
Incendiary	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	Firestarting
Match-Grade	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	+1 OCV
+P, +P+	1d6	1d6+1	1d6+2	1½d6+1	2d6	2d6+1	2d6+1	2d6+2	
Penetrating Frangible	1d6+1	1½d6	2d6	2d6+1	2d6+1	2½d6	2½d6	3d6	Penetrating
Poisoned	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	Carries poison
Reversed Ogive	1d6+1	1½d6	2d6	2d6+1	2d6+1	2½d6	2½d6	3d6	AP, +1 STUN Multiplier
Rubber	2d6 N	3d6 N	4d6 N	5d6 N	6d6 N	6d6 N	6d6 N	7d6 N	
Semi-Armor Piercing	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	Piercing 2
Silent	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	CE (-3 Hearing, -1 Sight)
Spent Uranium	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	AP, +1 STUN Multiplier
Subsonic	½d6	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	Moves at subsonic speeds
Tracer	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	+1 OCV
Tumbler	1d6-1	1d6	1d6+1	1½d6	2d6-1	2d6	2d6	2d6+1	RKA +1d6, Act 11-
Wadcutter	1d6	1d6+1	1d6+2	1½d6+1	2d6	2d6+1	2d6+1	2d6+2	

AMMO KEY

Listed damage is Killing Damage (unless followed by an N, signifying Normal Damage).

***:** These rounds gain a +1 STUN Multiplier from size in addition to other listed effects

Act: Activation Roll

AP: Armor Piercing (the Advantage)

CBB: Cannot Be Bounced

CE: Change Environment

IMR2: Increased Maximum Range (x2)

IPE: Invisible Power Effects

M: Magnum

N: Normal Damage

NND: No Normal Defense

Piercing1: 1 point of Piercing (Resistant)

RP: Reduced Penetration

Semi-AP: Semi-Armor Piercing

WM: Winchester Magnum

+1 point of damage. If subjected to the Optional Firearms Malfunction rules, Wadcutter rounds have an Activation Roll 1 point lower than normal (for example, if a gun would normally have a Malfunction on a 13-, with Wadcutter rounds it Malfunctions on a 12-).

Shotgun Ammunition

Shotguns are smoothbore guns — that is, their barrels aren't rifled, so the projectiles they fire don't spin the way bullets do. Instead of bullets, they fire shells. Most shells contain shot (lead pellets). The size of the pellets varies depending on the gauge of the shotgun (the larger the gauge, the smaller the shot). Shot size is ranked from #1 to #9, #1 being the largest. Buckshot, a type of shot which is larger than normal, is ranked from BB to 000. 00 ("double-ought") buckshot in a 12-gauge shell is the most common combat shot round. Other gauges include .410 (actually a caliber measurement), 28, 20, 16, 10, and even 4 for some combat shotguns.

A 12-gauge shotgun loaded with 00 buckshot fires nine pellets, each with about the same energy as a .32 bullet. This blast of multiple projectiles makes the shotgun a devastating combat weapon at close range — the shot inflicts tremendous damage. However, the further one gets from the shotgun, the more the shot spreads (in a roughly circular pattern) and the more energy it loses, making the shotgun a relatively poor weapon at long ranges. By about 40 meters for most shotguns, the pattern has spread so much that the chance of scoring a disabling wound is comparatively slight (especially if the target has cover, wears body armor, or the like).

The spread on shot varies according to barrel length (the shorter the barrel, the faster the spread) and "choke" (the amount of restrictions reducing the barrel's diameter at its end). Some chokes are "shot diverters" that can cause shot to spread in a more rectangular or oval pattern, or "shot spreaders" that create greater spread. Some chokes are adjustable, allowing the user to vary the spread from one pull of the trigger to another. Some types of shot (such as cubic shot) can also affect the spread pattern.

SHOTGUNS IN THE HERO SYSTEM

In *HERO System* terms, a shotgun has most of the standard Limitations described on page 68 for all firearms (OAF, STR Minimum, Real Weapon, and Charges), and also has the Advantage *+1 Increased STUN Multiplier* (+¼) and the Limitation *Two-Handed* (-½). For game purposes, you should design shotguns as being intended to fire shot, though of course they can fire slugs or other rounds if necessary. If a character wants to carry and shoot the other type of ammunition, you can use the Firearms Cost/Upgrade Tables on page 111 to determine the cost.

SHOTGUN BORES

The method used to determine gauges for shotguns is a traditional system that's centuries old. Basically, "gauge" means the number of lead balls with a diameter equal to the bore of the shotgun needed to make one pound of that size ball. For example, a 10-gauge shotgun has a bore whose size is such that 10 lead balls of that diameter weigh one pound.

For reference purposes, here's the nominal measurement of the bore of barrels of different gauge shotguns.

4 gauge = .905 inch

10 gauge = .775 inch

12 gauge = .729 inch

16 gauge = .662 inch

20 gauge = .615 inch

24 gauge = .580 inch

28 gauge = .550 inch

.410 bore = .410 inch

In addition to the Power Modifiers listed below for shot and slugs, a shotgun may have other Advantages and Limitations, depending on the type of shot or slug used.

DOUBLE-BARRELLED SHOTGUNS

Some types of shotguns, primarily ones intended for hunting, have two barrels (usually mounted side-by-side). They're typically "break-fed" — they open using a hinge on the bottom of the barrel near the trigger, allowing the shooter to insert one shell into each of the two barrels (in game terms, this would be bought as a clip of 2 Charges). Usually each of the barrels has its own trigger. This raises the possibility of a character pulling both triggers at once, and thus shooting an enemy with a double blast. In game terms, characters should buy such shotguns with Autofire (2 shots; +¼) and the Limitation *Both Shots Must Be At The Same Target* (-0). That way they don't have to use both barrels at once, but they can if they feel like it.

SHOTGUNS AND HIT LOCATIONS

Shotguns use the standard Hit Location rules. For shot, this can represent the part of the target's body that gets hit by the most pellets, or which bears the brunt of the shotgun blast.

SHOTGUN AMMUNITION TYPES

Here are descriptions of the many types of shotgun ammunition available to characters. For information on the cost of these shells and slugs, by gauge (and accounting for Charges and other factors), refer to the Firearms Cost/Upgrade Tables, pages 111.

STANDARD SHOT

The basic description of shotguns, above, also describes shot. In game terms, a shotgun that fires shot does not take the *Beam* Limitation. However, it does have the Limitations *Limited Range* (40m; -¼), *Reduced By Range* (-¼) and *Reduced Penetration* (-¼).

Shot takes the Advantage Area Of Effect (1m Radius; +¼). Depending on the type of shot and choke used and the distance to the target, the spread pattern ranges from approximately five inches to 58 inches. In game terms, the best way to simulate this is with a 1m Radius Area Of Effect, which reflects both the spread of the shot and the relative ease of hitting a target at close quarters. At the GM's option, shots at targets within 20m of the shooter do not get the 1m Radius effect; they only affect one target and are against his standard DCV instead of DCV 3.

For game purposes, assume a shotgun firing shot has no choke or a cylinder choke (the least restrictive type). For guns with improved, modified, or full chokes (or variable chokes used on those "settings"), the GM should increase the Limited Range of the shotgun by +2m, +4m, and +6m respectively — but add the same amount to the distance over which the character does not get the benefit of the 1m Radius Area Of Effect, since the choke inhibits the spread of the pellets. (At the GM's option, shotguns loaded with buckshot — *i.e.,* virtually all shot-firing shotguns characters are likely to use — all function as if the character used a full choke.)

The damage listed for shotguns in this book and other *HERO System* books assumes the gun is loaded with 00 buckshot. If the shell contains smaller shot, reduce the damage to 50-75% of that listed.

STANDARD SLUG

Some shells fire not shot, but *slugs* — a single, large, roughly bullet-shaped mass of metal. Slugs don't spread out the way shot does, but their size and force make them extremely lethal. However, since they're not fired from rifled barrels, they're not nearly as accurate as rifles.

In game terms, slugs have the *Beam* (-¼) Limitation, but not Reduced By Range or Reduced Penetration. They also have the Limitation *Limited Range* (100m; -¼).

AIR BOMB

Air Bomb shells explode in mid-air near the target. They're designed to stun, injure, and incapacitate the target more than to kill.

In game terms, an Air Bomb shell is bought as a Blast (with DCs equivalent to those in a Killing Attack shell of the same size), Area Of Effect (1m Radius; +¼) with the following Linked effect:

> *Sight and Hearing Group Flash 3d6, Area Of Effect (1m Radius; +¼) (25 Active Points); OAF (-1), Limited Range (40m; -¼), Linked (-½), Real Weapon (-¼), Two-Handed (-½), other Limitations vary based on firearm. Total cost: varies.*

ARMOR PIERCING SLUG

Armor Piercing Slugs are slugs specially designed to penetrate armor.

In game terms, Armor Piercing Slugs have the *Armor Piercing* (+¼) Advantage, but do slightly less damage than Standard Slugs (from -1 point to -1 DC, depending on gauge).

BATON/BEANBAG

Baton rounds are solid projectiles made of plastic, rubber, or wood designed to stun a target without inflicting serious harm. Beanbag projectiles are similar, but fire a small, sturdy beanbag filled with metal or rubber shot. Although intended to be non-lethal, these rounds can still cause serious injury or disability; a leg shot might, for example, cause numbness and pain that would prevent the target from walking for as much as a minute.

In game terms, these rounds are bought as a Blast with DCs equivalent to those in a Killing Attack shell of the same size. They don't have Reduced By Range and Reduced Penetration, but do take the *Beam* (-¼) Limitation. They have a Limited Range of 40m.

BRI SLUG

BRI slugs are more like bullets than standard shotgun slugs. This construction is intended to increase their range and accuracy.

In game terms, BRI Slugs do not have the *Limited Range* (-¼) Limitation.

BUFFERED SHOT

Buffered shot is designed to spread less than regular shot, which slightly extends the range of shot and makes it likely that more pellets hit the target.

In game terms, buffered shot changes a shotgun's Limited Range from 40m to 60m and removes the *Area Of Effect* (1m Radius; +¼) Advantage. The gun does a little extra damage (from +1 point to +1 DC, depending on gauge).

CUBIC SHOT

Cubic Shot shells fire pellets that are cube-shaped instead of round. The cubic shot maximizes the spread of the pellets so that a target is hit. (Some shells achieve the same result by mixing small cards into ordinary shot.)

In game terms, a shotgun firing Cubic Shot has Area Of Effect (16m Cone; +½) instead of 1m Radius, and replaces the *Limited Range* (-¼) Limitation with *No Range* (-½).

EXPLOSIVE SLUG

Explosive slugs explodes upon impact with the target, causing enormous damage. A properly-placed Explosive Slug can take out everyone in a small room or a car in one shot.

In game terms, an Explosive Slug is bought as if it were a slug, but it has the *Area Of Effect* (4m Radius Explosion; +¼) Advantage and the *Beam* (-¼) Limitation is removed. It affects ED, not PD.

FIREBALL

Fireball, or Incendiary, shells contain magnesium or some other flammable material that bursts into flame when it contacts the target, immolating him or it for several seconds.

In game terms, Fireball shells do the same damage as Standard Shot (though against ED rather than PD), but have the following additional effect:

RKA 1 point, Constant (+½), Reduced Endurance (0 END to enable Uncontrolled effect; +½), Sticky (only affects flammables; +¼), Uncontrolled (effect ends when it runs out of fuel or oxygen, or someone extinguishes the flames; +½) (14 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Activation Roll 13- (-¼), Linked (-½), Real Weapon (-¼), other Limitations vary based on firearm. Total cost: varies.

FLARE

Flare shells are something like Fireball shells, but are intended to blind the target temporarily, not injure him.

In game terms, a Flare shell is bought as a Sight Group Flash (with dice of effect equal to the RKA of the same gauge) with the Advantage *Area Of Effect* (4m Radius Explosion; +¼). It has a Limited Range of 40m.

FLECHETTE

Flechette shells are filled with tiny metal darts. The flechettes in this shell are bigger and stronger than those in a bullet, and fly further than standard buckshot. At close range Flechette shells are extremely lethal. (Similar rounds replace the metal darts with razor-like blades, circles or tubes of metal with sharpened forward edges, or the like.)

For game purposes, treat Flechettes as if they were Standard Shot with a Limited Range of 100m, but they do a little extra damage (from +1 point to +1 DC, depending on gauge) and have the Advantage *Armor Piercing.*

ICE

Ice shells are used by assassins who want to kill without leaving traces. The impact of the ice-filled shell is still enough to kill, but the ice soon melts, leaving the exact cause of the injuries a mystery. Of course, this only works if the shooter can use the shell very soon after removing it from the freezer, or else the ice in the shell melts, making it unusable.

In game terms, Ice shells are like Standard Shot, but also have the Advantage *Invisible Power Effects* (hide cause of death, imposes a -3 or greater penalty to Forensic Medicine rolls; +¼).

LINKED SHOT

Linked shot uses steel wire to connect the shot, thereby in theory inhibiting the spread and ensuring that more pellets hit their target. However, the greater air resistance slows the shot down, and the wire takes up room in the shell that would otherwise contain more pellets. Buffered shot accomplishes much the same result without these drawbacks.

In game terms, Linked shot does slightly less damage (from -1 point to -1 DC, depending on gauge), changes a shotgun's Limited Range from 40m to 60m, and removes the *Area Of Effect* (1m Radius) Advantage.

LOCKBREAKER

Lockbreaker rounds, also known as "lock-buster" or "Hatton" shells, are filled with lead or iron powder. When fired at a lock, they destroy the lock's internal workings, allowing the shooter (or his companions) to quickly pull or kick open the door. Its effects upon humans are not as great as those of ordinary shotgun shells.

In game terms, Lockbreaker shells do the same damage as Standard Shot, but take the Limitation *Half Effect On Targets Other Than Locks And Hinges* (-½). This halving of damage takes place before the application of Reduced Penetration, but after the application of Reduced By Range.

RUBBER SHOT

Rubber Shot shells were invented for anti-riot purposes. They're designed to stun the target with several .30 caliber rubber pellets. Although intended to be non-lethal, these rounds can still cause serious injury or disability; a leg shot might, for example, cause numbness and pain that would prevent the target from walking for as much as a minute.

In game terms, these rounds are bought as Standard Shot, but as a Blast with DCs equivalent to those in a Killing Attack shell of the same size.

SABOTED SLUG

Some slug shells contain the slug in a sabot. This means the slug is smaller than it otherwise could be, but it can attain greater velocity. Its shape and speed give it significant penetrating power, and also make it likely to tumble.

In game terms, a saboted slug functions like a Standard Slug, but with 1 point of Piercing (Resistant) (see APG 113; if the GM doesn't allow Piercing in the campaign, treat Semi-AP as if it were Standard shotgun rounds). Characters can also buy the Tumbling effect (page 94) for it if desired (the sample rounds listed elsewhere in this book do not have the Tumbling effect).

SEMI-ARMOR PIERCING SLUG

Semi-Armor Piercing Slugs are like AP Slugs, but have slightly less penetrating capability.

In game terms, Semi-Armor Piercing Slugs have 2 points of Piercing (Resistant) (see APG 113; if the GM doesn't allow Piercing in the campaign, treat Semi-AP as if it were Standard shotgun rounds).

SILENT

Silent shells are constructed so that the expanding gases that propel the round (a large metal and plastic flechette) forward are trapped inside the shell, which acts as a sort of "ram" to propel the flechette toward the target. Because the gases cannot escape properly, the shotgun is much quieter. A Silent round has to be relatively low-powered, and therefore (a) does slightly less damage than standard shells, and (b) cannot be fired in semi-automatic shotguns because it cannot cycle the action.

In game terms, Silent shells do slightly less damage (from -1 point to -1 DC, depending on gauge) than Standard Slugs and have less range (60m), but have the Armor Piercing (+¼) Advantage. They also have the following additional power:

Change Environment, -3 to Hearing Group PER Rolls and -1 to Sight Group PER Rolls to perceive (12 Active Points [the addition of other Advantages, such as Charges, may change this]); OAF (-1), Linked (-½), No Range (-½), Real Weapon (-¼), Self Only (-½), STR Minimum (varies), other Limitations vary based on firearm. Total cost: varies.

SMOKE

Smoke shells are miniature smoke grenades. Instead of injuring the target, they create a large cloud of thick smoke to blind the enemy, create temporary visual cover, or the like.

In game terms, Smoke shells of any gauge are bought as follows:

Change Environment (create smoke), -3 to Sight Group PER Rolls, Area Of Effect (8m Radius; +½) (18 Active Points); OAF (-1), Limited Range (40m; -¼), Real Weapon (-¼), STR Minimum (varies), a number of Continuing Charges lasting 1 Turn each that depends on the type of shotgun used. Total cost: varies.

STEEL SHOT

Some shot is made from steel instead of lead. Steel shot typically deforms less and spreads less than lead shot, and thus shoots with a denser pattern.

In game terms, Steel Shot does the same damage as Standard Shot, but does not have the *Area Of Effect* (1m Radius; +¼) Advantage, and its Limited Range increases to 60m.

TEAR GAS

Tear Gas shells fire finned projectiles that contain tear gas. They're used for riot control and other situations where the shooter needs to incapacitate people. The shell is specifically designed to penetrate walls and cars (if necessary) before releasing the gas. In game terms, regardless of gauge they're bought as follows:

Sight Group Flash 8d6, Area Of Effect (2m Radius; +¼), Constant (+½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2), Indirect (Path allows it to penetrate walls and similar barriers within 60m of shooter, as described in text; +½) (190 Active Points); OAF (-1), Limited Range (100m; -¼), Real Weapon (-¼), STR Minimum (varies), Two-Handed (-½), a number of Continuing Charges lasting 1 Turn each that depends on the type of shotgun used. ***Total cost: varies.***

At the GM's option, if a tear gas round is fired directly at a target within 10m of the shooter (other than a barrier the shooter intends to shoot through, as described above), the shell strikes as a slug of the same gauge (but with -2 DCs of damage) before releasing the tear gas.

SHOTGUN AMMUNITION SUMMARY CHART

Ammunition Type	.410	28, 24	20, 16	12	10	4	Notes
Standard Shot	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	AE1, LR (40m), RR, RP
Standard Slug	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	Beam, LR (100m)
Air Bomb	d6 N	6d6 N	7d6 N	8d6 N	9d6 N	10d6 N	AE1, LR (40m), Linked Flash 3d6
Armor Piercing Slug	1d6+1	2d6-1	2d6	2d6+1	2½d6	3d6	AP, Beam, LR (100m)
Baton/Beanbag	d6 N	6d6 N	7d6 N	8d6 N	9d6 N	10d6 N	Beam, LR (40m)
BRI Slug	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	Beam
Buffered Shot	2d6-1	2d6+1	2½d6	3d6-1	3d6+1	3½d6	LR (60m), RR, RP
Cubic Shot	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	AEC, NR, RR, RP
Explosive Slug	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	Exp, LR (100m)
Fireball	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	AE1, LR (40m), RR, RP, firestarting
Flare	5d6 Flash	6d6 Flash	7d6 Flash	8d6 Flash	9d6 Flash	10d6 Flash	Exp, LR (40m)
Flechette	2d6-1	2d6+1	2½d6	3d6-1	3d6+1	3½d6	AP, LR (100m), RR, RP
Ice	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	AE1, IPE, LR (40m), RR, RP
Linked Shot	1d6+1	2d6-1	2d6	2d6+1	2½d6	3d6	LR (60m), RR, RP
Lockbreaker	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	AE1, LR (40m), RR, RP, ½ damage
Rubber Shot	5d6 N	6d6 N	7d6 N	8d6 N	9d6 N	10d6 N	AE1, LR (40m), RR, RP
Saboted Slug	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	Beam, LR (100m), Piercing 1
Semi-AP Slug	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	Beam, LR (100m), Piercing 2
Silent	1d6+1	2d6-1	2d6	2d6+1	2½d6	3d6	AE1, AP, CE, LR (60m)
Smoke	CE	CE	CE	CE	CE	CE	CE (-3 Sight PER in 8m radius)
Steel Shot	1½d6	2d6	2d6+1	2½d6	3d6	3d6+1	LR (60m), RR, RP
Tear Gas	8d6 Flash	8d6 Flash	8d6 Flash	8d6 Flash	8d6 Flash	8d6 Flash	AE2, Indirect, LR (100m), 1 Turn

AMMO KEY

Listed damage is Killing Damage unless indicated otherwise (an "N" indicates Normal Damage)

All shotgun rounds have a +1 STUN Multiplier.

1 Turn: Continuing Charges lasting 1 Turn each

AE: Area Of Effect (Radius); the number following indicates the size of the Radius in meters.

Area Of Effect (16m Cone; +½)

AP: Armor Piercing (the Advantage)

CE: Change Environment

Exp: Area Of Effect (Radius Explosion)

IPE: Invisible Power Effects

LR: Limited Range

N: Normal Damage

NND: No Normal Defense

NR: No Range

Piercing1: 1 point of Piercing (Resistant)

RP: Reduced Penetration

RR: Reduced By Range

Semi-AP: Semi-Armor Piercing

FIREARMS ACCESSORIES

There are many accessories characters might wish to buy for their guns (or sometimes for other weapons, such as bows). Some are defined as Advantages for the gun's RKA, others as separate Powers. A table at the end of this section gives the Character Point costs for various accessories.

Some accessories are built to attach to any firearm, or any of a group of firearms. Others attach to the integral mounting rails built into many modern firearms, such as the standardized P-rail used on NATO firearms. Some manufacturers make P-rails that attach to guns which don't have integral ones.

Standard Firearm Accessories

The following types of accessories are available for standard firearms. (At the GM's option, characters can mount some of them, such as flashlights and some sights, on shotguns as well.)

BRASS CATCHER

A character who doesn't want to leave the shells ejected from an automatic and semi-automatic firearm lying around as evidence can attach a *brass catcher* to the side of his gun. This is a small box or bag that catches and holds the now-empty casings. In game terms this is bought as a naked Advantage, *Invisible Power Effects* (leaves no shell casings; +¼) with OAF (-1), Real Weapon (-¼), and Side Effects (increases weapon's PER Mod by +1, always occurs; -½). (See the Firearms Accessories Table for costs, if necessary; if the table doesn't list the Active Point cost of a character's gun, either use the next highest Active Point total listed or recalculate the cost on your own.)

CAMERAS

Some of the latest assault rifles are designed (or are being designed) to include cameras mounted on the weapon. The camera transmits a picture back to a lens worn over the user's eye. The shooter uses the camera to see around corners without having to expose any part of his body — he simply pokes the gun around the corner so he can see what the camera sees. The camera can also transmit pictures back to a commander or database so that rear-echelon leaders can see what the field soldiers see.

In game terms, a rifle-mounted camera is the *Adjacent* (up to 1m away) Sense Modifier for the Sight Group with a battery (Continuing Fuel Charge) that offers about three hours of performance.

FLASHLIGHTS AND SPOTLIGHTS

This device is a small, high-powered flashlight that attaches to the gun (usually underneath the front of the barrel, or to the front of the trigger guard). In game terms, it's bought this way: Sight Group Images, +4 to PER Rolls (22 Active Points); OAF (-1), Limited Range (20m; -¼), Only To Create Light (-1), Real Weapon (-¼), 1 Continuing Fuel Charge (batteries; easily replaced; 1 Hour; -0) (total cost: 6 points).

Rifles, assault rifles, and other large weapons can potentially carry much larger spotlights if necessary; these mount to the top of the weapon. For these, extend the length of the Limited Range. Some spotlights generate infrared or ultraviolet light, but characters need special equipment (such as nightsight goggles) to see such beams. For these, change the *Only To Create Light* (-1) Limitation to *Only To Create IR (or UV) Light* (-1¼) (total cost: 6 points).

FLASH SUPPRESSORS

Flash suppressors hide the muzzle flash of a gun from normal sight. They're usually found only on rifles, but it's assumed characters could make or buy flash suppressors for handguns if they wished. Flash suppressors can be combined with silencers, but not with recoil compensators.

In game terms, a flash suppressor is bought as Invisible to Normal Sight (+¼) for firearms of various Active Points with the Limitations *OAF* (-1) and *Real Weapon* (-¼). (See the Firearms Accessories Table for costs, if necessary; if the table doesn't list the Active Point cost of a character's gun, either use the next highest Active Point total listed or recalculate the cost on your own.) The Invisible Power Effects only covers the muzzle flash; the character firing the gun has to use Stealth or other means to conceal the gun itself.

RIFLE GRENADE LAUNCHER

Most modern flash suppressors also act as rifle grenade launchers. Rifle grenades are 22mm grenades fired from the end of a rifle using special blank cartridges (or ordinary ball ammunition if the grenade is equipped with a "bullet trap"). Characters who want their flash suppressors to have this capability can, with the GM's permission, buy them as Multipowers (one slot with the naked *Invisible Power Effects* Advantage, one with STR only for throwing grenades, as in the table on page 79). Alternately, the GM can simply allow all flash suppressors to function this way at no cost.

LANYARDS

A lanyard is a cord attached to a gun (usually on the bottom of the grip for a revolver or other guns with solid grips, other places for any gun that inserts the magazine into the grip). When looped around the shooter's wrist, a lanyard makes it impossible for the character to drop his gun (or be disarmed), unless the cord somehow breaks.

In game terms, a lanyard is defined as follows: Telekinesis (4 STR), Reduced Endurance (0 END; +½) (9 Active Points); OAF (-1), No Range (-1), Only To Hold Onto/Recover One Gun (-2), Real Weapon (-¼) (total cost: 2 points). The character can use the Telekinesis as a Zero Phase Action to "reel the gun in" when he's Disarmed or has to let it go for some reason.

RANGEFINDERS

These small but handy devices use a laser to measure the exact distance to the target. They're bought as Absolute Range Sense, OAF (-1), Real Weapon (-¼), Only When Shooter Braces And/Or Sets (-1).

RECOIL COMPENSATORS

As discussed n *Dark Champions,* guns have recoil when fired, and this recoil can throw off a character's aim. *Recoil compensators,* also known as muzzle brakes, help to reduce recoil by channeling some of the explosive force of a gun's discharge upward at the end of the barrel. They're most often found on automatic weapons (*i.e.,* weapons with the *Autofire* Advantage), but there are recoil compensators for some handguns.

Recoil compensators come in two types. The first attaches to a gun's muzzle, thus extending the length of the barrel by an inch or two (usually this has no game effect, but the GM might increase the gun's PER Mod by 1 if appropriate). The second involves cutting or drilling holes into the barrel itself, and thus adds no length... but the permanent alteration to the barrel means the gun can never use a silencer or flash suppressor.

In game terms, recoil compensators are bought as Recoil Skill Levels — Penalty Skill Levels that diminish or negate the recoil penalty. (You can find the full recoil rules in *Dark Champions;* roughly speaking, they impose a cumulative -1 OCV penalty for each shot after the first fired with Autofire or a Multiple Attack.) They have the Limitations *OAF* (-1) and *Real Weapon* (-¼), and *Side Effects* (+1 to firearm's Hearing PER modifier, always occurs; -½) (see the Firearms Accessories Table for costs, if necessary). Because they're PSLs, the device doesn't improve the character's OCV until after his first shot against a single target — all it can do is counteract some or all of the OCV penalty for recoil. The device only works when a character uses Autofire or a Multiple Attack against a single target; it has no effect on Autofire or Multiple Attack penalties when the character attacks multiple targets.

Handguns should not buy recoil compensators that provide more than +1 OCV. Other types of firearms can buy any type of recoil compensator, unless the GM rules otherwise.

Characters cannot use recoil compensators together with a silencer and/or a flash suppressor. In fact, a recoil compensator makes a gun louder.

SIGHTS AND SCOPES

Characters can buy sights and scopes for almost any kind of gun. They range from simple iron sights to telescopic scopes to laser-based sights. These devices help the shooter to aim better, and thus are bought as Combat (and/or Range) Skill Levels with the *OAF* (-1) and *Real Weapon* (-¼) Limitations (and possibly other Limitations, often including that they do not work unless the shooter uses the *Brace* and/or *Set* Combat Maneuvers (-1)). All guns come with standard iron sights (+0 OCV, +0 RMod) for free.

Some sights and scopes also include, or are combined with, a Rangefinder (see above). Typically a character only has one type of sight or scope on a gun, but it's possible to install more than one on some firearms. In that case, the GM should require the character to choose which one he's using for any given shot; characters can't combine the effects of two sights unless the text indicates otherwise or the GM specifically permits it.

COLLIMATING AND REFLEX SIGHTS

Collimating and reflex sights (*a.k.a.* red dot sights) have a lens on which the device electronically generates a dot (or other marker) that shows the weapon's point of aim. All the shooter has to do is adjust where the weapon's pointing until the dot overlays the target. Unlike with a laser sight, only the shooter can see the "aiming dot." These devices let the shooter keep both eyes open, and also improve his ability to acquire the target in low-light conditions.

Collimating and reflex sights have a range of about 250 meters.

LASER SIGHTS

Also known as *targeting lasers,* laser sights work by placing a "dot" of laser light on the point where the gun is aimed, thus showing the shooter where his shot will hit. Unlike most sights, they don't require the shooter to Brace and/or Set. (Realistically, the GM might consider imposing that restriction, but dramatically they don't seem to require that sort of aiming.)

Laser sights that use standard light do not work well in smoke, mist, or similar conditions, or against brightly-colored backgrounds (and smoke or mist may make the entire beam visible, showing the enemy exactly where the character is). A -¼ Limitation, *Does Not Work In Adverse Conditions,* reflects these restrictions. Furthermore, standard laser sights are only useful out to 125m (a -¼ Limitation). But because the target can see the dot of laser light on him (and thus knows exactly where he'll get hit by the shot), a standard laser sight can improve some Presence Attacks.

Some laser sights use infrared lasers. These also only work out to a range of 125m, but don't suffer from the other restrictions of standard laser sights. However, the shooter must have some means of perceiving IR light to use them (a -0 Limitation).

The 125m range restriction for either type of laser assumes a smaller, pistol-mounted laser sight. Larger models — about the size of a conventional flashlight — are available for long arms. These have a range of about 8,000 meters (five miles)... though of course that doesn't mean the weapon can fire that far. To simulate these, remove the *Limited Range* (-¼) Limitation.

In game terms, laser sights provide +2 OCV. Small ones also provide +8 versus the Range Modifier (enough to cancel the Range Modifier at their maximum range of 125m); larger ones increase that to +14. At the GM's option, only half of the Range Skill Levels apply unless the character Braces and/or Sets.

Some devices combine a flashlight (or spotlight) and a laser sight.

MICROMETER SIGHTS

A micrometer sight is a precisely-calibrated sight that can be adjusted in micrometer increments for accurate distance shooting. In game terms it provides a significant number of Range Skill Levels, but requires Extra Time to prepare for use (a Full Phase, so all told aiming and shooting with a micrometer sight requires an Extra Phase). The character must take the Full Phase to adjust the sight before every shot, unless the last target he shot at is the same distance away from him as his current target.

NIGHTSIGHT SCOPES

Nightsight scopes (sometimes referred to as "starlight scopes") provide passive light enhancement — rather than generating any light on their own, they amplify the ambient light, thus theoretically "turning night into day" for the person looking through them (though the world seen through the scope appears in a monochrome green, not color). They also allow the user to see infrared light. They don't function in total darkness (since then there's no light for them to amplify), and they emit ultrasonic sound (which animals, and characters with proper equipment, can hear).

In game terms, a nightsight scope provides a PER Roll bonus to overcome darkness modifiers — +2 to +4, depending on the sophistication of the device. The Limitations on this are OAF (-1), Real Weapon (-¼), Only To Counteract Darkness Penalties (-½), Only When Shooter Braces And/Or Sets (-1), Requires Ambient Light (it won't work in total darkness; -¼), and Side Effect (character suffers a 2 x Effect Vulnerability to Sight Group Flashes based on bright light while looking through the scope, and may experience a minor Sight Group Flash from looking at a bright light, always occurs; -½). The device also provides Detect Infrared Light (Sight Group) with most of these same Limitations.

TELESCOPIC SIGHTS

Telescopic sights, or *scopes,* are telescope-like devices that mount on top of a firearm. They're rated by how much they magnify the target. For example, a x2.0 scope makes the target seem twice as large, effectively halving the range to it in terms of shooting accuracy when the shooter takes the time to aim. Additionally, telescopic sights amplify ambient light slightly, and usually have illuminated reticles, making it a little easier for the user to see at night.

In game terms, telescopic sights are bought as both Range Skill Levels and the *Telescopic* Sense Modifier for the Sight Group, all with the Limitations *OAF* (-1), *Real Weapon* (-¼), and *Only When Shooter Braces And/Or Sets* (-1). They also provide a minor Sight Group PER Roll bonus that only counteracts the darkness penalty.

THERMAL SIGHTS

Thermal sights (also referred to as a thermal-imaging weapon sights, or TWS) are passive infrared sensors — they perceive patterns of heat, such as the body heat given off by a person or animal, or the heat of a vehicle's engine. They can "see" through light obstacles, such as most foliage, but not heavy ones like walls. They require two minutes to "warm up" when activated, and have a battery life of about four to five hours.

In game terms, thermal sights are Infrared Perception (Sight Group) with OAF (-1), Extra Time (2 Minutes to activate; -¾), Real Weapon (-¼), Only When Shooter Braces And/Or Sets (-1), 1 Continuing Fuel Charge lasting 5 Hours (-0).

TARGETING COMPUTER

The lastest advances in sighting and aiming technology are targeting computers, which can only be built into long arms such as assault rifles (though in more cinematic campaigns the GM could waive that restriction if desired). Using its built-in rangefinder, advanced nightsight device, video imager (equivalent to a telescopic sight), other sensors, and a dedicated ballistics computer, a targeting computer can accurately track the range to a target, improving the shooter's chance of hitting the target or placing a launched grenade just where he wants it to be when it explodes. Its battery has about three hours of power.

In game terms, a targeting computer provides various OCV Levels and Range Skill Levels with OAF (-1), Real Weapon (-¼), Only When Shooter Braces And/Or Sets (-1), and 1 Continuing Fuel Charge lasting 3 Hours (-0). Additionally it incorporates a Rangefinder, Type III Nightsight Scope, and a video imaging system that's equivalent to a x3 Telescopic Sight. The cost listed on the Firearms Accessories Table includes all of these devices (the listed RMod bonus includes both the computer's bonus and the bonus from its "x3 Telescopic Sight").

SILENCERS

Firearms make a lot of noise when fired. The expanding gases that propel a bullet create a loud "boom" as they leave the barrel, and the bullet itself makes a "crack" as it breaks the sound barrier. The accompanying table lists the standard Hearing PER Roll modifiers to hear various types of guns being fired.

Silencers, more accurately known as sound suppressors, trap the exploding gases given off when a gun is fired, thus muffling the sound of the explosion which propels the bullet forward. Silencers use baffles and/or absorbent materials to prevent the gases from escaping.

Silencers come in two types: integral and attached. An integral silencer is built into the gun and can't be detached. An attached silencer can be put on or taken off a gun as desired, but the muzzle of the gun has to be specially threaded to accept a silencer. Attaching or detaching this type of silencer takes a Full Phase (or a Half Phase if a character succeeds with a Fast Draw roll). An

attached silencer increases a gun's PER Mod (+1 for handguns, +2 or more for submachine guns and larger arms).

Most guns can be silenced, though submachine guns, rifles, and any gun capable of automatic fire need a silencer larger than those required for semi-automatic handguns (in other words, silencers aren't universally compatible; treat them as appropriate only for a single type of firearm). Revolvers cannot be silenced, because their open cylinder allow so much gas to escape. Shotguns cannot be silenced through conventional means, though Silent shells are available (see page 100).

Silencers tend to wear out — as more shots are taken, they allow more and more noise to leak through until they're effectively useless. For game purposes most GMs don't worry about this, but GMs in some high-"realism" games might want to give silencers Charges. Most modern silencers perform reasonably well for several hundred (or even thousand) shots.

In game terms, you can build silencers one of two ways:

1. To create a "cinematic" silencer — one that functions with the efficiency of silencers in movies — apply Invisible Power Effects (Hearing Group) to the firearm as a naked Advantage, with the Limitations OAF (-1) and Real Weapon (-¼). There are two versions of this type of silencer: the more "cinematic" one that renders the gun Imperceivable to the Hearing Group (a +½ Advantage); and the more "realistic" one that only makes it Inobvious (a +¼ Advantage) (see 6E1 124, 338-39).

2. The more "realistic" silencers are built as Change Environment with No Range (-½) to diminish — but not necessarily entirely eliminate — the Hearing PER Roll modifier for various firearms. The Firearms Accessories Table lists the costs and qualities of various types of "realistic" silencers. Of course, even if a silencer completely negates a gun's Hearing PER Roll modifier, that doesn't mean a character can't hear the gun — just that he gets no bonus to do so.

Some silencers also act as flash suppressors; characters could combine both accessories into one device if the GM allows. Silencers are incompatible with recoil compensators.

Characters can make crude homemade silencers if they have appropriate materials and succeed with a Weaponsmith (Firearms) roll at -2. These function as Poor quality silencers, and only work for one shot. A lot of objects can function as "one-time silencers"; for example, firing through a pillow, towel, or similar object can effectively silence a bullet.

OTHER FIREARM SOUNDS

Silencers only muffle the sound of the explosion that launches a bullet; they do not affect the sounds of the gun's parts operating or the "crack" made by bullets as they break the sound barrier.

To eliminate the supersonic crack, a gun has to fire Subsonic ammunition (see page 95).

FIREARMS NOISE

Type Of Firearm	Bonus To Hearing PER Rolls
Assault Rifle	+5
Handgun	+3
Rifle	+5
Shotgun	+5
Submachine Gun	+4

Other Situations	Bonus To Hearing PER Rolls
Cycling of the action	+1
Pulling back a gun's hammer	+1
Pumping a pump-action shotgun	+2
Reloading a clip	+1
Working a bolt action	+2

Alternately, some silencers are drilled with small holes to allow enough of the propellant gases to escape so that the bullet doesn't travel fast enough to break the sound barrier. Other silencers use "wipes" (a type of baffle) to slow the bullet down to subsonic speeds; these wear out quickly (in game terms, give them 20-32 Charges) and prevent the shooter from using any ammunition that expands on contact with the target (such as Hollow Point or Frangible rounds). This "slowing" effect reduces the damage caused by the bullet to about 75% of normal; use the damage figures for an equivalent Subsonic cartridge. In game terms, you can build these "slowing silencers" by applying a *Side Effects* Limitation (silencer makes gun do 75% of its regular damage, always occurs; -½).

To eliminate the sound of the action cycling, a gun needs a slide-stop (see below).

To eliminate the sound of the trigger being pulled and the hammer falling, a gun needs an electronic trigger, which means it has to use Caseless ammunition (see page 91).

SLIDE-STOP

Silencers cannot affect the mechanical action of a gun as the action cycles, which makes a distinct noise (+1 to Hearing PER Rolls to perceive). Semi-automatic firearms can be fitted with a *slide-stop* (also called a slide-lock) to prevent the action from cycling. The only mechanical sounds made by guns with this attachment are the trigger being pulled and the hammer falling. However, guns with slide-stops can only fire a single shot at a time; characters cannot use Autofire, Multifire, or Rapid Fire with them. Furthermore, the shooter has to cycle the action manually between shots (this requires a Half Phase Action).

In game terms, a slide-stop is typically bought as follows: Change Environment, -1 to Hearing PER Rolls, Reduced Endurance (0 END; +½) (4 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), Self Only (only counteracts the noise caused by the gun's action cycling; -½), Side

Effects (prevents multiple shots, always occurs; -½) (total cost: 1 point). (For a more cinematic slide-stop, buy the device as Invisible to Hearing Group, using the same cost as for cinematic silencers.)

Shotgun Accessories

The following accessories are specific to shotguns.

ROPETHROWER

Ropethrowers are an attachment to the barrel of a shotgun that uses the force of a fired shell to shoot a rope and grapnel. In game terms, characters can buy this as follows: Swinging 20m (10 Active Points); OAF (-1), Extra Time (Extra Phase; -¾), Uses 1 Charge From A Shotgun RKA (-¼), Real Weapon (-¼) (total cost: 3 points).

SHELL ADAPTER

A shell adapter allows a shotgun to fire normal bullets. The caliber of bullet is dictated by the size and type of shell adapter, but regardless of bullet type, using a shell adapter imposes a -1 OCV penalty on the shot. Inserting or removing a shell adapter takes 1 Minute.

In game terms, the best way to build this device is to have it convert a shotgun into a Multipower — one slot for shotgun rounds, one shot for the standard bullet the character could fire with the adapter, and Extra Time (1 Minute) on the Reserve to represent the time it would take to switch slots. Characters can build their own individual weapons that way if desired (or if the GM prefers), but building a shell adapter as a "generic" shotgun accessory that way would be needlessly complex. Therefore, the Firearms Accessories Chart simply indicates a cost of 1 Character Point (the GM can change this if necessary).

SHOTGUN BARREL FLATTENING

A character can increase the spread pattern of his shotgun by flattening the barrel slightly. This is bought as an additional +¼ Advantage to expand the shotgun's normal Area Of Effect (1m Radius) into Area Of Effect (2m Radius).

SHOT SPREADER

A shot spreader is essentially the opposite of a choke: it's a device to increase the spread pattern of shot as it emerges from the shotgun's muzzle. This allows the shooter to hit a lot of close targets with devastating effectiveness, but significantly decreases a shotgun's deadliness at greater ranges. In game terms, a shot spreader changes a shotgun's Area Of Effect (1m Radius) to an Area Of Effect (16m Cone; +½), and its Limited Range (40m; -¼) to No Range (-½). A character should recalculate the cost of his shotgun with these alterations.

STANDARD FIREARM ACCESSORIES

Name	A/R Cost	OCV	RMod	Notes
Brass Catcher				
10 Active Point gun	2/1	—	—	IPE (leaves no shell casings) (+¼)
20 Active Point gun	5/2	—	—	IPE (leaves no shell casings) (+¼)
30 Active Point gun	7/2	—	—	IPE (leaves no shell casings) (+¼)
40 Active Point gun	10/4	—	—	IPE (leaves no shell casings) (+¼)
50 Active Point gun	12/4	—	—	IPE (leaves no shell casings) (+¼)
60 Active Point gun	15/5	—	—	IPE (leaves no shell casings) (+¼)
70 Active Point gun	17/6	—	—	IPE (leaves no shell casings) (+¼)
80 Active Point gun	20/7	—	—	IPE (leaves no shell casings) (+¼)
90 Active Point gun	22/8	—	—	IPE (leaves no shell casings) (+¼)
100 Active Point gun	25/9	—	—	IPE (leaves no shell casings) (+¼)
Camera	3/1	—	—	Adjacent (up to 1m away for Sight Group)
Flashlight	22/6	—	—	+4 Sight Group PER in darkness, LR (20m or more)
Flash Suppressor				
10 Active Point gun	2/1	—	—	Invisible to Normal Sight (+¼)
20 Active Point gun	5/2	—	—	Invisible to Normal Sight (+¼)
30 Active Point gun	7/3	—	—	Invisible to Normal Sight (+¼)
40 Active Point gun	10/4	—	—	Invisible to Normal Sight (+¼)
50 Active Point gun	12/5	—	—	Invisible to Normal Sight (+¼)
60 Active Point gun	15/7	—	—	Invisible to Normal Sight (+¼)
70 Active Point gun	17/7	—	—	Invisible to Normal Sight (+¼)
80 Active Point gun	20/9	—	—	Invisible to Normal Sight (+¼)
90 Active Point gun	22/10	—	—	Invisible to Normal Sight (+¼)
100 Active Point gun	25/11	—	—	Invisible to Normal Sight (+¼)
Lanyard	9/2	—	—	Telekinesis (4 STR), Only On One Gun
Rangefinder	3/1	—	—	Absolute Range Sense, OBS
Recoil Compensator				
Type 1	2/1	+1	—	SE (+1 Hearing PER Rolls), Only Versus Recoil Penalties
Type 2	4/1	+2	—	SE (+1 Hearing PER Rolls), Only Versus Recoil Penalties
Type 3	6/2	+3	—	SE (+1 Hearing PER Rolls), Only Versus Recoil Penalties
Sights and Scopes				
Collimating/Reflex	34/10	+2	+10	LR (250m), OBS; also provides +2 PER versus darkness
Laser Sight				
Standard, Small	26/10	+2	+8	LR (125m), Not In Adverse Conditions
Infrared, Small	26/12	+2	+8	LR (125m), User Must Be Able To Perceive IR Light
Standard, Long Arm	38/16	+2	+14	Not In Adverse Conditions
Infrared, Long Arm	38/18	+2	+14	User Must Be Able To Perceive IR Light
Micrometer Sight	28/7	—	+14	OBS, Extra Phase to aim and shoot
Nightsight Scope				
Type I	9/2	—	—	+2 PER versus darkness, Detect Infrared Light, OBS
Type II	11/2	—	—	+3 PER versus darkness, Detect Infrared Light, OBS
Type III	13/3	—	—	+4 PER versus darkness, Detect Infrared Light, OBS
Telescopic Sight				
x2	12/4	—	+2	+2 vs. RMod for Sight Group, +1 PER vs. darkness, OBS
x3	22/8	—	+4	+4 vs. RMod for Sight Group, +1 PER vs. darkness, OBS
x4	32/11	—	+6	+6 vs. RMod for Sight Group, +1 PER vs. darkness, OBS

Name	A/R Cost	OCV	RMod	Notes
Telescopic Sight (cont)				
x6	42/16	—	+8	+8 vs. RMod for Sight Group, +1 PER vs. darkness, OBS
x8	62/23	—	+12	+12 vs. RMod for Sight Group, +1 PER vs. darkness, OBS
x10	72/26	—	+14	+14 vs. RMod for Sight Group, +1 PER vs. darkness, OBS
Thermal Sight	5/1	—	—	Infrared Perception (Sight Group), OBS
Targeting Computer	68/21	+2	+10	Type III Nightsight, x3 Telescopic Sight, Rangefinder, OBS
Silencer, Cinematic, Type I				
10 Active Point gun	5/2	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
20 Active Point gun	10/4	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
30 Active Point gun	15/7	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
40 Active Point gun	20/9	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
50 Active Point gun	25/11	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
60 Active Point gun	30/13	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
70 Active Point gun	35/15	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
80 Active Point gun	40/18	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
90 Active Point gun	45/20	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
100 Active Point gun	50/22	—	—	Invisible Power Effects (makes gun Imperceivable to Hearing Group; +½)
Silencer, Cinematic, Type II				
10 Active Point gun	2/1	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
20 Active Point gun	5/2	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
30 Active Point gun	7/3	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
40 Active Point gun	10/4	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
50 Active Point gun	12/5	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
60 Active Point gun	15/7	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
70 Active Point gun	17/7	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
80 Active Point gun	20/9	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
90 Active Point gun	22/10	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
100 Active Point gun	25/11	—	—	Invisible Power Effects (makes gun Inobvious to Hearing Group; +¼)
Silencer, Realistic				
Small, Poor Quality	3/1	—	—	CE (-1 to Hearing PER Rolls), Reduces/Eliminates Firing Noise
Small, Average Quality	6/2	—	—	CE (-2 to Hearing PER Rolls), Reduces/Eliminates Firing Noise
Small, High Quality	9/3	—	—	CE (-3 to Hearing PER Rolls), Reduces/Eliminates Firing Noise
Large, Poor Quality	9/3	—	—	CE (-3 to Hearing PER Rolls), Reduces/Eliminates Firing Noise
Large, Average Quality	12/4	—	—	CE (-4 to Hearing PER Rolls), Reduces/Eliminates Firing Noise
Large, High Quality	15/5	—	—	CE (-5 to Hearing PER Rolls), Reduces/Eliminates Firing Noise
Slide-Stop	4/1	—	—	CE (-1 Hearing PER Rolls), Cancels Out Action's Noise

SHOTGUN ACCESSORIES

Name	A/R Cost	OCV	RMod	Notes
Ropethrower	10/3	—	—	Swinging 20m, Extra Time (Extra Phase), Uses 1 Shotgun Charge
Shell Adapter	-/1	—	—	Lets shotgun fire one type of bullet, 1 Minute to switch
Shotgun Barrel Flattening	var/var	—	—	Increase to AE1 Doubled
Shot Spreader	var/var	—	—	Changes shotgun to AEC and NR

ACCESSORIES KEY/NOTES

All devices have the Limitations OAF (-1) and Real Weapon (-¼)

A/R Cost: The Active Point/Real Point cost of the accessory.

OCV: The OCV modifier the accessory provides, if any. See page 68 for information on how this is bought, though the *Two-Handed* (-½) Limitation is not applied since these devices might be attached to handguns or the like.

RMod: The Range Modifier modifier the accessory provides, if any. See page 68 for information on how this is bought, though the Two-Handed (-½) Limitation is not applied since these devices might be attached to handguns or the like.

Notes: Pertinent notes and information about the accessory.

AEC: Area Of Effect (Cone)

CE: Change Environment

IPE: Invisible Power Effects

LR: Limited Range

NR: No Range

OBS: Only When Shooter Braces And/Or Sets (-1)

SE: Side Effects

FIREARMS MODIFICATIONS AND CUSTOMIZATION

Characters can modify, customize, or improve their guns in many different ways. Listed below are several examples, for which you can find the costs in the accompanying table (most take the Limitations *OAF* (-1) and *Real Weapon* (-¼)).

Because the *HERO System* Attack Roll rules make each +1 OCV very effective, many of the listed modifications provide less than that — a +0.5 OCV modifier. To gain any benefit from these, a character has to install two different modifications that each provide +0.5 OCV (for a total of +1). For these purposes, a +0.5 OCV bonus costs 1 Character Point.

Some of the modifications are listed as costing no points. To discourage PCs from always taking them, the GM may want to change that to 1 Character Point.

Ambidextrous Conversion: Most guns are made to be shot by right-handed persons. This modification makes the gun easily usable by persons of either handedness.

Barrel Coating: A special microscopic coating applied to the inside of the barrel. This smooths the barrel, reduces fouling, and increases the gun's accuracy and the speed with which it can be fired.

Barrel Fluting: Fluting involves cutting radiused grooves down the length of a rifle's barrel. This allows the barrel to cool more quickly, thus extending its lifespan. In game terms, this has no effect, but reduces a rifle's weight by about 560-700 grams.

Clear Grips/Magazine: Semi-automatic guns can be equipped with clear plastic grips and/or magazines so that the shooter can see how much ammunition is left at any time (checking ammo status is a Zero Phase Action).

Cryotreatment: Exposing a gun to controlled temperatures of -300 degrees Fahrenheit strengthens the steel in it. This decreases barrel warpage from the heat of shooting and thus improves accuracy.

Custom Grips/Stock: A custom grips or stock, specially molded to fit the user's hand and arm, can improve accuracy. This provides a +0.5 OCV bonus, but imposes a -1 OCV penalty whenever anyone else tries to use the gun.

Electronic Trigger: It's possible to replace the mechanical trigger in some guns with an electronic trigger, which is noiseless because it has no mechanical action — firing the gun is more like pressing a button than pulling a trigger. However, this only works for guns that fire Caseless ammunition, since an electronic charge cannot activate Standard ammunition. This modification does not work in conjunction with Improved Trigger or Hair Trigger.

Enlarged Magazine: By changing the value of a gun's Charges and recalculating its cost, you can increase the size of a semi-automatic or automatic firearm's magazine. Some modern designs, such as the cylindrical magazine of the Calico M-950 or the C-Mag drum magazine for various assault rifles, pack a surprisingly large number of rounds into a small space — some don't even change the weapon's PER Mod.

Fine Tuning: General improvements by a gunsmith can make a gun more accurate (+.5 or +1 OCV).

Hair Trigger: A hair trigger fires the gun with only the slightest pressure (most triggers require several pounds of pressure). This makes the gun quicker to fire, which can be useful in a gunfight... but can also increase the chance of an accidental firing. If a character's Unluck activates or he rolls a fumble, an accidental shooting is a definite possibility. This modification does not work in conjunction with Improved Trigger or Electronic Trigger.

Improved Bedding: Rifle barrels are "bedded" to prevent excessive barrel movement, which negatively affects aim. An improved bedding makes the barrel even steadier, improving aim beyond that of ordinary rifles. Only rifles can benefit from this modification.

Improved Firing Pin: One of the factors affecting accuracy is *locktime* — the amount of time between when the trigger is squeezed and the bullet is fired. In this interval, even if it's measured in microseconds, a shooter's aim can wander. An Improved Firing Pin, usually made of titanium, strengthens the spring. This decreases locktime and increases accuracy without adding to the weight of the gun.

Improved Range: A gunsmith can fine-tune a gun to improve its accuracy over long distances. Although this is most commonly done with rifles, the procedure also works with handguns.

Improved Trigger: Modifications to the trigger to make it easier and smoother to use, thus improving accuracy. This modification does not work in conjunction with Electronic Trigger or Hair Trigger.

Personalization: Some "smart" guns only work for their owners, thus making it impossible for an attacker to take the gun away and use it against its owner. A smart gun has devices in its grip which read the signal from a ring worn by the owner and only fire if the hand holding the gun is wearing the ring. (More technologically-advanced versions might have fingerprint or DNA readers built into the grip, or the like.) In *HERO System* terms, smart guns are Personal Foci instead of Universal Foci.

Pistol Stock: Some handguns have detachable, rifle-like stocks that the shooter can attach to stabilize the gun for long-distance shots. Attaching or detaching the stock requires a Half Phase Action (or a Zero Phase Action if the character succeeds with a Fast Draw roll).

Polygonal Rifling: Guns with polygonal rifling have a better gas seal, which creates the maximum "push" possible on the bullet and decreases barrel friction. This causes the bullet to travel faster and do more damage (RKA +1 point).

Sawed-Off Shotgun: A sawed-off shotgun is one that's had most of its barrel cut off for either or both of two purposes: to make it easier to conceal or to cause the shot to spread more quickly. In game terms, sawing off a shotgun's barrel changes the shotgun's Area Of Effect (1m Radius) to an Area Of Effect (16m Cone; +½), and its Limited Range (40m; -¼) to No Range (-½); it also removes the Limitation *Two-Handed* (-½). The character should recalculate the cost of his shotgun with these alterations. Additionally, the shotgun's PER Mod drops from the usual +4 to +6 for most shotguns to +2 to +3.

Characters can only convert double-barreled shotguns into sawed-off shotguns. Sawing off a pump-action shotgun would involve sawing off the magazine and pump as well.

Size Reduction: Removing or trimming away unnecessary metal and parts of a gun can reduce its size (*i.e.,* PER Mod) without significantly affecting its accuracy. In game terms, this changes the weapon's PER Mod.

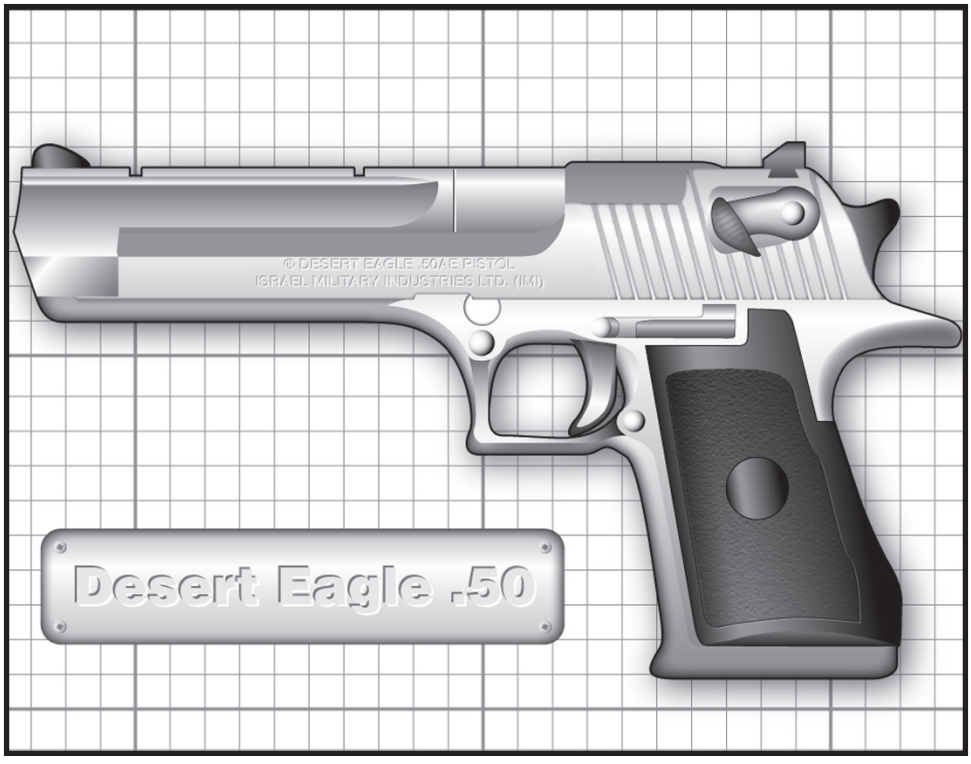
Streamlining: By trimming and smoothing the edges of a gun, a gunsmith can make it easier to draw because it's less likely to snag on holster material or clothing.

Watertight: A gunsmith can create and seal a gun so that it's watertight.

Weight Reduction: By trimming away unnecessary metal and replacing some parts of the gun with lighter-weight equivalents, a character can make his gun weigh up to 25% less.

FIREARMS MODIFICATIONS AND CUSTOMIZATION TABLE

Name	A/R Cost	OCV	RMod	Notes
Ambidextrous Conversion	0	—	—	
Barrel Coating	1/1	+.5	+0	
Barrel Fluting	0	—	—	Reduces gun's weight
Clear Grips/Magazine	0	—	—	Shows how much ammuntion is left
Cryotreatment	1/1	+.5	+0	
Custom Grips/Stock	1/1	+.5	+0	-1 OCV for other users
Electronic Trigger	3/1	—	—	CE (-1 to Hearing PER Rolls), Cancels out trigger's noise, requires Caseless ammo
Enlarged Magazine	var/var	—	—	See text
Fine Tuning I	1/1	+.5	+0	
Fine Tuning II	5/2	+1	—	
Hair Trigger	1/1	—	—	+1 Lightning Reflexes for shooting the gun
Improved Bedding	2/2	+.5	+1	
Improved Firing Pin	1/1	+.5	+0	
Improved Range I	1/1	+0	+1	+1 PER Mod
Improved Range II	2/2	+0	+2	+2 PER Mod
Improved Trigger	1/1	+.5	+0	
Personalization	0	—	—	Makes gun a Personal Focus
Pistol Stock	1/1	—	+1	+2 PER Mod
Polygonal Rifling	var/var	—	—	+1 point RKA
Sawed-Off Shotgun	var/var	—	—	Changes shotgun to Area Of Effect (Cone) and No Range
Size Reduction I	0	—	—	-1 PER Mod
Size Reduction II	0	—	-1	-2 PER Mod
Streamlining	2/1	—	—	+1 to Fast Draw (Small Arms)
Watertight	0	—	—	Makes gun watertight
Weight Reduction	0	—	—	Makes gun weigh up to 25% less



DISGUISED AND CONCEALED WEAPONS AND GADGETS

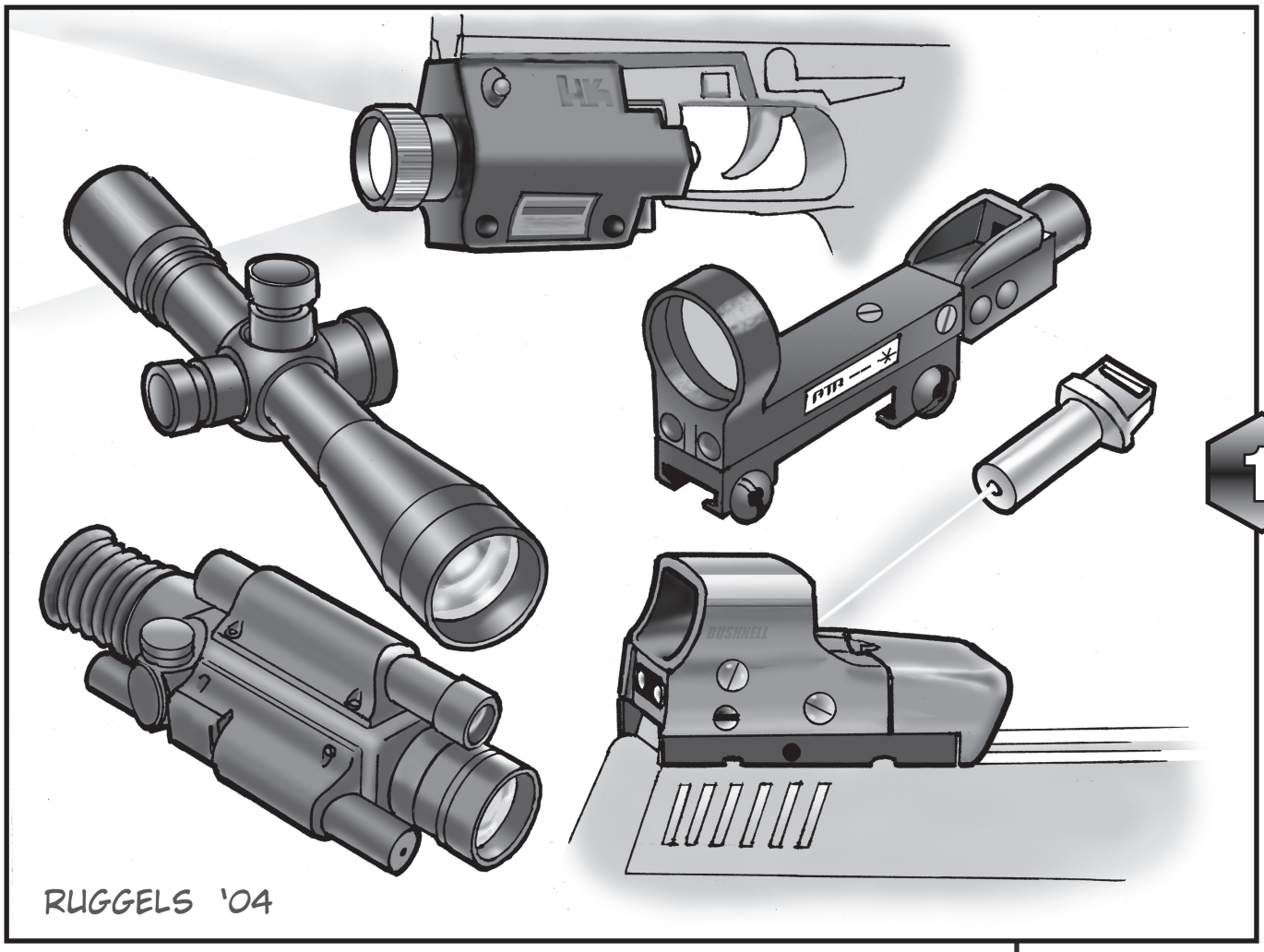
A character's ability to conceal a weapon on his person (or elsewhere) — such as a stilleto worn in an arm sheath under a character's sleeve, a small handgun tucked into the back of his pants underneath his sports jacket, or a straight razor hidden in a boot — depends on the weapon's size. See 6E2 175-76; the Concealed Objects Table lists the Concealment modifiers for a number of weapons, and the GM can easily come up with others by using them as guidelines.

If characters want to conceal firearms, use the rules on 6E2 175-76, with a PER Roll modifier ("PER Mod") based on the size and configuration of the weapon. Typically revolvers and semi-automatic handguns have PER Mods of +2 to +3 (sometimes +1 for particularly small or streamlined ones, or even +0 for derringers and the like); submachine guns have PER Mods of +3 to +5; rifles and shotguns have PER Mods of +4 to +7 (though a sawed-off shotgun may be only +3); assault rifles have PER Mods of +5 to +7; machine guns have PER Mods of +7 to +10; grenades have PER Mods of +1 (maybe +2 for some large ones); and grenade launchers have PER Mods of +6 to +8. The Notes column of the weapons tables sometimes indicates a PER modifier ("PER Mod") for a specific weapon.

But many of the firearms, other weapons, and gadgets built for characters aren't just hidden, they're *disguised* — in other words, designed specifically to look like something else. This is particularly true of guns and other weapons. For example, in real life people have built concealed guns into canes, knives, books, briefcases, hats, and many other items — and *HERO System* characters can certainly do the same.

Similarly, some devices are deliberately designed to be hidden. For example, a character might have a miniaturized tool of some sort that's built into a false tooth. In some cases the GM will consider those sorts of gadgets as OAFs that are just particularly well-hidden, but in others it makes sense to think of such a device as being "disguised" since it's *always* hidden in an especially clever way.

In *HERO System* terms, a disguised gun is an Inobvious Accessible Focus. The Inobvious part of the *Focus* Limitation corresponds to a Concealment "Skill" of 13- (11- base roll, +2 for the fact that the weapon is built into an object); extremely well made concealed weapons may merit higher Concealment "Skills." (If a character's building a disguised weapon with Character Points, he has to pay for this using the *Skill* Power; otherwise the GM can simply assign the appropriate modifiers.) When a character tries to spot a disguised object, he makes a PER Roll against the object's



Concealment roll in a Skill Versus Skill Contest. A successful roll only reveals that there's something unusual in the construction of the item; the perceiving character has to perform a hands-on search in another PER Roll Versus Concealment Roll Contest to open the weapon up or determine what it does.

Naturally, once a character actually uses a disguised weapon, it's no longer Inobvious. When a character starts firing bullets from his cigarette case, its true function becomes apparent.

Unless the GM rules otherwise, all disguised guns should have a minimum -1 OCV penalty (and no Range Skill Levels) to reflect the relative difficulty of aiming them.

See the Disguised Guns Table for some guidelines regarding the capacity of disguised guns built into various objects.

DISGUISED GUNS TABLE

Object	Ammunition Capacity
Belt Buckle	1
Beverage Can	3-8
Book	6+
Briefcase	6+
Calculator	2-3
Camera/Videorecorder	3+
Cane/Crutch/Umbrella	10
Cast (for broken arm)	8
Cigarette	1
Cigarette case	2-6
Flashlight	10
Gloves	1
Knife Handle	1-3
Lighter	1-2
Lipstick	1
Pen	1

MODERN HAND-TO-HAND WEAPONS

Guns aren't the only weapons modern-day characters use (or have used against them). They'll come into contact with many other implements of destruction during their adventuring careers. (See also the *Restraining And Non-Lethal Weapons* section on page 211.)

HAND-TO-HAND COMBAT WEAPONS

Sometimes characters can't fight their enemies at range with guns — they have to get in close and use their fists and any weapons designed for such fighting.

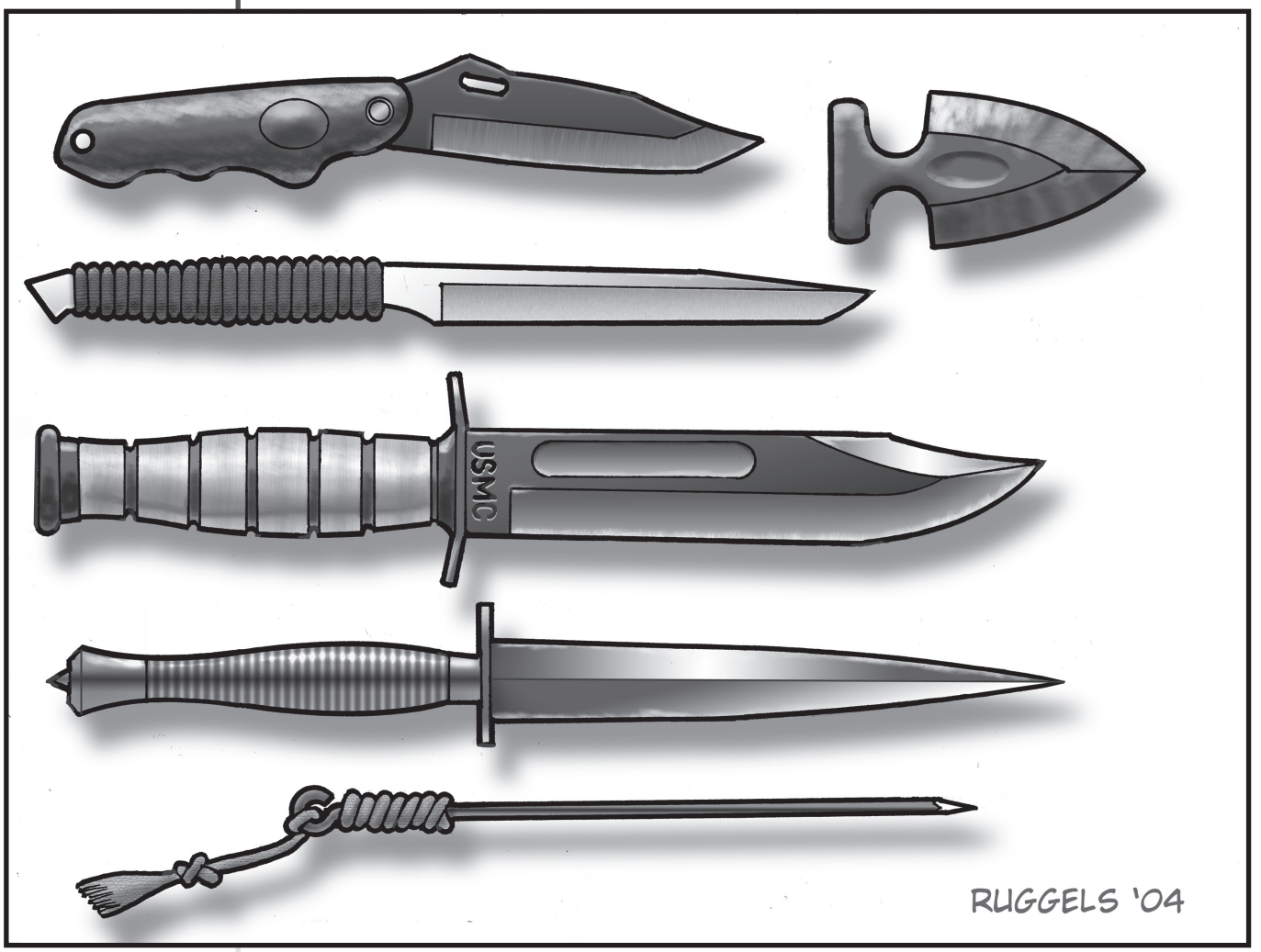
CLUBS

A "club" is any object a character can use to do do Normal Damage to another character in combat. Clubs that characters pay Character Points for are built with the Power *Hand-To-Hand Attack* and usually have the Advantage *Reduced Endurance* (0 END; +½) and the Limitations *OAF* (-1), *Real Weapon* (-¼), and Hand-To-Hand Attack (-¼). The accompanying table lists several, ranging from actual weapons to "weapons of opportunity" characters might lay their hands on during a fight. Characters can also throw some of these objects using the Throw rules from 6E2 80.

KNIVES

Knives and similar bladed weapons — prison "shanks," bayonets, machetes, and the like — are common in many games. They're built as HKAs with the Advantage *Reduced Endurance* (0 END; +½) and the the Limitations *OAF* (-1), *STR Minimum,* and *Real Weapon* (-¼).

Some knives are made to be thrown. These have the Advantage *Range Based On STR* (+¼) (or, more elaborately, are built as a Multipower, with one HKA slot, and one slot with HKA, Range Based On STR, 1 Recoverable Charge, and Lockout). At the GM's option, characters can throw knives without RBS, but at a -2 OCV penalty (characters can eliminate this penalty by buying the WF *Thrown Standard Knives*).



MODERN DAY HAND-TO-HAND WEAPONS TABLE

Weapon	OCV	Dam	STUNx	STR Min	BODY	DEF	Mass	A/R Cost	Notes
Clubs									
Blackjack	+0	2d6 N	—	5	2	3	0.50	15/5	
Bottle	+0	1d6 N	—	3	1	1	1.0	N/A	After the first hit, a bottle no longer functions as an HA, but rather as an HKA 1/2d6.
Brick	+0	2d6 N	—	8	2	5	2.0	N/A	
Chain	+0	3d6 N	—	8	3-4	5	2.0	N/A	
Chair/stool	+0	2-4d6 N	—	10	3-5	3-5	5.0	N/A	
Claw hammer	+0	3d6 N	—	5	2	3	0.9	N/A	The hammer's claw is an HKA 1 point.
Lead Pipe	+0	3d6 N	—	8	2	5	0.5	N/A	
Nightstick/Billy club	+0	3d6 N	—	8	3	3	0.9	22/8	See also the Tonfa on page 25
Pistol butt	+0	2d6 N	—	8	2	3	Various	15/5	
Rifle butt	+0	3d6 N	—	10	3	3	Various	22/8	
Roll of coins in fist	+0	1d6 N	—	3	1	2	0.02	N/A	
Shot gloves	+0	2d6 N	—	8	2	3	1.50	15/5	Gloves with pockets on the outside of the fingers filled with lead shot. They impose a -2 penalty on all DEX Rolls and Agility Skill Rolls involving the hands, and a -2 OCV penalty on attacks which require the hand to grip or use a weapon (a Side Effect [-1/2]).
Tire iron	+0	3d6 N	—	8	3	5	N/A		
Two-by-Four	+0	3d6 N	—	8	2	3	N/A		
Knives And Bladed Weapons									
Bayonet	+0	1d6-1	+0	6	3	5	0.8	18/7	
Combat knife	+0	1d6-1	+0	6	3	5	0.8	21/8	Can Be Thrown
Fiberglass knife	+0	½d6	+0	4	2	5	0.4	20/8	Can Be Thrown, IPE (metal detectors)
Machete	+0	1d6	+0	7	5	5	1.1	22/9	
Punch dagger	+0	½d6	+0	4	2	5	0.3	15/6	
Shank, shiv	+0	½d6	+0	4	2	5	0.4	17/7	Can Be Thrown
Stiletto#	+0	½d6 AP	+0	5	3	5	0.7	20/8	Can Be Thrown
Survival knife	+0	1d6-1	+0	6	3	5	0.8	21/8	Can Be Thrown
Switchblade	+0	½d6	+0	4	2	5	0.3	17/7	Can Be Thrown
Trenchknife	+0	1d6-1	+0	6	3	5	1.0	21/8	HKA Can Be Thrown, guard does 2d6 N when used with the Club Weapon Maneuver

See the Key and Notes for the Fantasy Hand-To-Hand Weapons Table on page 15 for an explanation of abbreviations and terms.
The "N" in the damage column stands for "Normal Damage."

SUPERHEROIC WEAPONS

1

Superheroic weapons are the amazing — and often impossible, in the real world — weapons that Comic Book Superheroes use. It also encompasses the "weird tech" weapons used by Pulp heroes, Victorian-era "steampunk" characters, and characters in Space Opera Science Fiction games could also adapt many of these weapons to their campaign.

WEIRD SCIENCE WEAPONS

While science in general enjoyed great esteem among the populace in the Pulp era, it enjoyed even greater favor in the pages of the pulps themselves. More than one Pulp hero relied on advanced technology to help him solve mysteries or thwart evildoers. While some characters just cleverly employed or manipulated the important technologies of the day (such as radio, telephone, television, and aircraft), some made discoveries or used devices that defied rational scientific explanation in "real world" terms. The general term for this concept is *Weird Science,* and devices created by Weird Science are "Weird tech."

Most Weird Science devices are weapons of some sort — everything from strange energy beams with eerie effects to guns and grenades disguised as everyday objects. The ones described below provide just a few examples; later chapters describe other Weird gadgets, and the fiendish minds of players and GMs can easily come up with many more.

Types Of Weird Technology

Weird tech devices tend to fall into two categories:

IMPROVED TECHNOLOGY

The first category is *improved technology of the Pulp era.* In essence, the creator takes something ordinary (like a radio or a zeppelin) and changes it in ways that make it more fantastical. The simplest way to do this is make it more reliable. The technology of the day is often difficult to use and prone to various problems; eliminating these offers a character a significant edge during an adventure. Similarly, improving the performance — making the gadget work or move faster, have no unpleasant side effects, or increasing its power — falls squarely into the province of Weird Science.

Weird Science can also miniaturize gadgets. By twenty-first century standards, most Pulp-era devices were big and heavy — for example, some radios occupied entire cabinets and weighed over a hundred pounds! Even early portable radios were large, bulky, and difficult to use. But thanks to the wonders of Weird Science, more than one Pulp hero had a seemingly foolproof radio that fit into his ear (much like a modern hearing aid). Not only are such devices easier to carry (and thus use), miniaturizing them makes it easier to conceal them (see below).

On the other hand, sometimes going Weird means *enlarging* a gadget. Ordinary zeppelins are already pretty big, but one built using the principles of Weird Science is *enormous,* dwarfing anything that ever appeared in the "real world." Devices are particularly likely to get bigger when the creator wants to improve the performance of an ordinary piece of technology, as described above: greater size symbolically (and in many ways "realistically") equates to greater power.

INCREDIBLE DEVICES

Second, Weird tech includes *completely incredible devices that couldn't possibly exist in the "real world."* These are devices that at least seem to verge into the realm of Science Fiction, if not occupy that territory altogether. Examples include forcefields, faster-than-light travel (particularly in an era when rockets remain experimental devices!), matter transmitters, various types of ray guns, anti-gravity vehicles, time machines, and the like. For devices like these, you should look at the Superhero and Science Fiction sections of this book and adapt what you see there to suit (often by applying additional Limitations like Bulky or Activation Roll... and of course adding a Pulp-style name!).

Principles Of Weird Tech

Like any other form of science, Weird Science is governed by its own particular rules. But they're *dramatic* rules, not scientific ones. The most important thing about Weird tech is to have it contribute to the story you're trying to tell, not making it scientifically accurate.

LITTLE OR NO EXPLANATION NECESSARY

First and foremost, Weird Science doesn't have to be plausible, rational, realistic, or logical — or even explained in any significant detail. Many a Pulp author gave his character a gadget and simply said that it "fires a beam of deadly energy" or "allows him to fly unhindered through the air." He made no attempt to justify how the device works by citing scientific theories or explaining the construction of the gadget's engine. The gadget is just a literary plot device designed to help the character accomplish things and move the action of the story forward at its usual brisk pace.

Even when an author provides an explanation for how Weird tech works, it's a very simple one with no grounding in real-world science. It has no justification in "reality," but it lets the author add a little verisimilitude to his tale, and perhaps inspires other gadgets or plot twists as he thinks about its ramifications.

IT'S OFTEN FALLIBLE

Weird tech is subject to a simple law of dramatic necessity: when the author needs it to work so the plot keeps moving forward, it works without any difficulty... but when the author wants to heap difficulties on the character, his wondrous device malfunctions (or fails to work at all) until he repairs it, obtains more fuel, or the like. The more "advanced" or Weird the device, the more likely it was to experience this problem. Simple weapons like mini-grenades almost never failed to work; complex devices like rocket packs and death rays are much less likely to function properly on demand.

Simulating this can be difficult in game terms. It's easy enough to construct an unreliable device using Limitations like *Activation Roll,* but getting those devices to malfunction only at dramatically appropriate moments is nigh-impossible if you rely on the standard dice roll. The GM has two options. First, he can have characters build their Weird tech devices without any "reliability" Limitations, but then impose malfunctions on them whenever he thinks doing so will add to the story. This requires a deft touch and proper exercise of the GM's discretion, since the players will (rightly) become leery of buying gadgets if they malfunction frequently or unfairly. Second, the GM can require characters to apply reliability Limitations to most Weird tech devices, but instead of invoking those Limitations whenever the rules say he should, he only calls for a roll when a malfunction would add to the drama of the story. Gamemasters who choose this option may want to reduce the value of the Limitation if they don't believe it will be as restrictive as normal.

TOOLS OF VILLAINY

Weird tech tends to be the province of villains and NPCs more than heroes. Pulp heroes are skilled, self-reliant folk who don't need to load themselves down with gadgetry. In fact, unless a character is a Gadgeteer or Scientist, or having a major gadget is his shtick (like the character the Rocketeer, in the comic book and movie of the same name), it's entirely possible he has no Weird tech at all... or at most, just a few simple, useful devices that help move the story along.

This is particularly true of powerful weapons and other devices, such as all of the energy rays listed below. Pulp heroes don't carry around wonder-weapons and use them every Phase of combat — they fight with their fists, their guns, and their unshakeable courage. They're usually out to stop the villain from using his fiendish death ray or giant zeppelin, not to steal it and use it for themselves.

In game terms, the GM may want to consider imposing point or effectiveness ceilings on the types of Weird Science devices Player Characters can have. Use these with caution — many of the simple, and perfectly allowable, gadgets described below take a lot of Active Points to create — but consider them as a way to keep Weird tech from unbalancing your campaign.

Using Weird Science In The Game

For many gamers, Weird Science is one of the most enjoyable aspects of Pulp gaming. It can add a lot to the game in terms of character creation, plot development, and action enhancement. On the other hand, if the GM isn't careful, it can negatively effect the game by giving the PCs too much power. In most Pulp stories and campaigns, the heroes can't fall back on powerful magic spells or planet-busting starships to achieve their goals; they have to get things done with their own personal Skills and abilities. Properly used, Weird Science can enhance this quality... but if the GM doesn't watch out, it can take over the game, leaving the characters looking weak when compared to the latest Weird tech weapon or vehicle.

The point and effectiveness ceilings discussed above are one way to try to keep Weird Science under control. Here are some other suggestions.

WHO CAN BUILD IT?

Weird tech tends to become more of a problem if you have a Player Character who can create it. As long as the heroes have to depend on NPCs for their gadgetry, the GM controls their access to it and prevent them from getting their hands on something they shouldn't have (like a disintegration ray or an infallible invisibility suit). But if one of the PCs is a Gadgeteer, Scientist, or the like, he has the Skills (and Character Points) to invent his own devices. That makes it a lot more likely that gadgets will affect the course of the action on a regular basis (in fact, it's almost a given), and that other types of characters will also have a few Weird tech devices of their own (since they can buy them with Character Points using the explanation of "my friend the Gadgeteer built this for me").

To prevent this from becoming a problem in a Pulp Hero game, the GM should monitor Gadgeteer PCs carefully. Just because a character has some Character Points to spend, or a VPP with which to build Weird tech, doesn't mean he can build anything he wants — the GM still has to approve all gadgets. If some weapon or gizmo seems likely to unbalance the game or cause other difficulties, the GM should just say no. And before he lets someone play a Gadgeteer character, the GM should make sure the player understands the problem and promises not to abuse his abilities.

Furthermore, the GM should be wary of letting characters who aren't Gadgeteers or Scientists buy technology-oriented Skills like Electronics, Inventor, and Systems Operation (not to mention Computer Programming!). The ability to create, modify, and repair advanced technologies isn't commonplace during the Pulp era; most people who know about such things tend to have specialized in them. In a Pulp Hero game, those Skills should generally remain the province of the Gadgeteer, the Scientist, and their ilk. There's nothing wrong with breaking out of stereotypes and giving characters depth by adding an unusual Skill or two, but if the GM sees characters start to buy Weird tech skills so they can load themselves up with gadgets, he should put a stop to it.

WHO CAN USE IT?

Just because characters have access to Weird tech doesn't mean they know how to use it. Simple gadgets — such as skeleton keys and concealed melee weapons — can be used by any character; after all, countless heroes in the pulps carried such things. But the strange, cutting-edge devices that Weird Science gives birth to aren't necessarily user-friendly. Just figuring out how to turn one on may require an Electronics or Systems Operation roll; using it may require a unique Skill (such as a form of the *Power* Skill, or a Weapon Familiarity). This is a good way for the GM to keep the Player Characters from using powerful Weird tech weapons they seize from the villains they fight — investing in several Skills just to learn how to use a device properly is more than most characters are willing to do.

Ray Weapons

One of the most popular Weird tech weapons in the pulps is the energy ray. Ever-eager for a story hook or an intriguing plot twist, Pulp authors created energy beam weapons with all sorts of strange effects.

DEATH RAY

Effect: RKA 10d6
Target: One character
Duration: Instant
Range: 1500m
Charges: 4 Charges
Breakability: 30 PD/30 ED

Description: This ray has a simple effect: it kills any living thing it strikes. It's the perfect weapon for a villain who wants to impress people with his brutality and ruthlessness.

Game Information: RKA 10d6 (150 Active Points); OAF Bulky (-1½), Only Works Against Living Beings (-½), 4 Charges (-1). Total cost: 37 points.

Options:

1) **Strong Death Ray:** Increase to RKA 12d6. 180 Active Points; total cost 45 points.
2) **Weak Death Ray:** Decrease to RKA 8d6. 120 Active Points; total cost 30 points.
3) **Experimental Death Ray:** The ray gun is a prototype that doesn't always work. Add Activation Roll 11- (-½). Total cost: 33 points.
4) **Long-Distance Ray:** The ray can affect targets nearly four miles away! Add Increased Maximum Range (6,000m, or about 3.7 miles; +½) and No Range Modifier (+½). 300 Active Points; total cost 75 points.
5) **Invisible Ray:** The ray can't be seen with the naked eye (though the gun itself can be). Add Invisible to Sight Group (+½). 225 Active Points; total cost 56 points.
6) **Wide-Beam Ray:** The ray can affect many living beings at once. Decrease to RKA 8d6 and add Area Of Effect (32m Cone; +¾) and No Range (-½). 210 Active Points; total cost 47 points.
7) **Delayed Ray:** The ray needs time to warm up to fire each shot. Add Extra Time (Extra Phase; -¾). Total cost: 31 points.
8) **Hard To Use:** The ray is so advanced not everyone can figure out how to use it. Add Requires An Electronics Roll (-1 per 20 Active Points; -¼). Total cost: 35 points.
9) **Variant Ray:** Only a force-field or specially-made clothing (see Death-Ray Resistant Suit on page 246) can protect someone from this form of the Death Ray. Decrease to RKA 8d6 and add NND (defense is ED Resistant Protection defined as a force-field, or the like, or a Death Ray-Resistant Suit; +1) and Does BODY (+1). 360 Active Points; total cost 90 points.

10) **Sonic Destructor:** This form of Death Ray kills without leaving any traces — the victim just drops dead, and unless someone sees the gun as it's being fired, no one knows why. Add Invisible Power Effects (the ray is Invisible to the Sight and Hearing Groups, and the effects of the Ray are Invisible to other characters; +1½). 375 Active Points; total cost 94 points.

DETONATION RAY

Effect: RKA 1 point-6d6, Requires Gunpowder
Target: Varies
Duration: Instant
Range: 900m
Charges: 4 Charges
Breakability: 36 PD/36 ED

Description: This ray has the devastating effect of making gunpowder explode! Armed with this weapon, a villain can make his foes' guns explode in their hands or cause an enemy nation's military stockpiles to go off like Fourth of July firecrackers.

Game Information:

Cost Power

33 **Detonation Ray:** Multipower, 180-point reserve; all OAF Bulky (-1½), Requires Gunpowder (-1); No Conscious Control (character can activate ray when desired, but the slot used depends on the amount of gunpowder present, not his choice; -1), 4 Charges (-1) for entire Multipower

1f **1) Minuscule Amount Of Gunpowder (1-2 Bullets):** RKA 1 point, Area Of Effect (1m Radius; +¼), Increased Maximum Range (900m; +1¼); OAF Bulky (-1½), Requires Gunpowder (-1)

1f **2) Tiny Amount Of Gunpowder (3-6 Bullets):** RKA ½d6, Area Of Effect (1m Radius; +¼), Increased Maximum Range (900m; +1); OAF Bulky (-1½), Requires Gunpowder (-1)

1f **3) Small Amount Of Gunpowder (7-20 Bullets):** RKA 2d6 (14m Radius Explosion; +¼), Increased Maximum Range (900m; +½); OAF Bulky (-1½), Requires Gunpowder (-1)

2f **4) Decent Amount Of Gunpowder (21-100 Bullets):** RKA 2d6 (24m Radius Explosion; +½), Increased Maximum Range (900m; +½); OAF Bulky (-1½), Requires Gunpowder (-1)

3f **5) Large Amount Of Gunpowder (101+ Bullets, Small Barrel):** RKA 3d6 (36m Radius Explosion; +¾), Increased Maximum Range (900m; +¼); OAF Bulky (-1½), Requires Gunpowder (-1)

3f **6) Really Large Amount Of Gunpowder (Barrel):** RKA 4d6 (48m Radius Explosion; +¾), Increased Maximum Range (900m; +¼); OAF Bulky (-1½), Requires Gunpowder (-1)

4f **7) Enormous Amount Of Gunpowder (Multiple Barrels):** RKA 5d6 (60m Radius Explosion; +¾), Increased Maximum Range (900m; +¼); OAF Bulky (-1½), Requires Gunpowder (-1)

5f **8) Humongous Amount Of Gunpowder (Lots And Lots Of Barrels):** RKA 6d6 (72m Radius Explosion; +1); OAF Bulky (-1½), Requires Gunpowder (-1)

Total cost: 53 points.

DISINTEGRATION RAY

Effect: RKA 8d6, NND, Does BODY
Target: One character
Duration: Instant
Range: 1200m
Charges: 4 Charges
Breakability: 72 PD/72 ED

Description: This ray disintegrates anything it touches, leaving nothing but dust in its wake.

Game Information: RKA 8d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1) (360 Active Points); OAF Bulky (-1½), 4 Charges (-1). Total cost: 103 points.

Options:

1) **Strong Disintegration Ray:** Increase to RKA 10d6. 450 Active Points; total cost 128 points.
2) **Weak Disintegration Ray:** Decrease to RKA 6d6. 270 Active Points; total cost 77 points.
3) **Experimental Disintegration Ray:** The ray gun is a prototype that doesn't always work. Add Activation Roll 11- (-½). Total cost: 90 points.
4) **Invisible Ray:** The ray can't be seen with the naked eye (though the gun itself can be). Add Invisible to Sight Group (+½). 420 Active Points; total cost 120 points.
5) **Wide-Beam Ray:** The ray can affect many living beings at once. Decrease to RKA 6d6 and add Area Of Effect (64m Cone; +1) and No Range (-½). 360 Active Points; total cost 90 points.
6) **Delayed Ray:** The ray needs time to warm up to fire each shot. Add Extra Time (Extra Phase; -¾). Total cost: 85 points.
7) **Hard To Use:** The ray is so advanced not everyone can figure out how to use it. Add Requires An Electronics Roll (-1 per 20 Active Points; -¼). Total cost: 96 points.

ELECTROPISTOL

Effect: Blast 8d6
Target: One character
Duration: Instant
Range: 400m
Charges: 12 Charges
Breakability: 8 PD/8 ED

Description: This amazing weapon is a pistol that fires a beam of energy rather than a bullet! Depending on the inventor's whims, the beam

may look like a crackling bolt of lightning, a straight beam in just about any color, a row of circles of energy, or just about any other appearance you can imagine.

Game Information: Blast 8d6 (40 Active Points); OAF (-1), Beam (-¼), STR Minimum (8; -¼), 12 Charges (-¼). Total cost: 14 points.

Options:

1) **Strong Electropistol:** Increase to Blast 10d6. 50 Active Points, total cost 18 points.
2) **Weak Electropistol:** Decrease to Blast 6d6. 30 Active Points; total cost 11 points.
3) **Experimental Electropistol:** The Electropistol is a very advanced device, and as such doesn't always work properly. Add Activation Roll 13- (-¼). Total cost: 13 points.
4) **Larger Battery:** Some Electropistols have larger batteries, so they can fire more shots. Change to 24 Charges (+¼). 50 Active Points; total cost 20 points.
5) **Smaller Battery:** On the other hand, some Electropistols don't have very much power. Change to 6 Charges (-¾). Total cost: 16 points.
6) **Expandable Electropistol:** The shooter can vary the width of the Electropistol's beam. Remove Beam (-¼). Total cost: 12 points.
7) **Automatic Electropistol:** This type of Electropistol can fire multiple beams at once. Add Autofire (3 shots; +¼) and change to 30 Charges (+¼). 60 Active Points; total cost 24 points.
8) **Short-Range Electropistol:** The Electropistol's beam can't maintain coherence over long distances. Add Reduced By Range (-¼). Total cost: 13 points.

ENGINE-STOPPING RAY

Effect: Dispel Movement Powers 20d6, Engine-Based Movement Only
Target: One engine
Duration: Instant
Range: 600m
Charges: 4 Charges
Breakability: 15 PD/15 ED

Description: A favorite of spies and military men everywhere, this ray, when projected against any kind of vehicle motor, causes that motor to cease functioning. Getting it working again requires significant repair work, or replacing the engine altogether.

Game Information: Dispel Movement Powers 20d6, Variable Effect (any one Movement Power at a time; +½) (90 Active Points); OAF Bulky (-1½), Only Works Against Engine-/Motor-Based Movement Powers (-1), 4 Charges (-1). Total cost: 20 points

Options:

1) **Strong Ray:** Increase to Dispel Movement Powers 24d6. 108 Active Points; total cost 24 points.
2) **Weak Ray:** Decrease to Dispel Movement Powers 16d6. 72 Active Points; total cost 16 points.
3) **Experimental Ray:** The Engine-Stopping Ray is a fairly new weapon; all the bugs haven't been worked out yet. Add Activation Roll 11- (-½). Total cost: 18 points.
4) **Long-Distance Ray:** The ray can affect targets over a mile away! Add Increased Maximum Range (2,400m, or about 1.5 miles; +½) and No Range Modifier (+½). 150 Active Points; total cost 33 points.
5) **Invisible Ray:** The ray can't be seen with the naked eye (though the gun itself can be). Add Invisible to Sight Group (+½). 120 Active Points; total cost 27 points.
6) **Delayed Ray:** The ray needs time to warm up to fire each shot. Add Extra Time (Extra Phase; -¾). Total cost: 17 points.
7) **Hard To Use:** The ray is so advanced not everyone can figure out how to use it. Add Requires An Electronics Roll (-1 per 20 Active Points; -¼). Total cost: 19 points.

PARALYSIS RAY

Effect: Entangle 6d6, 6 PD/6 ED, Takes No Damage From Physical Attacks
Target: One character
Duration: Instant
Range: 600m
Charges: 4 Charges
Breakability: 24 PD/24 ED

Description: Instead of killing or destroying the target, this ray leaves him unable to move.

Game Information: Entangle 6d6, 6 PD/6 ED, Takes No Damage From Physical Attacks (+1) (120 Active Points); OAF Bulky (-1½), 4 Charges (-1). Total cost: 34 points.

Options:

1) **Strong Paralysis Ray:** Increase to Entangle 8d6, 8 PD/8 ED. 160 Active Points; total cost 46 points.
2) **Weak Paralysis Ray:** Decrease to Entangle 4d6, 4 PD/4 ED. 80 Active Points; total cost 23 points.
3) **Experimental Paralysis Ray:** Even Weird Science isn't infallible. Some kink in the Ray's wiring makes it misfire on occasion. Add Activation Roll 14- (-¼). Total cost: 32 points.
4) **Invisible Ray:** The ray can't be seen with the naked eye (though the gun itself can be). Add Invisible to Sight Group (+½). 150 Active Points; total cost 43 points.
5) **Hard To Use:** The ray is so advanced not everyone can figure out how to use it. Add Requires An Electronics Roll (-1 per 20 Active Points; -¼). Total cost: 32 points.

Other Weapons

BUTTON GRENADES

Effect: RKA 2d6
Target: 14m Radius Explosion
Duration: Instant
Range: RBS
Charges: 6 Charges
Breakability: 9 PD/9 ED

Description: The character wears clothing with buttons, and some of those buttons aren't what they appear to be — they're actually cleverly-disguised grenades that pack the punch of a standard grenade into a tiny package.

Game Information: RKA 2d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); IAF (-½), Range Based On STR (-¼), 6 Charges (-¾). Total cost: 15 points.

Options:

1) **Strong Button Grenades:** Increase to Area Of Effect (24m Radius Explosion; +½). 45 Active Points; total cost 18 points.
2) **Weak Button Grenades:** Decrease to RKA 1d6. 19 Active Points; total cost 8 points.
3) **Experimental Button Grenades:** It's hard to build these things just right. Sometimes the character gets a dud. Add Activation Roll 14- (-¼). Total cost: 13 points.
4) **Exploding Matches:** Instead of deadly buttons, the character carries matches that are actually tiny grenades. Decrease to RKA 1d6 and change to 24 Charges (+¼). 22 Active Points; total cost 12 points.
5) **Cigarette Case Bomb:** What looks like a fancy silver cigarette case is actually a powerful bomb that the character can set to detonate at any time up to one hour. Increase to RKA 3d6 and the Radius to 20m (+½), add Trigger (a set amount of time within the next hour; +¼), and change to 1 Charge (-2). 79 Active Points; total cost 21 points.

ELECTRIC WAND

Effect: Blast 6d6, NND
Target: One character
Duration: Instant
Range: Touch
Charges: 8 Charges
Breakability: 12 PD/12 ED

Description: This wand-like, metal-tipped stick contains a battery capable of emitting a powerful electrical charge. When the character touches it to a target and activates it, the zap stuns the target unless he's totally insulated.

Game Information: Blast 6d6, NND (defense is insulated rED covering the target's entire body; +1) (60 Active Points); OAF (-1), No Range (-½), 8 Charges (-½). Total cost: 20 points.

Options:

1) **Strong Wand:** Increase to Blast 8d6. 80 Active Points; total cost 27 points.
2) **Weak Wand:** Decrease to Blast 4d6. 40 Active Points; total cost 13 points.
3) **Experimental Wand:** The Wand doesn't always work as desired. Add Activation Roll 14- (-¼). Total cost: 18 points.
4) **Hard To Use:** Not everyone can figure out how to use the Electric Wand properly — hitting the target and trigger simultaneously is difficult. Character must also buy WF: Electric Wand (1 Character Point).

FINGERTIP FLASH POWDER

Effect: Sight Group Flash 6d6
Target: One character
Duration: Instant
Range: No Range
Charges: 4 Charges
Breakability: 6 PD/6 ED

Description: The character dusts his fingertips with a special type of flash powder. By snapping his fingers, he can cause a flare of light bright enough to blind one of his foes for a few seconds. If he gets his hands wet, or wipes them on anything, he brushes off some or all of the powder.

Game Information: Sight Group Flash 6d6 (30 Active Points); IAF Fragile (-¾), No Range (-½), 4 Charges (-1). Total cost: 9 points.

Options:

1) **Strong Flash Powder:** Increase to Sight Group Flash 8d6. 40 Active Points; total cost 12 points.
2) **Weak Flash Powder:** Decrease to Sight Group Flash 4d6. 20 Active Points; total cost 6 points.

GAS GUN

Effect: Blast 8d6, NND
Target: One character
Duration: Instant
Range: 6m
Charges: 30 Charges
Breakability: 18 PD/18 ED

Description: A favorite of both Thrillseeking Criminals (who, after all, don't really want to hurt anyone...) and Masked Crimefighters, this weapon projects a harmless knockout gas over a range of a few meters. The gas usually takes effect instantly; some hardy individuals may require two doses.

Game Information: Blast 8d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), 30 Charges (+¼) (90 Active Points); OAF (-1), Limited Range (6m; -¼), Does Not Work In High Winds Or Rain (-¼). Total cost: 36 points.

Options:

1) **Strong Gas Gun:** Increase to Blast 10d6. 112 Active Points; total cost 45 points.

2) **Weak Gas Gun:** Decrease to Blast 6d6. 67 Active Points; total cost 27 points.
3) **Long-Lasting Gas Gun:** The standard version of this weapon assumes the character doesn't want to knock his victims out for very long — just long enough to capture them or get away. This version of the Gas Gun leaves the victim unconscious for hours. Change to Drain STUN 8d6, Delayed Return Rate (points return at the rate of 5 per Minute; +1) (160 Active Points); OAF (-1), Does Not Work In High Winds Or Rain (-¼), Limited Range (6m; -¼), 16 Charges (-0). Total cost: 64 points.
4) **Lethal Gas Gun:** Criminals of the less kind-hearted variety often prefer this version of the Gas Gun, which fires a lethal gas. Some wielders tailor the gas so that it has a distinctive effect on the victim (makes his face look skull-like, leaves him with a rictus grin on his face, turns his skin green, or the like). Change to RKA 4d6 and add Does BODY (+1). 195 Active Points; total cost 78 points.

HYPODERMIC FINGER-CAPS

Effect: Blast 8d6, NND
Target: One character
Duration: Instant
Range: Touch
Charges: 8 Charges
Breakability: 16 PD/16 ED

Description: This weapon consist of eight small caps the character wears on his fingers (excluding his thumbs). Each cap has a small needle coated with a potent knockout drug. All he has to do is touch the victim to render him unconscious.

Game Information: Blast 8d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity] or sufficiently thick clothing or body armor all over his body; +1) (80 Active Points); OAF (-1), No Range (-½), 8 Charges (-½). Total cost: 27 points.

Options:

1) **Strong Drug:** Increase to Blast 10d6. 100 Active Points; total cost 33 points.
2) **Weak Drug:** Decrease to Blast 6d6. 60 Active Points; total cost 20 points.
3) **Concealable Finger-Caps:** This version of the weapon isn't obvious. The caps may be concealed in a pair of gloves, or perhaps the needles fit under the fingernails in such a way that they can only be seen on close inspection. Change OAF (-1) to IAF (-½). Total cost: 32 points.

MERCY GUN

Effect: Blast 6d6, STUN Only
Target: One character
Duration: Instant
Range: 300m
Charges: 12 Charges
Breakability: 6 PD/6 ED

Description: This gun is a less-than-lethal alternative for crimefighters and adventurers who want to take their foes alive. Some versions use "bullets" that are actually anaesthetic darts or gas capsules; others simply strike with a non-harmful impact.

Game Information: Blast 6d6 (30 Active Points); OAF (-1), STUN Only (-0), Beam (-¼), STR Minimum (8; -¼), 12 Charges (-¼). Total cost: 11 points.

Options:

1) **Strong Mercy Gun:** Increase to Blast 8d6. 40 Active Points; total cost 14 points.
2) **Weak Mercy Gun:** Decrease to Blast 4d6. 20 Active Points; total cost 7 points.
3) **Mercy Autopistol I:** This form of the pistol can fire on full automatic mode, and has a larger clip of bullets to compensate. Add Autofire (5 shots; +½) and change to 32 Charges (+¼). 52 Active Points; total cost 21 points.
4) **Mercy Autopistol II:** As Mercy Autopistol I, but with a larger clip of ammunition. Increase to 60 Charges (+½). 60 Active Points; total cost 24 points.
5) **Mercy Pistol Variant:** The bullets from this Mercy Pistol are much harder to resist. Change to Drain STUN 4d6 (40 Active Points); OAF (-1), Beam (-¼), STR Minimum (8; -¼), 12 Charges (-¼). Total cost: 14 points.
6) **Mercy Autopistol Variant:** As Mercy Pistol Variant, but add Autofire (5 shots; +1½) and change to 32 Charges (+¼). 110 Active Points; total cost 40 points.

MINI-GRENADES

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: RBS
Charges: Varying Charges
Breakability: Varies

Description: Many Pulp adventurers carry miniaturized grenades. Useful as both weapons and tools, these devices have the impact of full-sized grenades but are much smaller and lighter, making it easy for a character to carry a lot of them in pockets or pouches.

For throwing purposes, mini-grenades weigh .4 kg.

Game Information:

Cost	Power
12	**Concussive Mini-Grenade:** Blast 6d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)
12	**Flare Mini-Grenade:** Sight Group Flash 6d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)
12	**Frag Mini-Grenade:** RKA 2d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)
12	**Incendiary Mini-Grenade:** RKA 1½d6, Armor Piercing (+¼), Area Of Effect (12m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)
17	**Knockout Gas Mini-Grenade:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (8m Radius; +½) (50 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)
30	**Paralysis Gas Mini-Grenade:** Entangle 4d6, 4 PD/4 ED, Takes No Damage From Attacks (+1), Area Of Effect (2m Radius; +¼) (90 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)
4	**Smoke Mini-Grenade:** Change Environment (create smoke), -3 to Sight Group PER Rolls, Area Of Effect (8m Radius; +½) (13 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)
27	**Tear Gas Mini-Grenade:** Sight Group Flash 4d6, Area Of Effect (8m Radius; +½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (80 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

RAPIER BELT

Effect: HKA 1d6
Target: One character
Duration: Instant
Range: Touch
END Cost: 0
Breakability: 4 PD/4 ED

Description: Many Pulp heroes are expert fencers... but it's not polite to carry a sword around on the streets. At the very least, it gets the character noticed. But this gadget avoids this problem. It consists of a Weird tech rapier whose blade can wrap all the way around a character's waist without losing temper, then return to true when drawn. The scabbard is the character's belt. Unless someone examines his clothing with great care, they'll never find the concealed weapon.

Game Information: HKA 1d6 (up to 2d6 with STR), Reduced Endurance (0 END; +½) (22 Active Points); IAF (-½), STR Minimum (10; -½). Total cost: 11 points.

ROCKET PISTOL

Effect: RKA 1½d6, Increased Maximum Range, Invisible Power Effects (leaves no shell casings)
Target: One character
Duration: Instant
Range: 1000m
Charges: 12 Charges
Breakability: 7 PD/7 ED

Description: This Weird tech pistol uses special bullets that are, in effect, self-propelled miniature rockets. The shots travel *much* further than typical bullets (a full kilometer!), and don't leave any shell casings behind as evidence.

Game Information: RKA 1½d6, Increased Maximum Range (1,000m; +½), Invisible Power Effects (leaves no shell casings; +¼) (44 Active Points); OAF (-1), STR Minimum (10; -½), Beam (-¼), 12 Charges (-¼). Total cost: 15 points.

Options:

1) **Strong Rocket Pistol:** Increase to RKA 2d6. 52 Active Points; total cost 17 points.
2) **Weak Rocket Pistol:** Decrease to RKA 1d6+1. 35 Active Points; total cost 12 points.
3) **Experimental Rocket Pistol:** Rocket bullets are a new form of technology and thus don't always work right. Add Activation Roll 14- (-¼). Total cost: 13 points.
4) **Hard To Use:** Not everyone can figure out how to use the Rocket Pistol properly — it's not quite the same as firing a standard pistol. Character must also buy WF: Rocket Pistol (1 Character Point).

SWORD-CANE

Effect: HKA 1d6 + knockout drug
Target: One character
Duration: Instant
Range: Touch
END Cost/Charges: 0 for sword, 8 Charges for knockout drug
Breakability: 4 PD/4 ED

Description: A walking stick always adds a touch of elegance to a gentleman's ensemble. This type of cane also adds an element of self-defense. It conceals a long, slender, strong sword-blade. Inside the blade is a reservoir of knockout drug the character can use to render opponents unconscious by stabbing or pricking them.

Game Information:

Cost Power

12 **Sword-Cane Blade:** HKA 1d6 (up to 2d6 with STR), Reduced Endurance (0 END; +½) (22 Active Points); IAF (-½), STR Minimum (8; -¼)

27 **Sword-Cane Drug:** Blast 8d6, NND (defense is Life Support [appropriate Immunity]; +1) (80 Active Points); IAF Fragile (-¾), No Range (-½), Linked (-¼), 8 Charges (-½)

Total cost: 39 points.

Options:

1) **Strong Knockout Drug:** Increase to Blast 10d6. 100 Active Points; total cost 33 points; total cost of Sword-Cane 45 points.
2) **Weak Knockout Drug:** Decrease to Blast 6d6. 60 Active Points; total cost 20 points; total cost of Sword-Cane 32 points.

TEAR GAS FOUNTAIN PEN

Effect: Sight Group Flash 4d6, Delayed Recovery
Target: One character
Duration: Instant
Range: No Range
Charges: 4 Charges
Breakability: 12 PD/12 ED

Description: This fountain pen is more than just an elegant writing implement. It also contains a reservoir of tear gas. When the character gets close to someone and triggers the weapon, it squirts a puff of tear gas right in the victim's face. (Some Pulp heroes disguise their tear gas squirters as cigarettes instead of fountain pens.)

Game Information: Sight Group Flash 4d6, NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (70 Active Points); IAF (-½), No Range (-½), 4 Charges (-1). Total cost: 23 points.

Options:

1) **Strong Tear Gas:** Increase to Sight Group Flash 6d6. 105 Active Points; total cost 35 points.
2) **Weak Tear Gas:** Decrease to Sight Group Flash 2d6. 35 Active Points; total cost 12 points.

SUPERHERO WEAPONS

This section covers weapons most often found in the Comic Book Superheroes genre: blaster pistols, theme-shaped boomerangs, web-projecting gadgets, and much more. Many of these weapons are also suitable for Space Opera Science Fiction games or Pulp/Victorian era games with a minor change in appearance (and perhaps in Power Modifiers).

Blasters

One of the most popular weapons in the Superheroes genre is the ubiquitous blaster — an energy pistol or rifle. Wielded by everyone from costumed super-agents to vigilantes, blasters play a part in many super-battles. The "pulson weapon series" described below represents the most common types of blasters, but many others exist.

BLASTER CANE

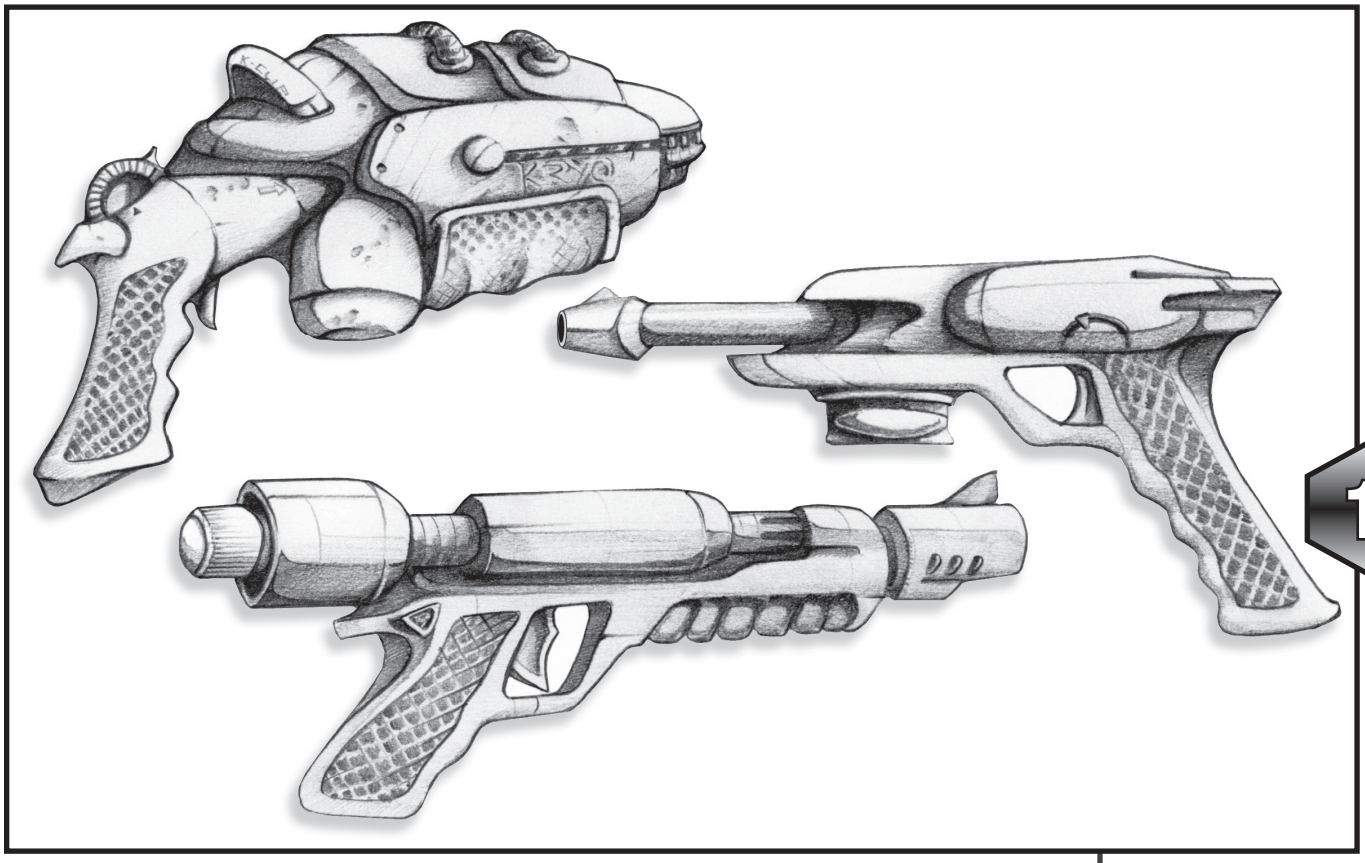
Effect: Blast 8d6
Target: One character
Duration: Instant
Range: 400m
Charges: 8 Charges
Breakability: 8 PD/8 ED

Description: This weapon looks like a more or less ordinary cane — but it conceals a powerful pulson blaster!

Game Information: Blast 8d6 (40 Active Points); IAF (-½), 8 Charges (-½). Total cost: 20 points.

Options:

1) **Strong Cane:** Increase to Blast 12d6. 60 Active Points; total cost 30 points.
2) **Weak Cane:** Decrease to Blast 6d6. 30 Active Points; total cost 15 points.
3) **Realistic Cane:** The Blaster Cane can't pack a powerful enough battery or focusing crystal to maintain beam coherency over long distances. Add Reduced By Range (-¼). Total cost: 18 points.
4) **Experimental Cane:** Due to the miniaturization necessary to fit a blaster into a cane, the weapon tends to burn out easily. Add Activation Roll 12-, Burnout (-¼). Total cost: 18 points.
5) **Disintegrator Cane:** A Disintegrator Cane packs a much deadlier form of blaster than the standard model. Change to RKA 4d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1) (180 Active Points); IAF (-½), 4 Charges (-1). Total cost: 72 points.
6) **Undisguised Cane:** This form of Blaster Cane doesn't look so much like an ordinary object; it's obviously a weapon. Change to OAF (-1). Total cost: Total cost: 16 points.



7) **Better Battery:** This form of the Cane has an enhanced battery and can fire more shots before it needs recharging. Change to 16 Charges (-0). Total cost: 27 points.

BLASTER GAUNTLET

Effect: Blast 8d6
Target: One character
Duration: Instant
Range: 400m
Charges: 32 Charges
Breakability: 10 PD/10 ED

Description: This weapon is a type of gauntlet, though some versions don't cover the full hand and others reach all the way up to the elbow. When triggered cybernetically, it emits a powerful pulson blast.

Game Information: Blast 8d6, 32 Charges (+¼) (50 Active Points); OIF (-½). Total cost: 33 points.

Options:

1) **Strong Blaster:** Increase to Blast 10d6. 62 Active Points; total cost 41 points.
2) **Weak Blaster:** Decrease to Blast 6d6. 37 Active Points; total cost 25 points.
3) **Realistic Blaster I:** Some types of Blaster Gauntlet are bulky and awkward, making it difficult for the wearer to use his hand properly. Add Side Effects (-2 to all DEX Rolls involving the manipulation of objects, automatically occurs; -½). Total cost: 25 points.
4) **Realistic Blaster II:** The Blaster Gauntlet can't pack a powerful enough battery to maintain beam coherency over long distances. Add Reduced By Range (-¼). Total cost: 28 points.
5) **Experimental Blaster:** The Blaster Gauntlet is a prototype that doesn't always work properly. Add Activation Roll 14- (-¼). Total cost: 29 points.
6) **Better Battery:** This form of the Gauntlet has an enhanced battery and can fire more shots before it needs recharging. Change to 64 Charges (+½). 60 Active Points; total cost 40 points.

BLASTER GLOVE

Effect: Blast 8d6
Target: One character
Duration: Instant
Range: 400m
Charges: 12 Charges
Breakability: 8 PD/8 ED

Description: This glove has blaster circuitry woven into its fibers, allowing the wearer to fire deadly bolts of energy by cybernetic command.

Game Information: Blast 8d6 (40 Active Points); OIF (-½), 12 Charges (-¼). Total cost: 23 points.

Options:

1) **Strong Glove:** Increase to Blast 12d6. 60 Active Points; total cost 34 points.
2) **Weak Glove:** Decrease to Blast 6d6. 30 Active Points; total cost 17 points.
3) **Realistic Glove:** The Glove doesn't work by cybernetic command. Instead, the character must hold the hand wearing the gauntlet in

the proper configuration, then use his other hand to touch a trigger on the gauntlet to fire it. Add Gestures (both hands; -½). Total cost: 18 points.

4) **Experimental Glove:** Sometimes the Blaster Gauntlet doesn't work as expected. Add Activation Roll 12- (-¼). Total cost: 20 points.

5) **Better Battery:** This glove has a more efficient power cell, so it can fire more times before running out of energy. Change to 20 Charges (+¼). 50 Active Points; total cost 33 points.

BRACER BLASTER

Effect: Blast 8d6
Target: One character
Duration: Instant
Range: 500m
Charges: 30 Charges
Breakability: 10 PD/10 ED

Description: This weapon is a standard blaster built into a bracer worn on the character's wrist.

Game Information: Blast 8d6, 30 Charges (+¼) (50 Active Points); OIF (-½). Total cost: 33 points.

Options:

1) **Strong Bracer Blaster:** Increase to Blast 12d6. 75 Active Points; total cost 50 points.

2) **Weak Bracer Blaster:** Decrease to Blast 6d6. 37 Active Points; total cost 25 points.

3) **Experimental Bracer Blaster:** The Bracer Blaster sometimes fails to fire. Add Activation Roll 14- (-¼). Total cost: 28 points.

4) **Bracer Auto-Blaster:** The Bracer Blaster is capable of fully automatic fire. Add Autofire (5 shots; +½). 70 Active Points; total cost 47 points.

5) **Focused Bracer Blaster:** The powerful beam of this form of Bracer Blaster cuts through armor easily. Add Armor Piercing (+¼). 60 Active Points; total cost 40 points.

6) **Bracer Exploso-Blaster:** This form of Bracer Blaster emits a beam with a powerful concussive effect. Add Area Of Effect (18m Radius Explosion; +½). 70 Active Points; total cost 47 points.

7) **Lethal Bracer Blaster:** Change to RKA 2½d6. 50 Active Points; total cost 33 points.

8) **Bracer Gun:** Instead of shooting bolts of energy, this bracer-based weapon is a firearm that fires high-caliber armor-piercing bullets. Change to RKA 2d6, Armor Piercing (+¼), 30 Charges (+¼) (45 Active Points); OIF (-½), Beam (-¼). Total cost: 26 points.

9) **Bracer SMG:** As the Bracer Gun, but add Autofire (5 shots; +½). 60 Active Points; total cost 34 points.

COMPRESSED AIR BLASTER

Effect: Blast 8d6, Double Knockback, plus other Attack Powers
Target: One character
Duration: Instant
Range: 400m/300m/450m/250m
Charges: 30 Charges for entire reserve
Breakability: 15 PD/15 ED

Description: This weapon is a blaster whose effects derive from firing bursts of highly-pressurized air. The basic effect is a concussive blast that tends to knock the victim head over heels, but the user can can also feed into the firing chamber sabots containing flechette darts, knockout gas, or flash powder. The user chooses which type of sabot to use (if any) with a thumb-activated selector switch.

Characters must have the GM's permission to buy this gadget, because it uses the *Charges* Limitation in an unusual way. First, the entire Multipower has 30 Charges, reflecting the amount of compressed air carried in the pistol's air cartridge. However, all the slots but the Air Blast have separate *Charges* Limitations to represent the number of sabots the weapon carries for them. Thus, each shot uses one Charge from the reserve *and* one of its own Charges.

Game Information:

Cost	Power
37	**Compressed Air Blaster:** Multipower, 60-point reserve, 30 Charges for entire reserve (+¼); all OAF (-1)
3f	**1) Air Blast:** Blast 8d6 (physical), Double Knockback (+½); OAF (-1)
1f	**2) Flechette Sabots:** RKA 2d6, Armor Piercing (+¼); OAF (-1), 4 Charges (-1)
1f	**3) Flare Sabots:** Sight Group Flash 9d6; OAF (-1), 4 Charges (-1)
2f	**4) Knockout Gas Sabots:** Blast 5d6, Area Of Effect (1m Radius; +¼), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1); OAF (-1), 4 Charges (-1)

Total cost: 44 points.

Options:

1) **Strong Blaster:** Increase reserve to 79 points, Slot 1 to Blast 10d6, Slot 2 to RKA 3d6, Slot 3 to Sight Group Flash 12d6, and Slot 4 to Blast 7d6. Total cost: 60 points.

2) **Weak Blaster:** Decrease to reserve to 45 points, Slot 1 to Blast 6d6, Slot 2 to RKA 1d6, Slot 3 to Sight Group Flash 6d6, and Slot 4 to Blast 3d6. Total cost: 33 points.

3) **Realistic Blaster:** Compressed blasts of air can't travel too far before losing so much cohesion that they have no offensive effect. Add Reduced By Range (-¼) to reserve and all slots. Total cost: 40 points.

4) **Experimental Blaster:** The various switching and firing systems in the Blaster sometimes get jammed up. Add Activation Roll 14- (-¼) to reserve and all slots. Total cost: 40 points.

DEVOLUTIONIZER RAY

Effect: Major Transform 9d6
Target: One character
Duration: Instant
Range: 900m
Charges: 5 Charges
Breakability: 22 PD/22 ED

Description: This energy rifle, one of the most unusual weapons ever created, fires a beam that can cause a living being to spontaneously devolve to a more primitive state. The GM, with input from the player, must determine the exact effects of "devolution energy" (also known as "D-rays") on any given creature. Typically devolved beings become less intelligent and more instinctual, stronger, tougher, and fiercer. The standard rules for removing or adding powers via Transform apply.

Game Information: Major Transform 9d6 (any living being into a less evolved version of itself, heals via another application of this power or a like power), Improved Results Group (+¼) (112 Active Points); OAF (-1), Limited Target (living beings; -¼), 5 Charges (-¾). Total cost: 37 points.

Options:

1) **Strong Ray:** Increase to Major Transform 12d6. 150 Active Points; total cost 50 points.
2) **Weak Ray:** Decrease to Major Transform 6d6. 75 Active Points; total cost 25 points.
3) **Realistic Devolution Ray:** The Ray has a very short range; beyond that point the energy dissipates so much it's totally ineffective. Add Limited Range (30m; -¼). Total cost: 34 points.
4) **Experimental Devolution Ray:** D-rays are a highly theoretical form of energy, defying human ability to create a weapon that can fire them flawlessly at all times. Add Activation Roll 11- (-½). Total cost: 28 points.
5) **Better Battery:** The Ray's battery contains a lot more energy, so it can fire more often before it requires recharging. Change to 10 Charges (-¼). Total cost: 45 points.
6) **Age-Altering Ray:** By changing the nature of the D-ray Transform from "devolution" to "artificial aging," you can convert this weapon into an age-altering ray that can make the target younger or older.

DISINTEGRATOR PISTOL

Effect: RKA 8d6, NND, Does BODY
Target: One character
Duration: Instant
Range: 120m
Charges: 6 Charges
Breakability: 72 PD/72 ED

Description: This terrifyingly powerful energy pistol emits a strange beam that disintegrates anything it touches! Only a properly-tuned force-field can prevent it from harming a target.

Game Information: RKA 8d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1) (360 Active Points); OAF (-1), Limited Range (120m; -¼), 6 Charges (-¾). Total cost: 120 points.

Options:

1) **Strong Disintegrator:** Increase to RKA 10d6. 450 Active Points; total cost 150 points.
2) **Weak Disintegrator:** Decrease to RKA 6d6. 270 Active Points; total cost 90 points.
3) **Experimental Disintegrator:** Sometimes the Disintegrator Ray "jams" due to its prototype technology, requiring a quick repair before it will work again. Add Activation Roll 14- Jammed (-½). Total cost: 103 points.
4) **Wide-Beam Disintegrator:** Add Area Of Effect (1m Radius; +¼). 390 Active Points; total cost 130 points.
5) **Disintegrator Rifle:** This form of Disintegrator Ray maintains the beam's coherency, and thus effectiveness, over long distances. Remove Limited Range (-¼) and add Two-Handed (-½). Total cost: 111 points.
6) **Weakening Disintegrator Ray:** This form of the Ray has a long range, but gets weaker the further it travels. Change Limited Range (-¼) to Reduced By Range (-¼). Total cost: 120 points.
7) **Stronger Battery:** Increase to 10 Charges (-¼). Total cost: 144 points.
8) **Weaker Battery:** Decrease to 3 Charges (-1¼). Total cost: 103 points.

HEAT RAY PISTOL

Effect: RKA 3d6, Penetrating (x2); RKA 2d6, Penetrating, ignites flammable objects; RKA 1d6
Target: One character/One character/Area Of Effect (up to a human-sized surface)
Duration: Instant/Constant/Constant
Range: 100m
Charges: 30 Charges
Breakability: 22 PD/22 ED

Description: This weapon is a blaster that emits a beam of heat so concentrated and powerful that it melts some objects (metals, plastics, glass, and the like) and burns/ignites others (such as flesh,

cloth, or wood). Ignited objects keep burning until they consumes all the fuel, run out of oxygen, or someone smothers the flames; other flammable objects touching them ignite as well. Alternately, the character can direct the beam at lower power against a metal object to heat it up to the point where it burns anyone who touches it.

When a character fires this pistol, he only declares which slot he's using if he wants to use Slot 3. Otherwise the GM determines which effect — Melting or Burning — applies based on the composition of the target object(s).

Game Information:

Cost	Power
45	**Heat Ray Pistol:** Multipower, 90-point reserve, 30 Charges for entire reserve (+¼); all OAF (-1), No Knockback (-¼), Limited Range (100m; -¼)
4f	**1) Melting:** RKA 3d6, Penetrating (x2; +1); OAF (-1), No Knockback (-¼), Limited Range (100m; -¼)
2f	**2) Burning:** RKA 2d6, Penetrating (+½); OAF (-1), No Knockback (-¼), Limited Range (100m; -¼) *plus* RKA 1 point, Constant (+½), Reduced Endurance (0 END; +½), Sticky (only affects flammables; +¼), Uncontrolled (see text; +½); OAF (-1), No Knockback (-¼), Limited Range (100m; -¼), Linked (-½)
1f	**3) Heat Metal:** RKA 1d6, Area Of Effect (Surface of any object up to human size; +¼), Constant (+½); OAF (-1), Limited Range (100m; -¼), Only Works On Metallic Objects (-½)

Total cost: 52 points.

Options:

1) **Strong Heat Ray:** Increase reserve to 120 points, Slot 1 to RKA 4d6, and Slot 2 to RKA 3d6. Total cost: 69 points.
2) **Weak Heat Ray:** Decrease to reserve to 60 points, Slot 1 to RKA 2d6, and Slot 2 to RKA 1d6. Total cost: 34 points.
3) **Experimental Heat Ray:** The Heat Ray's technology doesn't always function properly; sometimes the heat shielding fails and the weapon's heat melts a crucial component. Add Activation Roll 14- Jammed (-½) to reserve and all slots. Total cost: 47 points.

ICE BLASTER

Effect: Various ice/cold-based Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: 60 Charges for entire reserve
Breakability: 18 PD/18 ED

Description: This pistol uses a supply of supercooled fluid and various ultra-tech cooling and projecting technologies to create various ice effects. Depending on how the firer tunes the focusing crystal and feed mechanism, he can blast his targets with icy bolts or darts, coat the ground with slippery ice, or even encase his foes in blocks of solid ice!

Game Information:

Cost	Power
45	**Ice Blaster:** Multipower, 60-point reserve, 60 Charges (+½) for entire reserve; all OAF (-1)
3f	**1) Ice Blast I:** Blast 12d6; OAF (-1)
2f	**2) Ice Blast II:** Blast 8d6, Area Of Effect (1m Radius; +¼); OAF (-1)
2f	**3) Ice Blast III:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½); OAF (-1), Requires 3 Charges Per Use (-½)
2f	**4) Icicle Dart:** RKA 2d6, Armor Piercing (+¼); OAF (-1), Requires 2 Charges Per Use (-¼)
3f	**5) Deep Freeze Blast:** Blast 6d6, NND (defense is Life Support [Safe Environment: Intense Cold]; +1); OAF (-1)
2f	**6) Frozen In Ice:** Entangle 6d6, 6 PD/6 ED; OAF (-1), Vulnerable (Fire/Heat; -1), Requires 5 Charges Per Use (-½)
1f	**7) Ice Sheet:** Change Environment (create ice sheet), -4 to DEX Rolls to move on, Area Of Effect (Surface 16m radius; +1), Personal Immunity (+¼); OAF (-1), Can Only Be Applied To Horizontal Surfaces (*e.g.,* the ground and floors; -0), Requires 4 Charges Per Use (-½)

Total cost: 60 points.

Options:

1) **Strong Ice Blaster:** Increase reserve to 75 points, Slot 1 to Blast 15d6, Slot 2 to Blast 10d6, Slot 3 to Blast 10d6, Slot 4 to RKA 3d6, Slot 5 to Blast 7d6, Slot 6 to Entangle 7d6, 7 PD/7 ED, and Slot 7 to 32m radius. Total cost: 74 points.
2) **Weak Ice Blaster:** Decrease reserve to 45 points, Slot 1 to Blast 9d6, Slot 2 to Blast 6d6, Slot 3 to Blast 6d6, Slot 4 to RKA 1d6, Slot 5 to Blast 4d6, Slot 6 to Entangle 4d6, 4 PD/4 ED, and Slot 7 to 8m radius. Total cost: 44 points.
3) **Ice-Projecting Suit:** Instead of using a pistol, the character builds his ice weapon into a costume, suit of armor, or the like. Change OAF (-1) to OIF (-½) on all slots. Total cost: 79 points.

LASER PISTOL

Effect: RKA 2½d6, Armor Piercing
Target: One character
Duration: Instant
Range: 800m
Charges: 12 Charges
Breakability: 12 PD/12 ED

Description: This energy pistol fires a beam of coherent light with enough power to cut through solid steel.

Game Information: RKA 2½d6, Armor Piercing (+¼), Increased Maximum Range (+¼) (60 Active Points); OAF (-1), 12 Charges (-¼). Total cost: 27 points.

Options:

1) **Strong Laser:** Increase to RKA 3d6. 67 Active Points; total cost 30 points.
2) **Weak Laser:** Decrease to RKA 2d6. 45 Active Points; total cost 20 points.
3) **Realistic Laser:** Too much particulate matter in the air can "soak up" the power of the laser beam. Add Blocked By Smoke Or Steam (-¼). Total cost: 24 points.
4) **Experimental Laser:** Gadgeteers have found it difficult to build a Laser Pistol small enough to be carried easily but which retains enough power to inflict significant damage on the target; sometimes the beam fails to fire. Add Activation Roll 13- (-¼). Total cost: 24 points.
5) **Laser Bracer:** This form of Laser Pistol is built into a bracer, gauntlet, or other device that's difficult to take away from the character. Change OAF (-1) to OIF (-½). Total cost: 34 points.
6) **Larger Clip:** Increase to 30 Charges (+¼). 70 Active Points; total cost 35 points.
7) **Smaller Clip:** Decrease to 4 Charges (-1). Total cost: 20 points.

LASER RIFLE

Effect: Blast and RKA in various forms
Target: One character
Duration: Instant
Range: Varies
Charges: 64 Charges for entire reserve
Breakability: 18 PD/18 ED

Description: This laser weapon uses beam amplification, modulation, and alteration technology to turn a simple laser rifle into a multi-function weapon adaptable to nearly any combat situation or foe. Most of its slots are scaled back in power so they do Normal Damage instead of Killing Damage, but you can easily substitute the equivalent DCs in RKA if you prefer.

Game Information:

Cost	Power
45	**Laser Rifle:** Multipower, 60-point reserve, 64 Charges for entire reserve (+½); all OAF (-1)
3f	**1) Primary Laser:** Blast 12d6; OAF (-1), No Knockback (-¼)
2f	**2) Focused Laser:** Blast 9d6, Armor Piercing (+¼); OAF (-1), No Knockback (-¼)
3f	**3) X-Ray Laser:** Blast 8d6, Invisible To Sight Group (source of power not invisible, only the beam itself; +½); OAF (-1), No Knockback (-¼)
3f	**4) Sniping Laser:** Blast 8d6, No Range Modifier (+½); OAF (-1), No Knockback (-¼)
3f	**5) Pulse Laser:** Blast 8d6, Autofire (5 shots, +½); OAF (-1), No Knockback (-¼)
3f	**6) Modulated Laser:** Blast 6d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1); OAF (-1)
3f	**7) High-Intensity Laser:** RKA 4d6; OAF (-1), No Knockback (-¼)
3f	**8) Wide-Beam Laser:** Sight Group Flash 12d6; OAF (-1)

Total cost: 68 points.

Options:

1) **Strong Laser Rifle:** Increase reserve to 75 points, Slot 1 to Blast 15d6, Slot 2 to Blast 10d6, Slot 3 to Blast 10d6, Slot 4 to Blast 10d6, Slot 5 to Blast 10d6, Slot 6 to Blast 7d6, Slot 7 to RKA 5d6, and Slot 8 to Flash 15d6. Total cost: 81 points.
2) **Weak Laser Rifle:** Decrease reserve to 45 points, Slot 1 to Blast 9d6, Slot 2 to Blast 6d6, Slot 3 to Blast 6d6, Slot 4 to Blast 6d6, Slot 5 to Blast 6d6, Slot 6 to Blast 4d6, Slot 7 to RKA 3d6, and Slot 8 to Flash 9d6. Total cost: 48 points.
3) **Built-In Laser Rifle:** This form of the Laser Rifle is built into a backpack-mounted weapon, a suit of powered armor, or the like. Change OAF (-1) to OIF (-½) throughout. Total cost: 85 points.
4) **Larger Clip:** Increase to 125 Charges (+¾). Total cost: 74 points.
5) **Smaller Clip:** Decrease to 32 Charges (+¼). Total cost: 59 points.

MOLECULAR DESTABILIZATION BLASTER

Effect: Blast 10d6, RKA 2d6
Target: One character
Duration: Instant
Range: 500m/50m
Charges: 12 Charges for entire reserve
Breakability: 18 PD/18 ED

Description: Although similar to the Disintegrator Pistol (see above), this weapon is lower-powered and offers somewhat more tactical flexibility. It emits a beam of energy that cancels the bonds between molecules, causing matter to fall apart. On its low setting, the effect is relatively minor — painful, and potentially lethal, but survivable. The high setting, on the other hand, is deadly, though repeated shots may be required to completely disintegrate a large object.

Game Information:

Cost	Power
36	**Molecular Destabilization Blaster:** Multipower, 90-point reserve; all OAF (-1), No Knockback (-¼); 12 Charges (-¼) for entire reserve
3f	**1) Low Setting:** Blast 10d6, Penetrating (+½); OAF (-1), No Knockback (-¼)
4f	**2) High Setting:** RKA 2d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1); OAF (-1), No Knockback (-¼), Limited Range (50m; -¼)

Total cost: 43 points.

Options:

1) **Strong Blaster:** Increase reserve to 135 points, Slot 1 to Blast 16d6, and Slot 2 to RKA 3d6. Total cost: 64 points.
2) **Weak Blaster:** Decrease to reserve to 60 points, Slot 1 to Blast 8d6, and Slot 2 to RKA 1d6+1. Total cost: 29 points.
3) **Realistic Blaster:** The Destabilization beam won't function properly in magnetic fields. Add Does Not Work In Intense Magnetic Fields (-¼) to reserve and both slots. Total cost: 39 points.
4) **Experimental Blaster:** Destabilization technology remains experimental and prone to malfunction. Add Activation Roll 14- (-¼) to reserve and both slots. Total cost: 40 points.
5) **Stronger Battery:** Change to 20 Charges (+¼) for entire reserve. Total cost: 57 points.
6) **Weaker Battery:** Change to 6 Charges (-¾) for entire reserve. Total cost: 37 points.

MUTANT NEUTRALIZATION BLASTER

Effect: Drain Mutant Powers 6d6
Target: One character
Duration: Instant
Range: 40m
Charges: 4 Charges
Breakability: 84 PD/84 ED

Description: This advanced weapon emits an energy beam that, through biophysical means not yet fully understood, interferes with the use of mutant powers. A mutant hit with this beam loses some, and possibly all, of his powers for an hour or more.

Game Information: Drain Mutant Powers 6d6, Expanded Effect + Variable Effect (all Mutant Powers simultaneously; +4), Delayed Return Rate (points return at the rate of 5 per 6 Hours; +2) (420 Active Points); OAF (-1), Limited Range (40m; -¼), 4 Charges (-1). Total cost: 129 points.

Options:

1) **Strong Blaster:** Increase to Drain Mutant Powers 8d6. 560 Active Points; total cost 172 points.
2) **Weak Blaster:** Decrease to Drain Mutant Powers 4d6. 280 Active Points; total cost 86 points.
3) **Experimental Blaster:** The Mutant Neutralization Blaster is a prototype that often fails to work properly. Add Activation Roll 11- (-½). Total cost: 112 points.
4) **Long-Term Blaster:** The effects of the Mutant Neutralization Blaster last for months or years. Change to Delayed Return Rate (points return at the rate of 5 per 3 Months; +3). 480 Active Points; total cost 148 points.
5) **Stronger Battery:** Increase to 8 Charges (-½). Total cost: 153 points.
6) **Weaker Battery:** Decrease to 1 Charge (-2). Total cost: 99 points.
7) **Other Neutralization Blasters:** You can create a wide variety of Neutralization Blasters by replacing "Mutant Powers" with any other appropriate special effect. Examples include:

   Arcane Neutralization Blaster: *Magic Powers*

   Electronics Neutralization Blaster (a.k.a. EMP Blaster): *Electronic Device Powers*

   Fire Neutralization Blaster: *Fire Powers*

   Probability Neutralization Blaster: *Luck Powers*

   Psionic Neutralization Blaster: *Mental/Psionic Powers*

   Robot Neutralization Blaster: *Automaton/Robot Powers*

NEURO-INTERFERENCE RAY

Effect: Drain DEX/INT/EGO 6d6, Flash 9d6
Target: One character
Duration: Instant
Range: 600m
Charges: 12 Charges
Breakability: 12 PD/12 ED

Description: This weapon projects a beam of "neural energy" that can adversely affect the target's mind. Depending on the setting, it can interfere with his nervous system, reduce his will or his intelligence, or temporarily "blind" his senses by scrambling the synapthic pathways related to them.

Game Information:

Cost	Power
27	**Neuro-Interference Ray:** Multipower, 60-point reserve; all OAF (-1), 12 Charges for entire reserve (-¼)
3f	**1) Reflex Scrambling:** Drain DEX 6d6; OAF (-1)
3f	**2) Intellect Interference:** Drain INT 6d6; OAF (-1)
3f	**3) Will-Sapping:** Drain EGO 6d6; OAF (-1)
3f	**4) Sensory Synaptic Scrambling:** Sight, Hearing, Smell/Taste, and Touch Group Flash 9d6; OAF (-1)

Total cost: 39 points.

Options:

1) **Strong Ray I:** Increase Multipower reserve to 75 points, all Drain-based slots to Drain 7d6, and Slot 4 to Flash 12d6. Total cost: 46 points.
2) **Strong Ray II:** Increase Multipower reserve to 80 points, decrease each Drain to 4d6, and add Delayed Return Rate (points return at the rate of 5 per Minute; +1) to all Drain-based slots. Total cost: 50 points.
3) **Weak Ray:** Decrease Multipower reserve to 45 points, all Drain-based slots to Drain 4d6, and Slot 4 to Flash 6d6. Total cost: 28 points.

4) **Experimental Ray:** Neural energy is a new technology, and devices designed to manipulate it remain balky. Add Activation Roll 12- (-¼) to reserve and all slots. Total cost: 36 points.
5) **Stronger Battery:** Increase to 24 Charges (+¼) for entire Multipower. Total cost: 49 points.
6) **Weaker Battery:** Decrease to 4 Charges (-1) for entire Multipower. Total cost: 32 points.

PULSON PISTOL

Effect: Blast 8d6
Target: One character
Duration: Instant
Range: 400m
Charges: 2 clips of 12 Charges
Breakability: 8 PD/8 ED

Description: One of the most popular blaster pistols ever created, the Pulson Pistol fires a bolt of concentrated pulsons that hits the target with a powerful impact, often knocking him back several feet. The appearance of the beam depends on the color of the focusing crystal and other factors. Available in gold, silver, black, red, blue, purple, and green; gold or silver highlights available on some models. Master villains, ask the Sales Department about custom blaster color schemes!

Game Information: Blast 8d6 (40 Active Points); OAF (-1), 2 clips of 12 Charges (-0). Total cost: 20 points.

Options:

1) **Strong Pulson Pistol:** Increase to Blast 9d6. 45 Active Points; total cost 22 points
2) **Weak Pulson Pistol:** Decrease to Blast 6d6. 30 Active Points; total cost 15 points.
3) **Realistic Pulson Pistol:** Realistically, low-strength pulson bursts such as the one emitted by this pistol have relatively little physical impact. Add No Knockback (-¼). Total cost: 18 points.
4) **Experimental Pulson Pistol:** Unfortunately, despite years of development, pulson technology is not as reliable as one might like. Add Activation Roll 14- (-¼). Total cost: 18 points.
5) **Focused Pulson Beam:** This version of the Pulson Pistol uses magnetic fields to more tightly focus the pulson beam, resulting in a more intense impact. Add Armor Piercing (+¼). 50 Active Points; total cost 25 points.
6) **Wide-Beam Pulson Pistol:** The focusing lens in the barrel of this form of the Pulson Pistol spreads the beam out significantly with no loss of power. Add Area Of Effect (1m Radius; +¼). 50 Active Points; total cost 25 points.
7) **Boostable Pulson Pistol:** This powerful version of the Pulson Pistol has two settings, a standard one and a "boosted" one that is much deadlier but uses more of the weapon's energy.

Cost	Power
42	**Boostable Pulson Pistol:** Multipower, 67-point reserve, 30 Charges for entire reserve (+¼); all OAF (-1)
2f	**1) Standard Setting:** Blast 8d6, Armor Piercing (+¼); OAF (-1)
2f	**2) Boosted Setting:** RKA 3d6, Penetrating (+½); OAF (-1), Requires 3 Charges Per Use (-1)

Total cost: **46 points**.

PULSON-RF PISTOL

Effect: Blast 7d6, Autofire (3 shots)
Target: One character
Duration: Instant
Range: 350m
Charges: 16 Charges
Breakability: 9 PD/9 ED

Description: This submachine gun-style pulson blaster fires up to three energy beams with a single pull of the trigger. The firer controls the number of shots with a selector switch near the trigger.

Game Information: Blast 7d6, Autofire (3 shots; +¼) (44 Active Points); OAF (-1), 16 Charges (-0). Total cost: 22 points.

Options:

1) **Strong Pulson-RF Pistol:** Increase to Blast 8d6. 50 Active Points; total cost 25 points.
2) **Weak Pulson-RF Pistol:** Decrease to Blast 6d6. 37 Active Points; total cost 18 points.
3) **Realistic Pulson-RF Pistol:** Add No Knockback (-¼). Total cost: 19 points.
4) **Experimental Pulson-RF Pistol:** Add Activation Roll 14- (-¼). Total cost: 19 points.
5) **More Clips:** Having problem with over-enthusiastic agents firing at your enemies too quickly? Don't hold them back — give them more ammo! Change to 4 clips of 16 Charges each (+¼). 52 Active Points; total cost 26 points.
6) **Faster Fire:** Increase to Autofire (5 shots; +½). 52 Active Points; total cost 26 points.
7) **Focused Pulson Beam:** Add Armor Piercing (+¼). 52 Active Points; total cost 26 points.
8) **Wide-Beam Pulson-RF Pistol:** Decrease to Blast 6d6, add Area Of Effect (1m Radius; +¼) and increase Autofire to (+1¼). 75 Active Points; total cost 37 points.

PULSON CARBINE

Effect: Blast 10d6
Target: One character
Duration: Instant
Range: 300m
Charges: 16 Charges
Breakability: 10 PD/10 ED

Description: Although similar in most respects to the Pulson Rifle (see below), this weapon is shorter, and thus easier to conceal. However, the shorter barrel diminishes the weapon's effective range.

Game Information: Blast 10d6 (50 Active Points); OAF (-1), 16 Charges (-0), Limited Range (300m; -¼). Total cost: 22 points.

Options:

1) **Strong Pulson Carbine:** Increase to Blast 12d6. 60 Active Points; total cost 27 points.
2) **Weak Pulson Carbine:** Decrease to Blast 8d6. 40 Active Points; total cost 18 points.
3) **Realistic Pulson Carbine:** Add No Knockback (-¼). Total cost: 20 points.
4) **Experimental Pulson Carbine:** Add Activation Roll 14- (-¼). Total cost: 20 points.
5) **Larger Clip:** Change to 30 Charges (+¼). 62 Active Points; total cost 27 points.
6) **Focused Pulson Beam:** Add Armor Piercing (+¼). 62 Active Points; total cost 27 points.
7) **Wide-Beam Pulson Carbine:** Add Area Of Effect (1m Radius; +¼). 62 Active Points; total cost 27 points.

PULSON RIFLE

Effect: Blast 10d6
Target: One character
Duration: Instant
Range: 500m
Charges: 30 Charges
Breakability: 12 PD/12 ED

Description: This is the full-sized equivalent to the Pulson Carbine, with greater standard ammo capacity and a longer effective range.

Game Information: Blast 10d6, 30 Charges (+¼) (62 Active Points); OAF (-1). Total cost: 31 points.

Options:

1) **Strong Pulson Rifle:** Increase to Blast 12d6. 75 Active Points; total cost 37 points.
2) **Weak Pulson Rifle:** Decrease to Blast 8d6. 50 Active Points; total cost 25 points.
3) **Realistic Pulson Rifle:** Add No Knockback (-¼). Total cost: 27 points.
4) **Experimental Pulson Rifle:** Add Activation Roll 14- (-¼). Total cost: 27 points.
5) **More Clips:** Change to 2 clips of 30 Charges each (+½). 75 Active Points; total cost 37 points.
6) **Focused Pulson Beam:** Add Armor Piercing (+¼). 75 Active Points; total cost 37 points.
7) **Wide-Beam Pulson Rifle:** Add Area Of Effect (1m Radius; +¼). 75 Active Points; total cost 37 points.
8) **Pulson Sniper Rifle:** This larger, better-built version of the Pulson Rifle comes equipped with beam coherence technology and aiming systems that make it easy to hit distant targets. Add Increased Maximum Range (2,000m; +½) and No Range Modifier (+½). 112 Active Points; total cost 56 points.
9) **Juryrigged Pulson Assault Rifle:** Some users tinker with the Pulson Rifle to give it basic automatic fire capabilities, though this may cause the rifle to misfire on occasion. Add Autofire (3 shots; +¼) and Activation Roll 14- (-¼). 75 Active Points; total cost 33 points.
10) **Aim-By-Eye Pulson Rifle:** This form of the Pulson Rifle has a small headset that attaches to the rifle via a cable. The rifle's built-in targeting systems track where the wearer of the headset looks, and aims the rifle accordingly. Add Line Of Sight (+½). 87 Active Points; total cost 43 points.

PULSON ASSAULT RIFLE

Effect: Blast 12d6, Autofire
Target: One character
Duration: Instant
Range: 600m
Charges: 60 Charges
Breakability: 24 PD/24 ED

Description: A favorite of law enforcement commanders and master villains who want to equip their agents with the very best personal energy weaponry available today, the Pulson Assault Rifle provides a potent combination of powerful energy bolts and rapid-fire capability. Armed with this firearm, an agent can make precisely-aimed single shots, or lay down a lethal barrage of pulson beams!

Game Information: Blast 12d6, Autofire (5 shots; +½), 60 Charges (+½) (120 Active Points); OAF (-1). Total cost: 60 points.

Options:

1) **Strong Pulson Assault Rifle:** Increase to Blast 14d6. 140 Active Points; total cost 70 points.
2) **Weak Pulson Assault Rifle:** Decrease to Blast 10d6. 100 Active Points; total cost 50 points.
3) **Realistic Pulson Assault Rifle:** Add No Knockback (-¼). Total cost: 53 points.
4) **Experimental Pulson Assault Rifle:** Add Activation Roll 14- (-¼). Total cost: 53 points.
5) **Larger Clip:** Increase to 120 Charges (+¾). 135 Active Points; total cost 67 points.
6) **More Clips:** Increase to 2 clips of 60 Charges each (+¾). 135 Active Points; total cost 67 points.

7) **Focused Pulson Beam:** Add Armor Piercing (+¼). 135 Active Points; total cost 67 points.
8) **Pulson Assault Rifle With Built-In Targeting Computer:** For just a few hundred dollars more, the Pulson Assault Rifle comes equipped with an advanced targeting computer that automatically compensates for distance! Add No Range Modifier (+½). 150 Active Points; total cost 75 points.

PULSON CANNON

Effect: Blast 16d6
Target: One character
Duration: Instant
Range: 800m
Charges: 20 Charges
Breakability: 20 PD/20 ED

Description: When even a Pulson Assault Rifle doesn't have the power you need, it's time for the Pulson Cannon! Mounted on a bipod or vehicle, the Cannon requires a crew of two for optimum firing efficiency — but it's worth it!

Game Information: Blast 16d6, 20 Charges (+¼) (100 Active Points); OAF Bulky (-1½), Requires Multiple Users (2 people; -¼). Total cost: 36 points.

Options:

1) **Strong Pulson Cannon:** Increase to Blast 18d6. 112 Active Points; total cost 41 points.
2) **Weak Pulson Cannon:** Decrease to Blast 14d6. 87 Active Points; total cost 32 points.
3) **Realistic Pulson Cannon:** Add No Knockback (-¼). Total cost: 33 points.
4) **Experimental Pulson Cannon:** Add Activation Roll 14- (-¼). Total cost: 33 points.
5) **Automatic Fire Pulson Cannon:** This form of the Cannon has an automatic fire mode. Add Autofire (5 shots; +½). 140 Active Points; total cost 51 points.
6) **Larger Energy Module:** Increase to 60 Charges (+½). 120 Active Points; total cost 44 points.
7) **More Energy Modules:** Increase to 2 clips of 20 Charges each (+½). 120 Active Points; total cost 44 points.
8) **Focused Pulson Beam:** Add Armor Piercing (+¼). 120 Active Points; total cost 44 points.

PULSON MEGA-CANNON

Effect: Blast 20d6, Autofire
Target: One character
Duration: Instant
Range: 1500m
Charges: 32 Charges
Breakability: 30 PD/30 ED

Description: The largest weapon in the pulson family, the Mega-Cannon needs a crew of four to function properly, but its high-powered automatic-fire beam makes it worth the effort.

Game Information: Blast 20d6, Autofire (3 shots; +¼), 32 Charges (+¼) (150 Active Points); OAF Bulky (-1½), Requires Multiple Users (4 people; -½). Total cost: 50 points.

Options:

1) **Strong Pulson Mega-Cannon:** Increase to Blast 24d6. 180 Active Points; total cost 60 points.
2) **Weak Pulson Mega-Cannon:** Decrease to Blast 16d6. 120 Active Points; total cost 40 points.
3) **Realistic Pulson Mega-Cannon:** Add No Knockback (-¼). Total cost: 46 points.
4) **Experimental Pulson Mega-Cannon:** Add Activation Roll 14- (-¼). Total cost: 46 points.
5) **Automatic Fire Pulson Mega-Cannon:** This upgraded version of the Mega-Cannon has a full-auto fire mode. Increase to Autofire (5 shots; +½). 175 Active Points; total cost 58 points.
6) **Larger Energy Module:** Increase to 64 Charges (+½). 175 Active Points; total cost 58 points.
7) **More Energy Modules:** Increase to 2 clips of 32 Charges each (+½). 175 Active Points; total cost 58 points.
8) **Focused Pulson Beam:** Add Armor Piercing (+¼). 175 Active Points; total cost 58 points.

SONIC BLASTER

Effect: Blast 10d6
Target: One character
Duration: Instant
Range: 500m
Charges: 15 Charges
Breakability: 10 PD/10 ED

Description: Easily recognizable by its wide-mouthed barrel, this weapon projects focused sound for a devastating concussive effect.

Game Information: Blast 10d6 (50 Active Points); OAF (-1), 15 Charges (-0). Total cost: 25 points.

Options:

1) **Strong Sonic Blaster:** Increase to Blast 12d6. 60 Active Points; total cost 30 points.
2) **Weak Sonic Blaster:** Decrease to Blast 8d6. 40 Active Points; total cost 20 points.
3) **Realistic Sonic Blaster:** The secondary sound released when the user fires this weapon deafens him for a short period. Add Side Effects (firer suffers Hearing Group Flash 4d6, always occurs; -½). Total cost: 20 points.
4) **Experimental Sonic Blaster:** Sometimes the blaster's focusing technology fails to work properly, so that all it generates is a loud noise. Add Activation Roll 14- (-¼). Total cost: 22 points.
5) **Strong Battery:** Increase to 30 Charges (+¼). 62 Active Points; total cost 31 points.
6) **Weak Battery:** Decrease to 8 Charges (-½). Total cost: 20 points.
7) **Multiple-Setting Sonic Blaster:** Instead of having just one blast effect, this form of Sonic Blaster has several. Change to:

Cost Power

46 **Sonic Blaster:** Multipower, 62-point reserve, 60 Charges (+½) for entire reserve; all OAF (-1)

3f **1) Basic Sonic Blast:** Blast 12d6; OAF (-1)

3f **2) Deafening Sonic Blast:** Hearing Group Flash 12d6 (26m Radius Explosion; +½); OAF (-1)

2f **3) Stunning Sonic Blast:** Blast 6d6, AVAD (defense is Hearing Flash Defense; +1); OAF (-1), Requires 3 Charges Per Use (-½)

2f **4) Cutting Sonic Blast:** RKA 3d6; OAF (-1), Requires 3 Charges Per Use (-½)

Total cost: 56 points.

STUNNER PISTOL

Effect: Blast 6d6, NND; Drain STUN 6d6; Blast 12d6, STUN Only
Target: One character
Duration: Instant
Range: 300m/600m/600m
Charges: 24 Charges
Breakability: 15 PD/15 ED

Description: This weapon emits a tunable energy beam designed to stun and knock out targets without inflicting significant injury. The weapon's lowest setting can't cause so much as a bruise, but has no effect against targets shielded by force-fields. The mid-range setting creates a beam that causes pain but still causes no bodily harm. The highest setting is a more or less standard energy beam specially refracted to diminish the physical impact to the point where it won't cause injury.

Game Information:

Cost Power

37 **Stunner Pistol:** Multipower, 60-point reserve, 24 Charges for entire reserve (+¼); all OAF (-1)

3f **1) Lowest Setting:** Blast 6d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1); OAF (-1)

3f **2) Middle Setting:** Drain STUN 6d6; OAF (-1)

3f **3) Highest Setting:** Blast 12d6; OAF (-1), STUN Only (-0)

Total cost: 46 points.

Options:

1) **Stunner Rifle:** Increase reserve to 80 points, Slot 1 to Blast 8d6, Slot 2 to Drain STUN 8d6, and Slot 3 to Blast 15d6. Total cost: 62 points.

2) **Weak Pistol:** Decrease to reserve to 45 points, Slot 1 to Blast 4d6, Slot 2 to Drain STUN 4d6, and Slot 3 to Blast 9d6. Total cost: 34 points.

3) **Realistic Pistol I:** The pistol's stun-beams dissipate after a short distance, becoming useless. Add Limited Range (80m; -¼) to reserve and all slots. Total cost: 42 points.

4) **Realistic Pistol II:** The pistol's stun-beams become less effective over a distance. Add Reduced By Range (-¼) to reserve and all slots. Total cost: 42 points.

5) **Experimental Pistol:** The pistol's technology doesn't always work properly due to the weapon's experimental nature. Add Activation Roll 14- (-¼) to reserve and all slots. Total cost: 42 points.

6) **Stronger Battery:** Increase to 48 Charges (+½) for entire reserve. Total cost: 54 points.

7) **Weaker Battery:** Decrease to 12 Charges (-¼) for entire reserve. Total cost: 36 points.

VARI-BLASTER

Effect: Various Blasts and RKAs
Target: One character
Duration: Instant
Range: 750m/450m/500m/500m/350m
Charges: 4 Charges per slot
Breakability: 15 PD/15 ED

Description: This blaster looks like a high-tech version of an old-fashioned "pepperbox" pistol. It has five barrels arranged in a circular pattern, each able to fire a different kind of energy beam. The user chooses the barrel he wants with a thumb selector switch and it rotates into place before he fires. Each barrel has its own battery with enough power for four shots before it requires recharging.

Game Information:

Cost Power

37 **Vari-Blaster:** Multipower, 75-point reserve; all OAF (-1)

2f **1) Pulson Blast:** Blast 15d6; OAF (-1), 4 Charges (-1)

1f **2) Laser:** RKA 3d6; OAF (-1), 4 Charges (-1)

2f **3) Concussion Beam:** Blast 10d6 (physical), Double Knockback (+½); OAF (-1), 4 Charges (-1)

2f **4) Focussed Magnetic Beam:** Blast 10d6, Armor Piercing (+¼); OAF (-1), 4 Charges (-1)

2f **5) Sonic Blast:** Blast 10d6, NND (defense is Hearing Group Flash Defense; +½); OAF (-1), 4 Charges (-1)

Total cost: 46 points.

Options:

1) **Strong Vari-Blaster:** Increase reserve to 90 points, Slot 1 to Blast 18d6, Slot 2 to RKA 5d6, Slot 3 to Blast 12d6, Slot 4 to Blast 12d6, and Slot 5 to Blast 12d6. Total cost: 57 points.

2) **Weak Vari-Blaster:** Decrease reserve to 60 points, Slot 1 to Blast 12d6, Slot 2 to RKA 2½d6, Slot 3 to Blast 8d6, Slot 4 to Blast 8d6, and Slot 5 to Blast 8d6. Total cost: 38 points.

3) **Experimental Vari-Blaster:** This blaster contains experimental technological components, and as a result sometimes fails to work. Add Activation Roll 11- (-½) to reserve and all slots. Total cost: 38 points.

4) **Strong Batteries:** Change to 8 Charges (-½) on each slot. Total cost: 49 points.

5) **Weak Batteries:** Change to 1 Charge (-2) on each slot. Total cost: 44 points.

VEST BLASTER

Effect: Blast 10d6
Target: One character
Duration: Instant
Range: 60m
Charges: 10
Breakability: 10 PD/10 ED

Description: Part of the character's costume is a vest, and built into that vest is a short-range blaster.

Game Information: Blast 10d6 (50 Active Points); OIF (-½), Limited Range (60m; -¼), 10 Charges (-¼). Total cost: 25 points.

Options:

1) **Strong Blaster:** Increase to Blast 12d6. 60 Active Points; total cost 30 points.
2) **Weak Blaster:** Decrease to Blast 8d6. 40 Active Points; total cost 20 points.
3) **Realistic Blaster:** A weapon mounted on one's chest isn't easy to aim properly. Add Inaccurate (½ OCV; -¼). Total cost: 22 points.
4) **Experimental Blaster:** Fitting a blaster into a vest without changing the lines of the vest significantly requires some technological wizardry... and sometimes wizardry fails. Add Activation Roll 14- (-¼). Total cost: 22 points.
5) **Disguised Vest Blaster:** This form of Vest Blaster isn't obvious to casual inspection. Change OIF (-½) to IIF (-¼). Total cost: 29 points.
6) **Vest Arsenal:** A blaster isn't the only weapon built into the vest. Change to:

Cost	Power
40	**Vest Arsenal:** Multipower, 40-point reserve
2f	**1) Blaster:** Blast 8d6; OIF (-½), Limited Range (60m; -¼), 10 Charges (-¼)
2f	**2) Gas Projector:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1); IIF (-¼), Limited Range (12m; -¼), 4 Charges (-1)

Total cost: **44 points**.

VIBRO-BLASTER

Effect: Blast 10d6 plus Drain DEX 3d6
Target: One character
Duration: Instant
Range: 300m
Charges: 10 Charges
Breakability: 10 PD/10 ED

Description: This weapon blasts the target with vibratory energy, which not only injures him but throws off his sense of balance and coordination.

Game Information: Blast 10d6 (50 Active Points); OAF (-1), Limited Range (300m; -¼), 10 Charges (-¼) (total cost: 20 points) **plus** Drain DEX 4d6 (40 Active Points); OAF (-1), Linked (-½), 10 Charges (-¼) (total cost: 14 points). Total cost: 34 points.

Options:

1) **Strong Blaster:** Increase to Blast 12d6 plus Drain DEX 5d6. 60 + 50 = 110 Active Points; total cost 24 + 18 = 42 points.
2) **Weak Blaster:** Decrease to Blast 8d6 plus Drain DEX 3d6. 40 + 30 = 70 Active Points; total cost 16 + 11 = 27 points.
3) **Realistic Blaster:** The Blaster vibrates slightly as it generates the vibro-blast, making it difficult to aim. Add Side Effects (-1 OCV, always occurs; -½) to both powers. Total cost: 17 + 12 = 29 points.
4) **Experimental Blaster:** Vibro-technology remains experimental and prone to failure. Add Activation Roll 14- (-¼) to both powers. Total cost: 18 + 13 = 31 points.

WEAKNESS RAY

Effect: Drain STR 6d6
Target: One character
Duration: Instant
Range: 600m
Charges: 12 Charges
Breakability: 12 PD/12 ED

Description: Similar to the Neuro-Interference Ray, this weapon projects a beam of energy that weakens and interferes with the use of the target's muscles, significantly reducing his ability to use his Strength.

Game Information: Drain STR 6d6 (60 Active Points); OAF (-1), 12 Charges (-¼). Total cost: 27 points.

Options:

1) **Strong Ray:** Increase to Drain STR 8d6. 80 Active Points; total cost 35 points.
2) **Weak Ray:** Decrease to Drain STR 4d6. 40 Active Points; total cost 18 points.
3) **Experimental Ray:** The Weakness Ray is a prototype and doesn't always work as intended. Add Activation Roll 14- (-¼). Total cost: 24 points.
4) **Strong Battery:** Increase to 24 Charges (+¼). 75 Active Points; total cost 37 points.
5) **Weak Battery:** Decrease to 8 Charges (-½). Total cost: 24 points.
6) **Other Rays:** You can use this gadget to Drain any other Characteristic simply by changing the name and type of Drain. Examples include:
   - **Clumsiness Ray:** Drain DEX 6d6
   - **Feebleness Ray:** Drain CON 6d6
   - **Stupidity Ray:** Drain INT 6d6
   - **Will-Sapping Ray:** Drain EGO 6d6
   - **Cowardice Ray:** Drain PRE 6d6
   - **Slowness Ray:** Drain SPD 6d6
   - **Fragility Ray:** Drain PD 6d6
   - **Energy Weakness Ray:** Drain ED 6d6
   - **Enervation Ray:** Drain END 6d6
   - **Dazedness Ray:** Drain STUN 6d6

Gas Weapons

These weapons all use some sort of gas (or related chemical) to harm targets. Some of the Muscle-Powered Ranged Weapons described beginning on page 150 also use various forms of gas.

CORROSIVE GAS PELLET PROJECTOR

Effect: RKA 2d6, NND, Does BODY
Target: 1m Radius
Duration: Instant
Range: 60m
Charges: 8
Breakability: 21 PD/21 ED

Description: This pistol-like weapon fires break-on-contact pellets that emit an acidic gas able to eat through flesh, plastic, and metal alike.

Game Information: RKA 2d6, NND (the defense is a PD Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1), Area Of Effect (1m Radius; +¼) (97 Active Points); OAF (-1), Limited Range (60m; -¼), 8 Charges (-½). Total cost: 35 points.

Options:

1) **Strong Gas:** Increase to RKA 3d6. 146 Active Points; total cost 53 points.
2) **Weak Gas:** Decrease to RKA 1d6. 49 Active Points; total cost 18 points.
3) **Experimental Gas:** Sometimes a pellet is a dud, or fails to fire properly. Add Activation Roll 14- (-¼). Total cost: 32 points.
4) **Attached Projector:** This form of Pellet Projector is built into a gauntlet, bracer, or other device that's difficult to take away from the user. Change OAF (-1) to OIF (-½). Total cost: 43 points.
5) **Long-Lasting Gas:** This form of the corrosive gas lingers in the area for twelve seconds. Change to: RKA 1½d6, NND (the defense is a PD Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1), Constant (+½), Area Of Effect (1m Radius; +¼) (94 Active Points); OAF (-1), Limited Range (60m; -¼), 8 Continuing Charges lasting 1 Turn each (removed by winds or rain; -0). Total cost: 42 points.

FEAR GAS

Effect: Drain PRE 4d6
Target: One character
Duration: Instant
Range: No Range
Charges: 4
Breakability: 8 PD/8 ED

Description: This weapon, which consists of a gas plus a small aerosol projection device, looks like something completely ordinary, such as a piece of jewelry. But within HTH Combat range it can project a gas that terrifies the victim. (The character usually immediately follows the attack with a Presence Attack to make the target run away in terror.)

Game Information: Drain PRE 4d6 (40 Active Points); IAF (-½), No Range (-½), 4 Charges (-1). Total cost: 13 points.

Options:

1) **Strong Gas:** Increase to Drain PRE 6d6. 60 Active Points; total cost 20 points.
2) **Weak Gas:** Decrease to Drain PRE 3d6. 30 Active Points; total cost 10 points.
3) **Realistic Squirter:** If the character's not careful, he may accidentally gas himself instead! Add Requires A DEX Roll (-½) and Side Effects (character suffers the effects of the gas; -½). Total cost: 10 points.
4) **Experimental Gas:** The gas doesn't always work properly; sometimes the victim doesn't get properly dosed or immediately shakes off the effects. Add Activation Roll 14- (-¼). Total cost: 12 points.
5) **Attached Squirter:** This form of the Fear Gas squirter is more firmly attached to the character. Change to IIF (-¼). Total cost: 14 points.
6) **Long-Range Squirter:** The aerosol projection mechanism is strong enough to project the gas up to 8m away. Change No Range (-½) to Limited Range (8m; -¼). Total cost: 14 points.
7) **More Gas:** The weapon holds a larger supply of gas. Change to 8 Charges (-½). Total cost: 16 points.
8) **Easily-Activated Squirter:** The character can activate the gas projection mechanism by cybernetic command, making it an ideal weapon to use when grappling with someone or when one's hands are restrained. Add Trigger (cybernetic command, activating Trigger takes no time, Trigger immediately automatically resets; +1). 80 Active Points; total cost 27 points.
9) **Longer-Lasting Fear:** The effects of this form of Fear Gas linger for a long time. Add Delayed Return Rate (points return at the rate of 5 per Minute; +1). 80 Active Points; total cost 27 points.
10) **Acclimated To The Gas:** The character has acclimated himself to the gas so it can't affect him. Add Personal Immunity (+¼). 50 Active Points; total cost 17 points.

11) **Variant Fear Gas:** This gas affects virtually anyone who breathes it. Add NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1). 80 Active Points; total cost 27 points.

12) **Obvious Squirter:** This form of the device is obviously a weapon designed to spray a gas. Change IAF (-½) to OAF (-1). Total cost: 11 points.

GAS PISTOL

Effect: Various gas-based attacks
Target: 1m Radius
Duration: Instant
Range: 20m
Charges: 10 Charges per slot
Breakability: 16 PD/16 ED

Description: This weapon, which resembles a large pistol with several small, bulbous tanks attached to it, allows the user to fire a variety of gas attacks at targets within 20m.

Game Information:

Cost Power

35 **Gas Pistol:** Multipower, 80-point reserve; all OAF (-1), Limited Range (20m; -¼)

3f **1) Knockout Gas:** Blast 6d6, Area Of Effect (1m Radius; +¼), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1); OAF (-1), Limited Range (20m; -¼), 10 Charges (-¼)

3f **2) Tear Gas:** Sight Group Flash 4d6, Area Of Effect (1m Radius; +¼), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2); OAF (-1), Limited Range (20m; -¼), 10 Charges (-¼)

3f **3) Paralysis Gas:** Entangle 3d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼), Takes No Damage From Attacks (+1); OAF (-1), Limited Range (20m; -¼), 10 Charges (-¼)

3f **4) Lethal Gas:** RKA 1d6+1, Area Of Effect (1m Radius; +¼), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1); OAF (-1), Limited Range (20m; -¼), 10 Charges (-¼)

Total cost: 47 points.

Options:

1) **Strong Gas Pistol:** Increase Multipower reserve to 112 points, Slot 1 to Blast 8d6, Slot 2 to Sight Group Flash 6d6, Slot 3 to Entangle 5d6, 5 PD/5 ED, and Slot 4 to RKA 2d6. Total cost: 66 points.

2) **Weak Gas Pistol:** Decrease Multipower reserve to 56 points, Slot 1 to Blast 5d6, Slot 2 to Sight Group Flash 3d6, Slot 3 to Entangle 2d6, 3 PD/3 ED, and Slot 4 to RKA 1d6. Total cost: 33 points.

3) **More Gas:** Change 10 Charges (-¼) to 15 Charges (-0) on each slot. Total cost: 47 points.

4) **Less Gas:** Change 10 Charges (-¼) to 6 Charges (-¾) on each slot. Total cost: 44 points.

GAS SQUIRTER

Effect: Blast 4d6, NND
Target: One character
Duration: Instant
Range: No Range
Charges: 4
Breakability: 8 PD/8 ED

Description: This weapon looks like an ordinary piece of jewelry or accessory — a tie-tack, a stickpin, a flower in the lapel, or the like. But besides looking good, it can project a burst of anaesthetic gas! It only works on targets close to the character, so it's often a last-ditch weapon.

Game Information: Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1) (40 Active Points); IAF (-½), No Range (-½), 4 Charges (-1). Total cost: 13 points.

Options:

1) **Strong Gas:** Increase to Blast 6d6. 60 Active Points; total cost 20 points.
2) **Weak Gas:** Decrease to Blast 3d6. 30 Active Points; total cost 10 points.
3) **Realistic Gas Squirter:** If the character's not careful, he may accidentally gas himself instead! Add Requires A DEX Roll (-½) and Side Effects (character suffers the effects of the gas; -½). Total cost: 10 points.
4) **Experimental Gas Squirter:** The aerosol projection mechanism sometimes fails to work. Add Activation Roll 14- (-¼). Total cost: 12 points.
5) **Attached Squirter:** This form of the Gas Squirter is more firmly attached to the character. Change to IIF (-¼). Total cost: 14 points.
6) **Long-Range Squirter:** The aerosol projection mechanism is strong enough to project the gas up to 8m away. Change No Range (-½) to Limited Range (8m; -¼). Total cost: 14 points.
7) **More Gas:** The weapon holds a larger supply of gas. Change to 8 Charges (-½). Total cost: 16 points.
8) **Lethal Gas:** This form of the Squirter projects a lethal gas. Change to RKA 2d6, NND (d defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1). 90 Active Points; total cost 30 points.
9) **Easily-Activated Squirter:** The character can fire the Squirter by cybernetic command, making it an ideal weapon to use when grappling with someone or when one's hands are restrained. Add Trigger (cybernetic command, activating Trigger takes no time, Trigger immediately automatically resets; +1). 60 Active Points; total cost 20 points.

KNOCKOUT GAS PELLET PROJECTOR

Effect: Blast 6d6, NND
Target: 1m Radius
Duration: Instant
Range: 60m
Charges: 8
Breakability: 15 PD/15 ED

Description: This pistol-like weapon fires break-on-contact pellets that emit a soporific gas able to render most people unconscious quickly.

Game Information: Blast 6d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (1m Radius; +¼) (67 Active Points); OAF (-1), Limited Range (60m; -¼), 8 Charges (-½). Total cost: 24 points.

Options:

1) **Strong Gas:** Increase to Blast 8d6. 90 Active Points; total cost 33 points.
2) **Weak Gas:** Decrease to Blast 4d6. 45 Active Points; total cost 16 points.
3) **Experimental Gas:** Sometimes a pellet is a dud, or fails to fire properly. Add Activation Roll 14- (-¼). Total cost: 22 points.
4) **Attached Projector:** This form of Pellet Projector is built into a gauntlet, bracer, or other device that's difficult to take away from the user. Change OAF (-1) to OIF (-½). Total cost: 30 points.
5) **Long-Lasting Gas:** This form of the gas lingers in the area for twelve seconds. Change to: Blast 5d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Constant (+½), Area Of Effect (1m Radius; +¼) (69 Active Points); OAF (-1), Limited Range (60m; -¼), 8 Continuing Charges lasting 1 Turn each (removed by winds or rain; -0). Total cost: 31 points.

Melee Weapons

BILLY CLUB

Effect: HA +3d6, Blast 6d6, Swinging 20m, Clinging, +20 STR

Target: Varies

Duration: Varies

Range: Varies

END Cost: Varies

Breakability: 6 PD/6 ED

Description: A popular multi-purpose weapon and tool among martial artists, weaponmasters, and costumed vigilantes, the billy club looks like an ordinary stick-like club about a foot long and an inch or so in diameter, but it has several other uses and built-in devices. First, in addition to hitting people with it, the character can throw it at his foes; he must get it back (often by devoting a single Combat Skill Level to making it bounce back to him) before he can use the club for any purpose again. Second, the club can project a high-strength line and hook, allowing the user to swing (but if he does so, he can't use the club for anything else that Phase while the line retracts). Third, the club can extend just the hook, allowing the user to hold onto the club and hang from any projection or niche on a wall or slippery surface. Fourth, the character can use it as a prybar or lever, tremendously boosting his STR for leverage-based purposes.

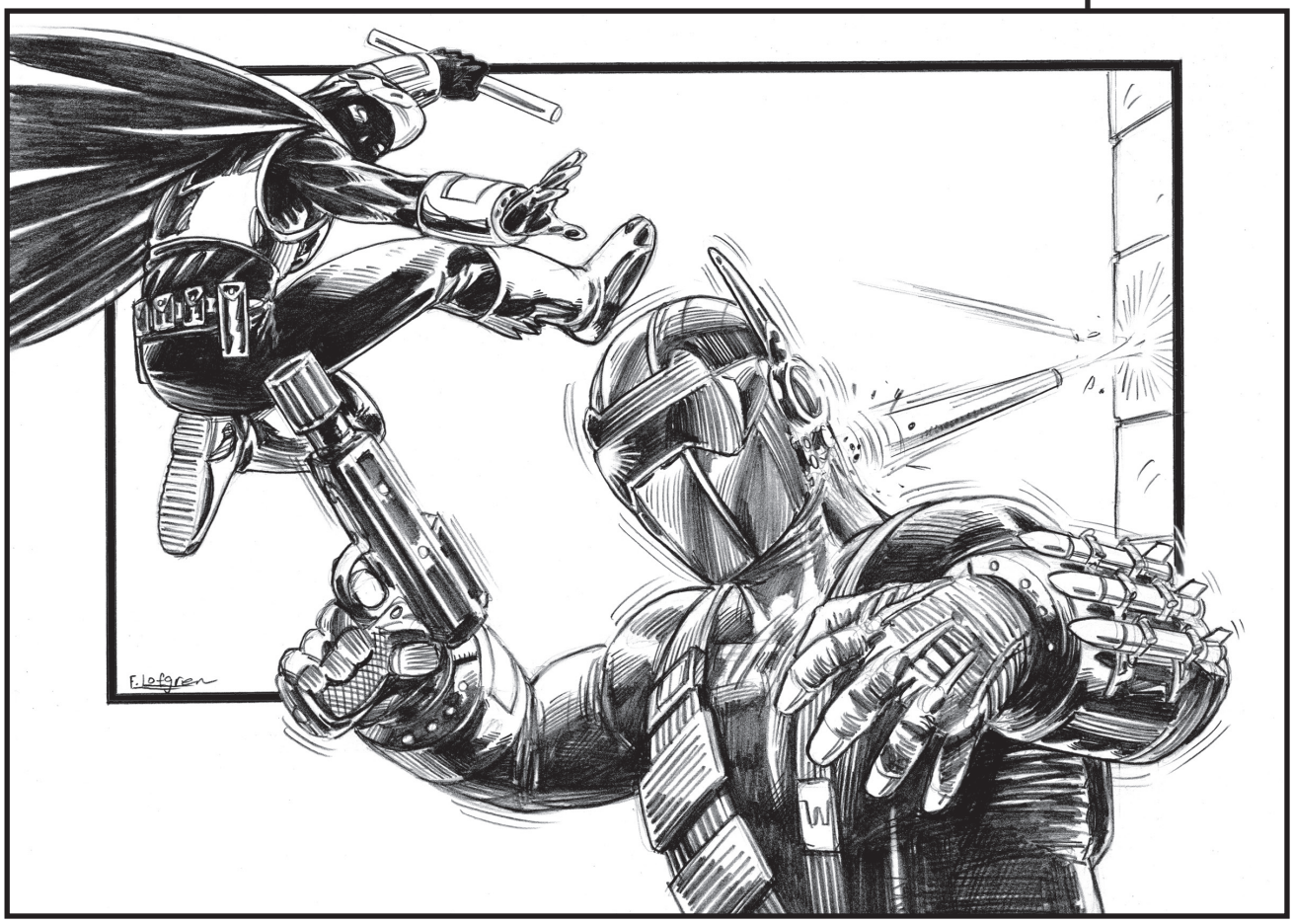
Game Information:

Cost	Power
15	**Billy Club:** Multipower, 30-point reserve; all OAF (-1)
1f	**1) Club:** HA +3d6; OAF (-1), Hand-To-Hand Attack (-¼)
1f	**2) Hurled Club:** Blast 6d6; OAF (-1), Range Based On STR (-¼), Lockout (cannot use any slot in Multipower until Charge is recovered; -½), 1 Recoverable Charge (-1¼)
1f	**3) Swingline:** Swinging 20m; OAF (-1), Lockout (cannot use any other slot in same Phase in which Swinging is used; -½)
1f	**4) Hanging Onto Projections:** Clinging (normal STR); OAF (-1), Requires A STR Roll (-½), Cannot Resist Knockback (-¼), No Movement Allowed (-½)
1f	**5) Lever:** +20 STR, Reduced Endurance (0 END; +½); OAF (-1), Only For Leverage-Based Tasks (-½)

Total cost: 20 points.

Options:

1) **Strong Billy Club:** Increase reserve to 40 points, and HA to +5d6, Blast to 8d6, and Swinging to 40m. Total cost: 25 points.
2) **Simple Billy Club:** This form of Billy Club lacks all the bells and whistles; it's just intended for use as a weapon. Remove Slots 3-5. Total cost: 17 points.



3) **Inaccessible Multitool:** Instead of a billy club, the character's multitool is a bracer or some other gadget that's an OIF instead of an OAF. (See the Multi-Bracer on page 179 for a similar gadget.) Change OAF (-1) to OIF (-½) and remove Slots 4-5. Total cost: 23 points.

BLADE-BOOTS

Effect: HKA 1d6
Target: One character
Duration: Instant
Range: Touch
END Cost: 1
Breakability: 3 PD/3 ED

Description: These boots have a six-inch-long blade, with a point like a needle and edges sharp as razors, projecting from the toe. They turn a simply kick into a lethal attack.

Game Information: HKA 1d6 (plus STR) (15 Active Points); OIF (-½). Total cost: 10 points.

Options:

1) **Large Blade:** Increase to HKA 1d6+1. 20 Active Points; total cost 13 points.
2) **Small Blade:** Decrease to HKA ½d6. 10 Active Points; total cost 7 points.
3) **Realistic Boot-Blades:** Wearing boots with a six-inch-long blade sticking out of the toe makes it difficult to walk, run, or jump. Add Side Effects (-2 on all DEX-based rolls involving walking, running, jumping, and like activities, always occurs; -½). Total cost: 7 points.
4) **Sharp Blade:** The boot-blades are particularly sharp. Add Armor Piercing (+½). 19 Active Points; total cost 13 points.
5) **Retractable Blades:** The user can retract the boot's blades into the sole of the boot to hide them. Change OIF (-½) to IIF (-¼). Total cost: 12 points.

BLADED CAPE

Effect: RKA 1d6
Target: One character
Duration: Instant
Range: 4m
END Cost: 0
Breakability: 4 PD/4 ED

Description: This cape has cleverly concealed sharp blades along its hem. When the wearer lashes out with it he can cut anyone within 4m of himself.

Game Information: RKA 1d6, Reduced Endurance (0 END; +½) (22 Active Points); IAF (-½), Limited Range (4m; -¼). Total cost: 12 points.

Options:

1) **Small Blades:** Decrease to RKA ½d6. 15 Active Points; total cost 8 points.
2) **Realistic Bladed Cape:** Fighting with a Bladed Cape is difficult — if the wielder doesn't flick the blade at his target just right, not only does he miss, he may cut himself! Add Requires A PS: Use Bladed Cape Roll (-¼) and Side Effects (character takes cape's damage himself; -¼). Total cost: 10 points.
3) **Weighted Cape:** Instead of blades, the cape's hem conceals weights that hit like a club. Change RKA 1d6 to Blast 3d6. 22 Active Points; total cost 12 points.

BLASTER STAFF

Effect: HA +4d6/Blast 9d6
Target: One character
Duration: Instant
Range: Touch/450m
END Cost: 2 END/10 Charges
Breakability: 9 PD/9 ED

Description: This metallic fighting staff, typically about four to five and a half feet long, looks like a simple hand-to-hand combat weapon... until you notice that one end of it is open, like a gun barrel. From that end the wielder can fire a powerful blast of energy.

Alternately, this device may come in the form of a cane, rather than a staff, or even some other melee weapon (such as a high-tech morningstar that can fire bolts of energy from its spikes).

Game Information:

Cost	Power
22	**Blaster Staff:** Multipower, 45-point reserve; all OAF (-1)
1f	**1) Staff:** HA +4d6; OAF (-1), Hand-To-Hand Attack (-¼) *plus* Reach +2m; OAF (-1)
2f	**2) Blaster:** Blast 9d6; OAF (-1), 10 Charges (-¼)

Total cost: 25 points.

Options:

1) **Strong Blaster:** Increase reserve to 60 points and second slot to Blast 12d6. Total cost: 34 points.
2) **Weak Blaster:** Decrease reserve to 30 points and second slot to Blast 6d6. Total cost: 17 points.
3) **Experimental Blaster:** While the staff itself always remains a useful melee weapon, the blaster sometimes fails to work. Add to the second slot Activation Roll 14- (-¼). Total cost: 25 points.

BUZZSAW GAUNTLET

Effect: RKA 1d6, Armor Piercing, Damage Shield (hands only)
Target: One character
Duration: Constant
Range: Touch
END Cost: 0
Breakability: 7 PD/7 ED

Description: This device consists of a heavy metallic gauntlet (or sometimes bracer) with a buzzsaw blade placed horizontally on top and a flat micro-motor inside to provide the power to spin it. While the Gauntlet's working, a punch or slap from the wearer can inflict lethal injuries on other people, cut through walls, and so forth. Safety locks prevent the wearer from flexing his wrist in such a way that he would accidentally cut himself.

This weapon uses the *Damage Shield* Advantage in an unusual way, and therefore requires the GM's permission. The Gauntlet's spinning blade is defined as an HKA Damage Shield that works when the character punches or touches another person. However, the Damage Shield it only covers the wearer's hands — so it's possible to Grab or touch the wearer without suffering the Damage Shield's effects, provided the character doing so doesn't touch the wearer's hands.

Game Information:

Cost	Power
21	**Buzzsaw Gauntlet:** Multipower, 37-point reserve; all OIF (-½), No Knockback (-¼)
2f	**1) Spinning Buzzsaw:** RKA 1d6, Armor Piercing (+¼), Constant (+½), Area Of Effect (personal Surface — Damage Shield, hands only, see text; +¼), Reduced Endurance (0 END; +½); OIF (-½), No Knockback (-¼), No Range (-½)
1f	**2) Still Buzzsaw:** HKA 1d6 (plus STR), Armor Piercing (+¼), Reduced Endurance (0 END; +½); OIF (-½), No Knockback (-¼)

Total cost: 24 points.

Options:

1) **Strong Buzzsaws:** Increase reserve to 75 points and both slots to KA 2d6. Total cost: 49 points.
2) **Weak Buzzsaws:** Decrease reserve to 25 points and both slots to KA ½d6. Total cost: 16 points.
3) **Realistic Buzzsaws:** The Gauntlet's motor can only run for a short period of time. Add 60 Charges (+½) to Slot 1 and remove Reduced Endurance (0 END; +½). Total cost: 24 points.
4) **Experimental Buzzsaws:** Sometimes the Gauntlet's motor jams up — flat micro-motor technology remains a highly experimental field. Add Activation Roll 14- (-¼) to Slot 1. Total cost: 23 points.

CLAWED GLOVE

Effect: HKA 1d6
Target: One character
Duration: Instant
Range: Touch
END Cost: 1
Breakability: 3 PD/3 ED

Description: This glove has claws built into the tips of the fingers, the back of the hand, the knuckles, or the like. Depending on the design, the claws may be affixed to the glove permanently, or they may retract. Some versions have blades along the sides of the wrist instead, so that a character slashes with them instead of punching or slicing.

Game Information: HKA 1d6 (plus STR) (15 Active Points); OIF (-½). Total cost: 10 points.

Options:

1) **Large Claws:** Increase to HKA 1d6+1. 20 Active Points; total cost 13 points.
2) **Small Claws:** Decrease to HKA ½d6. 10 Active Points; total cost 7 points.
3) **Realistic Claws:** Having claws attached to his hand makes it hard for the character to perform certain tasks. Add Side Effects (character suffers a -2 penalty on all DEX Rolls involving fine manipulation, always occurs; -½). Total cost: 7 points.
4) **Razor-Sharp Claws:** Add Armor Piercing (+¼). 19 Active Points; total cost 13 points.
5) **Venomous Claws:** The claws contain tiny reservoirs of poison which the character can inject into the target's bloodstream. Add RKA ½d6, NND (defense is appropriate Life Support [Immunity]; +1), Does BODY (+1), Damage Over Time (5 increments, one per minute for 5 Minutes, defenses only apply once; +2½), Personal Immunity (+¼) (57 Active Points); OIF (-½), No Range (-½), HKA Must Do BODY (-½), Linked (-¼), 4 Charges (-1) (total cost: 15 points). Total cost: 25 points.
6) **Electro-Claws:** The character can electrify his claws, thus increasing the damage they do. Add HKA +1d6 (15 Active Points); OIF (-½), 8 Charges (-½) (total cost: 7 points). Total cost: 17 points.

COMPRESSED AIR GAUNTLET

Effect: HA +4d6
Target: One character
Duration: Instant
Range: Touch
Charges: 12
Breakability: 4 PD/4 ED

Description: This gauntlet has a built-in supply of compressed air. When activated by a punching motion and simultaneous cybernetic command, the compressed air fires backwards, increasing the power of the punch.

Game Information: HA +4d6 (20 Active Points); OIF (-½), Hand-To-Hand Attack (-¼), 12 Charges (-¼). Total cost: 10 points.

Options:

1) **Strong Gauntlet:** Increase to HA +6d6. 30 Active Points; total cost 15 points.
2) **Weak Gauntlet:** Decrease to HA +2d6. 10 Active Points; total cost 5 points.
3) **Experimental Gauntlet:** Sometimes the gauntlet's air jets fail to fire. Add Activation Roll 13- (-¼). Total cost: 9 points.
4) **More Air:** The gauntlet has a larger air supply, and thus can activate more times before running out of "fuel." Change to 20 Charges (+¼). 25 Active Points; total cost 14 points.

ELECTRIFIED LARIAT

Effect: Telekinesis (40 STR), Only To Grab And Possibly Squeeze
Target: One character
Duration: Constant
Range: 12m
END Cost: 0
Breakability: 18 PD/18 ED

Description: This device is a lariat, similar to ones used by cowboys in the Old West, but made out of a metallic fiber instead of rope. After lassoing someone with it, the wielder can activate a battery in the device to send an electrical pulse through the lariat to harm the victim. The battery is powerful enough that it allows for essentially unlimited use, though it requires periodic recharging from any standard electrical outlet.

The Lariat has a 40 STR for purposes of Grabbing, but it can only Grab objects of roughly human size or smaller. After Grabbing a victim, the character can then "squeeze" him for 8d6 Normal Damage, the special effect of which is "electricity." However, the wielder can only Grab one person at once.

Although Telekinesis ordinarily doesn't allow for action/reaction — a character can't telekinetically Grab a moving person or object and be dragged along — the GM should waive that rule in the interest of common sense when one character lassos another, or lassos a moving vehicle. Thus, lassoing Grond may not be a very good idea, since he can still leap....

Game Information: Telekinesis (40 STR), Reduced Endurance (0 END; +½) (90 Active Points); OAF (-1), Limited Range (12m; -¼), Only Affects Human-Sized Or Smaller Objects (-¼), Only To Grab And Possibly Squeeze (-¼), Can Only Affect One Target At Once (-¼). Total cost: 30 points.

Options:

1) **Strong Lariat:** Increase to Telekinesis (50 STR). 112 Active Points; total cost 37 points.
2) **Weak Lariat:** Decrease to Telekinesis (30 STR). 67 Active Points; total cost 22 points.
3) **Realistic Lariat:** Wielding a Lariat isn't easy, especially in combat. Add Requires A PS: Use Lariat Roll (-¼). Total cost: 28 points.
4) **Deadly Lariat:** The electrical charge of the lariat is deadly. Change to: Telekinesis (40 STR), Reduced Endurance (0 END; +½) (90 Active Points); OAF (-1), Affects Whole Object (-¼), Limited Range (12m; -¼), Only Affects Human-Sized Or Smaller Objects (-¼), Only To Grab (-1), Can Only Affect One Target At Once (-¼) (total cost: 22 points) **plus** RKA 2½d6, Reduced Endurance (0 END; +½) (60 Active Points); OAF (-1), Only Works On Grabbed Targets (-1), No Knockback (-¼) (total cost: 18 points). Total cost: 40 points.
5) **Constrictor Gauntlets:** Instead of a lariat, this weapon takes the form of gauntlets that can each project a whip-like metallic "constriction coil" that wraps around targets within 6m of the wielder. Change OAF (-1) to OIF (-½), Can Only Affect One Target At Once (-¼) to Can Only Affect A Maximum Of Two Targets At Once (-¼), and decrease Limited Range to 6m. Total cost: 36 points.

ELECTRIFIED SWORD

Effect: HKA 1½d6, Armor Piercing, +2 Increased STUN Multiplier
Target: One character
Duration: Instant
Range: Touch
END Cost: 0
Breakability: 12 PD/12 ED

Description: This weapon is a sword with an electrification field generator built into the hilt. The generator causes an aura of electricity to surround the blade, which gives it greater cutting and stunning power.

Game Information: HKA 1½d6, Armor Piercing (+¼), +2 Increased STUN Multiplier (+½), Reduced Endurance (0 END; +½) (56 Active Points); OAF (-1). Total cost: 28 points.

Options:

1) **Strong Sword:** Increase to HKA 2d6. 67 Active Points; total cost 33 points.
2) **Weak Sword:** Decrease to HKA 1d6. 34 Active Points; total cost 17 points.
3) **Realistic Sword:** The sword has relatively little physical impact. Add No Knockback (-¼). Total cost: 25 points.

ENERGY WHIP

Effect: RKA 2d6, Penetrating
Target: One character
Duration: Instant
Range: 6m
END Cost: 4
Breakability: 9 PD/9 ED

Description: This unusual weapon uses magnetic fields to harness a stream of energy in the form of a whip, allowing the wielder to inflict deadly energy damage on targets within 6m. The character can define the exact type of energy when he buys the whip; fire and electricity are both popular.

Game Information: RKA 2d6, Penetrating (+½) (45 Active Points); OAF (-1), Limited Range (6m; -¼). Total cost: 20 points.

Options:

1) **Strong Whip:** Increase to RKA 3d6. 67 Active Points; total cost 30 points.
2) **Weak Whip:** Decrease to RKA 1d6. 22 Active Points; total cost 10 points.
3) **Realistic Whip:** The magnetic fields that allow the whip to function can't form properly in environmental magnetic fields, rendering the whip useless. Add Will Not Work In Strong Magnetic Fields (-¼). Total cost: 18 points.
4) **Experimental Whip:** The technology in the whip is highly experimental; sometimes the energy lash flickers out. Add Activation Roll 13- (-¼). Total cost: 18 points.
5) **Multi-Energy Whip:** The wielder can manipulate controls in the handle of the whip to change the form of energy it uses. Add Variable Special Effects (electricity, fire, pulson, or sonic energy; +¼). 52 Active Points; total cost 23 points.

MANIPULATORY CAPE

Effect: Extra Limb plus Reach +1m
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: Thanks to special wires and cybernetic circuitry woven into his cape, a character can control the cape's motion. He can use it to pick up or hold objects and perform other crude tasks, but can only hurt other people with it if he bunches it up and hits people next to him (*i.e.,* when he doesn't use the extra Reach).

Game Information: Extra Limb (1) (5 Active Points); Limited Manipulation (-¼), Nonpersistent (-¼) (total cost: 3 points) **plus** Reach +1m (1 Active Point); OAF (-1), Only With Extra Limb (-½), Cannot Do Damage (-½) (total cost: 1 point). Total cost: 4 points.

MONOMOLECULAR SWORD

Effect: HKA 2d6, Armor Piercing (x2), Penetrating (x2)
Target: One character
Duration: Instant
Range: Touch
END Cost: 0
Breakability: 21 PD/21 ED

Description: Forged using super-science techniques so that it's only one molecule (or perhaps even one atom!) thick, this sword can cut through anything.

With a change in special effects, you can also use this write-up for a *Sonic Sword,* a melee weapon with a blade of focused sonic energy.

Game Information: HKA 2d6 (plus STR), Armor Piercing (x2; +½), Penetrating (x2; +1), Reduced Endurance (0 END; +½) (90 Active Points); OAF (-1), No Knockback (-¼). Total cost: 40 points.

Options:

1) **Monomolecular Sword Variant:** This form of Monomolecular Sword can cut through anything except energy fields. Change to HKA 2d6 (plus STR), NND (defense is PD Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1), Reduced Endurance (0 END; +½) (105 Active Points); OAF (-1), No Knockback (-¼). Total cost: 47 points.
2) **Realistic Monomolecular Sword:** Because it's so thin in one dimension, the Monomolecular Sword is prone to breakage — if the wielder doesn't strike the blow exactly edge-on, the sword takes damage and may break. Add Requires A Use Monomolecular Sword Roll (-½) and Side Effects (sword takes 1d6 Killing Damage; -¼). Total cost: 30 points.

POWER HAMMER

Effect: HA +10d6
Target: One character
Duration: Instant
Range: Touch
END Cost: 5
Breakability: 10 PD/10 ED

Description: This weapon — sometimes sledgehammer-like, sometimes more akin to a mace — uses an energy field of some sort to augment the force of the blow. Even the puniest character can smash down walls with a Power Hammer!

Game Information: HA +10d6 (50 Active Points); OAF (-1), Hand-To-Hand Attack (-¼). Total cost: 22 points.

Options:

1) **Strong Hammer:** Increase to HA +12d6. 60 Active Points; total cost 27 points.
2) **Weak Hammer:** Decrease to HA +8d6. 40 Active Points; total cost 18 points.
3) **Realistic Hammer:** The Power Hammer is an awkward weapon; the wielder has to make a STR Roll to heft and hit with it properly. Add Requires A STR Roll (-½). Total cost: 18 points.
4) **Hammer Gauntlet:** This form of the Power Hammer is attached to a gauntlet so that it's difficult to take away from a character. Change to OIF (-½). Total cost: 28 points.

QUESTIONITE CLAWS

Effect: HKA 1d6, Armor Piercing, Penetrating (x2)
Target: One character
Duration: Instant
Range: Touch
END Cost: 0
Breakability: Unbreakable

Description: The character has claws made of unbreakable questionite that never lose their edge and can cut through virtually anything. They project from his fingertips, the back of his hands, or the like at will. Because they're a part of the character, the claws don't qualify as a Focus; it would require surgery to remove them.

Game Information: HKA 1d6 (plus STR), Armor Piercing (+¼), Penetrating (x2; +1), Reduced Endurance (0 END; +½). Total cost: 41 points.

Options:

1) **Large Claws:** Increase to HKA 1½d6. Total cost: 69 points.
2) **Small Claws:** Decrease to HKA ½d6. Total cost: 27 points.
3) **Realistic Claws I:** The character's claws project from his hands in such a way that it's fairly easy to prevent him from activating and using them by grabbing his hands, or positioning them in such a way that the character has to hurt himself to project them. Add Restrainable (-½). 41 Active Points; total cost 27 points.
4) **Realistic Claws II:** The character cannot retract his claws; they're always "out," and that makes it hard to handle some objects or perform some tasks requiring manual dexterity. Add Side Effects (-2 penalty on all DEX Rolls involving manual dexterity, always occurs; -½). 41 Active Points; total cost 27 points.
5) **Realistic Claws III:** The character's claws aren't natural; they're attached to his flesh and/or bones artificially. If he tries to cut objects that are too hard or dense, they can rip partially or wholly free from their housings, hurting him. Add Side Effects (character takes ½d6 Killing Damage to the hands [no defense applies] if he uses his Claws on large inanimate objects with more than 9 PD, always occurs; -½). 41 Active Points; total cost 27 points.

SHOCK GLOVE

Effect: Various Attack Powers
Target: One character
Duration: Instant
Range: Touch
Charges: 30 Charges for entire reserve
Breakability: 15 PD/15 ED

Description: This glove has a built-in battery. The wearer can activate the battery by cybernetic command, sending power to conductive fibers woven into the glove. Depending on which fibers and circuits the wearer activates, he can create a wide variety of offensive effects: a taser-like touch; paralysis; or a deadly shock.

Game Information:

Cost	Power
37	**Shock Gloves:** Multipower, 60-point reserve, 30 Charges for entire reserve (+¼); all OIF (-½), No Range (-½)
3f	**1) Taser Touch I:** Blast 8d6, NND (defense is insulated rED covering the entire body; +½); OIF (-½), No Range (-½)
2f	**2) Taser Touch II:** Blast 6d6, NND (defense is insulated rED covering the entire body; +½), Constant (+½); OIF (-½), Lockout (-½), No Range (-½), Must Maintain Touch To Maintain Effect (-¼), Costs 1 Charge Per Phase To Maintain (-¼)
2f	**3) Paralytic Grip:** Entangle 3d6, 3 PD/3 ED, Takes No Damage From Attacks (+1); OIF (-½), No Range (-½), Lockout (-½), Must Maintain Touch To Maintain Effect (-¼), Costs 1 Charge Per Phase To Maintain (-¼)
3f	**4) Deadly Touch I:** RKA 4d6; OIF (-½), No Range (-½), Requires 2 Charges Per Use (-¼)
1f	**5) Deadly Touch II:** RKA 2d6, Constant (+½); OIF (-½), No Range (-½), Requires 2 Charges Per Use, And 1 Charge Per Phase To Maintain (-½), Lockout (-½), Must Maintain Touch To Maintain Effect (-¼)

Total cost: 48 points.

Options:

1) **Strong Shock Glove:** Increase reserve to 80 points, Slot 1 to Blast 10d6, Slot 2 to Blast 8d6, Slot 3 to Entangle 4d6, 4 PD/4 ED, Slot 4 to RKA 5d6, and Slot 5 to RKA 3d6. Total cost: 65 points.
2) **Weak Shock Glove:** Decrease reserve to 45 points, Slot 1 to Blast 6d6, Slot 2 to Blast 4d6, Slot 3 to Entangle 2d6, 2 PD/2 ED, Slot 4 to RKA 3d6, and Slot 5 to RKA 1d6+1. Total cost: 39 points.
3) **Realistic Shock Glove:** Instead of having a built-in battery, the Shock Glove attaches to a battery pack worn on the belt (or elsewhere) via a cable. An attacker can easily cut or detach the cable, rendering the Glove useless until repaired. Change to OAF (-1). Total cost: 40 points.
4) **Experimental Shock Glove:** The Shock Glove doesn't always work on command. Add Activation Roll 14- (-¼) to reserve and all slots. Total cost: 43 points.
5) **Bigger Battery:** The Shock Glove have a much larger battery with more power capacity. Change to 60 Charges (+½) for reserve. Total cost: 56 points.

STEEL WHIP

Effect: HKA 1d6+1, Armor Piercing plus Reach +5m
Target: One character
Duration: Instant
Range: Touch (Reach +5m)
END Cost: 3
Breakability: 5 PD/5 ED

Description: This weapon is a whip made of woven steel mesh, high-flexibility steel cable, or the like. It can inflict deadly wounds on any target within 6m; the wielder can also use it to Grab objects and the like. (Ordinarily Reach bought for a weapon takes the Limitation *Only To Cause Damage,* but the Reach for the Steel Whip does not.)

Game Information: HKA 1d6+1, Armor Piercing (+¼) (25 Active Points); OAF (-1), No STR Bonus (-½) (total cost: 10 points) **plus** Reach +5m (5 Active Points); OAF (-1) (total cost: 5 points). Total cost: 15 points.

Options:

1) **Strong Whip:** Increase to HKA 1½d6. 31 + 5= 59 Active Points; total cost 12 + 5 = 17 points.
2) **Weak Whip:** Decrease to HKA 1d6. 19 + 5= 24 Active Points; total cost 8 + 5 = 13 points.
3) **Longer Whip:** Increase to Reach +9m. 25 + 9 = 34 Active Points; total cost 10 + 9 = 19 points.
4) **Cutting Whip:** The whip is so powerful it can cut through nearly anything. Change Armor Piercing to (x2; +½) and add Penetrating (+½) to HKA. 40 + 5 = 45 Active Points; total cost 16 + 5 = 21 points.
5) **Bullet Deflection:** The user can cause the whip to spin around in a circle at high enough speeds to deflect any physical missile. Change to a Multipower with a 41-point reserve, all OAF (-1), one slot as the standard power above, one slot Barrier 8 PD, 8 BODY (5m long, 5m high, and ½m thick), Non-Anchored (41 Active Points); OAF (-1), Costs Endurance (to maintain; -½), No Range (must center on user; -½), Self Only (-½). Total cost: 22 points.
6) **Electrification:** If the character can wrap the whip around a target — use the Reach to Grab the target instead of hitting him with the HKA, in other words — he can deliver a powerful electric jolt to the target. Depending upon the amount of power used, the jolt can simply stun the target, or it can kill. Character also buys:

Cost Power

13 **Whip Electrification:** Multipower, 40 point reserve; all OAF (steel whip; -1), Only Versus Targets Grabbed By Whip (-1)

1f **1) Standard Electrification:** Blast 8d6; OAF (-1), Only Versus Targets Grabbed By Whip (-1), No Knockback (-¼)

1f **2) Taser Electrification:** Blast 5d6, NND (defense is rED covering the entire body; +½); OAF (-1), Only Versus Targets Grabbed By Whip (-1)

1f **3) Deadly Electrification:** RKA 2½d6; OAF (-1), Only Versus Targets Grabbed By Whip (-1) No Knockback (-¼)

Total cost: 16 points (in addition to cost of Steel Whip)

WRECKING BALL

Effect: HA +8d6
Target: One character
Duration: Instant
Range: Touch (Reach +1m)
END Cost: 4
Breakability: 8 PD/8 ED

Description: This weapon is nothing more than a large, solid iron wrecking ball on the end of a sturdy chain. It's a favored weapon of some "brick" characters; it weighs 3,200 kilograms, so only characters of STR 40 and above can effectively wield it.

Game Information: HA +8d6 (40 Active Points); OAF (-1), Hand-To-Hand Attack (-¼), Can Only Be Used By Characters With STR 40 Or Above (-0) (total cost: 18 points) **plus** Reach +1m (1 Active Point); OAF (-1) (total cost: 1 point). Total cost: 19 points.

Options:

1) **Strong Wrecking Ball:** Increase to HA +10d6. 50 + 1 = 51 Active Points; total cost 22 + 1 = 23 points.
2) **Weak Wrecking Ball:** Decrease to HA +5d6. 25 + 1 = 26 Active Points; total cost 11 + 1 = 12 points.
3) **Realistic Ball:** The Wrecking Ball is an awkward weapon; the wielder has to make a STR Roll to heft and hit with it properly. Remove Can Only Be Used By Characters With STR 40 Or Above (-0) and add Requires A STR Roll (-½) to the HA. Total cost 14 + 1 = 15 points.
4) **Spinning The Ball:** The character's so skilled at whirling the Wrecking Ball around to build up momentum before he hits with it that he can sometimes do extra damage. Character also buys HA +2d6 (10 Active Points); OAF (-1), Hand-To-Hand Attack (-¼), Requires A Use Wrecking Ball Roll (-½) (total cost: 3 points). 40 + 1 + 10 = 51 Active Points; total cost 186 + 1 + 4 = 23 points.

Mind-Affecting Weapons

These devices affect the victim's mind in some way — they take control of it, psychically assault it, or the like. Most, but not all, are psionic in nature.

EMOTION MANIPULATOR

Effect: Mind Control 8d6
Target: One character
Duration: Constant
Range: LOS
END Cost: 5
Breakability: 10 PD/10 ED

Description: This sophisticated neuro-manipulation device, usually built in a rod- or box-like form, allows the wielder to control the emotions of others.

Game Information: Mind Control 8d6, Telepathic (+¼) (50 Active Points); OAF (-1), Only To Alter/Inflict Emotional States (-½). Total cost: 20 points.

Options:

1) **Strong Manipulator:** Increase to Mind Control 12d6. 75 Active Points; total cost 30 points.
2) **Weak Manipulator:** Decrease to Mind Control 6d6. 37 Active Points; total cost 15 points.
3) **Experimental Manipulator:** This form of technology remains highly experimental and doesn't always work properly. Add Activation Roll 14- (-¼). Total cost: 18 points.
4) **Restricted Manipulator I:** This form of the Manipulator can only affect one emotion, defined when the character buys the gadget. Change to Only To Alter/Inflict One Emotional State (-1). Total cost: 17 points.
5) **Restricted Manipulator II:** This form of the Manipulator can only affect three emotions, defined when the character buys the gadget. Change to Only To Alter/Inflict Three Emotional States (-¾). Total cost: 18 points.
6) **Disguised Manipulator:** This form of the Manipulator looks like an ordinary object, such as a piece of jewelry or a fountain pen. Change OAF (-1) to IAF (-½). Total cost: 25 points.
7) **Group Emotion Manipulator I:** This powerful version of the Manipulator can affect multiple persons' emotions at once. Add Area Of Effect (30m Radius Selective; +1¼). 100 Active Points; total cost 40 points.
8) **Group Emotion Manipulator II:** As Group Emotion Manipulator I, but the device only affects persons near the user. Add Personal Immunity (+¼) and No Range (-½). 110 Active Points; total cost 37 points.
9) **Neuromanipulator:** This device can take control of the victim's mind totally, not just manipulate his emotions. Remove Only To Alter/Inflict Emotional States (-½). Total cost: 25 points.

HALLUCINATION SPRAY

Effect: Mental Illusions 12d6
Target: One character
Duration: Instant
Range: 6m
Charges: 6 Charges
Breakability: 12 PD/12 ED

Description: This weapon is a hallucinogenic gas or mist the character sprays on other people, causing them to experience vivid visions indistinguishable from reality. The character has no control over the victim's hallucination (it could even help the victim, though that sort of reaction is very rare), and cannot change or affect the course of the hallucination.

Game Information: Mental Illusions 12d6 (60 Active Points); IIF (-¼), Based On CON (PD applies; -1), No Conscious Control (-1), Limited Range (6m; -¼), 6 Charges (-¾). Total cost: 14 points.

Options:

1) **Strong Spray:** Increase to Mental Illusions 15d6. 75 Active Points; total cost 18 points.
2) **Weak Spray:** Decrease to Mental Illusions 9d6. 45 Active Points; total cost 10 points.
3) **Realistic Spray:** If the winds are wrong or the character doesn't use the spray properly, it may affect him instead. Add Requires A DEX Roll (-½) and Side Effects (spray affects character; -1). Total cost: 10 points.
4) **Experimental Spray:** Some people seem to be immune to the effects of the spray, or don't always get enough of a dose for it to affect them. Add Activation Roll 14- (-¼). Total cost: 13 points.
5) **Obvious Spray:** The nature of the spray weapon is apparent to any who see it. Change IIF (-¼) to OIF (-½). Total cost: 13 points (or 12 points for OAF [-1]).
6) **Variant Spray:** This form of the spray can easily affect opponents with high PDs. Add NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1). 120 Active Points; total cost 28 points.
7) **More Spray:** Increase to 12 Charges (-¼). Total cost: 16 points.
8) **Less Spray:** Decrease to 3 Charges (-1¼). Total cost: 13 points.

HYPNOTIC MUSICAL INSTRUMENT

Effect: Mind Control 12d6, Gestures, Requires A Skill Roll
Target: 32m Radius
Duration: Instant
Range: No Range
END Cost: 0
Breakability: 33 PD/33 ED

Description: This unusual musical instrument, possibly the creation of a mad musician or a gift from the faerie-folk, allows the person playing it to take control of the minds of people who hear him (defined, for these purposes, as anyone within 48m of him). He can affect multiple people at once, and even choose to affect only some people within the Area Of Effect, but must issue the same order to everyone affected (usually by singing the commands).

Although Mind Control is an Instant Power, the character must keep playing the instrument as long as he wants the Mind Control to remain in effect. If he ever stops playing for any reason, the Mind Control effect effect stops immediately, returning the victims' self-will. Just drowning out the music won't necessarily stop the Mind Control as long as the character keeps playing, but in the GM's option may allow the victims another Breakout Roll (or impose a small penalty on MCV Attack Rolls to use the power).

Game Information: Mind Control 12d6, Area Of Effect (32m Radius Selective; +1¼), Reduced Endurance (0 END; +½) (165 Active Points); OAF (-1), Gestures (two hands throughout; -1), Effect Ends Immediately If Character Stops Playing (-½), No Range (-½), Requires A PS: [Play Instrument] Roll (-¼). Total cost: 39 points.

Options:

1) **Strong Instrument:** Increase to Mind Control 15d6. 206 Active Points; total cost 48 points.
2) **Weak Instrument:** Decrease to Mind Control 9d6. 124 Active Points; total cost 29 points.
3) **Unspoken Commands:** The character can transmit orders to the victims through his music alone. Add Telepathic (+¼). 180 Active Points; total cost 42 points.

HYPNOTIC SPINNER

Effect: Mind Control 10d6
Target: One character
Duration: Constant
Range: 20m
END Cost: 5
Breakability: 10 PD/10 ED

Description: This device, sometimes built into an item of jewelry (or the like) or a hat but always obvious because of the spiral pattern on it, can almost instantly hypnotize other people. When activated, the device spins the spiral pattern, and that and the neuro-energy it projects allows the wielder to take control of the victim's mind.

Game Information: Mind Control 10d6 (50 Active Points); OAF (-1), Limited Normal Range (20m; -¼). Total cost: 22 points.

Options:

1) **Strong Hypnosis:** Increase to Mind Control 12d6. 60 Active Points; total cost 27 points.
2) **Weak Hypnosis:** Decrease to Mind Control 8d6. 40 Active Points; total cost 18 points.
3) **Realistic Hypnosis:** Hypnotizing someone with this device takes a lot of time. Add Extra Time (1 Turn; -1¼). Total cost: 14 points.
4) **Experimental Hypnosis:** The neuro-energy projector in this device is prone to unexpected failure. Add Activation Roll 14- (-¼). Total cost: 20 points.
5) **Easy Hypnosis:** Using this device doesn't tire a character out at all. Add Reduced Endurance (0 END; +½). 75 Active Points; total cost 33 points.
6) **Telepathic Hypnosis:** The device can project telepathic commands from the user's mind to the victim's. Add Telepathic (+¼). 62 Active Points; total cost 27 points.
7) **Ocular Hypnosis:** To make the device work, the wielder must establish eye contact with his victim. Change Limited Normal Range (-¼) to Eye Contact Required (-½). Total cost: 20 points.
8) **Attached Spinner:** Taking the character's spinner away isn't easy. Change OAF (-1) to OIF (-½). Total cost: 28 points.

MINDBLASTER HEADBAND

Effect: Mental Blast 4d6
Target: One character
Duration: Instant
Range: LOS
END Cost: 4
Breakability: 8 PD/8 ED

Description: This device is a headband made of some gold-colored metal with a gem-like crystal (usually red or green) set into it in the center of the forehead. While wearing it, a character can attack his foes with powerful blasts of psionic force.

Game Information: Mental Blast 4d6 (40 Active Points); OAF (-1). Total cost: 20 points.

Options:

1) **Strong Headband:** Increase to Mental Blast 6d6. 60 Active Points; total cost 30 points.
2) **Weak Headband:** Decrease to Mental Blast 3d6. 30 Active Points; total cost 15 points.
3) **Realistic Headband:** The Headband has an internal battery that only has enough energy for a few mind-blasts before it requires recharging. Add 8 Charges (-½). Total cost: 16 points.
4) **Experimental Headband:** Psionic technology is a new field, and devices created with it don't always perform as expected. Add Activation Roll 14- (-¼). Total cost: 18 points.
5) **Attached Headband:** This form of the Headband isn't so easily taken away from the character. It may be built into a helmet, a ring, or the like — or it may simply fit very firmly around his head. Change OAF (-1) to OIF (-½). Total cost: 27 points.

MINDREADER HEADBAND

Effect: Telepathy 8d6
Target: One character
Duration: Instant
Range: LOS
END Cost: 4
Breakability: 8 PD/8 ED

Description: This device is a headband made of some silver-colored metal with a gem-like crystal (usually purple or blue) set into it in the center of the forehead. While wearing it, a character can communicate mentally with his friends and read the minds of his foes.

Game Information: Telepathy 8d6 (40 Active Points); OAF (-1). Total cost: 20 points.

Options:

1) **Strong Headband:** Increase to Telepathy 12d6. 60 Active Points; total cost 30 points.
2) **Weak Headband:** Decrease to Telepathy 6d6. 30 Active Points; total cost 15 points.
3) **Realistic Headband:** The Headband has an internal battery that only has enough energy for a few seconds' worth of mind-reading before it requires recharging. Add 8 Charges (-½). Total cost: 16 points.
4) **Experimental Headband:** Psionic technology is a new field, and devices created with it don't always perform as expected. Add Activation Roll 14- (-¼). Total cost: 18 points.
5) **Attached Headband:** This form of the Headband isn't so easily taken away from the character. It may be built into a helmet, a ring, or the like — or it may simply fit very firmly around his head. Change OAF (-1) to OIF (-½). Total cost: 27 points.

NEUROCONTROL LIMPETS

Effect: Mind Control 12d6
Target: One character
Duration: Instant
Range: Touch
Charges: 4 Recoverable Charges
Breakability: 12 PD/12 ED

Description: This device is a small disk or similar object — the character can give it whatever shape or appearance he wants when he buys it, as long as it's obviously out of the ordinary and recognizable as a weapon by those who perceive it — that attaches to the victim's head. After attaching it, the character gives the victim a command. If the Mind Control roll succeeds, the victim keeps obeying the order until he makes a Breakout Roll or the Limpet is removed (removing the Limpet takes a Zero Phase Action out of combat; in combat it's an Attack Action and the Limpet has the victim's DCV +5). If the character wants to change the order, he must remove the Limpet, re-attach it, and issue the new order.

The *Requires A DEX Roll* Limitation represents the potential difficulty a character has attaching a Limpet to the victim's head. The -6 penalty for the power's Active Points effectively represents the Hit Location penalty for targeting the Head; the GM can, at his option, reduce or eliminate the penalty to the roll if the character makes a Surprise Move or the victim is Surprised.

Game Information: Mind Control 12d6 (60 Active Points); OAF (-1), Character Cannot Change Orders Or Spend END To Prevent Improvement In Breakout Rolls (-¼), Effect Ends Immediately If Limpet Is Removed (-½), No Range (-½), Requires A DEX Roll (-½), 4 Recoverable Charges (-½). Total cost: 14 points.

Options:

1) **Strong Limpet:** Increase to Mind Control 15d6. 75 Active Points; total cost 18 points.
2) **Weak Limpet:** Decrease to Mind Control 10d6. 50 Active Points; total cost 12 points.
3) **Experimental Limpet:** Psionic technology is so new and advanced that it tends to be unreliable, especially when miniaturized like this. Add Activation Roll 14- (-¼). Total cost: 13 points.
4) **Telepathic Limpet:** The Limpet also creates a low-level telepathic bond between the character and his victim that allows him to issue the order telepathically. Add Telepathic (+¼). 75 Active Points; total cost 18 points.
5) **Disguised Limpet:** This form of the Limpet looks like something innocuous — an object the character might wear or have on or near his head. Change OAF (-1) to IAF (-½). Total cost: 16 points.
6) **Restricted Limpets:** This form of Limpet can only be used to issue a single command. Add Set Effect (chosen when character buys weapon; -1). Total cost: 11 points.
7) **More Limpets:** Increase to 8 Recoverable Charges (-0). Total cost: 16 points.
8) **Fewer Limpets:** Decrease to 2 Recoverable Charges (-1). Total cost: 13 points.

PSIONIC FEEDBACK INDUCER

Effect: Mental Blast 3d6 plus Drain DEX 2d6
Target: One character
Duration: Instant
Range: 200m
END Cost: 6
Breakability: 6 PD/6 ED

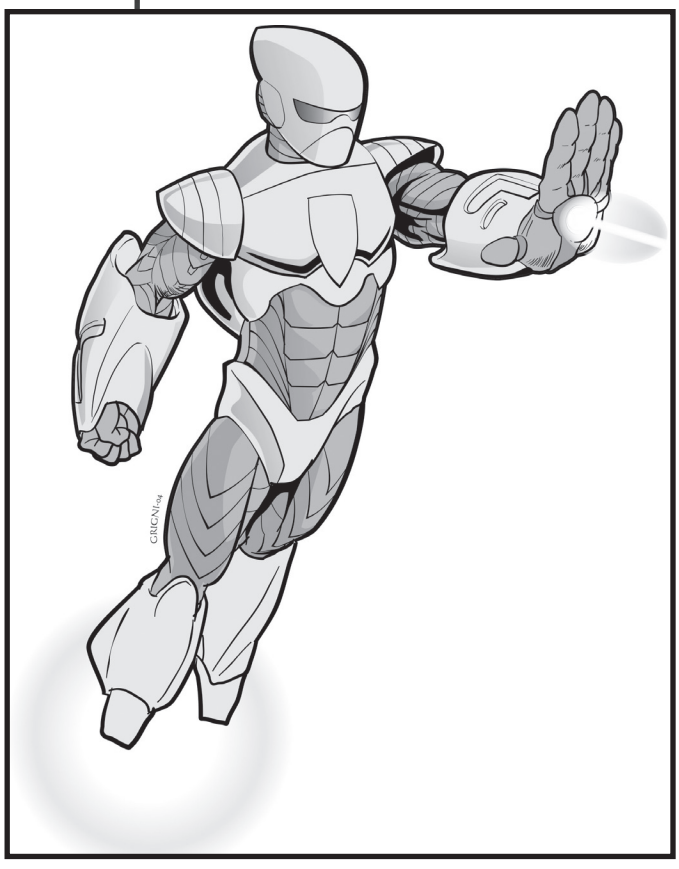
Description: This headband, or headband-like, device allows the wearer to cause synaptic misfirings in the target's brain, resulting in spasms and intense pain.

Game Information: Mental Blast 3d6 (30 Active Points); OAF (-1), Limited Normal Range (200m; -¼) (total cost: 13 points) **plus** Drain DEX 3d6

(30 Active Points); OAF (-1), Linked (-½) (total cost: 12 points). Total cost: 25 points.

Options:

1) **Strong Inducer:** Increase to Mental Blast 5d6 plus Drain 4d6. 50 + 40 = 90 Active Points; total cost 22 + 16 = 38 points.
2) **Weak Inducer:** Decrease to Mental Blast 2d6 plus Drain 2d6. 20 + 20 = 40 Active Points; total cost 9 + 8 = 17 points.
3) **Realistic Inducer:** The Inducer has a built-in battery that only provides enough power for a few Feedback blasts. Add 8 Charges (-½) to each power. Total cost 11 + 10 = 21 points.
4) **Experimental Inducer:** The psionic technology used to build the Inducer is experimental, and thus unreliable. Add Activation Roll 14- (-¼) to each power. Total cost 12 + 11 = 23 points.
5) **Attached Inducer:** The Inducer is built into a helmet, or otherwise more firmly attached to the character's person. Change OAF (-1) to OIF (-½). Total cost 17 + 15 = 32 points.
6) **Ongoing Feedback:** This form of the device continues generating painful feedback as long as the user concentrates on the target (*i.e.,* pays END). Add Constant (+½) to both powers. 45 + 45 = 90 Active Points; total cost 20 + 18 = 38 points.
7) **Variant Psionic Feedback Inducer:** This type of Inducer works on a Line Of Sight basis. Change to: Mental Blast 3d6 (30 Active Points); OAF (-1) (total cost: 15 points) **plus** Drain DEX 3d6, Line Of Sight (+½) (45 Active Points); OAF (-1), Linked (-¼) (total cost: 20 points). Total cost: 35 points.



Muscle-Powered Ranged Weapons

ARMOR-WEAKENING CAPSULES

Effect: Drain Armor 4d6
Target: One character
Duration: Instant
Range: RBS
Charges: 4
Breakability: 34 PD/34 ED

Description: This weapon is a capsule containing a chemical or nanotechnological compound that weakens metal, ceramic, cloth, leather, and other substances used to construct suits of armor. When it hits a target, it breaks, spreading the substance over the armor and thus diminishing the protective qualities of that armor. (In *HERO System* terms, this power has Variable Effect so it can Drain whatever Power's used to create a suit of armor: Resistant Protection, Damage Negation, Damage Reduction, ordinary PD/ED, or the like.)

Game Information: Drain Armor 4d6, Variable Effect (any one technological armor power at once; +½), Delayed Return Rate (points return at the rate of 5 per Month; +2¾) (170 Active Points); OAF (-1), Only Works On Technological Armors (-¼), Range Based On STR (-¼), 4 Charges (-1). Total cost: 48 points.

Options:

1) **Strong Capsules:** Increase to Drain Armor 5d6. 212 Active Points; total cost 60 points.
2) **Weak Capsules:** Decrease to Drain Armor 3d6. 127 Active Points; total cost 36 points.
3) **Realistic Capsules:** The capsules are prone to breaking. Add Fragile (-¼). Total cost: 45 points.
4) **Experimental Capsules:** Sometimes the capsules don't break, or the substance in them has expired and fails to work. Add Activation Roll 14- (-¼). Total cost: 45 points.
5) **Capsule Gun:** The character doesn't throw the capsules, he shoots them from a small gun. Remove Range Based On STR (-¼). 170 Active Points; total cost 52 points.
6) **More Capsules:** Increase to 8 Charges (-½). Total cost: 57 points.
7) **Fewer Capsules:** Decrease to 2 Charges (-1½). Total cost: 42 points.

GRENADES, MINI-GRENADES, AND THROWING PELLETS

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges
Breakability: Varies

Description: Many characters carry grenades or similar thrown weapons, such as mini-grenades or throwing pellets. Typically these weapons explode, or carry substances that expand to cover an area when the weapon bursts open. In many cases characters manufacture them in specific shapes to better match a costume or "theme."

Each weapon below comes in grenade, mini-grenade, and pellet form in descending level of power or effectiveness. Of course, many other options are appropriate; you could, for example, adapt some of the super-arrows described below for use as grenade-like weapons. Each grenade-like weapon is listed as having 6 Charges, but could easily have more or less if desired.

For throwing purposes, grenades weigh .8 kg, mini-grenades .4 kg, and throwing pellets .2 kg.

Game Information:

CONCUSSIVE

Cost Power

20 **Concussive Grenade:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½) (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

12 **Concussive Mini-Grenade:** Blast 6d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

10 **Concussive Throwing Pellet:** Blast 5d6 (12m Radius Explosion; +¼) (31 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

EMP

Cost Power

70 **EMP Grenade:** Drain Electronic Device Powers 4d6, Expanded Effect + Variable Effect (all Electronic Device powers simultaneously; +4), Area Of Effect (8m Radius Explosion; +¼) (210 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

52 **EMP Mini-Grenade:** Drain Electronic Device Powers 3d6, Expanded Effect + Variable Effect (all Electronic Device powers simultaneously; +4), Area Of Effect (6m Radius Explosion; +¼) (157 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

35 **EMP Throwing Pellet:** Drain Electronic Device Powers 2d6, Expanded Effect + Variable Effect (all Electronic Device powers simultaneously; +4), Area Of Effect (4m Radius Explosion; +¼) (105 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

FLARE

Cost Power

20 **Flare Grenade:** Sight Group Flash 8d6 (18m Radius Explosion; +½) (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

12 **Flare Mini-Grenade:** Sight Group Flash 6d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

10 **Flare Throwing Pellet:** Sight Group Flash 5d6 (10m Radius Explosion; +¼) (31 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

FRAGMENTARY

Cost Power

20 **Frag Grenade:** RKA 2½d6 (18m Radius Explosion; +½) (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

12 **Frag Mini-Grenade:** RKA 2d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

10 **Frag Throwing Pellet:** RKA 1½d6 (10m Radius Explosion; +¼) (31 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

INCENDIARY

Cost Power

15 **Incendiary Grenade:** RKA 2d6, Armor Piercing (+¼), Area Of Effect (14m Radius Explosion; +¼) (45 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

12 **Incendiary Mini-Grenade:** RKA 1½d6, Armor Piercing (+¼), Area Of Effect (12m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

10 **Incendiary Throwing Pellet:** RKA 1d6+1, Armor Piercing (+¼), Area Of Effect (8m Radius Explosion; +¼) (30 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

KNOCKOUT GAS

Cost Power

21 **Knockout Gas Grenade:** Blast 5d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (8m Radius; +½) (62 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

17 **Knockout Gas Mini-Grenade:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (8m Radius; +½) (50 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

11 **Knockout Gas Throwing Pellet:** Blast 3d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (1m Radius; +¼) (34 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

PARALYSIS GAS

Cost Power

37 **Paralysis Gas Grenade:** Entangle 5d6, 5 PD/5 ED, Takes No Damage From Attacks (+1), Area Of Effect (4m Radius; +¼) (112 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

30 **Paralysis Gas Mini-Grenade:** Entangle 4d6, 4 PD/4 ED, Takes No Damage From Attacks (+1), Area Of Effect (2m Radius; +¼) (90 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

22 **Paralysis Gas Throwing Pellet:** Entangle 3d6, 3 PD/3 ED, Takes No Damage From Attacks (+1), Area Of Effect (1m Radius; +¼) (67 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

PASTE

Cost Power

25 **Paste Grenade:** Entangle 5d6, 5 PD/5 ED, Area Of Effect (20m Radius Explosion; +½) (75 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

17 **Paste Mini-Grenade:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (16m Radius Explosion; +¼) (50 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

12 **Paste Throwing Pellet:** Entangle 3d6, 3 PD/3 ED, Area Of Effect (12m Radius Explosion; +¼) (37 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

SMOKE

Cost Power

24 **Smoke Grenade:** Darkness to Sight Group 12m radius (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

16 **Smoke Mini-Grenade:** Darkness to Sight Group 8m radius (40 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

12 **Smoke Throwing Pellet:** Darkness to Sight Group 6m radius (30 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

TEAR GAS

Cost Power

33 **Tear Gas Grenade:** Sight Group Flash 5d6, Area Of Effect (8m Radius; +½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (100 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

27 **Tear Gas Mini-Grenade:** Sight Group Flash 4d6, Area Of Effect (8m Radius; +½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (80 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

20 **Tear Gas Throwing Pellet:** Sight Group Flash 3d6, Area Of Effect (8m Radius; +½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

HURLED LIGHTNING

Effect: RKA 3d6
Target: One character
Duration: Instant
Range: RBS
Charges: 10 Charges
Breakability: Unbreakable

Description: This weapon is a quiver of 10 bolts of electricity, each encased in some sort of energy field that allows the character to handle and throw them without harm. When they're thrown, the field dissolves and they strike with deadly force.

For throwing purposes, each bolt of Lightning weighs 1 kilogram.

Game Information: RKA 3d6 (45 Active Points); OAF (-1), Range Based On STR (-¼), 10 Charges (-¼). Total cost: 18 points.

Options:

1) **Strong Lightning:** Increase to RKA 4d6. 60 Active Points; total cost 24 points.
2) **Weak Lightning:** Decrease to RKA 2d6. 30 Active Points; total cost 12 points.
3) **Experimental Lightning:** Sometimes one of the bolts is a dud that dissipates before striking the target. Add Activation Roll 14- (-¼). Total cost: 16 points.
4) **Boom Lightning:** Add Area Of Effect (20m Radius Explosion; +½). 67 Active Points; total cost 27 points.
5) **Cutting Lightning:** Add Armor Piercing (+¼). 56 Active Points; total cost 22 points.
6) **Cutting Lightning II:** This form of Hurled Lightning strikes with even greater effect. Add Armor Piercing (+¼) and +2 Increased STUN Multiplier (+½). 79 Active Points; total cost 32 points.
7) **Thunderclap Lightning:** When it strikes the target, the bolt also emits a tremendous thunderclap. Add Hearing Group Flash 6d6 (18m Radius Explosion; +½), Personal Immunity (+¼) (31 Active Points); OAF (-1), Linked (-½), Range Based On STR (-¼), 10 Charges (-¼) (total cost: 10 points). 45 + 31 = 76 Active Points; total cost 18 + 10 = 28 points.

8) **More Lightning Bolts:** Change to 15 Charges (-0). Total cost: 20 points.
9) **Fewer Lightning Bolts:** Change to 5 Charges (-¾). Total cost: 15 points.

POISON DUST

Effect: RKA 3d6, NND, Does BODY
Target: One character
Duration: Instant
Range: 6m
Charges: 4
Breakability: 1 PD/1 ED

Description: This weapon is a handful of dust with poisonous properties. When thrown in a victim's face or onto his skin, it poisons him.

The character can define the secondary physical effects of the Poison Dust when he buys it. It might discolor the victim's skin, contort the victim's facial features, cause all the victim's hair to fall out, wither the victim's body and leave his face with a skull-like appearance, or the like. It often depends on the character's name, theme, or other powers.

Game Information: RKA 3d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1) (135 Active Points); OAF Fragile (-1¼), Limited Range (6m; -¼), 4 Charges (-1). Total cost: 38 points.

Options:

1) **Strong Dust:** Increase to RKA 4d6. 180 Active Points; total cost 51 points.
2) **Weak Dust:** Decrease to RKA 2d6. 90 Active Points; total cost 26 points.
3) **Realistic Dust:** If the character's not careful, he may accidentally expose himself to the dust! Add Requires A DEX Roll (-½) and Side Effects (character suffers the effects of the dust; -1). Total cost: 27 points.
4) **Long-Range Dust:** Instead of throwing the dust, the character projects it with some sort of sprayer or similar device. Change to Limited Range (24m; -¼). Total cost: 38 points.
5) **More Dust:** The character carries a larger supply of dust. Change to 8 Charges (-½). Total cost: 45 points.
6) **Knockout Dust:** This form of the Dust only knocks the victim out. Change to Blast 8d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1). 80 Active Points; total cost 23 points.
7) **Paralysis Dust:** This form of the Dust only renders the victim unable to move. Change to Entangle 6d6, 6 PD/6ED, Takes No Damage From Attacks (+1). 120 Active Points; total cost 34 points.
8) **Dust Cloud:** When thrown, the dust expands into a cloud. Add Area Of Effect (2m Radius; +¼). 146 Active Points; total cost 42 points.
9) **Immune To The Dust:** The character's dust won't affect him. Add Personal Immunity (+¼). 146 Active Points; total cost 42 points.

RETURNING THROWING WEAPON

Effect: Blast 12d6
Target: One character
Duration: Instant
Range: RBS
END Cost: 6
Breakability: Not applicable (see text)

Description: The character possesses a throwing weapon, such as a hammer or metal disk, containing a technological system of some sort — a gravitic manipulator or directed magnetic beam, for example — that returns it to his hand after he throws it. (It could instead be a mystic weapon with an enchantment of returning cast upon it.) When he throws it, it automatically returns to his hand whether it hits or misses the target, and no one but him can pick it up or wield it.

In *HERO System* terms, this is a rare example of a gadget without the *Focus* Limitation. Although the special effect is "a thrown object," because the object returns to the character every time he throws it, and no one can stop it or use it against him, it doesn't function like a Focus in game terms. Therefore it gets no Limitation for being an object. Given the special effect, the GM could occasionally have someone snatch the weapon out of the air as a "plot device," but in most situations no one can take the weapon away from its user — if anyone tries to, it automatically returns to the wielder's hand. As an added bonus, since it's not a Focus, no one can break it.

Game Information: Blast 12d6 (60 Active Points); Range Based On STR (-¼). Total cost: 48 points.

Options:

1) **Powerful Weapon:** Increase to Blast 15d6. 75 Active Points; total cost 60 points.
2) **Weak Weapon:** Decrease to Blast 10d6. 50 Active Points; total cost 40 points.
3) **Throwing Arsenal:** The character has not one returning throwing weapon, but several. He can throw them all at one character, or one apiece at multiple targets. Decrease to Blast 8d6 and add Autofire (5 shots; +½). 60 Active Points; total cost 48 points.
4) **Long-Range Weapon:** The device that causes the weapon to return to the character can also propel it further than he can throw it. Remove Range Based On STR (-¼). Total cost: 60 points.
5) **Lethal Weapon:** The character's weapon has an edge or a point that makes it deadly. Change to RKA 4d6. 60 Active Points; total cost 48 points.
6) **Breakable Throwing Weapon:** Since this "gadget" is really just a power, it can't be taken away from the character or broken as if it were a Focus. If the character wants his Returning Throwing Weapon to be accessible and

breakable, add the Limitation *Physical Manifestation* (-¼), which means it's treated as if it were a Breakable Focus. Total cost: 40 points.

SUPER-BOOMERANGS

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges
Breakability: Varies

Description: From Australia with love, these boomerangs do more than hit the target from unusual angles. They carry explosives, knockout gases, and other advanced weaponry that gives them much greater "punch" than a standard wooden boomerang. (For *HERO System* statistics on real-world boomerangs and the like, including rules for how a character can get them to return to his hand if he misses the target, see the "Throwing Club" on page 35.)

Game Information:

STANDARD BOOMERANG

Cost Power

12 **Boomerang:** Blast 5d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (37 Active Points); OAF (-1), Range Based On STR (-¼), Beam (-¼), 4 Recoverable Charges (-½)

15 **Large Boomerang:** Blast 6d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (45 Active Points); OAF (-1), Range Based On STR (-¼), Beam (-¼), 4 Recoverable Charges (-½)

7 **Small Boomerang:** Blast 3d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (22 Active Points); OAF (-1), Range Based On STR (-¼), Beam (-¼), 4 Recoverable Charges (-½)

BLADERANG

Cost Power

12 **Basic Bladerang:** RKA 1½d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (37 Active Points); OAF (-1), Range Based On STR (-¼), Beam (-¼), 4 Recoverable Charges (-½)

15 **Large Bladerang:** RKA 2d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (45 Active Points); OAF (-1), Range Based On STR (-¼), Beam (-¼), 4 Recoverable Charges (-½)

7 **Small Bladerang:** RKA 1d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (22 Active Points); OAF (-1), Range Based On STR (-¼), Beam (-¼), 4 Recoverable Charges (-½)

15 **Sharp Bladerang:** RKA 1½d6, Armor Piercing (+¼), Indirect (Source Point is always the character, but Path can change from use to use; +½) (44 Active Points); OAF (-1), Range Based On STR (-¼), Beam (-¼), 4 Recoverable Charges (-½)

BOOM!ERANG

Cost Power

27 **Basic BOOM!erang:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½), Indirect (Source Point is always the character, but Path can change from use to use; +½) (80 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

30 **Large BOOM!erang:** Blast 9d6, Area Of Effect (18m Radius Explosion; +½), Indirect (Source Point is always the character, but Path can change from use to use; +½) (90 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

17 **Small BOOM!erang:** Blast 6d6, Area Of Effect (14m Radius Explosion; +¼), Indirect (Source Point is always the character, but Path can change from use to use; +½) (52 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

17 **Lethal BOOM!erang:** RKA 2d6 (14m Radius Explosion; +¼), Indirect (Source Point is always the character, but Path can change from use to use; +½) (52 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

20 **Shrapnelrang:** RKA 2d6, Armor Piercing (+¼), Area Of Effect (14m Radius Explosion; +¼), Indirect (Source Point is always the character, but Path can change from use to use; +½) (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Charges (-¾)

GRABBERANG

Telekinesis (10 STR) (15 Active Points); OAF (-1), Only To Pick Up Small Objects And Bring Them Back To Character (-½), Affects Whole Object (-¼), Range Based On STR (-¼), 1 Recoverable Charge (-1¼). **Total cost: 3 points.**

SMOKERANG

Cost Power

16 **Basic Smokerang:** Darkness to Sight Group 8m radius (40 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

24 **Large Smokerang:** Darkness to Sight Group 12m radius (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

12 **Small Smokerang:** Darkness to Sight Group 6m radius (30 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

32 **Variant Smokerang I:** Darkness to Sight Group 16m radius, Area Of Effect (32m Line; +0) (80 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

5 **Variant Smokerang II:** Change Environment (create smoke), -3 to Sight Group PER Rolls, Area Of Effect (8m Radius; +½) (13 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

SLEEPERANG

Cost Power

24 **Basic Sleeperang:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (6m Radius; +½), Constant (+½) (60 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

30 **Large Sleeperang:** Blast 5d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (8m Radius; +½), Constant (+½) (75 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

16 **Small Sleeperang:** Blast 3d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (1m Radius; +¼), Constant (+½) (41 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

22 **Variant Sleeperang:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (16m Line; +¼), Constant (+½) (55 Active Points); OAF (-1), Range Based On STR (-¼), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

SUPER-BOW AND ARROWS I

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges
Breakability: Varies

Description: With super-technology around, why should an archer character settle for *ordinary* bows and arrows? Here's an extensive selection of gimmicked arrows for characters to use.

Each of the arrows described below has a "basic" form, with various optional forms. Typically archer characters buy a half-dozen or more arrows in a Multipower. Each arrow comes with 6 Charges, but you can easily alter this (see also *Super-Bow And Arrows II,* below). If you'd like to know more about bows and arrows generally, see page 27.

For characters who use high-tech firearms, you can convert these arrows to "gimmicked bullets."

Game Information:

BROADHEAD ARROW

Cost Power

10 **Basic Broadhead Arrow:** RKA 2d6 (30 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

15 **Large Broadhead Arrow:** RKA 3d6 (45 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

10 **Extra-Sharp Broadhead Arrow:** RKA 1½d6, Armor Piercing (+¼) (31 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

17 **Extra-Sharp Large Broadhead Arrow:** RKA 2½d6, Armor Piercing (+¼) (50 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

CHISEL-POINT ARROW

Cost Power

12 **Basic Chisel-Point Arrow:** RKA 2d6, Armor Piercing (+¼) (37 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

17 **Large Chisel-Point Arrow:** RKA 2½d6, Armor Piercing (+¼) (50 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

ACID ARROW (SEE 6E2 147-48)

Cost Power

12 **Basic Acid Arrow:** RKA 1d6, Constant (+½), Penetrating (+½), Uncontrolled (+½) (37 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

21 **Strong Acid Arrow I:** RKA 1½d6, Constant (+½), Penetrating (+½), Uncontrolled (+½) (62 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

15 **Strong Acid Arrow II:** RKA 1d6, Constant (+½), Penetrating (x2; +1), Uncontrolled (+½) (45 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

15 **Acid Bomb Arrow:** RKA 1d6, Constant (+½), Area Of Effect (12m Radius Explosion; +¼), Penetrating (+½), Uncontrolled (+½) (41 Active Points); OAF (-1), 6 Charges (-¾)

15 **Acid Sprayer Arrow:** RKA 1d6, Area Of Effect (32m long, 4m wide Line; +¾), Constant (+½), Penetrating (+½), Uncontrolled (+½) (49 Active Points); OAF (-1), No Range (-½), 6 Charges (-¾)

BLUNT ARROW

Cost Power

13 **Basic Blunt Arrow:** Blast 8d6 (40 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Powerful Blunt Arrow:** Blast 12d6 (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

10 **Weak Blunt Arrow:** Blast 6d6 (30 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

BOLO ARROW

Cost Power

17 **Basic Bolo Arrow:** Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼) (50 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

21 **Strong Bolo Arrow:** Entangle 5d6, 5 PD/5 ED, Entangle And Character Both Take Damage (+¼) (62 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

12 **Weak Bolo Arrow:** Entangle 3d6, 3 PD/3 ED, Entangle And Character Both Take Damage (+¼) (37 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

19 **Variant Bolo Arrow I:** Entangle 4d6, 5 PD/5 ED, Entangle And Character Both Take Damage (+¼) (56 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

15 **Variant Bolo Arrow II:** Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼) (50 Active Points); OAF (-1), Beam (-¼), Can Be Deflected (-¼), 6 Charges (-¾)

BOOMERANG ARROW

Cost Power

15 **Basic Boomerang Arrow:** RKA 2d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (45 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Strong Boomerang Arrow:** RKA 2½d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

10 **Weak Boomerang Arrow:** RKA 1d6+1, Indirect (Source Point is always the character, but Path can change from use to use; +½) (30 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Blunt Boomerang Arrow:** Blast 8d6, Indirect (Source Point is always the character, but Path can change from use to use; +½) (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

BOOMERANG GRABBER ARROW

Cost Power

9 **Basic Boomerang Grabber Arrow:** Telekinesis (20 STR) (30 Active Points); OAF (-1), 6 Charges (-¾), Affects Whole Object (-¼), Only Works On Limited Types Of Objects (objects small enough to be grabbed by the pincer on the arrow; -½)

13 **Strong Boomerang Grabber Arrow:** Telekinesis (30 STR) (45 Active Points); OAF (-1), 6 Charges (-¾), Affects Whole Object (-¼), Only Works On Limited Types Of Objects (objects small enough to be grabbed by the pincer on the arrow; -½)

4 **Weak Boomerang Grabber Arrow:** Telekinesis (10 STR) (15 Active Points); OAF (-1), 6 Charges (-¾), Affects Whole Object (-¼), Only Works On Limited Types Of Objects (objects small enough to be grabbed by the pincer on the arrow; -½)

ELECTRO-ARROW

Cost Power

50 **Basic Electro-Arrow:** Dispel Electronic Device Powers 10d6, Expanded Effect + Variable Effect (all Electronic Device powers simultaneously; +4) (150 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

75 **Strong Electro-Arrow:** Dispel Electronic Device Powers 15d6, Expanded Effect + Variable Effect (all Electronic Device powers simultaneously; +4) (225 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

40 **Weak Electro-Arrow:** Dispel Electronic Device Powers 8d6, Expanded Effect + Variable Effect (all Electronic Device powers simultaneously; +4) (120 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

EXPLODING ARROW (*A.K.A.* BOMB ARROW)

Cost Power

22 **Basic Exploding Arrow:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

33 **Strong Exploding Arrow:** Blast 12d6, Area Of Effect (26m Radius Explosion; +½) (90 Active Points); OAF (-1), 6 Charges (-¾)

13 **Weak Exploding Arrow:** Blast 6d6, Area Of Effect (14m Radius Explosion; +¼) (37 Active Points); OAF (-1), 6 Charges (-¾)

18 **Low-Yield Exploding Arrow:** Blast 8d6, Area Of Effect (1m Radius; +¼) (50 Active Points); OAF (-1), 6 Charges (-¾)

22 **Variant Exploding Arrow:** RKA 2½d6, Area Of Effect (18m Radius Explosion; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

22 **Shaped-Charge Exploding Arrow:** RKA 2½d6, Area Of Effect (16m Cone; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

22 **Shrapnel Arrow:** RKA 2½d6, Armor Piercing (+¼), Area Of Effect (14m Radius Explosion; +¼) (60 Active Points); OAF (-1), 6 Charges (-¾)

EXTINGUISHER ARROW

Cost Power

50 **Basic Extinguisher Arrow:** Dispel Fire Powers 10d6, Expanded Effect + Variable Effect (all Fire powers simultaneously; +4) (150 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

75 **Strong Extinguisher Arrow:** Dispel Fire Powers 15d6, Expanded Effect + Variable Effect (all Fire powers simultaneously; +4) (225 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

40 **Weak Extinguisher Arrow:** Dispel Fire Powers 8d6, Expanded Effect + Variable Effect (all Fire powers simultaneously; +4) (120 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

FLARE ARROW

Cost Power

13 **Basic Flare Arrow:** Sight Group Flash 8d6 (40 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Strong Flare Arrow:** Sight Group Flash 12d6 (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

10 **Weak Flare Arrow:** Sight Group Flash 6d6 (30 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

22 **Flare Explosion Arrow:** Sight Group Flash 8d6 (18m Radius Explosion; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

17 **Screamer Flare Arrow:** Sight and Hearing Group Flash 9d6 (50 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

22 **Screamer Flare Explosion Arrow:** Sight and Hearing Group Flash 7d6 (18m Radius Explosion; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

GLUE ARROW

Cost Power

13 **Basic Glue Arrow:** Entangle 4d6, 4 PD/4 ED (40 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Strong Glue Arrow:** Entangle 6d6, 6 PD/6 ED (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

10 **Weak Glue Arrow:** Entangle 3d6, 3 PD/3 ED (30 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Sticky Glue Arrow:** Entangle 4d6, 4 PD/4 ED, Sticky (+½) (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

18 **Variant Glue Arrow I:** Entangle 8d6, 4 PD/4 ED (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

12 **Variant Glue Arrow II:** Entangle 4d6, 4 PD/4 ED (40 Active Points); OAF (-1), Beam (-¼), Can Be Deflected (-¼), 6 Charges (-¾)

20 **Glue-Bomb Arrow I:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼) (50 Active Points); OAF (-1), 6 Charges (-¾)

22 **Glue-Bomb Arrow II:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (18m Radius Explosion; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

GRAPNEL ARROW

Cost Power

7 **Basic Grapnel Arrow:** Swinging 40m (20 Active Points); OAF (-1), 6 Charges (-¾)

11 **Long-Line Grapnel Arrow:** Swinging 60m (30 Active Points); OAF (-1), 6 Charges (-¾)

9 **More Grapnel Arrows:** Swinging 40m (20 Active Points); OAF (-1), 12 Charges (-¼)

INCENDIARY ARROW

Cost Power

10 **Basic Incendiary Arrow:** RKA 1½d6, Armor Piercing (+¼) (31 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

15 **Strong Incendiary Arrow:** RKA 2d6+1, Armor Piercing (+¼) (44 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

6 **Weak Incendiary Arrow:** RKA 1d6, Armor Piercing (+¼) (19 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

15 **Extra-Hot Incendiary Arrow:** RKA 1½d6, Armor Piercing (+¼), Penetrating (+½) (44 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

16 **Long-Burning Incendiary Arrow:** RKA 1½d6, Armor Piercing (+¼), Constant (+½) (44 Active Points); OAF (-1), Beam (-¼), 6 Continuing Charges lasting 1 Extra Phase each (removed by dousing the flames/heat; -½)

13 **Firebomb Arrow I:** RKA 1½d6, Area Of Effect (1m Radius; +¼), Armor Piercing (+¼) (37 Active Points); OAF (-1), 6 Charges (-¾)

13 **Firebomb Arrow II:** RKA 1½d6 (12m Radius Explosion; +¼), Armor Piercing (+¼) (37 Active Points); OAF (-1), 6 Charges (-¾)

KNOCKOUT GAS ARROW

Cost Power

20 **Basic Knockout Gas Arrow:** Blast 5d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (1m Radius; +¼) (56 Active Points); OAF (-1), 6 Charges (-¾)

24 **Strong Knockout Gas Arrow:** Blast 6d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (1m Radius; +¼) (67 Active Points); OAF (-1), 6 Charges (-¾)

16 **Weak Knockout Gas Arrow:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (1m Radius; +¼) (45 Active Points); OAF (-1), 6 Charges (-¾)

20 **Large-Area Knockout Gas Arrow:** Blast 5d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (12m Radius Explosion; +¼) (56 Active Points); OAF (-1), 6 Charges (-¾)

18 **Long-Term Effect Knockout Gas Arrow:** Blast 3d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Constant (+½), Area Of Effect (8m Radius Explosion; +¼) (41 Active Points); OAF (-1), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

18 **Variant Knockout Gas Arrow:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (8m Radius; +½) (50 Active Points); OAF (-1), 6 Charges (-¾)

NET ARROW

Cost Power

22 **Basic Net Arrow:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼), Entangle And Character Both Take Damage (+¼) (60 Active Points); OAF (-1), 6 Charges (-¾)

27 **Strong Net Arrow:** Entangle 5d6, 5 PD/5 ED, Area Of Effect (1m Radius; +¼), Entangle And Character Both Take Damage (+¼) (75 Active Points); OAF (-1), 6 Charges (-¾)

16 **Weak Net Arrow:** Entangle 3d6, 3 PD/3 ED, Area Of Effect (1m Radius; +¼), Entangle And Character Both Take Damage (+¼) (45 Active Points); OAF (-1), 6 Charges (-¾)

22 **Large Net Arrow I:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (2m Radius; +¼), Entangle And Character Both Take Damage (+¼) (60 Active Points); OAF (-1), 6 Charges (-¾)

22 **Large Net Arrow II:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (8m Radius Explosion; +¼), Entangle And Character Both Take Damage (+¼) (60 Active Points); OAF (-1), 6 Charges (-¾)

20 **Variant Net Arrow:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼), Entangle And Character Both Take Damage (+¼) (60 Active Points); OAF (-1), Can Be Deflected (-¼), 6 Charges (-¾)

OIL SLICK ARROW

Cost Power

8 **Basic Oil Slick Arrow:** Change Environment, -4 to all DEX-based Rolls to move on/through, Area Of Effect (Surface 8m radius; +¾) (21 Active Points); OAF (-1), Can Only Be Applied To Horizontal Surfaces (*e.g.,* the ground and floors; -0), 6 Charges (-¾)

11 **Strong Oil Slick Arrow:** Change Environment, -6 to all DEX-based Rolls to move on/through, Area Of Effect (Surface 8m radius; +¾) (31 Active Points); OAF (-1), Can Only Be Applied To Horizontal Surfaces (*e.g.,* the ground and floors; -0), 6 Charges (-¾)

4 **Weak Oil Slick Arrow:** Change Environment, -2 to all DEX-based Rolls to move on/through, Area Of Effect (Surface 8m radius; +¾) (10 Active Points); OAF (-1), Can Only Be Applied To Horizontal Surfaces (*e.g.,* the ground and floors; -0), 6 Charges (-¾)

9 **Large Oil Slick Arrow:** Change Environment, -4 to all DEX-based Rolls to move on/through, Area Of Effect (Surface 16m radius; +1) (24 Active Points); OAF (-1), Can Only Be Applied To Horizontal Surfaces (*e.g.,* the ground and floors; -0), 6 Charges (-¾)

SMOKE ARROW

Cost Power

18 **Basic Smoke Arrow:** Darkness to Sight Group 8m radius (40 Active Points); OAF (-1), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

27 **Strong Smoke Arrow:** Darkness to Sight Group 12m radius (60 Active Points); OAF (-1), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

13 **Weak Smoke Arrow:** Darkness to Sight Group 6m radius (30 Active Points); OAF (-1), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

35 **Smoke Trail Arrow:** Darkness to Sight Group 16m radius (32m long, 4m wide Line; +0) (80 Active Points); OAF (-1), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

SONIC ARROW

Cost Power

22 **Basic Sonic Arrow:** Blast 8d6, Area Of Effect (8m Radius; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

27 **Strong Sonic Arrow:** Blast 10d6, Area Of Effect (8m Radius; +½) (75 Active Points); OAF (-1), 6 Charges (-¾)

16 **Weak Sonic Arrow:** Blast 6d6, Area Of Effect (8m Radius; +½) (45 Active Points); OAF (-1), 6 Charges (-¾)

24 **Deafening Sonic Arrow:** Blast 6d6, Area Of Effect (8m Radius; +½) (45 Active Points); OAF (-1), 6 Charges (-¾) (total cost: 16 points) *plus* Hearing Group Flash 6d6, Area Of Effect (8m Radius; +½) (27 Active Points); OAF (-1), Linked (-½), 6 Charges (-¾) (total cost: 8 points)

22 **Variant Sonic Arrow I:** Blast 6d6, NND (defense is Hearing Group Flash Defense; +½), Area Of Effect (8m Radius; +½) (60 Active Points); OAF (-1), 6 Charges (-¾)

30 **Variant Sonic Arrow II:** Blast 6d6, NND (defense is Hearing Group Flash Defense; +½), Area Of Effect (8m Radius; +½) (60 Active Points); OAF (-1), 6 Charges (-¾) (total cost: 22 points) *plus* Hearing Group Flash 6d6, Area Of Effect (8m Radius; +½) (27 Active Points); OAF (-1), Linked (-½), 6 Charges (-¾) (total cost: 8 points)

TASER ARROW

Cost Power

15 **Basic Taser Arrow:** Blast 6d6, NND (defense is insulated rED covering entire body; +½) (45 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Strong Taser Arrow:** Blast 8d6, NND (defense is insulated rED covering entire body; +½) (60 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

10 **Weak Taser Arrow:** Blast 4d6, NND (defense is insulated rED covering entire body; +½) (30 Active Points); OAF (-1), Beam (-¼), 6 Charges (-¾)

20 **Variant Taser Arrow:** Blast 12d6 (60 Active Points); OAF (-1), STUN Only (-0), Beam (-¼), 6 Charges (-¾)

TEAR GAS ARROW

Cost Power

34 **Basic Tear Gas Arrow:** Sight Group Flash 5d6, Area Of Effect (4m Radius; +¼), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (94 Active Points); OAF (-1), 6 Charges (-¾)

44 **Strong Tear Gas Arrow:** Sight Group Flash 6d6, Area Of Effect (8m Radius; +½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (120 Active Points); OAF (-1), 6 Charges (-¾)

27 **Weak Tear Gas Arrow:** Sight Group Flash 4d6, Area Of Effect (2m Radius; +¼), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (75 Active Points); OAF (-1), 6 Charges (-¾)

44 **Wide-Area Tear Gas Arrow I:** Sight Group Flash 6d6, Area Of Effect (24m Radius Explosion; +½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (120 Active Points); OAF (-1), 6 Charges (-¾)

31 **Wide-Area Tear Gas Arrow II:** Sight Group Flash 4d6, Area Of Effect (16m Radius; +¾), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (85 Active Points); OAF (-1), 6 Charges (-¾)

38 **Lingering Tear Gas Arrow:** Sight Group Flash 4d6, Area Of Effect (4m Radius; +¼), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Constant (+½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (85 Active Points); OAF (-1), 6 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -¼)

SUPER-BOW AND ARROWS II

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges per slot
Breakability: 15 PD/15 ED

Description: This form of super-archery weaponry presents a slightly different way of constructing a quiver of gimmicked arrows than the method above. Instead of carrying a defined number of each type of arrow, the character carries 60 arrow shafts with no heads, plus an assortment of gimmicked arrowheads. When he wants to use a particular type of arrow, he draws a shaft, attaches the right arrowhead to it, and lets fly. This gives him more flexibility in combat, but at the cost of taking more time to shoot — it requires a Full Phase to prepare and fire and arrow.

Since the typical Charge with these arrows is not a Continuing Charge, for the Smoke Arrow (Slot 6), which needs to last for 1 Turn, the "Continuing Charge" is bought with the *Uncontrolled* Advantage with a defined duration.

At the GM's option, a character using this type of super-archery may have to define how many of each arrowhead he carries; it's not "realistic" to carry 60 arrowheads for each of eight types of arrows (that's 480 arrowheads!). Typically this does not merit a Limitation (or, at most, a -0 Limitation), but the GM might allow a -¼ Limitation, *Defined Allocation,* if appropriate.(Alternately, a character could, with the GM's permission, apply 60 Charges to the reserve, then a separate *Charges* Limitation to each slot, as is done with the Compressed Air Blaster on page 126.)

Game Information:

Cost Power

36 **Super-Bow And Arrows:** Multipower, 60-point reserve, 60 Charges (+½) for entire reserve; all OAF (-1), Extra Time (Full Phase; -½)

2f **1) Broadhead Arrow:** RKA 3d6; OAF (-1), Extra Time (Full Phase; -½)

1f **2) Chisel-Point Arrow:** RKA 2d6, Armor Piercing (+¼); OAF (-1), Extra Time (Full Phase; -½)

2f **3) Taser Arrow:** Blast 12d6; OAF (-1), STUN Only (-0), Extra Time (Full Phase; -½)

2f **4) Explosion Arrow:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½); OAF (-1), Extra Time (Full Phase; -½)

2f **5) Glue Arrow:** Entangle 4d6, 4 PD/4 ED, Sticky (+½); OAF (-1), Extra Time (Full Phase; -½)

2f **6) Flare Arrow:** Sight and Hearing Group Flash 11d6; OAF (-1), Extra Time (Full Phase; -½)

2f **7) Smoke Arrow:** Darkness to Sight Group 8m radius, Time Limit (ends after 1 Turn or if exposed to high winds or rain; +¼); OAF (-1), Extra Time (Full Phase; -½)

2f **8) Knockout Gas Arrow:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing] or appropriate Immunity; +1), Area Of Effect (8m Radius; +½); OAF (-1), Extra Time (Full Phase; -½)

Total cost: 51 points.

THROWING BLADES

Effect: HKA ½d6
Target: One character
Duration: Instant
Range: RBS
Charges: 10 Charges
Breakability: 2 PD/2 ED

Description: This time-proven classic is a blade designed for throwing. Many villains and supervillains use throwing blades. Some are run-of-the-mill throwing knives or the equivalent (shuriken, needles, and so on); they tend not to be of too much use against supers, but are sometimes used by supers against normal targets. Others are scaled up in power and versatility to be of use against supers. Depending on the character's costume, powers, theme, or the like, the blade can have just about any shape: a crescent moon; a bat; a spider's web; a star; or even an ordinary throwing dagger.

Game Information: HKA ½d6 (up to 1d6+1 with STR), Range Based On STR (+¼) (12 Active Points); OAF (-1), 10 Charges (-¼). Total cost: 5 points.

Options:

1) **Large Blades:** Increase to HKA 1d6. 19 Active Points; total cost 8 points.
2) **Small Blades:** Decrease to HKA 1 point. 6 Active Points; total cost 3 points.
3) **Sharp Blades:** Add Armor Piercing (+¼):
   Standard: 15 Active Points; total cost 7 points.
   Large: 22 Active Points; total cost 10 points.
   Small: 7 Active Points; total cost 3 points.
4) **Multiple Blades:** The character can throw multiple blades at once. Add Autofire (5 shots; +½):
   Standard: 17 Active Points; total cost 7 points.
   Large: 26 Active Points; total cost 11 points.
   Small: 9 Active Points; total cost 4 points.
5) **Sharp, Multiple Blades:** Add Armor Piercing (+¼) and Autofire (5 shots; +½):
   Standard: 20 Active Points; total cost 9 points.
   Large: 30 Active Points; total cost 13 points.
   Small: 10 Active Points; total cost 4 points.
6) **More Blades:** Change to 20 Charges (+¼):
   Standard: 15 Active Points; total cost 7 points.
   Large: 22 Active Points; total cost 11 points.
   Small: 7 Active Points; total cost 3 points.
7) **Poisoned Blades:** The blades are coated with a deadly poison. Add to any blade: RKA ½d6, NND (defense is appropriate Life Support [Immunity]; +1), Does BODY (+1), Damage Over Time (5 increments, one per minute for 5 Minutes, defenses only apply once; +2½), Personal Immunity (+¼) (57 Active Points); OAF (-1), RKA Must Do BODY (-½), Linked (-¼), 4 Charges (-1). Total cost: +15 points to cost of blades.
8) **Throwing Disk:** This thrown weapon is a blunt disk intended to knock the victim out, rather than a deadly blade. Change to Blast 6d6 (30 Active Points); OAF (-1), Range Based On STR (-¼), 4 Charges (-1). Total cost: 9 points.

Restraining Weapons

These gadgets all restrict, confine, or restrain targets, or otherwise prevent the target from taking actions or moving. See also the Electrified Lariat (page 142).

BOLA GUN

Effect: Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage
Target: One character
Duration: Instant
Range: 500m
Charges: 4
Breakability: 10 PD/10 ED

Description: This carbine-sized weapon fires a bola with high-tech monofilament cord connecting the weights. The missile wraps itself around the target, neatly hog-tying him.

Game Information: Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼) (50 Active Points); OAF (-1), 4 Charges (-1). Total cost: 17 points.

Options:

1) **Stronger Bolas:** Increase to Entangle 5d6, 5 PD/5 ED. 62 Active Points; total cost 21 points.
2) **Weaker Bolas:** Decrease to Entangle 3d6, 3 PD/3 ED. 37 Active Points; total cost 12 points.
3) **Realistic Bola Gun:** This form of the Bola Gun has the same effect, but can only fire one shot before it needs reloading. Change 4 Charges (-1) to 4 clips of 1 Charge each (-1¼). Total cost: 15 points.
4) **Experimental Bola Gun:** Sometimes the Bola Gun doesn't work as intended. If it jams, the character must spend a Full Phase unjamming it. Add Activation Roll 14- Jammed (-½). Total cost: 14 points.
5) **Larger Clip:** Change to 8 Charges (-½). Total cost: 20 points.
6) **Thrown Bolas:** Instead of firing the bolas from a launcher, the character throws them in the traditional manner. Change 4 Charges (-1) to 2 Recoverable Charges (-1) and add Range Based On STR (-¼). Total cost: 15 points.
7) **Wire Gun:** This weapon doesn't fire bolas — it shoots a stream of high-tensile strength wire that wraps around the target. However, it's much less effective against distant targets, since the wire begins to coil up on itself in flight. Increase to Entangle 5d6, 5 PD/5 ED and add Reduced By Range (-¼). 62 Active Points; total cost 19 points.

CAPTUREFOAM PROJECTOR

Effect: Entangle 4d6, 4 PD/4 ED
Target: 1m Radius
Duration: Instant
Range: 40m
Charges: 32
Breakability: 12 PD/12 ED

Description: This weapon is a rifle with a large cylindrical cannister mounted underneath the barrel. When the character squeezes the trigger, the weapon projects a stream of foam that covers an entire area and then hardens almost instantly. Although tough enough to restrain people easily, the foam is porous and therefore poses no danger of suffocating the victim(s). The stream can only travel about 40m before spreading out and breaking up to the point where it's not effective.

Game Information: Entangle 4d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼), 32 Charges (+¼) (60 Active Points); OAF (-1), Limited Range (40m; -¼). Total cost: 27 points.

Options:

1) **Stronger Foam:** Increase to Entangle 6d6, 6 PD/6 ED. 90 Active Points; total cost 40 points.
2) **Weaker Foam:** Decrease to Entangle 3d6, 3 PD/3 ED. 45 Active Points; total cost 20 points.
3) **Experimental Capturefoam Projector:** The Projector is only a prototype; sometimes the ammunition tank explodes, coating the character with foam. Add Activation Roll 13-, Burnout (-¼) and Side Effects (character and the area he's in are affected by Entangle; -1). Total cost: 17 points.
4) **Coherent Stream:** The weapon's projection system and improved foam formula allow it to project a stream of capturefoam over a much longer distance. Remove Limited Range (-¼). Total cost: 30 points.
5) **Stream Spreader Attachment:** This form of the Projector can spread its foam over a larger area. Change to Area Of Effect (8m Radius; +½). 70 Active Points; total cost 31 points.
6) **Capturefoam Grenade Launcher:** This weapon fires a grenade filled with pressurized capturefoam instead of a stream. Remove Limited Range (-¼), replace 32 Charges (+¼) with 2 clips of 8 Charges each (-¼), and replace Area Of Effect (1m Radius; +¼) with Area Of Effect (10m Radius Explosion; +¼). 50 Active Points; total cost 22 points.
7) **Capturefoam Projector Variant:** This form of the Projector simulates stream breakup with a different Limitation. Change Limited Range (-¼) to Reduced By Range (-¼). Total cost: 27 points.
8) **Capturefoam Mask Projector:** The foam from the Projector invariably gets all over the target's face, clogging his ears and blinding him. Add Stops A Given Sense (Sight and Hearing Groups). 90 Active Points; total cost 40 points.
9) **Capturefoam Projector Pack:** This version of the projector replaces the under-barrel fuel tank with a backpack containing two tanks that have three times the ammunition capacity. The rifle connects to the pack with a flexible hose. Change to 96 Charges (+¾). 80 Active Points; total cost 35 points.

ENERGY NET

Effect: Entangle 4d6, 4 PD/4 ED
Target: 1m Radius
Duration: Instant
Range: RBS
Charges: 1 Recoverable Charge
Breakability: 10 PD/10 ED

Description: This weapon resembles an ordinary net — except that its strands and meshes are woven of pulson energy, not rope! The small "weights" around the edge of the net are the batteries and field projectors that form the energy into the proper shape and give the net weight so the wielder can throw it.

Game Information: Entangle 4d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼) (50 Active Points); OAF (-1), Range Based On STR (-¼), 1 Recoverable Charge (-1¼). Total cost: 14 points.

Options:

1) **Strong Net:** Increase to Entangle 6d6, 6 PD/6 ED. 75 Active Points; total cost 21 points.
2) **Weak Net:** Decrease to Entangle 3d6, 3 PD/3 ED. 37 Active Points; total cost 10 points.
3) **Realistic Net:** Using a normal net as a weapon in combat isn't easy, and using one formed of energy is even more difficult! Add Requires A PS: Use Energy Net Roll (-¼). Total cost: 13 points.
4) **Experimental Net:** Sometimes the net's field projectors fail to function properly. Add Activation Roll 14- (-¼). Total cost: 13 points.
5) **Deadly Net:** This form of the net inflicts energy damage on anyone it captures. Change to Entangle 4d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼), Takes No Damage From Linked Attack (+¼) (60 Active Points); OAF (-1), Range Based On STR (-¼), 1 Recoverable Charge (-1¼) (total cost: 17 points) **plus** RKA 2d6, Area Of Effect (1m Radius; +¼), Constant (+½), Trigger (when Entangle succeeds; +¼), Reduced Endurance (0 END; +½), Uncontrolled (remains in effect until captured victims are freed; +½) (90 Active Points); OAF (-1), Does Not Affect Persons Who Enter Area After Attack Begins Or Try To Free Entangled Victims (-¼), Linked (-¼), No Knockback (-¼), Range Based On STR (-¼), 1 Recoverable Charge (-1¼) (total cost: 21 points). Total cost: 38 points.

GLUE GRENADES

Effect: Entangle 5d6, 5 PD/5 ED
Target: Explosion
Duration: Instant
Range: RBS
Charges: 4
Breakability: 12 PD/12 ED

Description: Upon impact, these thrown grenades burst open, splattering a large area with extremely sticky, fast-drying glue. Everyone within 10m is affected, but the further a target is away from the point of impact, the less glue that covers him.

Game Information: Entangle 5d6, 5 PD/5 ED, Area Of Effect (10m Radius Explosion; +¼) (62 Active Points); OAF (-1), Range Based On STR (-¼), 4 Charges (-1). Total cost: 19 points.

Options:

1) **Strong Grenades:** Increase to Entangle 6d6, 6 PD/6 ED. 75 Active Points; total cost 23 points.
2) **Weak Grenades:** Decrease to Entangle 4d6, 4 PD/4 ED. 50 Active Points; total cost 15 points.
3) **Realistic Grenades:** The glue from the grenade only covers a small area; beyond that it won't affect anyone, though they might get a few splatters of glue on their clothes. Change to Area Of Effect (1m Radius; +¼). 62 Active Points; total cost 19 points.
4) **Experimental Grenades:** Since they're still experimental technology, some grenades are duds. Add Activation Roll 13- (-¼). Total cost: 18 points.
5) **Broad-Area Grenades:** These grenades contain extra glue under high pressure, so the sticky stuff covers its burst area more effectively. Change Area Of Effect (10m Radius Explosion; +¼) to Area Of Effect (10m Radius; +¾). 87 Active Points; total cost 27 points.
6) **Improved Glue Grenades:** The glue from these grenades hardens enough to trap targets, but remains sticky enough that anyone who touches a victim gets trapped, too! Add Sticky (+½). 87 Active Points; total cost 27 points.
7) **Glue Grenade Launcher:** Instead of throwing his grenades, the character fires them from a pistol-like launcher. Remove Range Based On STR (-¼). Total cost: 21 points.
8) **Glue Grenade Bandolier:** The character carries a whole bandolier of grenades. Change to 12 Charges (-¼). Total cost: 25 points.
9) **Mini-Glue Grenade Wrist Launcher:** The character fires miniature glue grenades from a wrist-mounted launcher. Change to Entangle 4d6, 4 PD/4 ED, Area Of Effect (1m Radius; +¼) (50 Active Points); OIF (-½), Limited Range (60m; -¼), 6 Charges (-¾). Total cost: 20 points.

GLUE GUN

Effect: Entangle 5d6, 5 PD/5 ED
Target: One character
Duration: Instant
Range: 60m
Charges: 15
Breakability: 10 PD/10 ED

Description: This weapon, a gun about the size of a large submachine gun, projects a stream of quick-drying glue that restrains targets. The stream only remains coherent, and thus able to affect targets, for 60m.

Game Information: Entangle 5d6, 5 PD/5 ED (50 Active Points); OAF (-1), Limited Range (60m; -¼), 15 Charges (-0). Total cost: 22 points.

Options:

1) **Strong Gun:** Increase to Entangle 6d6, 6 PD/6 ED. 60 Active Points; total cost 27 points
2) **Weak Gun:** Decrease to Entangle 4d6, 4 PD/4 ED. 40 Active Points; total cost 18 points.
3) **Experimental Gun:** Because it's a prototype, the gun's hermetic-sealing systems don't always work properly — meaning that sometimes the glue is exposed to air too quickly and dries in the barrel. Add Activation Roll 14- Jammed (-½). Total cost: 18 points.
4) **Improved Glue Gun:** The glue from this Glue Gun remains sticky enough to restrain other people who touch the victim. Add Sticky (+½). 75 Active Points; total cost 33 points.
5) **Broad Glue-Stream I:** This form of Glue Gun projects the glue in a stream broad enough to capture more than one person, if they're standing close together. Add Area Of Effect (1m Radius; +¼). 62 Active Points; total cost 27 points.
6) **Broad Glue-Stream II:** This form of Glue Gun creates an even broader stream of glue. Add Area Of Effect (32m Line; +½) and change Limited Range (-¼) to No Range (-½). 75 Active Points; total cost 30 points.
7) **Larger Glue Reservoir:** Change to 30 Charges (+¼). 62 Active Points; total cost 27 points.
8) **Smaller Glue Reservoir:** Change to 10 Charges (-¼). Total cost: 20 points.

GLUE RIFLE

Effect: Entangles of various sorts
Target: Varies
Duration: Instant
Range: 60m
Charges: 32 Charges for entire reserve
Breakability: 22 PD/22 ED

Description: This rifle fires a quick-drying glue that prevents the target from moving. The size of the area covered by the glue depends on how the user varies the flow and shape of the glue-stream (which he controls with a thumb selector switch). The glue-stream only remains coherent, and thus able to affect targets, for 60m.

Game Information:

Cost	Power
48	**Glue Rifle:** Multipower, 87-point reserve, 32 Charges for entire reserve (+¼); all OAF (-1), Limited Range (60m; -¼)
4f	**1) Narrow Glue-Beam:** Entangle 6d6, 8 PD/8 ED, Entangle And Character Both Take Damage (+¼); OAF (-1), Limited Range (60m; -¼)
3f	**2) Wide Glue-Beam:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (12m Radius; +¾), Entangle And Character Both Take Damage (+¼); OAF (-1), Limited Range (60m; -¼)
3f	**3) Glue-Stream:** Entangle 4d6, 4 PD/4 ED, Area Of Effect (32m Line; +½), Entangle And Character Both Take Damage (+¼); OAF (-1), Limited Range (60m; -¼)
3f	**4) Glue-Blob:** Entangle 5d6, 5 PD/5 ED, Area Of Effect (1m Radius; +¼), Entangle And Character Both Take Damage (+¼); OAF (-1), Limited Range (60m; -¼)

Total cost: 61 points.

Options:

1) **Attached Rifle:** This form of the Glue Rifle is built into a suit of powered armor or a backpack, attaches to the character via a lanyard, or is otherwise much harder to take away from the character. Change OAF (-1) to OIF (-½) throughout. Total cost: 80 points.

GRAVITY GLOBES

Effect: Entangle 4d6, 4 PD/4 ED, Indirect
Target: One character
Duration: Instant
Range: 60m
Charges: 4 Boostable Charges
Breakability: 12 PD/12 ED

Description: These tennis ball-sized flying spheres come in packs of twelve. To use them, the character releases three spheres, which fly toward the target and then begin flying in a pattern around him. As they surround the target, they generate a gravitic field that prevents him from moving. The character can make the gravitic field stronger by releasing more than three Globes at once, but he must release them in multiples of three to maintain the harmonic of the gravitic field.

Game Information: Entangle 4d6, 4 PD/4 ED, Indirect (Source Point is always the character, but Path can vary from use to use; +½) (60 Active Points); OIF (difficult to grasp spheres; -½), Limited Range (60m; -¼), 4 Boostable Charges (-¾). Total cost: 24 points.

Options:

1) **Strong Gravity Globes:** Increase to Entangle 6d6, 6 PD/6 ED. 90 Active Points; total cost 36 points.
2) **Weak Gravity Globes:** Decrease to Entangle 3d6, 3 PD/3 ED. 45 Active Points; total cost 18 points.
3) **Reusable Gravity Globes:** The character only has one set of three Gravity Globes, but he can recover them and use them again after a target breaks free from the gravitic field. Change 4 Boostable Charges (-¾) to 1 Recoverable Charge (-1¼). Total cost: 20 points.
4) **Experimental Gravity Globes:** The Gravity Globes don't always work quite right. Add Activation Roll 14- (-¼). Total cost: 22 points.

NET RIFLE

Effect: Entangle 4d6, 4 PD/4 ED, Entangle And Character Both Take Damage
Target: 4m Radius
Duration: Instant
Range: 50m
Charges: 4
Breakability: 12 PD/12 ED

Description: This weapon fires a metal-mesh net that expands as it travels. It covers the target area, entangling and trapping anyone caught beneath it.

Game Information: Entangle 4d6, 4 PD/4 ED, Area Of Effect (2m Radius; +¼), Entangle And Character Both Take Damage (+¼) (60 Active Points); OAF (-1), Two-Handed (-½), Limited Range (50m; -¼), 4 Charges (-1). Total cost: 16 points.

Options:

1) **Stronger Nets:** Increase to Entangle 5d6, 5 PD/5 ED. 75 Active Points; total cost 20 points.
2) **Weaker Nets:** Decrease to Entangle 3d6, 3 PD/3 ED. 45 Active Points; total cost 12 points.
3) **Realistic Net Rifle:** This form of the Net Gun can only fire one shot before it needs reloading. Change 4 Charges (-1) to 4 clips of 1 Charge each (-1¼). Total cost: 15 points.
4) **Experimental Net Rifle:** Sometimes the Net Gun doesn't work as intended. If it jams, the character must spend a Full Phase unjamming it. Add Activation Roll 14- Jammed (-½). Total cost: 14 points.
5) **Larger Clip:** Change to 8 Charges (-½). Total cost: 18 points.
6) **Long-Range Net Rifle:** This version of the Net Rifle encases the net in a discarding sabot so it can travel further before expanding. Remove Limited Range (-¼). Total cost: 17 points.

PARALYSIS BEAM

Effect: Entangle 4d6, 4 PD/4 ED, Takes No Damage From Attacks
Target: One character
Duration: Instant
Range: 100m
Charges: 6
Breakability: 16 PD/16 ED

Description: This pistol emits a beam of energy that interferes with a target's neural impulses, paralyzing him. It has no effect on robots, cars, or other beings without nervous systems.

Game Information: Entangle 4d6, 4 PD/4 ED, Takes No Damage From Attacks (+1) (80 Active Points); OAF (-1), Limited Range (100m; -¼), 6 Charges (-¾). Total cost: 27 points.

Options:

1) **Strong Paralysis Beam:** Increase to Entangle 6d6, 6 PD/6 ED. 120 Active Points; total cost 40 points.
2) **Weak Paralysis Beam:** Decrease to Entangle 3d6, 3 PD/3 ED. 60 Active Points; total cost 20 points.
3) **Experimental Paralysis Beam:** This form of Paralysis Beam doesn't always work properly. Add Activation Roll 11- (-½). Total cost: 23 points.
4) **Built-In Paralysis Beam:** Instead of being an Accessible pistol, the Paralysis Beam is built into a gauntlet, ring, or similar device. Replace OAF (-1) with OIF (-½). Total cost: 32 points.

PARALYSIS DART PROJECTOR

Effect: Entangle 4d6, 4 PD/4 ED, Takes No Damage From Attacks
Target: One character
Duration: Instant
Range: 40m
Charges: 8
Breakability: 16 PD/16 ED

Description: This device, worn on the wrist, projects small darts filled with a paralytic venom.

Game Information: Entangle 4d6, 4 PD/4 ED, Takes No Damage From Attacks (+1) (80 Active Points); OIF (-½), Limited Range (40m; -¼), 8 Charges (-½). Total cost: 35 points.

Options:

1) **Strong Dart Projector:** Increase to Entangle 6d6, 6 PD/6 ED. 120 Active Points; total cost 53 points.
2) **Weak Dart Projector:** Decrease to Entangle 3d6, 3 PD/3 ED. 60 Active Points; total cost 27 points.
3) **Realistic Dart Projector:** The standard form of Paralysis Dart Projector assumes the character always hits a location that lets the dart take effect — he can do so effortlessly, without suffering any OCV penalties or the like. With

this form of Projector, the darts are sharp enough and fast enough to pierce any skin (even armored skin), but cannot penetrate thick armors worn over the skin; the user must target an unarmored Hit Location (at appropriate OCV penalties). Add Must Target Unarmored Hit Locations (-¼). Total cost: 32 points.

4) **Experimental Dart Projector:** The Projector's mechanism sometimes fails, causing it to jam. Clearing the jam takes two Full Phases. Add Activation Roll 14- Jammed (-½). Total cost: 29 points.
5) **Paralysis Dart Pistol:** This Projector takes the form of a pistol. Change OIF (-½) to OAF (-1). Total cost: 29 points.

POWER NEGATOR

Effect: Suppress All Powers 15d6
Target: One character
Duration: Constant
Range: No Range
END Cost: 0
Breakability: 20 PD/20 ED

Description: When attached to a super, this device leeches away all of his powers. (It usually comes in the form of a collar, belt, or bracers that are built into Supercuffs).

Game Information: Suppress 15d6, Expanded Effect (all superhuman powers simultaneously; +4), Variable Special Effects (eight special effects simultaneously; +1), Reduced Endurance (0 END, deactivated by removing cuffs from victim; +½) (975 Active Points); OAF (-1), Fragile (only 20 DEF; -0), Costs Endurance (-0), No Range (-½), Only Works On Manacled/Restrained Subjects (-¼). Total cost: 354 points.

Options:

1) **Strong Negator:** Increase to Suppress 20d6. 1,300 Active Points; total cost 473 points.
2) **Weak Negator:** Decrease to Suppress 10d6. 650 Active Points; total cost 236 points.

SUPERCUFFS

Effect: Entangle 12d6 (standard effect: 12 BODY), 18 PD/18 ED
Target: One character
Duration: Instant/Constant
Range: No Range
END Cost: 0
Breakability: 20 PD/20 ED

Description: You can't attach a Power Negator to a super who isn't already under restraint, and one of the most common restraints in a Champions campaign is "supercuffs" — hand- and legcuffs built especially to hold superhumans, and specifically constructed to cover the entire hand and foot so the captive can't use Accessible Foci, or employ Contortionist or Lockpicking to escape. (The downside is, unless the guards are willing to take them off a prisoner at certain times, they have to feed him by hand, help him go to the bathroom, and so on.)

The leg-restraining version of supercuffs looks like a set of high-tech boots linked by a high-tech cable. Unlike a standard Entangle they do not prevent the wearer from walking entirely; they just restrict him to a maximum of Running 4m.

Game Information: Entangle 12d6 (standard effect: 12 BODY), 18 PD/18 ED, Takes No Damage From Attacks (+½) (225 Active Points); OAF (-1), Fragile (only 20 DEF; -0), Set Effect (hands only; -½), No Range (-½), Must Follow Grab Or Target Must Be Willing (-½), 1 Recoverable Charge (-1¼). Total cost: 47 points.

Options:

1) **Strong Supercuffs:** Increase to Entangle 15d6 (standard Effect: 15 BODY), 20 PD/20 ED. 262 Active Points; total cost 55 points.
2) **Weak Supercuffs:** Decrease to Entangle 10d6 (standard Effect: 10 BODY), 14 PD/14 ED. 180 Active Points; total cost 38 points.

TANGLEWEB PROJECTOR

Effect: Entangle 5d6, 5 PD/5 ED
Target: One character
Duration: Instant
Range: 50m
Charges: 10 Boostable Charges
Breakability: 10 PD/10 ED

Description: This rifle-style weapon projects "tangleweb," a sticky, tape-like material that wraps around and confines a target. The tangleweb rests in a drum magazine on top of the weapon; when the firer pulls the trigger, vacuum and compressed air devices in the gun pull strands out of the magazine and project them toward the target. The longer the target holds down the trigger, the more tangleweb he covers the target with.

Game Information: Entangle 5d6, 5 PD/5 ED (50 Active Points); OAF (-1), Limited Range (50m; -¼), 10 Boostable Charges (-0). Total cost: 22 points.

Options:

1) **Strong Projector:** Increase to Entangle 6d6, 6 PD/6 ED. 60 Active Points; total cost 27 points.
2) **Weak Projector:** Decrease to Entangle 4d6, 4 PD/4 ED. 40 Active Points; total cost 18 points.
3) **Experimental Projector:** The feed inside the rifle sometimes gets clogged up with tangleweb, rendering the weapon useless until someone spends 5 Minutes unclogging and cleaning it. Add Activation Roll 14- Jammed (-½). Total cost: 18 points.
4) **Double Drums:** The Projector comes with two drum magazines, thus doubling its ammo capacity. Change to 20 Boostable Charges (+½). 75 Active Points; total cost 33 points.

5) **Attached Projector:** This form of the Tangleweb Projector is attached to a backpack, powered armor, a gauntlet, or something else that's difficult to take away from the user. Change OAF (-1) to OIF (-½). Total cost: 28 points.

Theme Weaponry

Some characters build a weapon (or arsenal of weapons) around a particular concept or theme. Here are a few examples:

ATTACK TOYS

Effect: RKA 1d6, Armor Piercing, Indirect
Target: One character
Duration: Constant
Range: 150m
Charges: 6 Continuing Charges
Breakability: 7 PD/7 ED

Description: Attack Toys are tiny robots in wickedly whimsical forms — toy planes armed with real bombs, teddy bears wielding butcher knives, tin soldiers that can move and shoot, robots with little built-in guns, murderous action figures wielding tiny swords, and so on. In game terms, these function as an Indirect attack, since they can approach the target from just about any angle. They have an outer range of 150m, though the GM may require them to spend a few Segments reaching the target if the character using them isn't close to the target, or if they have to navigate around obstacles to reach the target.

Each Attack Toy has a motor that lasts for one Turn. Since they're Breakable OAFs with 7 PD/7 ED, a single attack that does 8 BODY destroys one.

Game Information: RKA 1d6, Armor Piercing (+¼), Constant (+½), Indirect (Source Point is always the character, but Path can vary from use to use; +½) (34 Active Points); OAF (-1), 6 Continuing Charges lasting 1 Turn each (-¼). Total cost: 15 points.

Options:

1) **Strong Attack Toys:** Increase to RKA 2d6. 67 Active Points; total cost 30 points.
2) **Weak Attack Toys:** Decrease to RKA ½d6. 22 Active Points; total cost 10 points.
3) **Experimental Attack Toys:** Sometimes the toys' little motors don't work. Add Activation Roll 12- (-¼). Total cost: 14 points.
4) **Long-Lasting Toys:** These Attack Toys have more efficient motors. Change to 6 Continuing Charges lasting 1 Minute each (-0). Total cost: 17 points.

BOTANO-WEAPONS

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges
Breakability: Varies

Description: Characters fascinated by plants, flowers, and trees might develop weapons that using plant bio-matter or which are shaped like plant parts.

Game Information:

Cost	Power
40	**Botano-Weapons:** Multipower, 60-point reserve; OIF (multiple OAFs; -½) on entire reserve
2f	**1) Puffballs:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
2f	**2) Sleep Spores:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (8m Radius; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
1f	**3) Mind Control Spores:** Mind Control 8d6, Area Of Effect (1m Radius; +¼); OAF (-1), Based On CON (-1), Life Support: Self-Contained Breathing Prevents Power From Taking Effect (-½), Range Based On STR (-¼), 8 Charges (-½)
2f	**4) Thorn Whip:** RKA 2d6, Armor Piercing (+¼), Penetrating (+½); OAF (-1), Limited Range (12m; -¼)
2f	**5) Tangling Vines:** Entangle 5d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
1f	**6) Pine Needles:** RKA 1½d6, Area Of Effect (1m Radius; +¼), Armor Piercing (+¼); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)

Total cost: 50 points.

Options:

1) **Accessible Arsenal:** The character carries all of his weapons in a bag or other easy-to-Grab object, making it a simpler matter to disarm him. Change to OAF (-1) on reserve. Total cost: 40 points.

CANDY-SHAPED WEAPONS

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges
Breakability: Varies

Description: Don't take candy from strangers... especially *this* candy! It looks like a tasty, sugary treat, but it's actually lethal weaponry. From the exploding chocolate-covered cherry bombs, to

the vicious candy corn caltrops, to the entangling licorice whips, these fiendish devices can definitely spoil your dinner.

Game Information:

Cost	Power
40	**Candy-Shaped Weapons:** Multipower, 60-point reserve; OIF (multiple OAFs; -½)
2f	**1) Chocolate-Covered Cherry Bombs:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
1f	**2) Candy Cane:** HA +4d6; OAF (-1), Hand-To-Hand Attack (-¼)
2f	**3) Licorice Whips:** Entangle 5d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
1f	**4) Cookie Shuriken:** RKA 1d6, Autofire (3 shots; +¼); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
1f	**5) Candy Corn Caltrops:** RKA 1d6, Area Of Effect (2m Radius Surface; +¼), Constant (+½), Uncontrolled (removable by spending a Full Phase to sweep them aside; +½); OAF (-1), Activation Roll 14- (-¼), Only On Horizontal Surfaces (-0), DEX Roll Cancels Effect (-¼), Range Based On STR (-¼), Automatically Targets Hit Location 18 (-0), 2 Recoverable Charges (-1)

Total cost: 47 points.

Options:

1) Accessible Weaponry: The character carries all of his weapons in a bag or other easy-to-Grab object, making it a simpler matter to disarm him. Change to OAF (-1) on reserve. Total cost: 37 points.

COMBAT YO-YO

Effect: Blast 8d6; RKA 2d6; HKA 1 point, NND, Does BODY
Target: One character
Duration: Instant/Instant/Constant
Range: 6m/6m/Touch
END Cost: 0
Breakability: 12 PD/12 ED

Description: A favorite of characters with Toy Weapons (see below), this device looks and functions like an ordinary yo-yo... except that the "wooden" parts are made of super-hard plastic and can project deadly buzzsaw blades! Furthermore, the character can use the string as a garrote.

Game Information:

Cost	Power
30	**Combat Yo-Yo:** Multipower, 60-point reserve; all OAF (-1)
3f	**1) Buzzsaw Blades Retracted:** Blast 8d6 (physical), Reduced Endurance (0 END; +½); OAF (-1), Limited Range (6m; -¼)
2f	**2) Buzzsaw Blades Activated:** RKA 2d6, Reduced Endurance (0 END; +½); OAF (-1), Limited Range (6m; -¼)
1f	**3) Garrote:** HA +3d6, NND (defense is rigid Resistant PD on the neck or not needing to breathe; +1), Constant (+½) (37 Active Points); OAF (-1), Hand-To-Hand Attack (-¼), Lockout (-½), Must Follow Grab (-½), Must Be Aimed At Head (-1), Real Weapon (-¼), STR Minimum (5; -¼), Two-Handed (-½)

Total cost: 36 points.

HALLOWEEN ARSENAL

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges
Breakability: Varies

Description: Trick or treat? With this collection of weapons shaped to look like Halloween icons — jack o'lantern grenades, poison-tipped darts in the form of pitchforks, bat-shaped boomerang, and so forth — there are no treats, and the tricks are likely to prove lethal.

Game Information:

Cost	Power
34	**Halloween Arsenal:** Multipower, 60-point reserve; OIF (multiple OAFs; -½) on entire reserve, all Range Based On STR (-¼)
2f	**1) Jack O'Lantern Grenades:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
2f	**2) Skull Grenades:** RKA 2d6, Armor Piercing (+¼), Area Of Effect (18m Radius Explosion; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
3f	**3) Black Cat Bomb:** Darkness to Sight Group 12m radius; OAF (-1), Range Based On STR (-¼), 8 Continuing Charges lasting 1 Turn each (-0)
2f	**4) Devil's Pitchfork Darts:** Blast 6d6, NND (defense is rPD covering the entire body or appropriate Life Support [Immunity]; +1); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
2f	**5) Jack O'Lantern Bolos:** Entangle 5d6, 4 PD/4 ED, Entangle And Character Both Take Damage (+¼); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)
1f	**6) Vesperang:** Blast 8d6 (physical); OAF (-1), Range Based On STR (-¼), 1 Recoverable Charge (-1¼)
1f	**7) Vesperine Throwing Blade, Large:** HKA 1d6 (plus STR), Armor Piercing (+¼), Range Based On STR (+¼); OAF (-1), 1 Recoverable Charge (-1¼)

1f **8) Vesperine Throwing Blades, Small:** HKA ½d6 (plus STR), Armor Piercing (+¼), Autofire (5 shots; +½), Range Based On STR (+¼); OAF (-1), 6 Recoverable Charges (-¼)

2f **9) Banshee Bomb:** Blast 6d6, NND (defense is Hearing Group Flash Defense; +½), Area Of Effect (8m Radius; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)

2f **10) Witch's Candle Grenade:** Sight and Hearing Group Flash 5d6, Area Of Effect (8m Radius; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)

2f **11) Phantom Gas Grenade:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing]; +1), Area Of Effect (8m Radius; +½); OAF (-1), Range Based On STR (-¼), 8 Charges (-½)

Total cost: 54 points.

Options:

1) Accessible Arsenal: The character carries all of his weapons in a bag or other easy-to-Grab object, making it a simpler matter to disarm him. Change to OAF (-1) on reserve. Total cost: 47 points.

TOY WEAPONS

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: Varying Charges
Breakability: Varies

Description: Pleasant childhood memories turn horrifying when heroes encounter villains armed with these weapons. Shaped like various toys and novelty items, they can cause all sorts of harm.

Game Information:

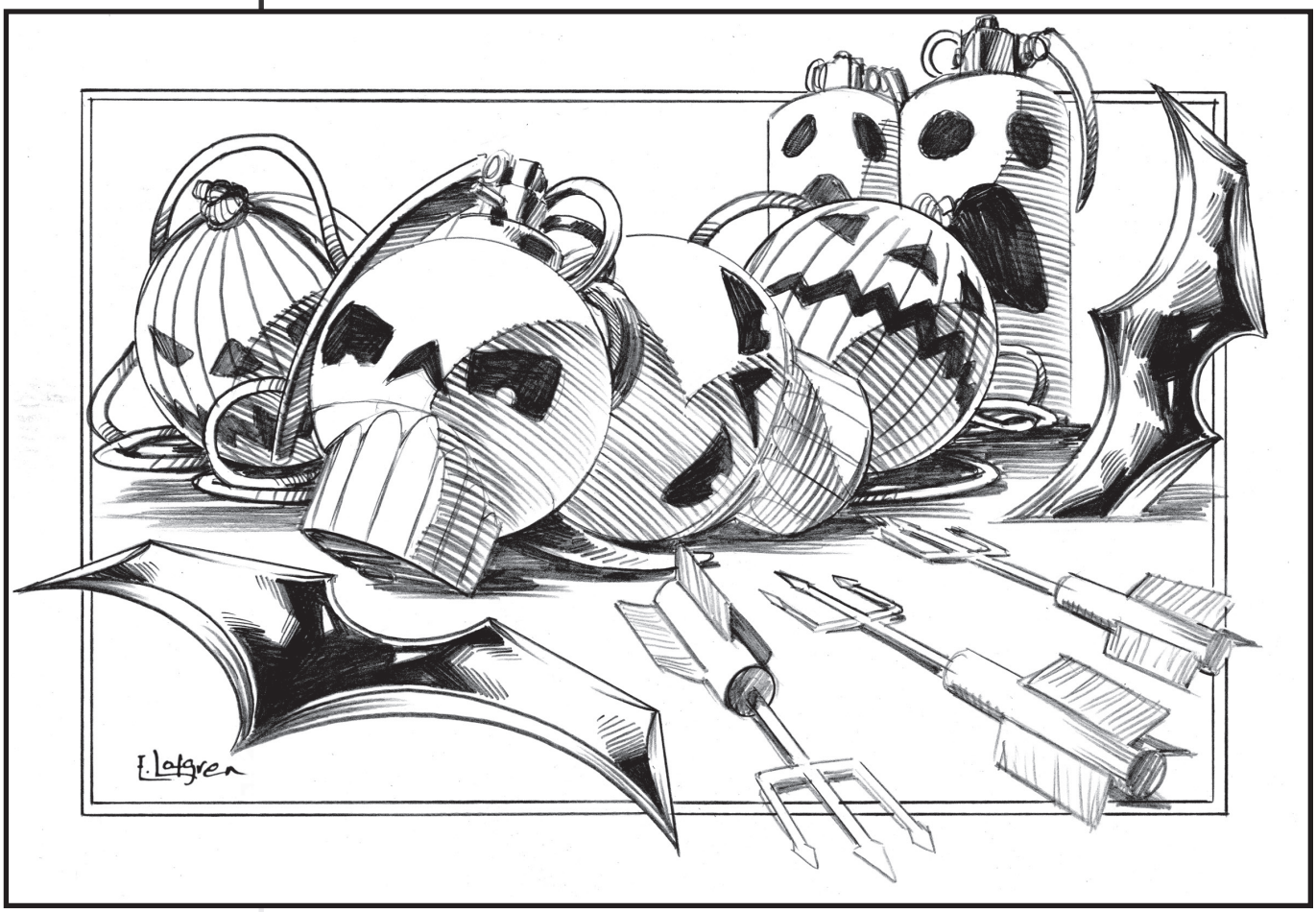
Cost Power

40 **Toy Weapons:** Multipower, 60-point powers; OIF (multiple OAFs; -½) on entire reserve

1f **1) Jack-In-The-Box:** Blast 8d6 (physical); OAF (-1), Extra Time (Full Phase; -½), Gestures (must turn crank; -¼), Limited Range (6m; -¼), 1 Recoverable Charge (-1¼)

1f **2) Bouncy Ball:** Blast 8d6 (physical); OAF (-1), Range Based On STR (-¼), 1 Recoverable Charge (-1¼)

2f **3) Caustic Confetti:** Sight Group Flash 12d6; OAF (-1), Does Not Work Against Desolidified Characters (-¼), Limited Range (4m; -¼), 8 Charges (-½)



1f **4) Sharpened Jacks:** RKA 1d6, Area Of Effect (2m Radius Surface; +¼), Constant (+½), Uncontrolled (removable by spending a Full Phase to sweep them aside; +½); OAF (-1), Activation Roll 14- (-¼), Only On Horizontal Surfaces (-0), DEX Roll Cancels Effect (-¼), Range Based On STR (-¼), Automatically Targets Hit Location 18 (-0), 2 Recoverable Charges (-1)

2f **5) Not-So-Silly String:** Entangle 6d6, 6 PD/6 ED; OAF (-1), Limited Range (40m; -¼), 8 Charges (-½)

Total cost: 47 points.

Options:

1) Accessible Weapons: The character carries all of his weapons in a bag or other easy-to-Grab object, making it a simpler matter to disarm him. Change to OAF (-1) on reserve. Total cost: 37 points.

Miscellaneous Weapons

ACID SQUIRTER

Effect: RKA 1d6, Penetrating, Uncontrolled
Target: One character
Duration: Uncontrolled
Range: 8m
Charges: 12 Charges
Breakability: 9 PD/9 ED

Description: This device projects a stream of concentrated acid at a target within 8m of the user. While the nature and function of the weapon are normally obvious, some people (particularly supervillains) prefer versions that looks like something else — a button, a watch, a harmless-looking flower in the lapel, a ring, or the like.

See 6E2 147-48 for more information about how acids function in *HERO System* terms.

Game Information: RKA 1d6, Constant (+½), Penetrating (+½), Uncontrolled (see 6E2 147-48; +½) (37 Active Points); OAF (-1), Limited Range (8m; -¼), 12 Charges (-¼). Total cost: 15 points.

Options:

1) Strong Acid: Increase to RKA 1½d6. 62 Active Points; total cost 25 points.

2) Weak Acid: Decrease to RKA ½d6. 25 Active Points; total cost 10 points.

3) Experimental Squirter: This form of the device doesn't always work properly; sometimes the acid leaks out and ruins the mechanism, requiring the character to make repairs before he can use it again. Add Activation Roll 13- Burnout (-¼). Total cost: 13 points.

4) Attached Squirter: This form of Acid Squirter is firmly attached to the character. Change OAF (-1) to OIF (-½). Total cost: 18 points.

5) Disguised Squirter I: This form of Acid Squirter looks like some ordinary object. Change OAF (-1) to IAF (-½). Total cost: 18 points.

6) Disguised Squirter II: This form of Acid Squirter both looks ordinary and is firmly attached to the character. Change OAF (-1) to IIF (-¼). Total cost: 21 points.

7) Expanded Reservoir: Increase to 25 Charges (+¼)

OAF: 41 Active Points; total cost 18 points.

OIF: 41 Active Points; total cost 23 points.

IAF: 41 Active Points; total cost 23 points.

IIF: 41 Active Points; total cost 27 points.

ALLURE PERFUME

Effect: +20 PRE and Charm 16-, Only Versus Men
Target: Varies
Duration: Constant
Range: Self
Charges: 2 Continuing Charges
Breakability: 4 PD/4 ED

Description: This device is a perfume enhanced by human pheromones. When worn by a woman, it makes her extremely attractive to men — indeed, perhaps irresistible — for the space of one hour.

Game Information: +20 PRE (20 Active Points); OAF (perfume spritzer; -1), Only To Attract The Attention Of Men (-1), 2 Continuing Charges lasting 1 Hour each (-0) (total cost: 7 points) **plus** Charm 16- (17 Active Points); OAF (perfume spritzer; -1), Only Versus Men (-1), 2 Continuing Charges lasting 1 Hour each (-0) (total cost: 6 points). Total cost: 13 points.

Options:

1) Strong Perfume: Increase to +30 PRE and Charm 20-. 30 + 25 = 55 Active Points; total cost 10 + 8 = 18 points.

2) Weak Perfume: Decrease to +15 PRE and Charm 14-. 15 + 13 = 28 Active Points; total cost 5 + 4 = 9 points.

3) Experimental Perfume: Pheromones and their functions remain poorly understood and difficult to use; sometimes the perfume evaporates almost instantly, or somehow interacts with the user's biochemistry in such a way that it has no effect (or reduced effect). Add Activation Roll 14- (-¼) to both powers. Total cost 6 + 5 = 11 points.

4) More Perfume: Increase to 4 Continuing Charges lasting 1 Hour each (+0 [the value is capped because this power already costs no END]). 20 + 17 = 37 Active Points; total cost 7 + 6 = 13 points.

5) Less Perfume: Decrease to 1 Continuing Charge lasting 1 Hour (-¼). Total cost: 6 + 5 = 11 points.

6) Allure Cologne: Men can take advantage of pheromone technology, too. Change all references to "Men" in the Limitations to "Women." Total cost: 13 points.

ARSENAL STAFF

Effect: Various Attack Powers
Target: Varies
Duration: Instant
Range: Varies
Charges: Varies
Breakability: 12 PD/12 ED

Description: This weapon looks like an ordinary metallic staff — but it's actually got an arsenal of high-tech weaponry built into it! It can project beams of force, fire micro-missiles or flare blasts, and even project tangleweb.

Game Information:

Cost	Power
30	**Arsenal Staff:** Multipower, 60-point reserve; all OAF (-1)
2f	**1) Electro-Blast:** Blast 12d6; OAF (-1), 8 Charges (-½)
2f	**2) Micro-Missiles:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½); OAF (-1), 4 Charges (-1)
2f	**3) Flare Blast:** Sight Group Flash 12d6; OAF (-1), 4 Charges (-1)
2f	**4) Tangleweb:** Entangle 6d6, 6 PD/6 ED; OAF (-1), Limited Range (20m; -¼), 4 Charges (-1)

Total cost: 38 points.

Options:

1) **Strong Staff:** Increase reserve to 75 points, Slot 1 to Blast 15d6, Slot 2 to Blast 10d6, Slot 3 to Flash 15d6, and Slot 4 to Entangle 7d6, 6 PD/6 ED. Total cost: 46 points.
2) **Weak Staff:** Decrease reserve to 45 points, Slot 1 to Blast 9d6, Slot 2 to Blast 6d6, Slot 3 to Flash 9d6, and Slot 4 to Entangle 5d6, 4 PD/4 ED. Total cost: 27 points.

BLADESHOOTER

Effect: RKA 1d6, Armor Piercing
Target: One character
Duration: Instant
Range: 150m
Charges: 10
Breakability: 4 PD/4 ED

Description: This blaster-like weapon doesn't fire energy beams or bullets — its rounds are razor-sharp circular blades! Depending on the designer, the blades may look like miniature buzzsaws, throwing stars, featureless disks, or just about any other aerodynamic shape.

Game Information: RKA 1d6, Armor Piercing (+¼) (19 Active Points); OAF (-1), 10 Charges (-¼). Total cost: 8 points.

Options:

1) **Strong Bladeshooter:** Increase to RKA 2d6. 37 Active Points; total cost 16 points.
2) **Weak Bladeshooter:** Decrease to RKA ½d6. 12 Active Points; total cost 5 points.
3) **Realistic Bladeshooter:** Aerodynamic or not, the blades can't fly very far. Add Limited Range (60m; -¼). Total cost: 8 points.
4) **Experimental Bladeshooter:** Sometimes the Bladeshooter malfunctions. Add Activation Roll 14- (-¼). Total cost: 8 points.
5) **Auto-Bladeshooter:** This form of Bladeshooter can fire multiple rounds at once. Add Autofire (3 shots; +¼) and change to 32 Charges (+¼). 25 Active Points; total cost 12 points.

BOOSTER PILL

Effect: +30 STR, +10 DEX, +10 CON, +5 PD, +5 ED
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Charge
Breakability: 14 PD/14 ED

Description: This super-drug radically enhances a character's physical capabilities... but only for a period of one hour from the time he takes it. Characters typically use it to augment themselves during a battle or crisis situation.

The Characteristics added by this pill are all bought as one big *Characteristics* power for ease of use. While technically they could be bought separately and Linked together, many GMs would consider that abusive given the special effects involved and the like.

The pill is bought as an IAF, rather than an OAF, for two reasons. First, while obviously a pill, it's not obviously a Booster Pill; another character might mistake it for an ordinary medicine. Second, since it's so small it's easy for the character to hide in his clothes or elsewhere.

Game Information: +30 STR, +10 DEX, +10 CON, +5 PD, +5 ED (70 Active Points); IAF (-½), 1 Continuing Charge lasting 1 Hour (-¼). Total cost: 40 points.

Options:

1) **Strong Pill:** Increase to +40 STR, +15 DEX, +15 CON, +10 PD, +10 ED. 105 Active Points; total cost 60 points.
2) **Weak Pill:** Decrease to +20 STR, +5 DEX, +5 CON, +3 PD, +3 ED. 41 Active Points; total cost 24 points.
3) **Realistic Pill I:** It takes time for the pill's effects to work. Add Extra Time (5 Minutes to activate; -1). Total cost: 26 points.
4) **Realistic Pill II:** The pill is easy to break, crush, or ruin. Add Fragile (-¼). Total cost: 34 points.
5) **Experimental Pill I:** The drugs in the pill don't always react positively with the character's metabolism. Add Activation Roll 14- (-¼). Total cost: 34 points.
6) **Experimental Pill II:** As Experimental Pill I, but if the pill fails to work it causes cramps and intestinal pain. Add Side Effects (Drain 4d6,

STR, DEX, and CON simultaneously, Delayed Return Rate (points return at the rate of 5 per 5 Minutes); -1). Total cost: 22 points.

7) **Mindbooster Pill:** This pill enhances the character's mental acuity instead of his physical prowess. Change to +20 INT, +20 EGO. 40 Active Points; total cost 22 points.

8) **More Pills:** The character has more than one Booster Pill he can take per day. The GM should evaluate this power carefully, since the ability to use it more than once may effectively eliminate the hindrance posed by the Charges Limitation.

   2 Charges (-0): Total cost 46 points.

   3 Charges (+¼): 77 Active Points; total cost 51 points.

9) **Short-Term Pill:** The pill's effects only last for a few minutes

   1 Continuing Charge lasting 20 Minutes (-½): Total cost 34 points.

   1 Continuing Charge lasting 5 Minutes (-¾): Total cost 30 points.

10) **Variant Pill:** This form of the pill uses the less predictable Aid. Change to Aid Characteristics 6d6, Expanded Effect (STR, DEX, CON, and PD simultaneously; +2), Delayed Return Rate (points fade at the rate of 5 per 20 Minutes; +1½) (162 Active Points); IAF (-½), Only Aid Self (-1), 1 Charge (-2). Total cost: 36 points.

11) **Booster Belt:** The product of some ultra-advanced science (perhaps alien technology, or even quasi-mystical tech), this belt draws on "ambient energy" to boost the wearer's physical capabilities as long as he wears it. Change to: +30 STR, +10 DEX, +10 CON, +5 PD, +5 ED (70 Active Points); OIF (-½). Total cost: 47 points.

COMBAT ANALYZER

Effect: +3 with All Combat, +3 versus Range Modifier with All Attacks, Tactics 16-
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 3 PD/3 ED

Description: Ordinarily built into a helmet, a suit of powered armor, or the like, this device uses microsensors and ultra-fast wafer-thin computers to analyze a battlefield situation and advise the user on the best tactics. It warns him of incoming attacks so he can dodge them, helps him aim at designated targets, and so forth.

Game Information:

Cost	Power
13	**Combat Analyzer:** +2 with All Combat; OIF (-½)
6	**Combat Analyzer:** +3 versus Range Modifier with All Attacks; OIF (-½)
11	**Combat Analyzer:** Tactics 16-; OIF (-½)

Total cost: 30 points.

Options:

1) **Strong Analyzer:** Increase to +3 with All Combat, +5 versus Range Modifier with All Attacks, and Tactics 18-. Total cost 20 + 10 + 14 = 44 points.

2) **Weak Analyzer:** Decrease to +1 with All Combat, +2 versus Range Modifier with All Attacks, and Tactics 14-. Total cost 7 + 4 + 9 = 20 points.

3) **Realistic Analyzer:** The Analyzer has its own battery and requires periodic recharging with special equipment. Add to each power 1 Continuing Fuel Charge lasting 1 Hour (-0). Total cost: 30 points.

4) **Experimental Analyzer:** The Analyzer isn't yet sophisticated enough to keep up with every factor in a rapidly-evolving battle; sometimes it fails to account for a variable and leaves the user exposed. Add Activation Roll 14- (-¼) to each power. Total cost 11 + 5 + 10 = 26 points.

COMBAT GAUNTLETS

Effect: Blast 8d6, Variable Advantage, Variable Special Effects; Telekinesis (40 STR); HA +8d6
Target: Varies
Duration: Instant/Constant/Instant
Range: Varies
END Cost: Varies
Breakability: 20 PD/20 ED

Description: Built with multiphasic energy technology, these gauntlets can produce a wide variety of offensive effects, thus allowing the wearer to project many different forms of ranged attack.

Game Information:

Cost	Power
67	**Combat Gauntlets:** Multipower, 100-point reserve; all OIF (-½)
7f	**1) Multiphasic Blasts:** Blast 8d6, Variable Advantage (+½ Advantages; +1), Variable Special Effects (+½); OIF (-½)
6f	**2) Graviton Manipulators:** Telekinesis (40 STR), Reduced Endurance (0 END; +½); OIF (-½)
3f	**3) Smashing Punch:** HA +8d6, Reduced Endurance (0 END; +½); OIF (-½), Hand-To-Hand Attack (-¼)

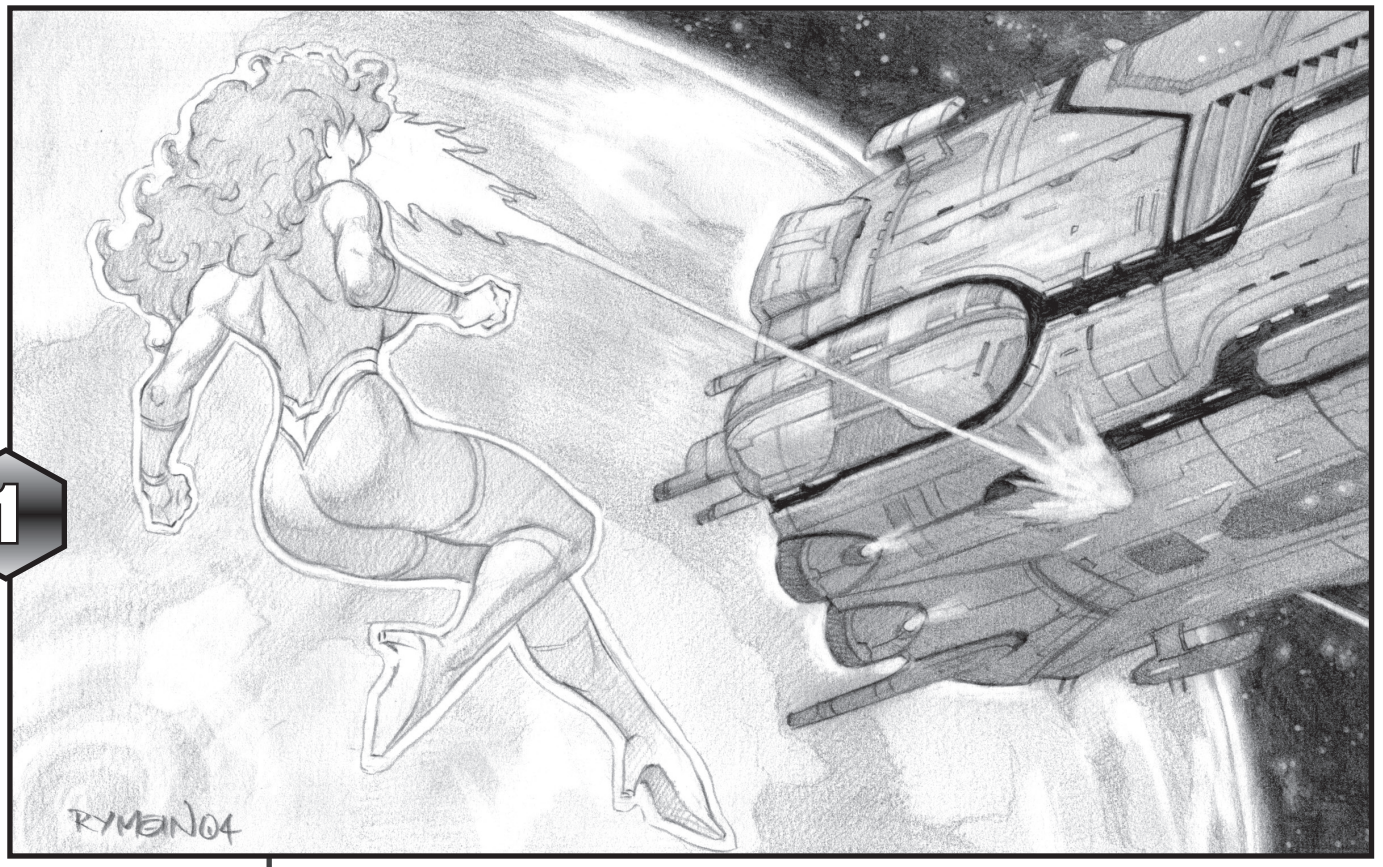
Total cost: 83 points.

Options:

1) **Strong Gauntlets:** Increase reserve to 125 points, Slot 1 to Blast 10d6, Slot 2 to Telekinesis (50 STR), and Slot 3 to HA +10d6. Total cost: 102 points.

2) **Weak Gauntlets:** Decrease to reserve to 75 points, Slot 1 to Blast 6d6, Slot 2 to Telekinesis (30 STR), and Slot 3 to HA +6d6. Total cost: 62 points.

3) **Realistic Gauntlets I:** The Gauntlets only have a limited supply of energy. Add 10 Charges (-¼) for entire reserve and remove Reduced



Endurance (+½) from Slots 2 and 3. Total cost: 70 points.

4) **Realistic Gauntlets II:** The Gauntlets are so big and bulky they interfere with the wearer's ability to use his hands. Add Side Effects (-2 to DEX Rolls to handle objects, always occurs; -½) to reserve. Total cost: 66 points.

5) **Experimental Gauntlets:** The Gauntlets are prototypes and don't always work properly. Add Activation Roll 14- (-¼) to reserve and all slots. Total cost: 71 points.

COSMIC GEM

Effect: Various Powers
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: Unbreakable

Description: This strange device, probably the product of a long-dead Galaxy-spanning alien empire or entity of cosmic power, resembles a gem. Some are small enough to wear on the forehead, while others fit comfortably in the fist; it may be that the owner can control the size and appearance of a Gem to suit himself. A Cosmic Gem is a font of cosmic power that the owner can use for a variety of effects — it projects powerful energy bolts, allows the user to fly, protects the user from harm, and so forth.

Game Information:

Cost	Power
50	**Cosmic Gem:** Multipower, 100-point reserve; all OAF (-1)
6v	**1) Standard Gem-Blast:** Blast 12d6; OAF (-1)
6v	**2) Deadly Gem-Blast:** RKA 2d6, ACV (uses OMCV against DMCV; +¼), AVAD (Mental Defense; +1), Does BODY (+1); OAF (-1), Increased Endurance Cost (x3 END; -1)
6v	**3) Nonlethal Gem-Blast:** Mental Blast 6d6; OAF (-1)
8v	**4) Protection Field:** Resistant Protection (25 PD/25 ED), Hardened (+¼); OAF (-1), Costs Endurance (-½)
6v	**5) Atmospheric Flight:** Flight 60m; OAF (-1)
8v	**6) Spaceflight:** FTL Travel (1 LY/15 Minutes), Usable By Nearby (+1); OAF (-1)
8	**Protection Field:** Life Support (Self-Contained Breathing; Safe Environments: all); OAF (-1), Linked (to Protection Field; -½)

Total cost: 98 points.

Options:

1) **Attached Gem:** The Gem firmly attaches itself to the owner, making it difficult to take away from him. Change OAF (-1) to OIF (-½). Total cost: 125 points.

2) **Powered Gem:** The Gem also contains an internal source of power that it draws on, instead of using the owner's energy. Character also buys: Endurance Reserve (200 END, 51 REC); OAF (-1) (total cost: 42 points). Total cost: 140 points.

3) **True Cosmic Gem:** This form of the Cosmic Gem can do almost anything. Change to Variable Power Pool, 90 Pool + 90 Control Cost, No Skill Roll Required (+1), Powers Can Be Changed As A Zero Phase Action (+1); OAF (-1). Total cost: 157 points (or 180 points for OIF [-½]).

CYCLONE GAUNTLETS

Effect: Various Attack Powers
Target: Varies
Duration: Instant
Range: Varies
Charges: 32 Charges for entire reserve
Breakability: 22 PD/22 ED

Description: This gauntlet-based weapon uses highly-compressed air to create several different offensive effects. In addition to simply enhancing his punch or blasting a target with compressed air, the user can create a wide-beam blast or a cyclone-like effect that slams into the target and throws him in a random direction.

Game Information:

Cost	Power
75	**Cyclone Gauntlets:** Multipower, 90-point reserve, 32 Charges (+¼) for entire reserve; all OIF (-½)
6f	**1) Cyclone Blast (Focused):** Blast 12d6, Double Knockback (+½); OIF (-½)
4f	**2) Cyclone Blast (Wide-Beam):** Blast 10d6, Area Of Effect (30m Cone; +¾); OIF (-½), No Range (-½)
4f	**3) Cyclone Effect:** Blast 12d6, Area Of Effect (26m Radius Explosion; +½); OIF (-½), Requires A DEX Roll (-½), Random Knockback (-0)
1f	**4) Cyclone Punch:** HA +2d6; OIF (-½), Hand-To-Hand Attack (-¼)

Total cost: 90 points.

Options:

1) **Strong Cyclone Gauntlets:** Increase reserve to 105 points, Slot 1 to Blast 14d6, Slot 2 to Blast 12d6, Slot 3 to Blast 14d6, and Slot 4 to HA +4d6. Total cost: 105 points.
2) **Weak Cyclone Gauntlets:** Decrease reserve to 75 points, Slot 1 to Blast 10d6, Slot 2 to Blast 7d6, Slot 3 to Blast 10d6, and Slot 4 to HA +1d6. Total cost: 76 points.
3) **Cyclone Rifle:** Instead of Gauntlets, this weapon is a rifle that an enemy can easily take away from a character. Remove Slot 4 and change OIF (-½) to OAF (-1) and Two-Handed (-½) throughout. Total cost: 55 points.
4) **More Air:** Increase to 64 Charges (+½) for entire reserve. Total cost: 105 points.
5) **Less Air:** Decrease to 16 Charges (-0) for entire reserve. Total cost: 75 points.

DARKNESS RAY

Effect: Darkness to Sight Group
Target: 20m Cone
Duration: Constant
Range: No Range
Charges: 1 Continuing Charge
Breakability: 10 PD/10 ED

Description: This unusual device is something like a flashlight or flare-beam blaster, but instead of projecting a beam of bright light, it projects one of utter darkness! When the user turns it on, it creates a cone of darkness 20m on a side; anyone within the cone cannot see. The weapon's internal battery has 5 minutes of power, and can only be recharged in a special recharging device.

Game Information: Darkness to Sight Group 10m radius (20m Cone) (50 Active Points); OAF (-1), No Range (-½), 1 Continuing Fuel Charge lasting 5 Minutes (-½). Total cost: 17 points.

Options:

1) **Strong Ray:** Increase to Darkness to Sight Group 12m radius (24m Cone). 60 Active Points; total cost 20 points.
2) **Weak Ray:** Decrease to Darkness to Sight Group 8m radius (16m Cone). 40 Active Points; total cost 13 points.
3) **Experimental Ray:** Darkness technology remains highly experimental and prone to malfunction. Add Activation Roll 14- (-¼). Total cost: 15 points.
4) **Stronger Battery:** Increase to 1 Continuing Fuel Charge lasting 20 Minutes (-¼). Total cost: 18 points.
5) **Attached Ray:** The Ray generator is built into a gauntlet, helmet, powered armor suit, ring, or the like, making it much harder for anyone to take it away from the character. Change OAF (-1) to OIF (-½). Total cost: 20 points.
6) **Advanced Ray:** The character's eyes are especially tuned to his Darkness Ray so that it doesn't affect him, only his foes. Add Personal Immunity (+¼). 62 Active Points; total cost 21 points.

DIMENSION-SHIFTER RAY

Effect: Extra-Dimensional Movement, Usable As Attack
Target: One character
Duration: Instant
Range: 400m
Charges: 8
Breakability: 10 PD/10 ED

Description: This highly dangerous weapon projects a beam of energy that negates the "dimensional vibration" that keeps the target in his home dimension. This has the effect of thrusting him into another dimension, thus possibly exiling him from his home plane for life.

This weapon requires the GM's permission, since it has a strong potential to unbalance the campaign.

Game Information: Extra-Dimensional Movement (one location in one dimension, chosen when the Ray is built), Usable As Attack (does not work on characters with Desolidification, Extra-Dimensional Movement, Power Defense, or Teleportation; +1¼), Ranged (+½) (55 Active Points); OAF (-1), 8 Charges (-½). Total cost: 22 points.

Options:

1) **Strong Ray:** Increase to any location in any dimension. 124 Active Points; total cost 50 points.
2) **Weak Ray:** Change Ranged (+½) to Limited Range (20m; +¼). 50 Active Points; total cost 20 points.
3) **Experimental Ray:** This technology is highly experimental and prone to frequent failure. Add Activation Roll 11- (-½). Total cost: 20 points.
4) **Uncontrollable Ray:** The character has no control over which dimension his Ray sends the target to. As Strong Ray, but add No Conscious Control (character controls activation of the Ray but not the target's destination; -1). Total cost: 35 points.
5) **Attached Ray:** The Ray is built into a gauntlet, powered armor suit, or the like; it's much harder to take away from the character. Change OAF (-1) to OIF (-½). Total cost: 27 points.

DISTRACTING COSTUME

Effect: +20 PRE, Only For Seductive Purposes
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 4 PD/4 ED

Description: The character's costume is particularly flattering and revealing, making it harder for his opponents to fight effectively.

Game Information: +20 PRE (20 Active Points); OIF (-½), Only To Make Seductive/Friendly Presence Attacks Solely For Purposes Of Causing Target To Delay His Actions In Combat (-1), Only Versus Targets Of Appropriate Sexual Orientation (-1), Only Works Once Per Target Per Scene (-½). Total cost: 5 points.

EELSKIN COSTUME

Effect: Blast 6d6, NND; Resistant Protection (4 PD/4 ED); +30 STR, Only Versus Grabs; +5 to Contortionist, Only Versus Grabs
Target: One character/Self
Duration: Instant/Persistent/Persistent/Constant
Range: Touch/Self
END Cost: Varies
Breakability: 12 PD/12 ED

Description: This costume is made out of an extremely slippery super-material and coated with special oils so that it not only protects the wearer, it makes it very difficult for anyone to Grab him. Additionally, it contains a built-in power pack that lets the wearer deliver a powerful electric shock attack by touch.

Game Information:

Cost	Power
24	**Electric Eel Touch:** Blast 6d6, NND (defense is insulated rED covering the entire body, or ED Resistant Protection defined as a force-field or the like; +1) (60 Active Points); OIF (-½), No Range (-½), 8 Charges (-½)
8	**Eelskin Costume:** Resistant Protection (4 PD/4 ED) (12 Active Points); OIF (-½)
18	**Eelskin Costume:** +30 STR, Reduced Endurance (0 END; +½) (45 Active Points); OIF (-½), Only To Escape From Grabs (-1)
5	**Eelskin Costume:** +5 to Contortionist (10 Active Points); OIF (-½), Only To Escape From Grabs (-½)

Total cost: 55 points.

Options:

1) **Strong Touch:** Increase Electric Eel Touch to Blast 8d6. 80 Active Points; total cost 32 points; total cost of gadget 63 points.
2) **Weak Touch:** Decrease Electric Eel Touch to Blast 4d6. 40 Active Points; total cost 16 points; total cost of gadget 47 points.
3) **Tough Costume:** Increase to Resistant Protection (6 PD/6 ED). 18 Active Points; total cost 12 points; total cost of gadget 59 points.
4) **Even Slipperier Costume:** Increase to +40 STR and +7 to Contortionist. 60 and 14 Active Points; total cost 24 and 7 points; total cost of gadget 63 points.

ELECTRO-LIMPET

Effect: Dispel Electronic Device Powers 25d6
Target: One electronic device
Duration: Instant
Range: Touch
Charges: 1
Breakability: 75 PD/75 ED

Description: When attached to an electronic device, this small weapon emits a focused electromagnetic pulse that fries the device's circuits, rendering it inoperable. Getting it back in working condition requires the replacement or repair of many parts of the device, which usually takes time and skill.

Game Information: Dispel Electronic Device Powers 25d6, Expanded Effect + Variable Effect (all Electronic Device powers simultaneously; +4) (375 Active Points); OAF (-1), No Range (-½), 1 Charge (-2). Total cost: 83 points.

Options:

1) **Strong Electro-Limpet:** Increase to Dispel Electronic Device Powers 30d6. 450 Active Points; total cost 100 points.
2) **Weak Electro-Limpet:** Decrease to Dispel Electronic Device Powers 20d6. 300 Active Points; total cost 67 points.
3) **Realistic Electro-Limpet:** The pulse isn't focused; it spreads outward from itself in all directions, frying all nearby circuitry. Add Area Of Effect (32m Radius; +1). 450 Active Points; total cost 100 points.
4) **Experimental Electro-Limpet:** The technology needed to shrink an EMP generator down to the size of a limpet mine isn't always reliable. Add Activation Roll 14- (-¼). Total cost: 79 points.
5) **Triggered Electro-Limpet:** A character can use this form of Electro-Limpet as a threat against the owner of an electronic device. After he attaches the Limpet to the device, he Triggers it by remote control whenever he wants (removing the Limpet requires destroying the device it's attached to, or destroying the Limpet, which has 75 DEF). Add Trigger (radio signal after being attached to device; +¼). 394 Active Points; total cost 87 points.

ENERGY BRACERS

Effect: Blast 12d6, Flight 30m, Resistant Protection (20 PD/20 ED)
Target: One character/Self/Self
Duration: Instant/Constant/Constant
Range: 600m/Self/Self
END Cost: 6/3/4
Breakability: 15 PD/15 ED

Description: These bracers are built with technology that allows them to harness and manipulate energy for various effects. They can project deadly blasts, shield the wearer with a force-field, or even propel the wearer through the air. The wearer can use two or more functions at once, but not all at full power.

Game Information:

Cost	Power
50	**Energy Bracers:** Multipower, 75-point reserve; all OIF (-½)
8v	**1) Blast:** Blast 12d6; OIF (-½)
4v	**2) Fly:** Flight 30m; OIF (-½)
8v	**3) Shield:** Resistant Protection (20 PD/20 ED); OIF (-½)

Total cost: 70 points

Options:

1) **Strong Bracers:** Increase reserve to 90 points, Slot 1 to Blast 15d6, Slot 2 to Flight 50m, and Slot 3 to Resistant Protection (30 PD/30 ED). Total cost: 89 points.
2) **Weak Bracers:** Decrease to reserve to 60 points, Slot 1 to Blast 8d6, Slot 2 to Flight 20m, and Slot 3 to Resistant Protection (15 PD/15 ED). Total cost: 54 points.
3) **Realistic Bracers:** The Bracers have only a limited supply of energy. Add 64 Charges (+½) for entire reserve. Total cost: 91 points.
4) **Experimental Bracers:** The technology in the Bracers is not fully understood and doesn't always work properly. Add Activation Roll 14- (-¼) to reserve and all slots. Total cost: 60 points.
5) **Solar Bracers:** The Bracers' power depends on channeling sunlight; at night or when shielded from sunlight, they won't work. Add Only Works In Sunlight (-½) to reserve and all slots. Total cost: 52 points.
6) **Star-Bracers:** The Bracers' power depends on channeling the light of stars (be it the sun or other stars); when shielded from stellar light, they won't work. Add Only Works In Stellar Light (-¼) to reserve and all slots. Total cost: 60 points.
7) **Untiring Bracers:** Using the Bracers doesn't tire the character out at all. Increase reserve to 90 points and add Reduced Endurance (0 END; +½) to all slots. Total cost: 86 points.

GRAVITIC CONTROL ROD

Effect: Varies
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: Unbreakable

Description: This powerful weapon, possibly the creation of some ultra-advanced alien civilization, allows the character to manipulate gravity for a wide variety of attacks and effects.

Game Information:

Cost	Power
31	**Gravitic Powers:** Multipower, 63-point powers; all OAF (-1)
3f	**1) Gravitic Manipulation:** Telekinesis (40 STR); OAF (-1)
3f	**2) Gravitic Blast I:** Blast 12d6; OAF (-1)
3f	**3) Gravitic Blast II:** Blast 8d6, Reduced Endurance (0 END; +½); OAF (-1)
3f	**4) Crushing And Rending:** RKA 2d6, Penetrating (+½), Reduced Endurance (0 END; +½); OAF (-1)
3f	**5) Technology Destruction:** Dispel Technology 14d6, Variable Effect (any one technology-based power at a time; +½); OAF (-1)
3f	**6) The Big Squeeze:** Blast 6d6, NND (defense is PD Resistant Protection defined as a forcefield, or the like; +1); OAF (-1)
3f	**7) Altered Individual Gravity:** Flight 22m, Usable As Attack (does not affect anyone with Desolidification, Power Defense, or gravity-manipulation abilities; +1¼), Ranged (+½); OAF (-1)

Total cost: 52 points.

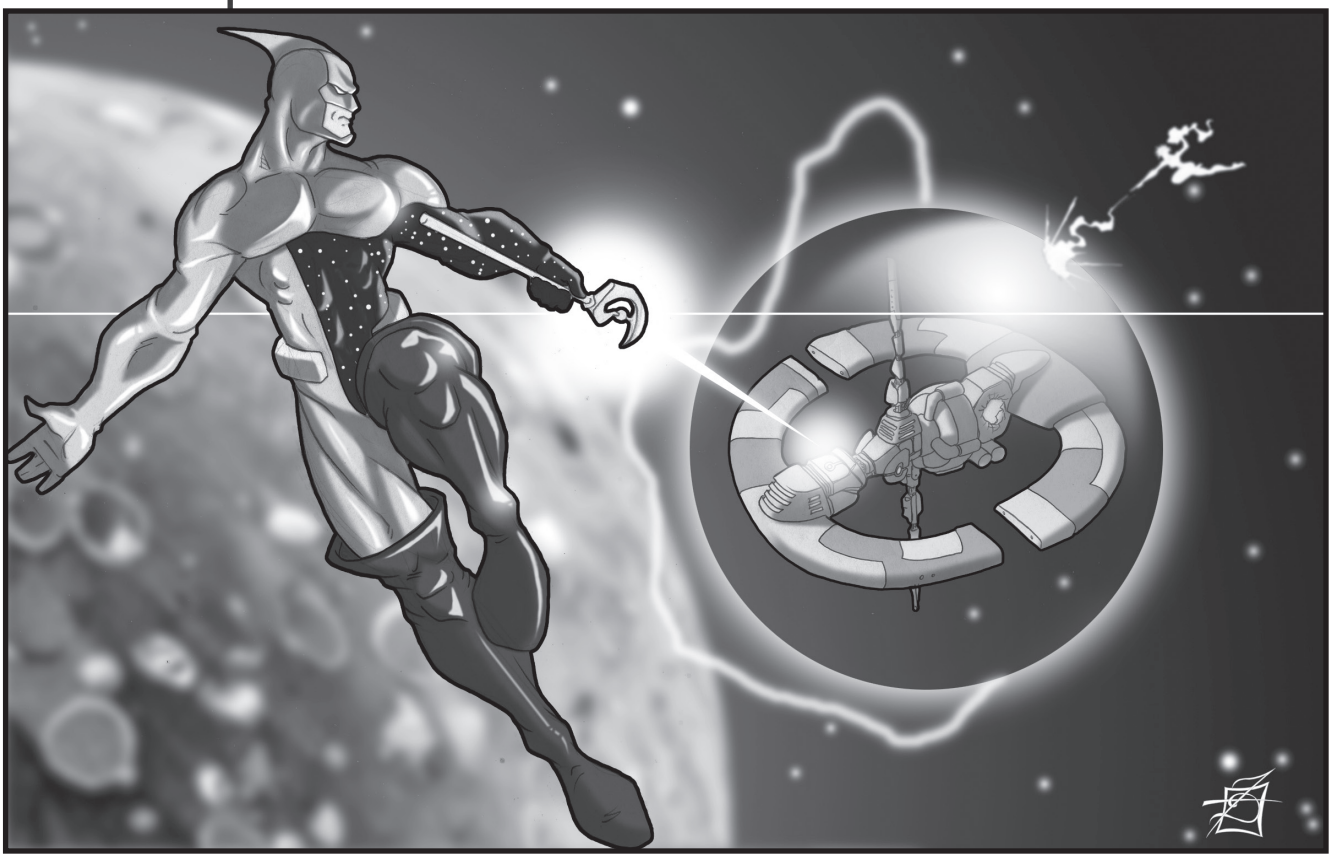
Options:

1) **Strong Gravitic Control Rod:** Increase reserve to 90 points, Slot 1 to Telekinesis (60 STR), Slot 2 to Blast 18d6, Slot 3 to Blast 12d6, Slot 4 to RKA 3d6, Slot 5 to Dispel 20d6, Slot 6 to Blast 9d6, and Slot 7 to Flight 32m. Total cost: 73 points.
2) **Weak Gravitic Control Rod:** Decrease reserve to 45 points, Slot 1 to Telekinesis (30 STR), Slot 2 to Blast 9d6, Slot 3 to Blast 6d6, Slot 4 to RKA 2d6 without Reduced Endurance, Slot 5 to Dispel 10d6, Slot 6 to Blast 4d6, and Slot 7 to Flight 16m. Total cost: 36 points.
3) **Gravitic Control Gauntlet/Ring/Helmet:** This form of gravitic control device is not so easily removed from the character's possession. Change OAF (-1) to OIF (-½) throughout. Total cost: 70 points.
4) **Returning Gravitic Control Rod:** If someone attempts to take the Rod away from its owner, the Rod automatically returns to the character of its own "volition." Remove OAF (-1) throughout. Total cost: 105 points.

GRENADE LAUNCHER BACKPACK

Effect: Various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: 4 Charges per slot
Breakability: 15 PD/15 ED

Description: This weapon is worn on the back and has a barrel or launching tube that mounts on the wearer's shoulder or the like. It allows him to fire a variety of grenades; he selects which type he wants by cybernetic command or with a hand control. The Backpack carries 32 grenades, four each of eight types. A character who buys it could, if desired, change the number of Charges on various slots to reflect personal preference, but the total number of grenades cannot exceed 32.



Game Information:

Cost	Power
50	**Grenade Launcher Backpack:** Multipower, 75-point powers; OIF (-½)
3f	**1) Blast Grenade:** Blast 15d6; OIF (-½), 4 Charges (-1)
3f	**2) Fire Grenade:** Blast 10d6 (22m Radius Explosion; +½); OIF (-½), 4 Charges (-1)
3f	**3) Frag Grenade:** RKA 3d6 (20m Radius Explosion; +½); OIF (-½), 4 Charges (-1)
3f	**4) Concussor Grenade:** Blast 10d6 (22m Radius Explosion; +½); OIF (-½), Stun Only (-0), 4 Charges (-1)
3f	**5) Flashbang Grenade:** Sight and Hearing Group Flash 9d6 (20m Radius Explosion; +½); OIF (-½), 4 Charges (-1)
3f	**6) Smoke Grenade:** Darkness to Sight Group 12m radius; OIF (-½), 4 Continuing Charges lasting 1 Turn each (-½)
3f	**7) Enhanced Smoke Grenade:** Darkness to Sight, Radio, and Mental Groups 10m radius; OIF (-½), 4 Continuing Charges lasting 1 Turn each (-½)
3f	**8) Tranq Gas Grenade:** Blast 5d6, NND (defense is Life Support [Self-Contained Breathing] or appropriate Immunity; +1), Area Of Effect (10m Radius; +1); OIF (-½), 4 Charges (-1)

Total cost: 74 points.

Options:

1) **Strong GLB:** Increase reserve to 90 points, Slot 1 to Blast 18d6, Slot 2 to Blast 12d6, Slot 3 to RKA 4d6, Slot 4 to Blast 12d6, Slot 5 to Flash 11d6, Slot 6 to Darkness 18m, Slot 7 to Darkness 16m, and Slot 8 to Blast 6d6. Total cost: 91 points.
2) **Weak GLB:** Decrease reserve to 60 points, Slot 1 to Blast 12d6, Slot 2 to Blast 8d6, Slot 3 to RKA 2d6, Slot 4 to Blast 8d6, Slot 5 to Flash 7d6, Slot 6 to Darkness 10m, Slot 7 to Darkness 8m, and Slot 8 to Blast 4d6. Total cost: 56 points.
3) **Grabbable GLB:** This form of GLB is easily taken away from the character. Change OIF (-½) to OAF (-1) throughout. Total cost: 53 points.

HOLOGRAM PROJECTOR

Effect: Sight, Hearing, and Smell/Taste Group Images, Invisibility to Sight, Hearing, and Smell/Taste Groups
Target: 16m Radius/Self
Duration: Constant
Range: 320m/Self
END Cost: 0
Breakability: 16 PD/16 ED

Description: This device, built into the fabric of a costume so cleverly that no one can detect it without a detailed out-of-combat examination, generates convincing holograms able to affect multiple senses through the use of odor generators, sound broadcast units, and the like.

Game Information:

Cost	Power
64	**Illusions:** Multipower, 80-point reserve; all IIF (-¼)
6f	**1) Hologram Generator:** Sight, Hearing, and Smell/Taste Group Images, -3 to PER Rolls, Area Of Effect (16m Radius; +¾), Reduced Endurance (0 END; +½), Persistent (+¼); IIF (-¼)
4f	**2) Cloak Of Illusion:** Invisibility to Sight, Hearing, and Smell/Taste Groups, Reduced Endurance (0 END; +½), Persistent (+¼); IIF (-¼)

Total cost: 74 points.

Options:

1) **Strong Holograms:** Increase reserve to 114 points, and Images to Sight, Hearing, and Smell/Taste Group Images, -5 to PER Rolls, Area Of Effect (64m Radius; +1¼), and add No Fringe to Invisibility. Total cost: 105 points.
2) **Weak Holograms:** Decrease reserve to 60 points and Images to Sight, Hearing, and Smell/Taste Group Images, -2 to PER Rolls, Area Of Effect (8m Radius; +½). Total cost: 57 points.
3) **Realistic Holograms:** These holograms only affect sight and are easily perceived as fake images. Change to Sight Group Images, Area Of Effect (16m Radius; +¾), Reduced Endurance (0 END; +½), Persistent (+¼); IIF (-¼). 25 Active Points; total cost 20 points.
4) **Experimental Holograms:** Sometimes the hologram flickers, suffers interference, or otherwise doesn't work properly. Add Activation Roll 14- (-¼) to the reserve and both slots. Total cost: 61 points.
5) **Accessible Projector:** Although still difficult to perceive, this form of the Projector is easy to remove from the user once detected. Change to IAF (-½). Total cost: 61 points.

MATTER CONDENSER

Effect: Blast 12d6, RKA 2d6 (Armor Piercing x2), Entangle 6d6, 6 PD/6 ED
Target: One character
Duration: Instant
Range: 600m/450m/600m
Charges: 12 Charges for entire reserve
Breakability: 12 PD/12 ED

Description: This device condenses the particulate matter in the air into solid objects, using the energy created by the condensing process to project those objects at a target. It can create three types of objects: large boulder-like ones to smash into the target; sharp knife- or dart-like ones to cut the target; and wire- or ring-like ones to tie the target up.

Game Information:

Cost	Power
27	**Matter Condenser:** Multipower, 60-point reserve; all OAF (-1), 12 Charges for entire reserve (-¼)
3f	**1) Particulate Boulders:** Blast 12d6; OAF (-1)
2f	**2) Particulate Darts:** RKA 2d6, Armor Piercing (x2; +½); OAF (-1)
3f	**3) Particulate Rings/Wire:** Entangle 6d6, 6 PD/6 ED; OAF (-1)

Total cost: 35 points.

Options:

1) Strong Condenser: Increase reserve to 75 points, Slot 1 to Blast 15d6 and Slot 3 to Entangle 8d6, 7 PD/7 ED. Total cost: 43 points.

2) Weak Condenser: Decrease reserve to 45 points, Slot 1 to Blast 9d6, Slot 2 to Armor Piercing (+¼), and Slot 3 to Entangle 5d6, 4 PD/4 ED. Total cost: 26 points.

3) Attached Condenser: The Condenser is built into a gauntlet, powered armor suit, or the like; it's much harder to take away from the character. Change OAF (-1) to OIF (-½). Total cost: 45 points.

MINI-MISSILE LAUNCHER

Effect: RKA 3d6, Indirect, No Range Modifier
Target: Explosion
Duration: Instant
Range: 450m
Charges: 4
Breakability: 22 PD/22 ED

Description: This weapon looks like a large, bulky energy pistol with four barrels mounted two-by-two. But it actually fires mini-missiles instead of energy beams! The missiles can track targets around obstacles and the like.

Game Information: RKA 3d6, Area Of Effect (20m Radius Explosion; +½), Indirect (Source Point is always the character, but Path can alter from use ot use to strike the target from any direction; +½), No Range Modifier (+½) (112 Active Points); OAF (-1), 4 Charges (-1). Total cost: 37 points.

Options:

1) Strong Mini-Missiles: Increase to RKA 4d6. 150 Active Points; total cost 50 points.

2) Weak Mini-Missiles: Decrease to RKA 2d6. 75 Active Points; total cost 25 points.

3) Realistic Mini-Missiles: The missiles are so small that they don't have enough fuel to fly very far, and they take time to reach their target. Add Extra Time (Extra Segment; -½) and Limited Range (400m; -¼). Total cost: 30 points.

4) Experimental Mini-Missiles: Sometimes one of the missiles is a dud. Add Activation Roll 14- (-¼). Total cost: 34 points.

5) Improved Mini-Missiles: Increase to Area Of Effect (54m Radius Explosion; +¾). 124 Active Points; total cost 41 points.

6) More Mini-Missiles: Increase to 8 Charges (-½). Total cost: 45 points.

7) Attached Launcher: The Launcher is built into a gauntlet, powered armor suit, or the like; it's much harder to take away from the character. Change OAF (-1) to OIF (-½). Total cost: 45 points.

MIST GENERATOR

Effect: Darkness to Sight Group, Change Environment (-4 to Sight Group), and various gas-based Attack Powers
Target: 16m radius
Duration: Constant, Instant
Range: No Range
Charges: 60 Charges, 12 Charges
Breakability: 30 PD/30 ED

Description: This device is built into a costume and is almost impossible to detect without detailed examination of the garb. It consists of various chemicals stored in suspension, plus a network of miniaturized release nozzles that allow the character to project clouds of gas and smoke around himself. These may simply give him cover... but sometimes he laces the smoke with knockout gas, poison gas, or the like! The user is immune to these effects, and the GM should have the cloud of smoke and gas move with him as he moves.

Typically a character only uses the Dangerous Gasses part of this device when using the Concealing Mist Generator, thus hiding the gas in the mists and smokes. This constitutes making a Multiple Attack.

Game Information:

Cost	Power
86	**Concealing Mist Generator:** Multipower, 100-point reserve, 60 Charges for entire reserve (+½); all IIF (-¼), No Range (-½)
5f	**1) Thick Mist:** Darkness to Sight Group 16m radius, Personal Immunity (+¼); IIF (-¼), Requires 2 Charges Per Use (-¼), No Range (-½)
1f	**2) Thin Mist:** Change Environment,-4 to Sight Group PER Rolls, Area Of Effect (8m Radius; +½), Personal Immunity (+¼); IIF (-¼), No Range (-½)
51	**Dangerous Gasses:** Multipower, 90-point reserve; all IIF (-¼), No Range (-½)
5f	**1) Knockout Gas:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (16m Radius; +¾), Constant (+½), Personal Immunity (+¼), 100 Charges (+¾); IIF (-¼), No Range (-½)

4f **2) Deadly Gas:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1), Area Of Effect (16m Radius; +¾), Constant (+½), Personal Immunity (+¼); IIF (-¼), No Range (-½), 12 Charges (-¼)

Total cost: 152 points.

Options:

1) **Obvious Generator:** The Generator technology can be perceived as part of the character's costume without difficulty. Change to OIF (-½) throughout. Total cost: 133 points.

MULTI-BRACER

Effect: Swinging 24m and various Attack Powers
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: 10 PD/10 ED

Description: Much like the Billy Club (page 139), the Multi-Bracer is a combination weapon/tool popular with martial artists, "trained normals," and costumed vigilante-style heroes. The bracer has five sections, each with a specific device built into it: a blaster; a swingline; a knockout gas pellet projector; a tangleweb pellet projector; and a flash pellet projector.

Game Information:

Cost Power

33 **Multi-Bracer:** Multipower, 50-point reserve; all OIF (-½)

1f **1) Swingline:** Swinging 24m; OIF (-½)

2f **2) Blaster:** Blast 8d6; OIF (-½), 8 Charges (-½)

2f **3) Knockout Gas Pellets:** Blast 4d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (16m Radius Explosion; +¼); OIF (-½), 8 Charges (-½)

2f **4) Tangleweb Pellets:** Entangle 5d6, 5 PD/5 ED; OIF (-½), 8 Charges (-½)

2f **5) Flash Pellets:** Sight Group Flash 6d6 (12m Radius Explosion; +¼); OIF (-½), 8 Charges (-½)

Total cost: 42 points.

Options:

1) **Strong Bracer:** Increase reserve to 62 points, Slot 1 to Swinging 40m, Slot 2 to Blast 12d6, Slot 3 to Blast 5d6, Slot 4 to Entangle 6d6, 6 PD/6 ED, and Slot 5 to Flash 8d6. Total cost: 53 points.

2) **Weak Bracer:** Decrease reserve to 40 points, Slot 1 to Swinging 20m, Slot 3 to Blast 3d6, Slot 4 to Entangle 4d6, 4 PD/4 ED, and Slot 5 to Flash 5d6. Total cost: 35 points.

3) **Multi-Pistol:** This form of the weapon is a pistol, not a bracer. Change OIF (-½) to OAF (-1) throughout. Total cost: 33 points.

PAINT GUN

Effect: Cosmetic Transform 6d6, Sight Group Flash 6d6
Target: One character
Duration: Instant
Range: 60m
Charges: 15 Charges for entire reserve
Breakability: 9 PD/9 ED

Description: This gun fires streams or pellets of paint for two effects. First, if fired at the target's eyes, it blinds him until he can wipe the paint away. Second, it can mark the target for easy identification. In this case, the Partial Transform Advantage on the Cosmetic Transform allows it to work without doing Transform damage equal to twice the victim's BODY — the amount of Transform damage inflicted relative to the amount of BODY the victim has tells you how much of his physical form has been colored by the paint.

Game Information:

Cost Power

13 **Paint Gun:** Multipower, 30-point reserve; all OAF (-1), Limited Range (60m; -¼), 15 Charges for entire reserve (-0)

1f **1) Change Color:** Cosmetic Transform 6d6 (being or object to differently-colored being or object; heals back by washing thoroughly), Partial Transform (+½); OAF (-1), Limited Range (60m; -¼)

1f **2) Blinding Paint:** Sight Group Flash 6d6; OAF (-1), Limited Range (60m; -¼)

Total cost: 15 points.

PORCUPINE COSTUME

Effect: Resistant Protection (6 PD/6 ED); RKA 1d6, Damage Shield
Target: Self/One character
Duration: Persistent/Constant
Range: Self/Touch
END Cost: 0
Breakability: 10 PD/10 ED

Description: This costume not only provides the character with protection from attacks, it makes it difficult for others to Grab him — because it's covered with sharp, porcupine-like "quills"! While some areas, such as the joints, aren't covered by the quills (hence the Activation Roll for the Damage Shield), most people who touch the character are going to regret it.

Game Information:

Cost Power

12 **Porcupine Costume:** Resistant Protection (6 PD/6 ED) (18 Active Points); OIF (-½)

16 **Porcupine Quills:** RKA 1d6, Constant (+½), Area Of Effect (personal Surface — Damage Shield; +¼), Reduced Endurance (0 END; +½), Persistent (+¼) (37 Active Points); OIF (-½), No Range (-½), Activation Roll 14- (-¼)

Total cost: 28 points.

Options:

1) **Strong Quills:** Add Armor Piercing (+¼) for the RKA. 41 Active Points; total cost 18 points; total cost of costume 30 points.
2) **Weak Quills:** Decrease to RKA ½d6. 25 Active Points; total cost 11 points; total cost of costume 23 points.
3) **Realistic Costume:** All those quills make it hard for the character to move gracefully or handle things. Add Side Effects (-2 to DEX Rolls, always occurs; -½) to RKA. Total cost 13 points; total cost of costume 25 points.
4) **Shooting Quills I:** The character can also shoot quills from his costume at his enemies — but the more quills he shoots, the fewer he has to protect himself. Character also buys: RKA 1d6, Armor Piercing (+¼), 55 Charges (+½) (26 Active Points); OIF (-½), No Knockback (-¼), Side Effects (every 5 quills shot reduces the Activation Roll of the Damage Shield by 1, always occurs; -½). Total cost 11 points; total cost of costume 39 points.
5) **Shooting Quills II:** As Shooting Quills I, but add Autofire (5 shots; +½) to the RKA. 34 Active Points; total cost 15 points; total cost of costume 43 points.

POWER AUGMENTOR

Effect: Aid 5d6, all powers of a defined Special Effect at once
Target: Self
Duration: Instant
Range: Self
END Cost: 0
Breakability: 30 PD/30 ED

Description: This device — possibly the product of terrestrial super-science, possibly the creation of an advanced alien species, possibly of mysterious origin — has the effect of significantly enhancing all of a character's powers, provided they belong to a defined special effect. The character must choose what special effect the device Aids when he buys the gadget; he cannot change this thereafter. Thus, a Fire Power Augmentor would help Feuermacher, but do nothing for Durak or Ultrasonique.

Game Information: Aid 5d6, Expanded Effect + Variable Effect (all powers of a defined Special Effect at once; +4) (150 Active Points); OAF (-1), Only Aid Self (-1). Total cost: 50 points.

Options:

1) **Strong Augmentor:** Increase to Aid 6d6. 180 Active Points; total cost 60 points.
2) **Weak Augmentor:** Decrease to Aid 4d6. 120 Active Points; total cost 40 points.
3) **Experimental Augmentor:** Sometimes the Augmentor fails to work, burning itself out in the process. Add Activation Roll 14- Jammed (-½). Total cost: 43 points.
4) **Extended Augmentor:** The Augmentor's effects don't wear off for a while. Add Delayed Return Rate (points fade at the rate of 5 per Minute; +1). 180 Active Points; total cost 60 points.

POWER STAFF

Effect: Various powers
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: Unbreakable

Description: This gadget looks like a quarterstaff made of metal, perhaps with various small devices and energy crystals attached to it. It may be a technological item developed by a super-genius or a highly-advanced alien race, or it may be some sort of mystic artifact. Regardless of its origin, it has vast energy powers which its wielder can control with his thoughts alone. It can project various types of energy beams, create different types of protective energy shields, fly, move objects without touching them, and so forth.

The character may, if he wishes, define this device as any other form of OAF. It could be a Power Crystal, Power Sword, Power Wand, Power Lantern, or the like.

Game Information:

Cost	Power
60	**Power Staff:** Multipower, 120-point reserve; all OAF (-1)
5v	**1) Power Hands/Power Fields:** Telekinesis (40 STR); OAF (-1), Affects Whole Object (-¼)
6v	**2) Power Blast:** Blast 12d6; OAF (-1)
8v	**3) Power Fist:** Blast 8d6, Indirect (Source Point and Path can vary from use to use; +1); OAF (-1)
6v	**4) Power Blast Fusillade:** Blast 8d6, Autofire (5 shots; +½); OAF (-1)
6v	**5) Power Shackles:** Entangle 4d6, 8 PD/8 ED; OAF (-1)
6v	**6) Power Spear:** RKA 4d6; OAF (-1)
5v	**7) Strangulation Bubble:** RKA 1d6, NND (defense is Life Support [Self-Contained Breathing] or not needing to breathe; +1), Does BODY (+1), Constant (+½); OAF (-1)
2v	**8) Power Point Defense:** Deflection; OAF (-1)
7v	**9) Power Shield I:** Resistant Protection (30 PD/30 ED); OAF (-1), Costs Endurance (-½)
7v	**10) Power Shield II:** Resistant Protection (25 PD/25 ED); OAF (-1), Costs Endurance (-½) **plus** Life Support (Self-Contained Breathing); OAF (-1), Costs Endurance (-½), Linked (-½)
7v	**11) Power Shield III:** Resistant Protection (15 PD/15 ED/10 Mental Defense/10 Power Defense/10 Sight Group Flash Defense); OAF (-1), Costs Endurance (-½)
6v	**12) Power Wall:** Barrier 10 PD/10 ED, 10 BODY (up to 12m long, 4m high, and ½m thick), Non-Anchored, Dismissable; OAF (-1), Costs Endurance (to maintain; -½)
6v	**13) Power Flight:** Flight 40m, Reduced Endurance (0 END; +½); OAF (-1)

Total cost: 137 points.

Options:

1) **Power Ring/Helmet/Bracers/Torc/Etc.:** This form of the device is not so easily taken away from the character. Change to OIF (-½). Total cost: 180 points.
2) **Utter Control:** The character's control over the Power Staff is so great that it teleports or flies back to him if it's involuntarily taken away from him. Remove OAF (-1). Total cost: 261 points.
3) **Inherent Weakness:** The Power Staff suffers from two drawbacks. First, it runs out of energy after a day, so the wielder has to recharge it at a recharging station created especially for it. If he does not do so, the item loses all power 24 hours after it was last charged, and cannot function at all until recharged. (This is represented with a -¼ Limitation, *24 Hour Power Supply,* on the Multipower reserve.) Second, due to a flaw in the item's construction, its powers do not work against some substance or phenomenon that the character must define when he buys the item. This is represented with a -¼ Limitation, *Powerless Against X,* taken on the reserve and each slot (except Slot 13). The character must define "X," keeping the value of the Limitation in mind (the GM can increase it, if desired). Some possibilities include: any person or item of a particular color ("You take on the Purple Prowler — thanks to that stupid lavender-colored costume of his, my Power Staff can't affect him!"); any being or item made of a particular substance (stone, wood, metal, a specific type of metal) ("Oakman again? Who built this lousy Power Staff?"); or any being or item possessing a certain type of powers (fire powers, sonic powers, water powers). Total cost: 118 (OAF version); 147 (OIF version).
4) **Power Staff II:** Instead of being built as a large Multipower of ultra slots, this form of the Power Staff is built as a VPP, thus increasing the flexibility of the device's powers. Change to Variable Power Pool, 120 Pool + 120 Control Cost. Total cost: 150 points (OAF version); 160 points (OIF version); 147 points (OAF version with 24 Hour Power Supply (-¼)); 154 points (OIF version with 24 Hour Power Supply (-¼)).
5) **Power Staff III:** This version of the Power Staff is much more limited; it functions primarily as a weapon.

Cost Power

35 **Power Staff III:** Multipower, 70-point reserve; all OAF (-1)

3f **1) Power Hands/Power Fields:** Telekinesis (40 STR); OAF (-1), Affects Whole Object (-¼)

3f **2) Power Blast:** Blast 12d6; OAF (-1)

3f **3) Power Fist:** Blast 9d6, Indirect (Source Point is always the character, but Path can vary from use to use; +½); OAF (-1)

3f **4) Power Blast Fusillade:** Blast 8d6, Autofire (5 shots; +½); OAF (-1)

3f **5) Power Shackles:** Entangle 4d6, 8 PD/8 ED; OAF (-1)

3f **6) Power Spear:** RKA 4d6; OAF (-1)

1f **7) Power Point Defense:** Deflection; OAF (-1), Costs Endurance (-½)

Total cost: 54 points.

6) **Powered Power Staff:** The Power Staff also has its own reserve of power. Character also buys Endurance Reserve (200 END, 33 REC). 72 Active Points; total cost: 36 points (OAF version) or 48 points (OIF version).

POWER SUPPRESSION FIELD GENERATOR

Effect: Suppress 10d6
Target: 32m Radius
Duration: Uncontrolled
Range: No Range
END Cost: 0
Breakability: 150 PD/150 ED

Description: When activated, this device generates a field that interferes with the use of all superpowers of a particular special effect within a 50m radius. The character must specify which special effect the Suppress affects when he buys the gadget. Alternately, at the GM's option, characters may use this device as if it were a sort of VPP, by allowing them to make appropriate Skill Rolls to set the device to the special effect they want to Suppress. If the characters miss the Skill Roll, the Suppression Field fails to work.

Game Information: Suppress 10d6, Expanded Effect + Variable Effect (all Powers of one special effect simultaneously, must be defined when device is built; +4), Area Of Effect (32m Radius; +1), Constant (+½), Reduced Endurance (0 END; +½), Uncontrolled (deactivated by destroying or turning off device; +½) (750 Active Points); OAF (-1), No Range (-½). Total cost: 300 points.

Options:

1) **Strong Generator:** Increase to Suppress 12d6. 900 Active Points; total cost 360 points.
2) **Weak Generator:** Decrease to Suppress 8d6. 600 Active Points; total cost 240 points.
3) **Large Generator:** This form of the Generator is so large it's difficult to move into position. Add Bulky (-½). Total cost: 250 points.
4) **Suppression Rifle:** This form of the Generator is a rifle-like weapon that can project the Suppression Field at a distance. Remove No Range (-½) but add Two-Handed (-½). Total cost: 300 points.
5) **Advanced Power Suppression Field Generator:** The character can change what special effect the Generator affects by making some alterations to the device. Change to: Variable Power Pool, 750 Pool + 750 Control Cost; OAF (-1), No Range (-½), Only To Create Suppression Field Effect (see above; -2). Total cost: 833 points.

1

SHRINKING RAY

Effect: Shrinking, Usable As Attack plus related Linked powers
Target: One character
Duration: Uncontrolled
Range: 100m
Charges: 4 Charges
Breakability: 75 PD/75 ED

Description: This insidious device projects a beam that shrinks a human being down to the size of an insect! It also reduces a normal human victim's STR and Running to insect-like levels (persons stronger and faster than normal suffer the same effect, but retain more overall STR and Running because they had more than normal to begin with). The victim returns to normal size after a month, or if he's exposed to the Shrinking Ray a second time.

Game Information:

Cost Power

45 **Shrinking Ray:** Shrinking (.032 m tall [about 1 inch], .0004 kg mass, -12 to PER Rolls to perceive character, +12 DCV, takes +36m KB), Usable As Attack (does not work against characters who have Density Increase, Desolidification, Growth, or Shrinking; +1¼), Limited Range (100m; +¼), Reduced Endurance (0 END; +½), Persistent (+¼), Uncontrolled (effects wear off after a month, or if the victim is exposed to the Shrinking Ray while shrunk; +½) (153 Active Points); OAF (-1), 4 Charges (-1)

107 **Shrinking Ray:** Drain STR 15d6 (standard Effect: -45 STR), Constant (+½), Reduced Endurance (0 END; +½), Uncontrolled (effects wear off after a month, or if the victim is exposed to the Shrinking Ray while shrunk; +½) (375 Active Points); OAF (-1), 4 Charges (-1), Limited Range (100m; -¼), Linked (to Shrinking; -¼), Victim Always Has Minimum Of 1 STR (-0)

28 **Shrinking Ray:** Drain Running 4d6 (standard Effect: -10m), Constant (+½), Reduced Endurance (0 END; +½), Uncontrolled (effects wear off after a month, or if the victim is exposed to the Shrinking Ray while shrunk; +½) (100 Active Points); OAF (-1), 4 Charges (-1), Limited Range (100m; -¼), Linked (to Shrinking; -½), Victim Always Retains Minimum Of 1m Running (-0)

Total cost: 180 points.

Options:

1) **Attached Shrinking Ray:** This form of the Ray is more difficult to take from the character. Change OAF (-1) to OIF (-½) throughout. Total cost 54 + 125 + 33 = 212 points.

2) **Variant Shrinking Ray:** GMs who prefer a more predictable effect for this weapon, and who don't mind bending the rule about substituting Transform for other Powers, can build the Shrinking Ray this way instead: Severe Transform 10d6 (normal-sized person or object to person or object one inch tall with STR -35 [but no less than 1 STR], Running 1m, and other relevant abilities appropriately reduced; heals back after one month or when exposed to Shrinking Ray a second time), Constant (+½), Reduced Endurance (0 END; +½) (300 Active Points); OAF (-1), 4 Charges (-1), Limited Range (100m; -¼). Total cost: 92 points.

STEEL TENTACLES

Val	Char	Cost	Roll	Notes
50	STR	40	19-	Lift 25 tons; 10d6 HTH damage [0]
20	DEX	20	13-	
10	CON	0	11-	
10	INT	0	11-	PER Roll 11-
0	EGO	0	—	
25	PRE	15	14-	PRE Attack: N/A
7	OCV	20		
7	DCV	20		
0	OMCV	0		
0	DMCV	0		
5	SPD	30		*Phases:* 3, 5, 8, 10, 12
20	PD	57		*Total:* 20 PD (20 rPD)
20	ED	57		*Total:* 20 ED (20 rED)
10	REC	6		
0	END	-4		
20	BODY	10		
—	STUN	—		**Total Characteristics Cost: 271**

Movement: Running: 22m

Cost	Powers	END
15	**Robot Body:** Does Not Bleed	0
45	**Robot Body:** Takes No STUN	0
25	**Tireless:** Reduced Endurance (0 END; +½) on 50 STR	0
6	**Tireless:** Reduced Endurance (0 END; +½) on base Running	0
1	**Tireless:** Reduced Endurance (0 END; +½) on Leaping	0
1	**Tireless:** Reduced Endurance (0 END; +½) on Swimming	0
5	**Four Tentacles:** Extra Limbs ("feet" limbs as manipulatory as "hands")	0
9	**Long Tentacles:** Reach +9m	0
60	**Steel Body:** Resistant (+½) for 20 PD/20 ED	0
35	**Robot Body:** Life Support: Total	0
15	**Long "Legs":** Running +10m (22m total) Reduced Endurance (0 END; +½)	0
5	**Neural Link:** Mind Link (with character)	0
	Skills	
32	+4 HTH	

Total Powers & Skills Cost: 254

Total Cost: 525

400 Matching Complications (75)

10	**Physical Complication:** Affected By Cyberkinesis (has EGO 25 for purposes of cyberkinetic powers, and can be affected by cyberkinesis-based Presence Attacks) (Infrequently, Slightly Impairing)
10	**Physical Complication:** Cannot Make Presence Attacks (Infrequently, Slightly Impairing)
25	**Psychological Complication:** Must Obey Wearer's Commands (Very Common, Total)

Total Complications Points: 45

Experience Points: 155

SOUND MIMICRY SYSTEM

Effect: Hearing Group Images, -3 to PER Rolls

Target: 112m Radius

Duration: Constant

Range: 180m

END Cost: 3

Breakability: 6 PD/6 ED

Description: This device, which is built into a helmet, suit of powered armor, or the like, allows the user to create a wide variety of sound effects.

Game Information: Hearing Group Images, -3 to PER Rolls, Area Of Effect (32m Radius; +1) (28 Active Points); OIF (-½). Total cost: 19 points.

Options:

1) **Strong System:** Increase to -6 to PER Rolls. 46 Active Points; total cost 31 points.
2) **Weak System:** Decrease to -2 to PER Rolls. 22 Active Points; total cost 15 points.
3) **Realistic System:** The System has its own built-in battery with enough energy for a short period of use. Add 60 Charges (+½). 35 Active Points; total cost 23 points.
4) **Experimental System:** The System uses some experimental components that don't always work properly. Add Activation Roll 14- (-¼). Total cost: 16 points.

STEEL TENTACLES

Effect: Automaton Follower

Target: N/A

Duration: N/A

Range: N/A

END Cost: N/A

Breakability: Special

Description: The character has a set of four steel tentacles that attach to a harness he wears on his body. Longer, stronger, and more durable than his own arms, they give him a significant advantage in HTH Combat.

In game terms, the tentacles-and-harness are defined as an Automaton which the character buys as a Follower. That way they can act, and are affected by attacks, separately from the character — an RKA or Drain STR used on the tentacles won't injure the character or reduce his STR, for example. As a Follower, the tentacles are *technically* free-willed, but for the sake of common and dramatic sense it's best to treat them like an

ordinary device and let the character control them absolutely (the device's Psychological Complications reflect this).

The Tentacles has four limbs like other Automatons. However, instead of being defined as "legs" and "arms," they're defined as the four tentacles, with two of them bought as Extra Limbs so the "feet" are as dexterous as the "hands."

For ease of game play, it often works best if the Tentacles have the same DEX and SPD as the character wearing them. If necessary, adjust the device's DEX and SPD. The GM may also want the character to "synch up" other aspects of the two characters, such as Combat Skill Levels or INT.

Game Information: See character sheet. Total cost to character: 105 points.

Options:

1) **Simplified Steel Tentacles:** A simpler, albeit less accurate, way to buy Steel Tentacles is simply as Extra Limbs with some Stretching and STR:

Cost	Power
3	**Steel Tentacles:** Extra Limbs (4); OIF (-½)
8	**Steel Tentacles:** Stretching 10m, Reduced Endurance (0 END; +½); OIF (-½), Limited Body Parts (Extra Limbs only; -¼)
15	**Steel Tentacles:** +30 STR; OIF (-½), Only With Extra Limbs (-½)

Total cost: 26 points.

2) **Multiple Tentacles:** Instead of buying all four tentacles as one Follower, a character could buy the Follower with just one tentacle, then buy four times the number of Followers for +10 Character Points. That way each tentacle could act independently.

STUN DART PROJECTOR

Effect: Drain STUN 4d6
Target: One character
Duration: Instant
Range: 400m
Charges: 10
Breakability: 8 PD/8 ED

Description: This pistol uses compressed air to fire tiny darts tipped with a powerful knockout drug. The darts must penetrate the skin to introduce the drug into the victim's bloodstream; therefore the shooter must target unprotected parts of the body.

Game Information: Drain STUN 4d6 (40 Active Points); OAF (-1), Must Target Unprotected Hit Locations (-¼), 10 Charges (-¼). Total cost: 16 points.

Options:

1) **Strong Darts:** Increase to Drain STUN 6d6. 60 Active Points; total cost 24 points.
2) **Weak Darts:** Decrease to Drain STUN 2d6. 20 Active Points; total cost 8 points.
3) **Realistic Darts:** The darts aren't heavy enough, or the compressed air powerful enough, for the Projector to fire them very far. Add Limited Range (50m; -¼). Total cost: 14 points.
4) **Experimental Darts:** Sometimes the Dart Projector jams or misfires. Add Activation Roll 14- (-¼). Total cost: 14 points.
5) **Long-Lasting Darts:** The drug on the darts has an extended effect on the victim. Add Delayed Return Rate (points return at the rate of 5 per Minute; +1). 80 Active Points; total cost 32 points.
6) **Variant Dart Projector I:** This form of Dart Projector is built as an NND Blast, making certain potential victims immune. Change to Blast 5d6, NND (defense is appropriate Life Support [Immunity] or not having a circulatory system; +1). 50 Active Points; total cost 20 points.
7) **Variant Dart Projector II:** Instead of Draining STUN, you can use this same writeup for a Dart Projector that fires other types of darts, such as:

   Weakness Darts: Drain STR
   Numbness Darts: Drain DEX
   Neurodarts: Drain INT
   Paralytic Darts: Drain SPD

   You could even build the weapon as a Multipower with different types of darts the user can select from; a five-slot Multipower where each slot is like the writeup above but targets a different Characteristic would cost 26 points.
8) **Bigger Clip:** This form of Dart Pistol has a lot more darts. Change to 25 Charges (+¼). 50 Active Points; total cost 22 points.
9) **Dart Projector Bracer:** This form of the weapon is built as a bracer worn on the wrist, not a pistol. Change OAF (-1) to OIF (-½). Total cost: 20 points.

SUPER-FLAMETHROWER

Effect: Various Fire-based Attack Powers
Target: Varies
Duration: Varies
Range: Varies
Charges: 125 Charges for entire reserve
Breakability: 16 PD/16 ED

Description: This weapon is a high-tech version of a standard flamethrower. It has a variety of settings the user controls by pressing buttons with his thumb or carefully squeezing the variable-use trigger. It can fire a concentrated stream of flame, larger balls or cones of flame, or a series of large gouts of flame. Perhaps most interestingly, the user can soak a person in unburned fuel, then with the tiniest flick of the trigger, send a spark down the fuel stream to immolate the target. (This is bought as a Continuous Uncontrolled attack, with Reduced Endurance even though the Super-Flamethrower uses Charges, to represent how the victim keeps burning until the fire is put out.)

The Super-Flamethrower uses a special form of highly-concentrated jet fuel contained in a reservoir built into the weapon. At the GM's option, a character could refuel with ordinary gasoline (which reduces each slot's damage by 2 DCs, or perhaps more).

Game Information:

Cost	Power
39	**Super-Flamethrower:** Multipower, 45-point reserve, 125 Charges for entire reserve (+¾); all OAF (-1)
2f	**1) Concentrated Firestream:** RKA 2d6, Armor Piercing (+¼); OAF (-1)
1f	**2) Fireball:** RKA 2d6 (14m Radius Explosion; +¼); OAF (-1), Requires 3 Charges Per Use (-½)
2f	**3) Rapid-Fire Mini-Fireballs:** RKA 1d6, Armor Piercing (+¼), Area Of Effect (1m Radius; +¼), Autofire (5 shots; +1½); OAF (-1), Requires 2 Charges Per Use (-¼)
1f	**4) Cone Of Fire:** RKA 2d6, Area Of Effect (16m Cone; +½); OAF (-1), No Range (-½), Requires 3 Charges Per Use (-½)
2f	**5) Fuel Stream:** RKA 1d6, Armor Piercing (x2; +½), Constant (+½), Uncontrolled (removable by any means that snuffs the fire; +½), Reduced Endurance (0 END; +½); OAF (-1), Limited Range (20m; -¼), Requires 3 Charges Per Use (-½)

Total cost: 47 points.

Options:

1) **Strong Flamethrower:** Increase reserve to 67 points, Slots 1, 2, and 4 to RKA 3d6, and Slots 3 and 5 to RKA 1d6+1. Total cost: 70 points.
2) **Realistic Flamethrower:** Unfortunately, the weapon can be as dangerous to the user as to his enemies. If it takes even a single point of BODY damage past its defenses from an energy attack (or any other attack that could ignite the fuel), it bursts into flame, causing the user to take 2d6 damage every Phase (no defense) until the flames are extinguished. You can represent this with a -¼ Limitation on the reserve. Total cost: 43 points.
3) **Larger Reservoir:** This form of the Super-Flamethrower has more fuel and thus requires less frequent refilling. Change to 250 Charges for entire reserve (+1). Total cost: 53 points.
4) **Smaller Reservoir:** Decrease to 64 Charges for entire reserve (+½). Total cost: 41 points.
5) **Attached Flamethrower:** This form of the Super-Flamethrower is built into a gauntlet, powered armor suit, or the like; it's much harder to take away from the character. Change OAF (-1) to OIF (-½) throughout. Total cost: 64 points.

TITANOBELT

Effect: Growth (32 m tall)
Target: Self
Duration: Constant
Range: Self
END Cost: 12
Breakability: 24 PD/24 ED

Description: This belt emits an energy field or gas that causes the wearer to grow to a height of about 100 feet, making him proportionately stronger and tougher as well.

Game Information: Increase to Growth (+60 STR, +20 CON, +20 PRE, +12 PD, +12 ED, +12 BODY, +24 STUN, +15m Reach, +48m Running, -24m KB, +8 to others' OCV to hit character, +8 to others' PER Rolls to perceive character, 32m tall, 16m wide, 400,000 kg) (120 Active Points); OIF (-½). Total cost: 80 points.

Options:

1) **Strong Titanobelt:** Increase to Growth (+75 STR, +25 CON, +25 PRE, +15 PD, +15 ED, +15 BODY, +30 STUN, -30m, +31m Reach, +60m Running, -30m KB, +10 to others' OCV to hit character, +10 to others' PER Rolls to perceive character, 64m [about 200 feet] tall, 32m wide, 3,200,000 kg). 150 Active Points; total cost 100 points.
2) **Weak Titanobelt:** Decrease to Growth (+45 STR, +15 CON, +15 PRE, +9 PD, +9 ED, +9 BODY, +18 STUN, +7m Reach, +36m Running,-18m KB, +6 to others' OCV to hit character, +6 to others' PER Rolls to perceive character, 16m tall, 8m wide, 50,000 kg). 90 Active Points; total cost 60 points.
3) **Experimental Titanobelt:** The energies (or gas) that allow this belt to function don't always interface properly with the human biosystem; fluctuations may cause the character to spontaneously revert to normal size on occasion. Add Activation Roll 14- (-¼). Total cost: 68 points.

TRACTOR BEAM GENERATOR

Effect: Telekinesis (30 STR)
Target: One character
Duration: Constant
Range: 450m
END Cost: 4
Breakability: 9 PD/9 ED

Description: This handheld device manipulates gravitons and magnetism to move objects at a distance. The user can only move objects, not crush or "punch" them.

Game Information: Telekinesis (30 STR) (45 Active Points); OAF (-1), Affects Whole Object (-¼). Total cost: 20 points.

Options:

1) **Strong Generator:** Increase to Telekinesis (40 STR). 60 Active Points; total cost 27 points.

2) **Weak Generator:** Decrease to Telekinesis (20 STR). 30 Active Points; total cost 13 points.

3) **Realistic Generator:** The Generator's built-in battery only has enough power for a short time; after that the character must plug it into a special recharger. Add 1 Continuing Fuel Charge lasting 30 Seconds (-¾). Total cost: 15 points.

4) **Experimental Generator:** The miniaturized tractor beam technology is still balky and prone to sudden failure. Add Activation Roll 14- (-¼). Total cost: 18 points.

5) **Attached Generator:** The Generator is built into a costume, gauntlet, suit of armor, or the like, making it difficult to take it away from the user. Change OAF (-1) to OIF (-½). Total cost: 26 points.

6) **Advanced Tractor Beam:** This tractor beam is so sophisticated it can affect different parts of the same object differently, allowing it to "squeeze" or "punch" a target instead of just moving it. Remove Affects Whole Object (-¼). Total cost: 22 points.

TRICK UMBRELLA

Effect: RKA 2-3d6/Gliding 12m
Target: 1m Radius/16m Cone/Self
Duration: Instant/Instant/Constant
Range: 40m/No Range/Self
END Cost: 10 Charges/0 END
Breakability: 11 PD/11 ED

Description: This seemingly ordinary umbrella actually contains a sophisticated weapon — a flamethrower with adjustable blast size — and supports the user as if it were a parachute when opened.

Game Information:

Cost	Power
25	**Umbrella Flamethrower:** Multipower, 56-point reserve; OAF (-1), 10 Charges (-¼) for entire Multipower
2f	1) **Narrow Flame Blast:** RKA 3d6, Area Of Effect (1m Radius; +¼); OAF (-1), Limited Range (40m; -¼)
2f	2) **Wide Flame Blast:** RKA 2d6, Area Of Effect (16m Cone; +½); OAF (-1), No Range (-½)
3	**Umbrellachute:** Flight 12m (12 Active Points); OAF (-1), Gliding (-1), Gestures (character must hold the umbrella upward with one hand, throughout; -½), Limited Movement (character cannot gain altitude, and must move at least 12m downward for every 1m forward; -½), Lockout (cannot use Umbrella Flamethrower while parachuting; -½)

Total cost: 32 points.

Options:

1) **Helicopter Mode:** Instead of working as a simple parachute, the umbrella has a helicopter mode — the vanes and cloth spin at tremendous speed, allowing the user to fly. Replace Umbrellachute with (or buy in addition) Flight 16m (16 Active Points); OAF (-1), Gestures (character must hold the umbrella upward with one hand, throughout; -½), Lockout (cannot use Umbrella Flamethrower while parachuting; -½) (total cost: 5 points). Total cost of Trick Umbrella: 34 points (or 37 points if Helicopter Mode is bought in addition to Umbrellachute).

2) **Bumbershooter:** Instead of a flamethrower, the Trick Umbrella conceals a simple but effective machine gun. (Alternately, the character can buy this ability in addition to the flamethrower.) Replace Umbrella Flamethrower with RKA 2d6, Autofire (3 shots; +¼), Armor Piercing (+¼), 30 Charges (+¼) (52 Active Points); OAF (-1), No Knockback (-¼), Beam (-¼) (total cost: 21 points). Total cost of Trick Umbrella: 24 points (or 26 points if Bumbershooter is bought in addition to Umbrella Flamethrower).

UTILITY BELT

Effect: Various
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: 6 PD/6 ED

Description: A utility belt is a way to carry numerous small devices a character may find useful in crimefighting situations (they're particularly popular with weaponmasters, martial artists, costumed vigilantes, and the like). If a belt is not to the character's taste, other possibilities include a vest, a harness or bandolier with cartridge belt-like pockets, or the like.

The Utility Belt listed below carries an enormous number of gadgets, and creative players can undoubtedly think of many more. A character may buy any or all of these gadgets, as desired. The GM may prefer to have a character pick a limited number of them — say, 15 or 20 at most — to keep things from getting out of hand.

Game Information:

Cost	Power
20	**Utility Belt:** Multipower, 30-point reserve; OIF (-½)
1f	1) **Advanced Lockpick Set:** +2 to Lockpicking; OAF (-1)
1f	2) **Billy Club:** HA +3d6, Reduced Endurance (0 END; +½); OAF (-1), Hand-To-Hand Attack (-¼)
1f	3) **Bomb Defusing Kit:** +2 to Demolitions; OAF (-1), Only To Defuse Bombs (-¼)
1f	4) **Boomerang:** Blast 4d6, Reduced Endurance (0 END; +½); OAF (-1)
1f	5) **Calculator:** Lightning Calculator; OAF (-1)
1f	6) **Crime Scene Kit:** +2 to Criminology; OAF (-1), 8 Charges (-½)

1f **7) Fake Bomb:** Sight and Hearing Group Images 1m radius, -5 to PER Rolls; OAF (-1), 1 Charge (-2), Set Effect (fake bomb; -1)

1f **8) Fear Darts:** Drain PRE 2d6; OAF (-1), Must Target Non-Armored Hit Locations (-¼), Range Based On STR (-¼), 6 Charges (-¾)

1f **9) Flashlight:** Sight Group Images, +4 PER Rolls; OAF (-1), Only To Create Light (-1), Limited Range (20m; -¼), 1 Continuing Fuel Charge (refueled by recharging, easy to obtain; 1 Hour; -0)

1f **10) Flash Pellets:** Sight Group Flash 6d6; OAF (-1), 6 Charges (-¾), Range Based On STR (-¼)

1f **11) Freeze Gas:** Minor Transform 6d6 (normal object to frozen stiff object, "heal" by thawing out at normal rate); OAF (-1), 4 Charges (-1) (note: Freeze Gas is for use against the working parts of an alarm, a bomb, and so forth, not against living creatures)

1f **12) Laser Torch:** 1 pip RKA, Penetrating (x2; +1), Reduced Endurance (0 END; +½); OAF (-1), No Range (-½)

1u **13) Medkit:** +2 to Paramedics; OAF (-1), 4 Charges (-1)

1f **14) Miniature Climbing Rig:** +2 to Climbing; OAF (-1)

1f **15) Mini-bolos:** Entangle 3d6, 3 PD/3 ED; OAF (-1), 3 Charges (-1 ¼)

1f **16) Mini-camera:** Eidetic Memory; OAF (-1), Visual Images Only (-½)

1f **17) Mini-Console:** HRRP (Radio Group); OAF (-1)

1f **18) Mini-radios:** Mind Link, up to 4 minds at once; OAF (-1), Affected As Hearing And Radio Groups, Not Mental Group (-¼), Only Works With Others Who Have Same Mind Link (-1)

1f **19) Mini-recorder:** Eidetic Memory; OAF (-1), Sound Only (-½)

1f **20) Nightsight Monocular:** Infrared Perception (Sight Group) and +6 versus Range Modifier for Sight Group; OAF (-1)

1f **21) Painkillers:** Physical and Energy Damage Reduction, Resistant, 25%; OAF (-1), 2 Continuing Charges lasting 1 Hour each (-0)

1f **22) Paint Tag Bomb:** Cosmetic Transform 6d6 (normal person to person painted bright red, heal by washing with vinegar), Partial Transform (see page 179; +½); OAF (-1), 4 Charges (-1), Range Based On STR (-¼)

1f **23) Parabolic Mini-Mike:** +6 versus Range Modifier for Hearing Group; OAF (-1)

1f **24) Rebreather:** Life Support (Expanded Breathing: Breathe Underwater); OAF (-1), 1 Continuing Fuel Charge (refueled through recharging system, easy to obtain; 1 Hour; -0)

1f **25) Security Systems Analyzer:** +2 to Security Systems; OAF (-1)

1f **26) Sleep Gas Pellets:** Blast 3d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1); OAF (-1), 6 Charges (-¾), Range Based On STR (-¼)

1f **27) Smoke Pellets:** Darkness to Sight Group 6m radius; OAF (-1), 8 Continuing Charges lasting 1 Turn each (removed by high winds or rain; -0), Range Based On STR (-¼)

1f **28) Swingline:** Swinging 20m, Reduced Endurance (0 END; +½); OAF (-1)

1f **29) Thermite Pellets I:** RKA 1d6, Armor Piercing (+¼), Area Of Effect (6m Radius Explosion; +¼); OAF (-1), 6 Charges (-¾), Range Based On STR (-¼)

1f **30) Thermite Pellets II:** RKA 1d6, Constant (+½); OAF (-1), 6 Continuing Charges lasting 1 Turn each (-¼), Range Based On STR (-¼)

1f **31) Throwing Blades:** HKA ½d6 (up to 1d6+1 w/ STR), Armor Piercing (+¼), Autofire (3 shots; +¼), Range Based On STR (+¼); OAF (-1), 6 Recoverable Charges (-¼)

1f **32) Vertigo Darts:** Drain DEX 3d6; OAF (-1), Must Target Non-Armored Hit Locations (-¼), Range Based On STR (-¼), 6 Charges (-¾)

1f **33) Weakness Darts:** Drain STR 3d6; OAF (-1), Must Target Non-Armored Hit Locations (-¼), Range Based On STR (-¼), 6 Charges (-¾)

Total cost: 53 points (assuming character buys all slots)

WEB PROJECTOR

Effect: Swinging 30m, Entangle 5d6, 5 PD/5 ED, and others
Target: Varies
Duration: Varies
Range: Varies
Charges: 4 clips of 32 Charges each
Breakability: 17 PD/17 ED

Description: This device, typically built to be worn around the wrist or incorporated into a suit of armor, shoots a line or fluid that resembles high-tech spider webbing. The user can project a line of webs to swing from, or tie other people up in his webs. Other possible applications include spraying the webbing across a target's eyes or mouth, building a parachute or protective bubble out of webbing, creating a hard "ball" or tougher line of webbing to shoot at targets, and even spinning an impromptu shield for extra protection against attacks.

At the GM's option, the user can adapt the Barrier powers of this device to create simple storage devices of webbing — a web-backpack or web-bag, for example. This may require a *Use Web Projector* roll.

Game Information:

Cost Power

50 **Web Projector:** Multipower, 50-point reserve, 4 clips of 32 Charges for entire reserve (+½); OIF (-½)

1f **1) Webline:** Swinging 30m; OIF (-½)

1f **2) Web-Grab:** Reach +19m; OIF (-½)

2f **3) Webbed Up:** Entangle 5d6, 5 PD/5 ED; OIF (-½), Requires 3 Charges Per Use (-½), Limited Range (40m; -¼)

2f **4) Web-Ball/Web-Blast:** Blast 6d6; OIF (-½), Limited Range (40m; -¼)

1f **5) Web Wall/Bubble:** Barrier 6 PD/6 ED, 8 BODY (up to 4m long, 4m high, ½m thick); OIF (-½), Restricted Shape (must join ends to form a bubble or dome, or must be anchored on all sides; -¼), Requires 8 Charges Per Use (-¾), Limited Range (40m; -¼)

3f **6) Here's Webs In Your Eye:** Sight Group Flash 10d6, NND (defense is STR 30+ or web-proof eye coverings; +0); OIF (-½), Limited Range (40m; -¼)

1f **7) Web Gag:** Darkness to Hearing Group 1m radius, Usable As Attack (does not work against persons with STR 30+, web-proof masks or skin, or the like; +1¼), Ranged (+½); OIF (-½), Only Affects One Person (-½), Only Prevents Speech, Not Hearing (-1)

1f **8) Web Shield:** Resistant Protection (6 PD/6 ED); OIF (-½), Activation Roll 14- (-¼), Ablative (-½)

1f **9) Webchute:** Flight 12m; OIF (-½), Gliding (-1), Requires 3 Charges Per Use (-½), Limited Movement (character cannot gain altitude, and must move at least 12m downward for every 1m forward; -½)

1f **10) Web-Footfloats:** Flight 4m; OIF (-½), Requires 3 Charges Per Use (-½), Only On The Surface Of Calm Waters (-1), Extra Time (Full Phase; -½)

Total cost: 61 points.

Options:

1) *Web-Pistol:* Instead of being a worn device, this is a hand-held pistol-shaped weapon. Change to OAF (-1). Total cost: 48 points.

WRIST-ROCKETS

Effect: Blast 8d6 with Explosion or Penetrating
Target: 18m Radius Explosion/One character
Duration: Instant
Range: 400m
Charges: 4 per slot
Breakability: 12 PD/12 ED

Description: This bracer-like device is worn on the wrist. It mounts eight micro-rockets, four each of Explosive and Shaped-Charge types, which the user fires through arm-pointing and galvanic response (or cybernetic) command.

Game Information:

Cost Power

40 **Wrist-Rockets:** Multipower, 60-point reserve; all OIF (-½)

2f **1) Explosive Rocket:** Blast 8d6, Area Of Effect (18m Radius Explosion; +½); OIF (-½), 4 Charges (-1)

2f **2) Shaped-Charge Rocket:** Blast 8d6, Penetrating (+½); OIF (-½), 4 Charges (-1)

Total cost: 44 points.

Options:

1) Strong Wrist-Rockets: Increase reserve to 75 points and both slots to 10d6. Total cost: 56 points.

2) Weak Wrist-Rockets: Decrease reserve to 45 points and both slots to 6d6. Total cost: 34 points.

3) Realistic Wrist-Rockets: The micro-rockets don't have enough fuel to fly very far. Add Limited Range (100m; -¼) to reserve and both slots. Total cost: 38 points.

4) Experimental Wrist-Rockets: Some micro-rockets are duds. Add Activation Roll 14- (-¼) to reserve and both slots. Total cost: 38 points.

5) Indirect-Fire Rockets: The micro-rockets can strike the target from any angle thanks to their built-in cybernetic guidance system. Increase reserve to 80 points and add Indirect (Source Point is always the character, but Path can alter from use to use to strike target from any angle; +½) to both slots. Total cost: 59 points.

6) Other Types Of Rockets: Here are some other types of micro-rockets, each built on 60 Active Points, that a character could fire from a Wrist-Rocket. Characters can replace an existing Multipower slots with one of these, or add slots — but if he adds slots, the total number of rockets should never exceed eight, so he'll have to change the Charges and recalculate the slot values.

Capturefoam Rocket: Entangle 4d6, 4 PD/4 ED, Area Of Effect (18m Radius Explosion; +½); OIF (-½), 4 Charges (-1)

Flare Rocket: Sight Group Flash 8d6 (18m Radius Explosion; +½); OIF (-½), 4 Charges (-1)

Frag Rocket: RKA 2½d6 (18m Radius Explosion; +½); OIF (-½), 4 Charges (-1)

SCIENCE FICTION WEAPONS

Weapons are among Humanity's oldest technology, and are an area where progress tends to be rapid no matter what type of Science Fiction setting the game takes place in. In theory the number of weapons in a Science Fiction campaign could be larger than in any other type of game, due to each species having its own version of each type of weapon, variations based on the number of manipulatory limbs a species has, and so forth. In practice, though, for gaming purposes it's usually sufficient to define a relatively small number of weapons and assume that the myriad variations aren't important in *HERO System* terms.

In Space Opera Science Fiction games, and others where technology is extremely advanced, many of the weapons from the *Superheroic Weapons* section of this chapter, above, are appropriate. They're not reprinted here, but you can easily adapt them to a Star Hero game simply by changing a weapon's name to something more suitable to the genre. Similarly, weapons from the Modern era aren't reprinted here, though they may be common in some Science Fiction settings.

MELEE WEAPONS

As advanced as weapons may get, sometimes nothing beats a good, old-fashioned club or axe. Melee weapons crop up in Science Fiction frequently, both in the fists of primitive natives and in the hands of characters also versed in the use of blasters and teleporters.

ALIEN BLADES

It's become common in recent film and television SF to give alien cultures their own unique bladed weapons. This usually allows for a certain amount of "ethnic bad-ass" effect — someone from another culture armed with a weird or archaic weapon is always more effective than a regular guy with a regular sword or knife.

Most alien weapons are simply varieties of HKA with spiky bits for added coolness. There are some principles to keep in mind, however. One is that size matters — an alien species uses weapons appropriate to its members' average size and strength (see 6E2 203 for more information; the data in the accompanying table assumes a roughly human-sized user). Another factor is alien anatomy. Boneless or tentacled aliens go for swinging weapons like axes and broadswords; short-limbed species may prefer thrusting weapons. It's also worth considering the anatomy of what the aliens usually fight. Aliens with natural body armor may develop armor-piercing hand weapons like rapiers and daggers, or whips and garrotes to entangle and strangle.

Here are some examples taken from Hero Games's *Terran Empire* setting:

Ackálian Sickle: The traditional hand weapon of the Ackálians, this is a one-handed sharp blade curved forward to strike point-first. The outer edge is sometimes sawtoothed for backhand slashes. Ackálians are strong enough to fight with one in each hand, and normally carry sickles in scabbards strapped to the thighs.

Mon'dabi *Cha'shur*: The *cha'shur* is a weapon similar to an axe, but with a slightly downward-curving spike attached to the upper outer edge of the blade, pointing forward. Heavy, and often unwieldy, the weapon was originally designed to punch through the thick skins of Mon'da's many fearsome reptilian predators.

Se'ecra Wrist-Blades: Worn by the insectoid Se'ecra, this weapon consists of a heavy leather or metal wrist-band with one or more blades projecting outward. The shape and number of blades varies, but most have one to three blades that curve forward.

CHAINSWORD

A stereotypical weapon in some Science Fiction settings, the chainsword is a chainsaw converted into a sword-like weapon, with a razor-sharp cutting chain rotating around the blade at high speed. It can cut through armor with ease, and is particularly useful for broad sweeping attacks (*i.e.,* Multiple Attacks) against masses of robots, zombies, or other simple foes.

A chainsword has the *No STR Bonus* (-½) Limitation, since the user's strength isn't a primary factor in how much damage it does. Strictly speaking it should have a Fuel Charge (representing how long its motor can keep it running), but this rarely seems to be a factor in fiction so it simply has Reduced Endurance (0 END; +½) instead.

SCIENCE FICTION HAND-TO-HAND WEAPONS TABLE

Weapon	OCV	Dam	STUNx	STR Min	BODY	Def	Mass	A/R Cost	Length	Origin	Notes
Ackálian Sickle	+0	1d6	+0	12	4	4	0.7	22/8	S	Ackál	
Chainsword I	+0	3d6 AP2	+0	15	6	5	3.0	92/27	M	Various	
Chainsword II	+0	1d6 AP2	+0	15	6	5	3.0	47/14	M	Various	AF5 (single target only)
Energy Sword	+0	3d6 NND	+0	—	6	6	0.3	349/122	M		RKA 3d6 DS if struck
Force Blade	+0	3d6 NND	+0	—	6	6	0.3	373/134	M		RKA 3d6 DS if struck, ResP (6 PD/10 ED)
Intertial Gloves	+0	5d6 N	—	—	3	3	0.1	56/22	S	Various	
Mon'dabi Cha'shur	+0	2d6	+0	15	6	4	2.1	47/16	M	Mon'da	
Se'ecra Wrist-Blades	+0	½d6	+0	7	3	3	0.4	15/5	S	Se'ecra	
Stun Rod	+0	6d6 NND	—	—	4	4	0.3	75/27	S		

See the Key and Notes for the Fantasy Hand-To-Hand Weapons Table on page 15 for an explanation of abbreviations and terms. The "N" in the damage column stands for "Normal Damage."

ENERGY BLADES

A mainstay of Space Opera SF ever since *Star Wars,* energy blades have a variety of names: lightsabers, force swords, laser-blades, photonic rapiers, and so forth. Typically, they're rare, difficult to build, and/or restricted to a limited group of warriors. Possible explanations for them include molecularly-thin force-fields or energy fields, molecularly-thin wire stiffened by an internal force-field, and force-fields containing a laser bolt or superheated plasma. The blade can cut through any matter with its subatomically sharp "edge"; only another energy blade, or a force-field of some sort, can stop an energy blade.

A character armed with an energy blade can often use it to do other things besides cut, slash, and block. He may be able to Block energy bolts, or even fire them himself from his blade (Blast, RKA). A skilled user can weave such a "web" around himself that anyone who comes close gets hurt (similar to the "Weapon Flourish" or "Whirling Spear Strike" abilities on HSMA 130, 152).

Presented below are two examples. One is a basic Energy Sword, which damages not only that which it strikes, but any matter which strikes it. The other is a more sophisticated Force Blade, that can also project a protective force screen around its wielder. Both require WF: Energy Blades. Strictly speaking either type should have a Fuel Charge (representing how long its battery can maintain the blade), but this rarely seems to be a factor in fiction so they simply have Reduced Endurance (0 END; +½) instead.

ENERGY SWORD

Cost Power

122 **Energy Sword:** RKA 3d6, NND (defense is ED Resistant Protection defined as a force-field, or the like, an ED Barrier, or being blocked by another energy blade; +1), Does BODY (+1), Reduced Endurance (0 END; +½) (157 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼) (total cost: 57 points) **plus** RKA 3d6, NND (defense is ED Resistant Protection defined as a force-field, or the like, an ED Barrier, or being blocked by another energy blade; +1), Does BODY (+1), Area Of Effect (personal Surface — Damage Shield; +¼), Constant (+½), Reduced Endurance (0 END; +½) (191 Active Points); OAF (-1), Linked (-¼), Only Affects Material Objects Which Strike Blade (-½), Real Weapon (-¼) (total cost: 64 points) **plus** Reach +1m (1 Active Point); OAF (-1), Real Weapon (-¼) (total cost: 1 point)

FORCE BLADE

Cost Power

122 **Force Blade:** As Energy Sword, above

12 **Force Screen:** Resistant Protection (6 PD/10 ED) (24 Active Points); OAF (-1)

Total cost: 134 points.

MISCELLANEOUS SCIENCE FICTION MELEE WEAPONS

Here are a few more example melee weapons. Each requires its own WF to use properly.

Inertial Gloves: These are heavy gauntlets equipped with rubber science inertia-enhancing generators. The user triggers the effect in mid-swing, so the gloves hit like a freight train. This weapon requires its own WF to use properly.

Stun Rod: Law enforcement agents and soldiers on peacekeeping missions have long wished for a reliable way to subdue people without deadly force. Stun rods are the answer — a short baton with a contact-triggered neural stun pulse. The victim feels no pain, only numbness and weakness. Stun Rods are part of WF: Clubs, though a few moments' instruction on how the control buttons work is helpful.

RANGED WEAPONS

As popular as melee weapons may be, in most cases they can't beat a Ranged weapon, whether it's a chemical-propellant gun or the most advanced disintegrator available. Here are some of the types of Ranged weapons available in Star Hero settings. (See also *Firearms Of The Future* on page 87.)

NOTES

1) The first-generation electron weapon, an Electron Rifle is reasonably robust, and can be boosted for extra effect. Its pilot beam acts as a laser sight. The pistol version of the same weapon has 16 Boostable Charges and STR Min 10; it's a more refined development of the electron rifle, commonly used as a law-enforcement weapon.

ELECTRON RIFLE

Cost Power

10 **Electron Rifle:** Multipower, 30-point reserve, 20 Boostable Charges (+½) for entire Multipower; all OAF (-1), Real Weapon (-¼), STR Minimum (14; -¾), Two-Handed (-½)

1f **1) Standard Setting:** Blast 6d6; common Limitations (-2½), Beam (-¼), Does Not Work In Vacuum, In Water, In Magnetic Fields, Or Against Targets Encased In Metal (-¾)

1f **2) Stun Setting:** Blast 3d6, NND (defense is being in vacuum, water, a magnetic field, or a metal casing, or having ED Resistant Protection defined as a force-field or the like; +1); common Limitations (-2½)

1 **Laser Pilot Beam:** +1 OCV; OAF (-1), Real Weapon (-¼)

3 **Well-Made Rifle:** +3 versus Range; OAF (-1), Real Weapon (-¼)

Total cost: 16 points

ELECTRON PISTOL

Cost Power

13 **Electron Pistol:** Multipower, 30-point reserve, 16 Boostable Charges (+¼) for entire Multipower; all OAF (-1), Real Weapon (-¼), STR Minimum (10; -½)

1f **1) Standard Setting:** Blast 6d6; common Limitations (-1¾), Beam (-¼), Does Not Work In Vacuum, In Water, In Magnetic Fields, Or Against Targets Encased In Metal (-¾)

1f **2) Stun Setting:** Blast 3d6, NND (defense is being in vacuum, water, a magnetic field, or a metal casing, or having ED Resistant Protection defined as a force-field or the like; +1); common Limitations (-1¾)

1 **Laser Pilot Beam:** +1 OCV; OAF (-1), Real Weapon (-¼)

Total cost: 16 points

2) The Multi-Purpose Energy Weapon is a powerful pistol-sized blaster device found in some Space Opera and Pulp Science Fiction settings. It has various offensive and utilitarian functions: stunning, blasting, disintegration, even projecting a low-power burst at a rock or metal wall to provide heat in cold climates. It's so high-tech and sophisticated it doesn't qualify as a Real Weapon or have a STR Minimum — even a small child can pick it up, press the trigger-button, and wreak havoc.

In *HERO System* terms, this weapon is built as a Multipower with three primary slots (stun, blast, disintegrate) plus a fourth slot that's a naked Area Of Effect (Radius) that can be applied to any of the three slots. The Multipower's reserve is large enough to account for applying the Advantage to any of those slots. The Radius's size equals 2m per 1d6 in the Blast slots, and 1m for the Disintegrate slot. (Ordinarily this sort of construction is illegal. It's used here to make the weapon easier to write up and and read during game play.) The weapon has 1,000 Boostable Charges, and each slot has the *Requires Multiple Charges* Limitation. Each slot costs 1 Charge for each 1d6 of Normal Damage used (or each DC of Killing Damage), and applying the "Wide-Beam" (Area Of Effect) mode doubles that number. Thus, firing Slot 2 at 8d6 strength costs 8 Charges; if it's fired in Wide-Beam mode it costs 16 Charges.

MULTI-PURPOSE ENERGY WEAPON

Cost Power

495 **Multi-Purpose Energy Weapon:** Multipower, 360-point reserve, 1,000 Boostable Charges for entire reserve (+1¾); all OAF (-1)

5f **1) Stun Setting:** Blast 12d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1); OAF (-1), Requires Multiple Charges (see text; -½)

2f **2) Blast Setting:** Blast 12d6; OAF (-1), Requires Multiple Charges (see text; -½)

9f **3) Disintegration Setting:** RKA 6d6, NND (defense is ED Resistant Protection defined as a force-field, or the like; +1), Does BODY (+1); OAF (-1), -1 Decreased STUN Multiplier (-¼), Limited Range (50m; -¼), Reduced By Range (-¼), Requires Multiple Charges (see text; -½)

4f **4) Wide-Beam Mode:** Area Of Effect (Radius, see text; +1) for any of Slots 1-3; OAF (-1), Requires Multiple Charges (doubles regular number of Charges used, see text; -½)

1f **5) Heat Rocks/Metal:** RKA ½d6, Area Of Effect (Surface of any object up to human size; +¼), Constant (each Charge's effect lasts for 1 Minute; +½); OAF (-1), Requires Appropriate Substance To Be Heated (-¼)

Total cost: 516 points.

3) The Early Plasma Rifle is a good "ultimate weapon" for Cyberpunk-period and "early

interstellar exploration" campaigns. Its chief disadvantage is that mishaps are catastrophic for bystanders: if the Activation Roll fails, it creates a Blast 6d6 in a 24m Radius area.

4) The Early Gauss Cannon is a heavy gauss "assault cannon" intended for Cyberpunk-era games. It's not commercially available, but may be a top-secret military prototype or the latest from a megacorporation's laboratories. It has a very high rate of fire but requires large ammunition clips and an external power pack which pumps out a *lot* of waste heat. (In game terms it has Side Effect (automatic Change Environment +3 Temperature Levels over a 12m radius area, -1 Temperature Level per 4m; -¼).)

Science Fiction Pistols And Rifles

The following weapon types are often referred to generically as "blasters" in either pistol or rifle form.

DISINTEGRATORS

Disintegrators are a beloved weapon in Science Fiction, with almost no basis in reality. Most of them work by somehow suppressing the atomic forces which hold matter together — one hit, and the target flies apart! Other seem to apply energy damage on an atomic level uniformly to a target to thoroughly destroy it. The phasers of the old *Star Trek* series are, in part, a type of disintegrator; so are the disintegrator "tools" in Niven's *Ringworld*. In a campaign with disintegrators, GMs must consider the problems they create — murderers could literally make their victims disappear!

ELECTRON BEAMS

These are real technology — every television set has an electron beam generator inside it. A powerful beam of electrons traveling along a laser "pilot beam" (to create an ionized pathway for the electrons) would damage the target by heat and electrical effects. Magnetic fields deflect electron beams, and any kind of closed metal protection lets the charge pass around the target without doing any harm. In a vacuum the electrons repel one another, turning the deadly beam into a harmless spray; water also disperses the blast. Electron beams can be fired on both lethal and "stun" settings, with the latter delivering a shock strong enough to knock out opponents without doing permanent damage. All electron blasters have Boostable Charges.

GAUSS WEAPONS

Gauss weapons, or electromagnetic slugthrowers, use powerful magnetic fields to launch metal projectiles at high speeds. They have the advantange of being much quieter than chemical-propellant rifles, and can sustain very high rates of fire. Gauss weapons typically use very small caliber rounds, making their attacks Armor Piercing.

The chief disadvantage of Gauss weaponry is that like lasers and other energy weapons, they require a lot of energy. Early gauss weapons have disposable chemical-energy cartridges in a power pack; later ones have highly efficient batteries or capacitors. Heavy gauss guns use dedicated generators to achieve really massive rates of fire.

ION BEAMS

These weapons fire a beam of ionized gas at the target, doing damage by heat, impact, and secondary electrical effects. They are very close to the cinematic blaster weapon in terms of special effects. The ionized beam does glow brightly as it fires, and the bolts, while fast, do not travel at the speed of light. A disadvantage is that ion beams need both a supply of gas (usually argon or neon) to ionize and a power supply; most ion guns use special cartridges which are not compatible with other energy weapons or electrical devices. They cannot be "set to stun" and have no pilot beam as a sighting aid. At the GM's option, characters can substitute the equivalent DC in Killing Damage for the weapons' standard Normal Damage.

LASERS

Lasers are real technology; probably all *HERO System* players have lasers in their homes, in the form of CD players or laser pointers. As of 2010, the Pentagon is developing real laser antimissile systems, and laser rangefinders and target designators are standard military gear. Lasers emit beams of coherent light, in which all the light waves are in phase with one another. They are perfectly straight, and remain tightly concentrated over long distances. Higher-powered lasers use more energetic photons, like ultraviolet light, x-rays, or gamma rays.

As weapons, lasers do damage by suddenly superheating the surface of whatever they hit. The energies are modest, but concentrated into so tiny an area that they cause significant damage. Solid materials melt and shatter, and living tissue burns. More powerful lasers pierce better, and x-rays do additional damage from radiation effects. In combat, lasers are useful because it is very hard to detect where they were fired from (they only show up in the air if smoke or other particulates render them visible), there is no recoil, and they can fire as long as the power holds out.

The main limitation for lasers (as with any directed-energy weapon) is power. Early optical lasers use chemical reactions for sudden bursts of energy; later ultraviolet ones are powered by advanced capacitors. Hand-held X-ray lasers depend on micro-fusion powercells (in other words, "rubber science" power). Most laser weapons have built-in laser sights, using a low-power beam to paint a spot on the target before firing.

In game terms, lasers are Killing Attacks with the *Beam* Limitation. Ultraviolet lasers are Armor Piercing, and X-Ray or Gamma-Ray lasers are Armor Piercing and Penetrating. Early lasers are bulky and fragile, but over time they become more compact and durable.

SCIENCE FICTION PISTOLS

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Disintegrator Pistol	—	+2	+2	6d6 NND	-1	8 BC	10	1.2	100m	276/76	LR(100m), RR
Electron Pistol	—	+1	+1	Text	—	10 BC	10	1.3	Text	Text	Beam, 1
Ion Blaster, Mk I	—	+0	+1	8d6 N	—	12	9	1.1	100m	51/17	AF2, LR (100m)
Ion Blaster, Mk II	—	+1	+2	10d6 N	—	10	10	1.2	80m	65/21	AF2, LR (80m)
Ion Blaster, Pocket	—	+0	+0	6d6 N	—	10	8	0.7	60m	37/12	AF2, LR (60m), PER Mod +2
Gauss Pistol	.42	+1	+1	1½d6 AP	+0	15	10	1.5	250m	34/13	AF3
Laser Pistol	—	+1	+2	1d6+1	+0	16	8	0.9	200m	24/9	BBS, Beam, Fragile
Laser Pistol, UV	—	+1	+2	1d6+1	+0	12	8	1.0	200m	29/11	AP, BBS, Beam
Multipurpose Energy Weapon	—	+0	+0	Text	Text	1000 BC	—	0.6	Text	Text	2
Plasma Pistol	—	+0	+0	9d6 NX	—	12	10	1.2	50m	67/21	LR(50m)
Proton Blaster-Alpha	—	+1	+1	6d6 N AP	—	10	10	1.0	300m	40/14	
Proton Blaster-Beta	—	+1	+1	8d6 N AP	—	10	12	1.1	400m	53/19	
Rocket Pistol	—	+1	+1	2d6+1 X	+0	6	11	1.6	350m	55/17	
Rocket Pistol, Military	—	+1	+2	2½d6 X	+0	6	12	1.8	400m	64/20	
Sonic Pistol	—	+0	+0	9d6 N	—	12	9	1.0	450m	45/15	
Sonic Stunner	—	+0	-1	7d6 N NND	—	8	7	1.0	20m	52/13	LR (20m), PER Mod +0

SCIENCE FICTION RIFLES

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Disintegrator Rifle	—	+2	+4	6d6 NND	-1	12 BC	12	5.5	200m	278/73	LR(200m), RR, 2H
Electron Rifle	—	+1	+3	Text	—	20 BC	14	4.1	Text	Text	2H, Beam, 1
Gauss Rifle	.45	+1	+2	2d6	+1	30	13	4.8	300m	71/24	AF5, AP, 2H
Ion Rifle, Early	—	+0	+1	10d6 N	—	12	15	5.0	500m	51/13	2H, Bulky, Fragile
Ion Rifle	—	+1	+2	10d6 N	—	15	12	4.0	500m	66/21	AF3, 2H, Fragile
Laser Rifle, Experimental	—	+0	+0	2d6	+0	8	15	5.0	1200m	45/9	IMR4, 2H, BBS, Beam, Bulky, Fragile
Laser Rifle	—	+1	+4	2d6	+0	16	10	4.0	1200m	51/17	IMR4, 2H, BBS, Beam
Laser Rifle, Military	—	+2	+4	2d6	+0	32	10	4.5	1200m	75/24	AF5, IMR4, 2H, BBS, Beam
Laser Rifle SB	—	+1	+3	2d6	+0	30	14	4.5	300m	52/17	Constant, 2H, BBS, Beam
Laser Rifle, UV	—	+1	+4	2½d6	+0	16	12	4.6	2400m	76/24	AP, IMR8, 2H, BBS, Beam
Laser Rifle, Military UV	—	+2	+4	2½d6	+0	50	12	4.7	2400m	128/38	AF5, AP, IMR8, 2H, BBS, Beam
Laser Rifle, X-Ray	—	+1	+4	3d6	+0	10	14	4.8	1800m	107/30	AP, IMR4, Penet, 2H, BBS, Beam
Plasma Rifle, Early	—	+0	+0	10d6 NX	—	12	15	7.0	60m	75/13	Act 15- J, LR(60m), 2H, Bulky, Fragile, 3
Plasma Rifle Mark I	—	+1	+2	10d6 NX	—	20	12	6.0	60m	91/28	2H, LR(60m)
Plasma Rifle Mark II	—	+1	+3	12d6 NX	—	100	13	5.0	80m	125/38	2H, LR(80m)
Proton Rifle Mark I	—	+1	+1	7d6 N	—	30	12	4.5	350m	55/17	AP, 2H, NUV
Proton Rifle Mark II	—	+0	+2	7d6 N	—	45	13	3.85	350m	81/24	AF5, AP, 2H, NUV
Rocket Rifle, Early	—	+1	+1	2d6+1 X	+0	20	14	7.5	300m	64/19	2H
Rocket Rifle	—	+2	+4	2½d6 X	+0	30	14	7.0	400m	138/43	AF5, 2H
Sonic Rifle	—	+1	+3	12d6	—	40	11	4.25	600m	95/32	2H

SCIENCE FICTION HEAVY AND MISCELLANEOUS WEAPONS

Name	Caliber	OCV	RMod	Dam	STUNx	Max Shots	STR Min	Mass	Range	A/R Cost	Notes
Dimensional Missile	—	+0	+0	6d6 X	+0	1	—	120.0	900 km	450/72	Indirect, IPE, NRM
Gauss Cannon, Early	.60	+0	+0	3½d6	+1	30	17	10.5	1100m	165/35	AF10, AP, IMR2, 2H, Bulky, Fragile, Beam, 4
Gauss Cannon	.60	+1	+4	3½d6	+1	100	16	9.0	1100m	198/50	AF10, AP, IMR2, 2H, Bulky, Beam
Grenade, Disintegrator	—	+0	+0	4d6 NND	-1	4	—	0.4	RBS	210/56	AE (8m Radius), RBS
Grenade, Energy	—	+0	+0	2½d6	+0	4	—	0.4	RBS	70/20	AE (16m Radius), RBS
Plasma Bazooka	—	+0	+4	15d6 NX	—	1	14	12.0	100m	116/25	LR(100m)
Self-Propelled Nuke	—	+0	+0	20d6 X	+0	1	—	200.0	Spec	1,050/168	MegaRange and Area (1m = 1 km)

ACCESSORIES KEY/NOTES

2H: Two-Handed (a -½ Limitation)

Act: Activation Roll (a "J" after the roll indicates Jammed)

AE: Area Of Effect (Radius); the number following indicates the size of the Radius in meters.

AF: Autofire; the number after the letters indicates the maximum number of shots

AP: Armor Piercing ("AP2" indicates Armor Piercing (x2; +½))

BBS: Blocked By Smoke Or Steam (a -¼ Limitation)

BC: Boostable Charges

DS: Damage Shield

IMR: Increased Maximum Range (the number indicates the multiplier)

IPE: Invisible Power Effects

LR(Xm): Limited Range (number indicates range)

NRM: No Range Modifier

NUV: Not Underwater Or In A Vacuum (a -¼ Limitation)

RBS: Range Based On STR

ResP: Resistant Protection

RR: Reduced By Range

SFW: Shoulder-fired weapon (characters need WF: Shoulder-Fired Weapons to use one of these properly)

X: Area Of Effect (Radius Explosion, assumed to be of a size to give the Advantage a final value of +½)

Name: The name of the weapon. This may include a manufacturer and/or model number.

Caliber: The weapon's caliber (where appropriate). See page 83 for more information.

OCV: This is applied as a bonus or penalty against all attacks made with the weapon. OCV bonuses are bought as a 2-point Combat Skill Level with the Limitations *OAF, Required Hands,* and *Real Weapon.* OCV penalties are a minor Side Effect (automatically occurs; -½) for the weapon. Until the penalties on a weapon reach the 30 Active Point level (which is highly unlikely to ever occur), the Side Effect remains at this value. Even if a weapon has both OCV and RMod penalties, it takes only one Side Effect until the penalties exceed 30 points.

RMod: This represents a modifier to the weapon's accuracy at Range. Positive values (bought as 1-point Penalty Skill Levels versus the Range Group with the *Focus* and *Required Hands* Limitations) help to offset the standard Range Modifier; negative values (a minor Side Effect (automatically occurs; -½)) add to it. RMod can never raise a character's base OCV, it can only negate penalties.

Damage: The amount of damage the weapon does. An "N" indicates Normal Damage; otherwise the listed damage is Killing.

STUNx: This is the STUN Multiplier for Killing Damage weapons (a +0 means "no modification"; use the standard ½d6 STUN Multiplier). Apply the STUNx modifier to the STUN Multiplier roll (or to the STUNx for the Hit Location struck, if the campaign uses Hit Location rules). For example, if a character with a .45 Gauss Rifle (STUNx +1) hits an opponent in the Head, the total STUNx would be 6.

Shots: The number of shots in the gun's cylinder or magazine, or the amount of shots' worth of energy in its battery or power source (in game terms, how many Charges the gun has). Each gun comes with one "clip" of ammunition/energy unless noted otherwise. If a gun can use more than one size clip, the largest or most common clip is listed. Guns with a "clip" of 1 shot are single-shot guns (often for target shooting) that the user must reload after each shot. In the case of weapons like missiles and bombs, often the Charges have the "Never Recover" modifier.

STR Min: The STR Min necessary to use the weapon effectively; see 6E2 199 for rules. Remember firearms and related weapons (which are built as RKAs or Blasts) don't get bonus damage or other benefits from exceeding the STR Minimum. The STR Minimum simply indicates the STR needed to effectively use the weapon — to hold, draw, and/or cock it.

Mass: The weight of the gun, in kilograms. Typically this is the unloaded weight; inserting a clip of ammunition or a power-pack adds a few grams.

Max Range: The weapon's maximum Range in meters according to the *HERO System* rules. (Of course, its effective range — the range over which it's likely to hit a target — is much less, thanks to the Range Modifier.) Typically this means Base Points x 10 meters, but Advantages or Limitations may change that. "NR" means No Range; "RBS" means Range Based On STR.

A/R Cost: The Active Point/Real Point Cost of the weapon, in Character Points. For greater variation, these costs use the expanded Killing Attack costs on APG 56 (thus, an RKA 1d6-1 costs 12 Character Points).

Notes: This catch-all category includes any information not listed elsewhere. All notes and abbreviations are explained at the end of the tables.

Optical and ultraviolet lasers are blocked by smoke and steam (reflected by a Limitation, since these phenomena are common); X-ray and gamma ray lasers are not, but special anti-laser aerosols do interfere with them normally.

PARTICLE GUNS

Particle guns are small hand-held proton accelerators. They function in much the same way electron beams do, but the proton beam has more penetrating power, and cannot be set to stun. Like electron beams, proton beams use a laser pilot beam to create an ionized pathway through the air. In vacuum and water the protons disperse into a harmless stream. The proton rifle and particle blaster depend on as-yet-undiscovered power sources.

Particle guns cause damage through surface blasting and radiation effects. Characters may substitute equivalent DCs in Killing Damage with the GM's permission.

PLASMA GUNS

Plasma weapons are an outgrowth of fusion power technology. They generate a tiny fusion reaction which releases superhot plasma; the gun then directs this plasma at the target via magnetic fields. The plasma spreads quickly over a wide area, which gives it a large area effect but limits the weapon's range. Designers can't scale them down to pistol size easily, but they're quite powerful as battlefield weapons. Plasma guns use deuterium pellets, similar to those used in fusion rockets, as their fuel — in pre-fusion societies the weapons cannot be refueled. Assuming portable fusion generators are possible at all, plasma weapons don't involve any major violations of the laws of physics.

SONIC WEAPONS

Sonic weapons project focused sound for various tactical effects. The standard sonic blaster does Normal Damage, but some are tuned to knock the target unconscious without inflicting permanent harm. (See the *Sonic Blaster* on page 133 for another example of a sonic weapon.)

Other Science Fiction Weapons

The types of weapons employed by Science Fiction characters is practically endless. Here are a few examples.

COMBAT DRUGS

In some Science Fiction settings, soldiers and other characters use drugs to enhance their ability to fight. Here are two examples; on page 282 you can find two defensive drugs.

BRAWN SERUM

Effect: Aid STR 3d6
Target: One character
Duration: Instant
Range: No Range
Charges: 4 Charges
Breakability: 1 PD/1 ED

Description: This drug boosts the recipient's strength for a short period — long enough to finish a fight or accomplish a specific task. However, it doesn't always work, and when it fails to work, it actually weakens the user.

Game Information: Aid STR 3d6, Delayed Return Rate (points fade at the rate of 5 per Minute; +1) (36 Active Points); OAF Fragile (-1¼), Requires A CON Roll (-½), Side Effects (Drain STR 3d6; -½), 4 Charges (-1). Total cost: 8 points.

Options:

1) **Strong Serum:** Increase to Aid STR 4d6. 48 Active Points; total cost 11 points.
2) **Weak Serum:** Decrease to Aid STR 2d6. 24 Active Points; total cost 6 points.
3) **Long-Lasting Serum:** Increase to Delayed Return Rate (points fade at the rate of 5 per 5 Minutes; +1¼). 40 Active Points; total cost 9 points.

QUICKJUICE

Effect: +1 SPD
Target: One character
Duration: Instant
Range: No Range
Charges: 4 Charges
Breakability: 1 PD/1 ED

Description: On the field of battle, swiftness of action is often the deciding factor. To gain the upper hand, soldiers sometimes use Quickjuice, a drug that enhances reaction time. After the drug expires, the user suffers a temporary neural slowdown

Game Information: +1 SPD (10 Active Points); OAF Fragile (-1¼), Side Effect (-1 SPD for 24 hours after Charge stops working, automatically occurs; -½), 1 Continuing Charge lasting 1 Hour (-¼). Total cost: 3 points.

Options:

1) **Strong Serum:** Decrease Side Effect so that it only lasts 12 hours (-½). Total cost: 3 points.
2) **Stronger Serum:** The drug also enhances the character's reflexes and agility. Add +3 DEX and Linked (-½). 6 Active Points; total cost 2 points; total cost of drug 5 points.

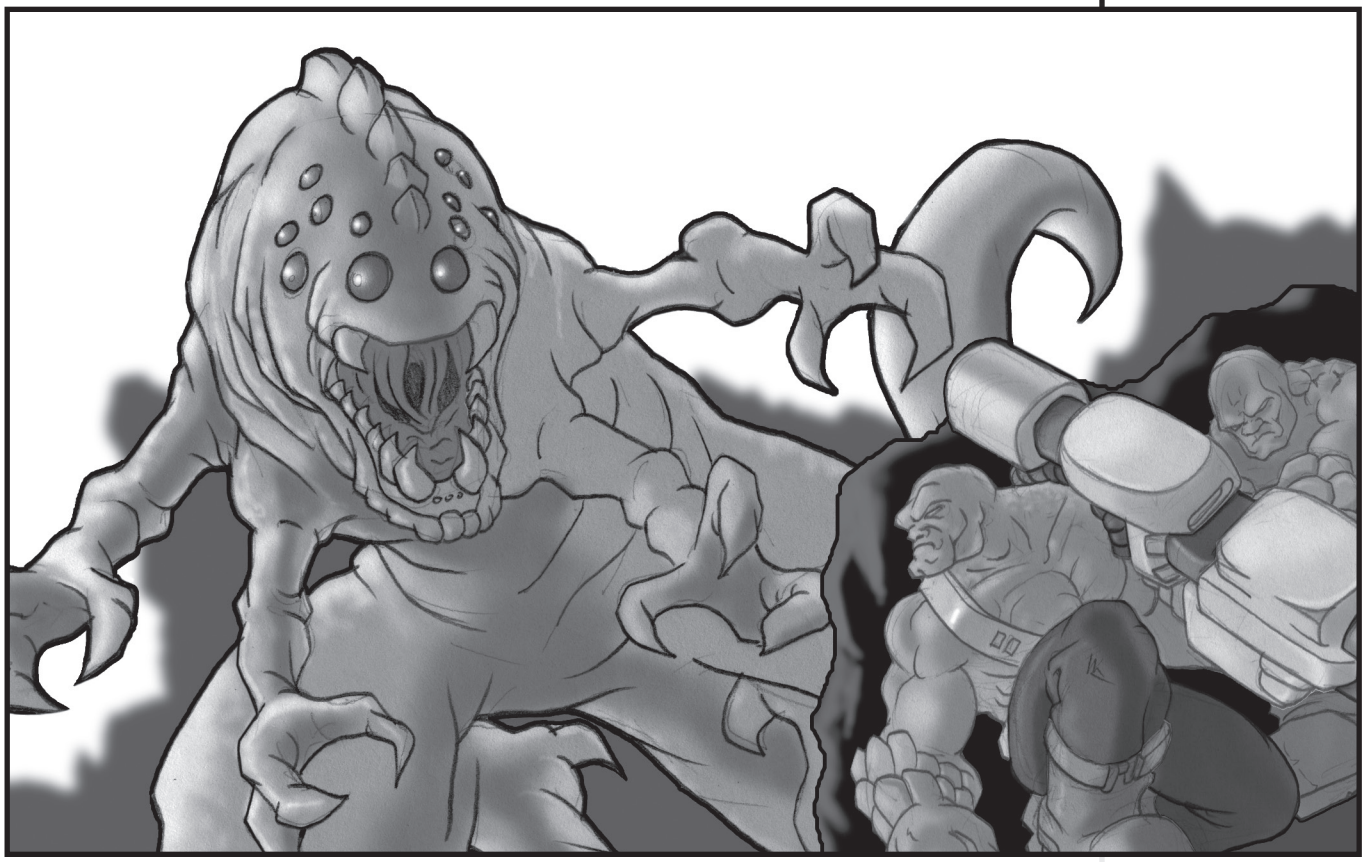
GRENADES AND ROCKETS

Hand grenades are reaching the limit of improvement as of the early twenty-first century — since they must be thrown, they can't be too powerful or they injure the user. Although a few Science Fiction settings do feature energy grenades — which through rubber science means emit contained energy fields similar to those created by blasters — or like weapons, for the most part the emphasis is on nonlethal grenades and rocket grenades. The ultimate development of the rocket-propelled grenade is the Rocket Gun, which appears as a rival to firearms in many SF settings (particularly Low SF, or stories set in the early days of interplanetary exploration). Rocket guns launch tiny solid-fuel missiles with a variety of warheads. Improvements in electronics make them highly accurate, and their larger size makes them far deadlier than bullets (or allows them to carry other, nonlethal, payloads).

HEAVY WEAPONS

Most of the types of weapons described above have their battlefield-scale equivalents. A "quick and dirty" way to make an artillery version of a personal weapon is to add the *MegaScale* Advantage to range (and perhaps the Area Of Effect, if applicable) and make it Immobile. Gamemasters willing to do a little more work can make Automaton weapons, such as artillery launchers with built-in AI computers and the ability to drive, fly, or even teleport themselves.

Even in the early twenty-first century, there's already almost no upper limit to the destructive power of battlefield weapons — high explosive shells lead to fuel-air explosive bombs, which can be as powerful as low-end nuclear weapons. In the worlds of Science Fiction, this trend can easily continue, as basic nukes evolve into smaller and more powerful versions. Other possible weapons of mass destruction include new explosives based on high-tech chemistry, biological and chemical weapons that make today's gases and plagues look mild, FTL kinetic weapons, antimatter bombs, teleporting weapons and weapon launchers, black hole generators, and more. The problem, as on modern Earth, is not how how to destroy something, but how to find it and hit it. Defensive technology may become less a matter of brute-force protection and more a matter of either (a) preventing the attack from being launched in the first place, (b) interfering with it so that it misses, or (c) hiding from the attacker.



MILITARY NANOTECHNOLOGY

Nanotechnology is a term coined by futurist Eric Drexler to describe a new field of engineering dealing with extremely tiny machines — devices on the same scale as cells or viruses. The advantage to such miniscule machinery is it can work with and manipulate single molecules of material. As it's moved from being just a neat theoretical idea toward practicality, "nanotech" has become synonymous with "magic" in some circles — perhaps because of inflated gee-whiz claims by enthusiasts.

When used as weapons, "nanobots" (nano-sized robots) plow through solid matter, breaking armor, weapons, and flesh down to their basic components (and sometimes using the component matter to construct *more* nanobots). Fortunately, nanobot manufacturers have also created countermeasures for such weapons.

Nanobots usually come into contact with the target object(s) in one of two ways. First, they can be released into the environment to find the target by blundering into it, or by using whatever sensors they possess to track it down. In some cases, personnel leave nanobots where they think they'll be needed (such as by coating a suit of battle armor with them) so they can attack or take action when necessary. Second, they can be fired or projected at it, usually in spheres that shatter upon contact. The examples below using this method assume a four-shot pistol.

All military and espionage nanotechnology is kept heavily secured. Usually it's not even available for sale on the black market.

ATTACK NANOBOTS (AGING)

Effect: RKA 1d6, Penetrating (x2)
Target: 1m Radius
Duration: Constant
Range: 150m
Charges: 4 Continuing Charges lasting 1 Turn each
Breakability: 8 PD/8 ED

Description: These nanobots disassemble materials they come into contact with into component molecules and atoms. However, they cannot reproduce themselves, so in military engineering parlance they "age" and "die," causing the effect to cease.

Game Information: RKA 1d6, Area Of Effect (1m Radius; +¼), Constant (+½), Penetrating (x2; +1) (41 Active Points); OAF (-1), 4 Continuing Charges lasting 1 Turn each (neutralized by defensive nanobots, fire, or any other area-affecting damage-causing phenomenon; -½). Total cost: 16 points.

ATTACK NANOBOTS (IMMORTAL)

Effect: RKA 1d6 plus Aid 6d6 (half to increase the size of the Area Of Effect, half to the Aid itself)
Target: 8+ meter Radius (see text)
Duration: Constant
Range: 150m
Charges: 4 Charges
Breakability: 18 PD/18 ED

Description: Unlike "aging" nanobots, this type of nanobot has the ability to build more of itself. The more matter it disassembles, the more of itself it can build, and the more it destroys. If left unchecked, a single use of this type of nanotechnology could ravage an entire ship or planet, which is why few species dare to use it.

Because this attack uses an Aid to increase the size of an Area Of Effect (which is against the rules), and lets an Aid increase itself (which may cause game balance problems in many campaigns), it requires the GM's permission.

Game Information: RKA 1d6, Area Of Effect (8m Radius; +½), Constant (+½), Penetrating (x2; +1), Uncontrolled (stopped by defensive nanobots, fire, or any other area-affecting damage-causing phenomenon; +½), Reduced Endurance (0 END; +½) (60 Active Points); OAF (-1), 4 Charges (-1) (total cost: 20 points) **plus** Aid 6d6 (half to increase the size of the Area Of Effect, half to the Aid itself), Constant (+½), Uncontrolled (stopped by defensive nanobots, fire, or any other area-affecting damage-causing phenomenon; +½), Reduced Endurance (0 END; +½) (90 Active Points); OAF (-1), 4 Charges (-1), Only Aid Self (-1) (total cost: 22 points). Total cost: 42 points.

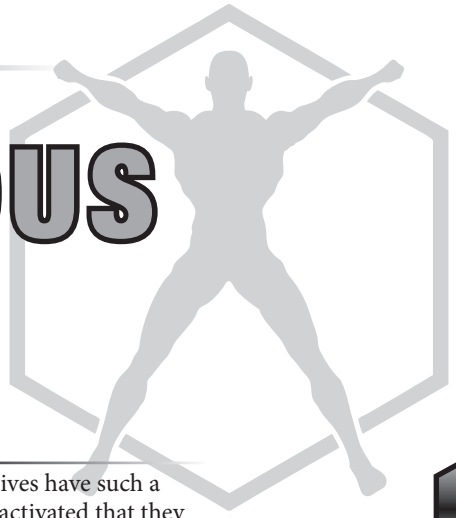
NANOMINE

Effect: RKA 1d6, NND, Does BODY, Penetrating (x2), Trigger
Target: 16m Radius
Duration: Constant
Range: No Range
Charges: 4 Continuing Charges lasting 1 Turn each
Breakability: 16 PD/16 ED

Description: Often placed in abandoned buildings or on the battlefield, this trap scatters destructive nanobots over a large area. Programmed simply to rapidly deconstruct living matter, the bots have no effect on metallic armor, weapons, or any other non-organic material.

Game Information: RKA 1d6, Area Of Effect (16m Radius; +¾), NND (defense is ED Resistant Protection defined as a force-field, or the like, being made of or encased in fire or energy, or being in a hermetically-sealed non-organic suit of armor; +1), Does BODY (+1), Constant (+½), Penetrating (x2; +1), Trigger (when stepped on or otherwise activated by pressure; +¼) (82 Active Points); OAF (-1), No Range (-½), Only Affects Organic Matter (-½), 4 Continuing Charges lasting 1 Turn each (neutralized by defensive nanobots, fire, or any other area-affecting damage-causing phenomenon; -½). Total cost: 23 points.

MISCELLANEOUS WEAPONS



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Besides guns and melee weapons, many other implements of destruction are available to *HERO System* characters.

EXPLOSIVES

An explosive is a substance which rapidly creates tremendous heat and pressure when properly activated. Explosives are generally divided into "low" and "high" types, as explained below. In the *HERO System*, working with explosives is a function of the Skill *Demolitions* (see 6E1 75; for advanced and expanded rules for Demolitions, see HSS 170).

The accompanying table lists suggested damage ratings for explosives (each of which has the Advantage *Area Of Effect* (Radius Explosion) at the +½ level [or sometimes more, if the GM prefers]). However, because determining a particular bomb's power depends upon how it's constructed and other variables, these figures should be considered guidelines the GM can alter or adapt as he sees fit.

LOW EXPLOSIVES

Low explosives, also known as deflagrating explosives, do not really explode — they burn very, very quickly. They create relatively low pressure and more of an effect of "heaving" than of shattering (or "brisance"). However, using a sufficient quantity of low explosive causes a detonating effect similar to high explosives (see below).

The low explosive most commonly used today is black powder (and its modern improvement, smokeless powder), a mixture of carbon (charcoal, 15%), sulfur (10%), and potassium nitrate (saltpetre, 75%). It's basically insensitive to impact and friction, requiring a flame and/or heat to initiate the explosion. For bullets, an impact-sensitive explosive charge ignites the powder; for pipe bombs and other improvised munitions, a fuse of some sort is required. Working with black powder is easy; the GM should add +1 to +3 to a character's Demolitions roll in appropriate circumstances.

HIGH EXPLOSIVES

High, or detonating, explosives have such a rapid chemical reaction when activated that they produce immense pressure and shattering force (brisance). Detonation waves from high explosives often exceed 20,000 feet per second.

High explosives can be further divided into two types. The first is *primary or initiating explosives.* Fire/heat, impact, or friction can readily detonate these substances. Because of this sensitivity, they're rarely used for actual demolitions — instead, they're used in initiating devices (such as blasting caps) to set off safer explosives. Primary explosives include diazodinitrophenol (DDNP), fulminate-chlorate mixtures, lead azide, lead styphnate, mercury fulminate, silver azide, and silver fulminate.

The second type of high explosive is the *secondary (or noninitiating) explosive.* These are mixed together to produce the right combination of sensitivity, brisance, and stability for particular jobs. The most important secondary explosives include ammonium picrate, cyclonite (RDX and HMX), dynamite, and TNT.

DETONATION METHODS

There are five main types of fuses, or methods of detonating the primer charge that sets off a bomb:

- flame fuses
- chemical fuses
- electric fuses (including radio-controlled fuses)
- mechanical fuses (including impact fuses and "tremblers" that trigger a bomb if it's moved)
- pressure fuses (which go off when a certain amount of pressure is applied, whether by foot [as with land mines] or by reaching a certain barometric pressure [as with some terrorist bombs placed on airplanes]).

The type of fuse chosen depends on the explosive used and the type of bomb. Flame works for black powder, for example, but not for plastique. An elaborate radio-controlled electrical fuse or a pressure fuse isn't needed for a kamikaze bombing run with a truckful of dynamite, but would be ideal for many types of terrorist bombings.

Simple fuses impose no penalty to Demolitions rolls to disarm the explosive. Complex electrical, chemical, mechanical, or pressure fuses could impose a -1 to -4 penalty to Demolitions.

TYPES OF EXPLOSIVES

Here are some of the common types of explosives used in the modern world for various industrial, military, criminal, and terrorist activities.

AMMONIUM PICRATE

Ammonium picrate (or explosive D) is made of picric acid and ammonium. It's used in situations calling for an explosive that's particularly resistant to impact. For example, ammonium picrate is sometimes used in anti-tank shells because of its ability to pierce armor without exploding — tests have shown it can be fired through twelve inches of armor and detonate on the other side! Picric acid itself is explosive, but is no longer used militarily because of its sensitivity. There is no modifier to Demolitions for working with ammonium picrate.

ANFO

ANFO, a combination of ammonium nitrate and fuel oil, is a favorite of terrorists because its ingredients are all legally available — the Oklahoma City bombing, for example, involved an ANFO bomb. ANFO's legitimately used in mining, construction, and other industries. There is no modifier to Demolitions for working with ANFO.

Ammonoium nitrate absorbs water easily. If it's not stored in a watertight container or environment, it may not detonate as well (reduce damage by 25-50%).

DYNAMITE

Invented by Alfred Nobel in 1867, dynamite is a combination of nitroglycerin and various substances which absorb large amounts of the nitroglycerin, making it relatively safe to handle (it's still sensitive to fire/heat and extreme impact, and if it gets wet tends to break down and becomes as volatile as nitroglycerine). The manufacturing process incorporates antacids and other stabilizers to make dynamite even safer to use. Today, demolitions experts use various mixtures of explosives and bases to achieve different results. For example, there's gelatin dynamite which has great water resistance and more blasting power than comparable dynamites, and can be molded into crude shapes. Another development is low-freezing dynamite, which works well in extremely cold conditions. Using dynamite adds +1 or +2 to a character's Demolition roll in appropriate circumstances.

Dynamite has many commercial uses (such as the construction industry). That means it's widely available (though it usually requires a license or other authorization to purchase); it's generally sold in sticks.

FOAM EXPLOSIVE

Foam explosive is an explosive substance with the appearance and consistency of shaving cream or the like. Designed primarily for detonating landmines, it can stick to objects and delivers a low-powered blast — but one that's strong enough to make a mine go off, or open a door. Compared to other explosives, it makes very little noise, so it's ideal for some of the covert missions characters perform. Working with it entails no Demolitions penalty.

INITIATORS

Initiators are explosive devices used to start larger explosions. They include blasting caps and detonating cord.

Blasting caps, both basic and electric, are small cylindrical devices used to initiate explosions. They consist of a base charge (usually RDX or PETN), a priming charge (usually lead azide or silver azide), and a flash charge (usually lead styphnate), all contained in an aluminum or copper shell. Mercury fulminate used to be an important blasting cap ingredient, but is no longer commonly used. A basic blasting cap is set off by a fuse, whereas an electrical blasting cap has two wires running through it that let the demolitionist detonate it with electricity (allowing for precise timing of an explosion). Working with blasting caps (*e.g.,* crimping them onto a timing fuse and detonating cord) can be quite dangerous, imposing a -2 to the Demolitions roll.

Detonating cord (detcord, also called primacord) is a cord made with a core of sensitive explosive (such as PETN or RDX) surrounded by a plastic or cloth covering. It's usually used together with blasting caps, and enables the demolitionist to time explosions precisely. Working with it entails no Demolitions penalty.

LEAD AZIDE

Lead azide ($Pb(N_3)_2$) is a primary explosive used in a variety of military explosives and in initiators. It tends to be more stable than many other primary explosives, particularly at higher temperatures, so a cover charge of lead styphnate (or another more sensitive explosive) is often added to ensure detonation. A related chemical, silver azide, is more powerful and is used similarly, but is more sensitive to heat. There's no modifier to Demolitions for working with lead azide.

MERCURY FULMINATE

Mercury fulminate (mercuric cyanate, $HgC_2N_2O_2$) is a grey-white powder that explodes at 160° C (320° F). It's both a primary and a secondary explosive, and is sensitive to electricity, fire/heat, impact, and friction (-2 to Demolitions rolls in appropriate circumstances). It was discovered in the late 1600s, and was used for many years in initiators and commercial explosives. Because cheaper and better replacements were found, it fell out of use in the 1970s, but characters may still chance across some here and there, or even discover an illegal lab manufacturing it for terrorists.

NITROGLYCERIN

This explosive oil or liquid was discovered by Ascanio Sobrero in 1846. It's one of the principal ingredients in dynamite. By itself, nitroglycerin is extremely sensitive and very dangerous to handle (-3 or more to Demolitions rolls), so it's rarely used without stabilizers.

PETN

PETN (pentaerythritol tetranitrate) was invented in 1891. It's cheaply and easily produced, and is as strong as nitroglycerin but safer to handle. Because it's almost insoluble, it's commonly used for underwater demolitions work. There's a -1 modifier to Demolitions for working with PETN.

RDX AND HMX

RDX (cyclonite) is one of the most common military explosives in use today. HMX is similar, but denser and with a higher melting point and explosion temperature. Both are white crystalline solids that are extremely stable. They're usually mixed with TNT to desensitize them. RDX is as powerful as nitroglycerin, HMX is slightly more powerful.

RDX is used to produce *plastique,* or plastic explosive (PE), of which Semtex (a combination of RDX and PETN, in varying ratios) is one variety. PEs are about 80% RDX and 20% oils, waxes, and plastics. They're very stable, requiring both heat and impact to detonate — a blasting cap or other initiator will do it, but by itself an electrical charge, fire, or impact won't set plastique off. Plastique can be safely molded into an infinite number of forms, and is extremely powerful, even in small amounts — a single block (0.56 kg) can create a 30 cm square hole in 10mm thick steel plate! Thus, PEs are a favorite of the military, terrorists, and criminals. The American military uses four types designated C1 through C4, each of which is useful in a different temperature range. C4, for example, remains plastic down to -70° F, and does not leak up to 170° F.

RDX is also the primary ingredient in many military composite explosives, such as Composite A3 and Composition B4.

Working with RDX, HMX, plastique, or other composite explosives including RDX or HMX adds +1 to +2 to Demolitions rolls in appropriate circumstances.

TNT

TNT (trinitrotoluene), which differs from dynamite, is one of the principal military explosives. Made from toluene and nitric acid, it's stable and insensitive to impact, friction, and electricity (+1 to +2 to Demolitions rolls). It does not readily absorb water, and may be stored indefinitely in temperate areas.

TNT is usually melted and used to fill bombs, either by itself or in combination with other substances (binary explosives): ammonium nitrate (amatol); ammonium picrate (picratol); HMX (octol); PETN (pentolite); RDX (cyclotol); RDX and ammonium (torpex); tetryl (tetrytol); and so forth. TNT binary explosives can be very powerful — for example, cyclotol and pentolite have detonation pressures as high as 4,000,000 pounds per square inch.

Incendiaries

Incendiaries are chemicals designed to start fires and/or burn people. They're usually used in firebombs and flamethrowers, but characters may also want to build incendiary grenades, pellets, and other weapons. Working with incendiaries is a function of the *Demolitions* Skill.

FIRE BOTTLE/MOLOTOV COCKTAIL

A fire bottle is a primitive incendiary grenade — a bottle filled with gasoline and sulfuric acid, then wrapped in a rag or piece of paper. Just prior to use, the wrapper is soaked with a sugar-potassium chlorate mixture (which is very sensitive). Upon impact, the chemicals mix and the reaction ignites the gasoline. The Molotov cocktail, a bottle filled with some flammable liquid and with a rag stuffed in the top and lit, counts as a crude fire bottle.

GELLED GASOLINE

Gelled gasoline is ordinary gasoline which has been gelled by the use of chemicals or improvised substances (such as soap powder, lye, wax, or animal blood). Charcoal may be added to increase the mixture's flammability. Essentially, gelled gasoline is a primitive form of napalm (see below), and like napalm it sticks to surfaces. Working with it imposes a -1 penalty to Demolitions rolls.

INCENDIARY BRICK

This object looks like an ordinary brick, but is made of potassium chlorate, sulfur, sugar, iron filings, and wax. It burns relatively slowly and is normally used to set fire to buildings and other flammable objects. Creating or using one imposes no Demolitions penalty.

MAGNESIUM

The metallic element magnesium is an incendiary substance which burns at very high temperatures and is easily manufactured and handled. It can get hot enough to melt mild steels, and often scatters molten bits of metal about, increasing the

SHAPED CHARGES

A shaped charge allows the force of an explosion to be aimed, roughly. Pressure waves are emitted by an explosion at right angles to the explosive, so by shaping the explosive, a bomber can provide some direction to the force of the explosion. A shaped charge typically uses a cone of metal or glass surrounded by a high-strength explosive (such as TNT or RDX). The detonation vaporizes the cone and projects it in the desired direction as an immensely hot and powerful "jet" of particles. This jet strikes the target and literally forces it to "flow" away from the point of impact. However, a shaped charge only uses a small percentage of the force of the explosion (about 15%), so the explosion is not totally contained or channeled.

Setting up a shaped charge requires a Demolitions roll at -0 to -3, depending upon the circumstances and the materials available.

chances of setting secondary fires. Even worse, using water to try to put out a magnesium fire may create an explosive mix of hydrogen and some other gases. Working with magnesium imposes no Demolitions penalty.

NAPALM

Modern napalm is made of gasoline, benzene, and polystyrene thickener. Earlier forms of napalm were advanced forms of gelled gasoline, but modern napalm is a liquid. It's used by militaries for many different kinds of weapons. By varying the amount of thickener and the additives, a demolitionist can impart different properties to it (such as increased burning time, increased fluidity, and so forth). Napalm sticks to surfaces (even vertical ones), so the victim cannot simply wipe it off.

Napalm is not self-igniting — it requires some sort of initiating heat (such as from an electric spark or another incendiary substance) to set off. Working with it imposes no Demolitions penalty.

PARAFFIN-SAWDUST

This incendiary is a simple mix of paraffin wax or beeswax and sawdust. It burns slowly and is used to set fire to flammable objects and buildings. It can be carried and stored safely; working with it provides a +2 Demolitions bonus.

THERMITE

Thermite is made of powdered ferric oxide and powdered or granular aluminum. When lit it creates molten iron aluminum oxide, and can produce temperatures as high as 2,400° C under proper conditions. It has many commercial uses (such as welding) in addition to its military applications.

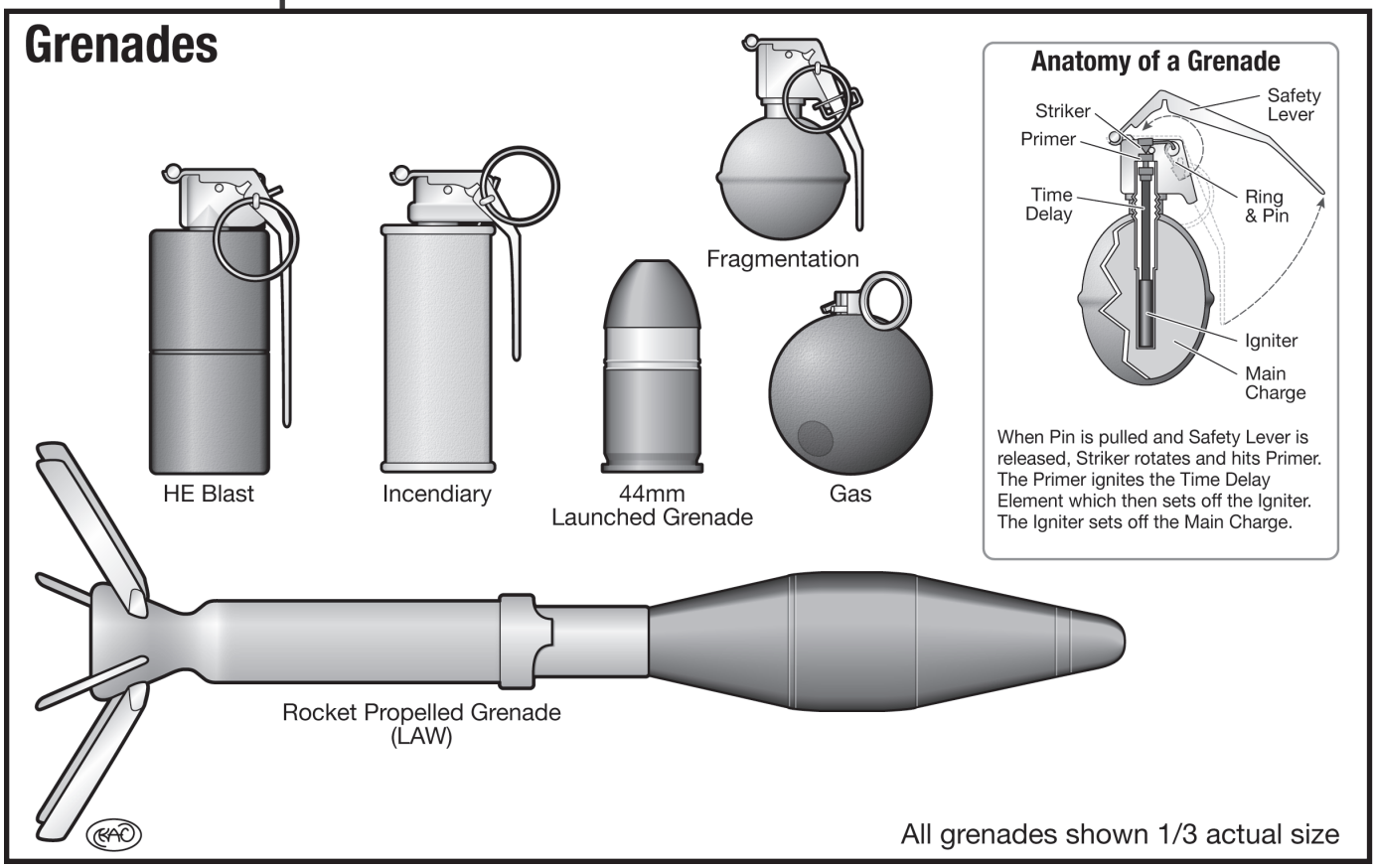
Thermite requires strong heat to ignite it (more than a match), so igniter materials (such as magnesium, white phosphorus, or depleted uranium flakes) are added when it's used for military purposes. (In game terms, working with it involves no Demolitions penalty.) However, its stability also means characters can safely carry and store it, and that it burns strongly once lit. It's easy to use in cold and windy situations, and can burn through metal containers to ignite any flammable objects they hold.

Demolitionists can mix thermite with pyrotechnic agents to form a more volatile compound called thermate. Neither thermite and thermate can be doused with water.

WHITE PHOSPHORUS

White phosphorus (WP, or "Willie Pete") is most often used to ignite other incendiaries, but can be used on its own. It is pyrophoric (self-igniting) — it burns on contact with air. It's stored underwater. Working with it entails a -2 Demolitions penalty.

A WP incendiary consists of white phosphorus dissolved in carbon disulfide (or some other solvent to keep it away from air). To use it, a demolitionist pours it on the item he wants to burn. Once the solvent evaporates, the WP bursts into flame, creating large clouds of dense white smoke. For military purposes, sometimes plastic white phosphorus (PWP) is used; this is a rubbery solution that binds the WP together so it cannot disperse freely. WP cannot be doused with water.



EXPLOSIVES AND INCENDIARIES

Name	Suggested Effect	Scaling
EXPLOSIVES		
Ammonium Picrate (1 liter)	Blast 9d6 Explosion	+1d6 per +1 liter
ANFO (0.45 kg)	Blast 10d6 Explosion	+1d6 per +0.45
Black powder (0.45 kg)	Blast 2d6 Explosion	+1d6 per +0.45 kg
Dynamite (one .25 kg stick)	Blast 5d6 Explosion	+1d6 per +1 stick
Foam explosive (one .25 kg can)	Blast 4d6 Explosion per quarter-can used	+1d6 per +quarter can
HMX (0.45 kg)	Blast 13d6 Explosion	+2d6 per +0.45 kg
Initiator		
Blasting cap	RKA 1 point	+1 point per +1 cap
Detonating cord (.3 m)	RKA ½d6	+½d6 per +.3 meter
Lead azide (0.45 kg)	Blast 12d6 Explosion	+2d6 per +0.45 kg
Mercury fulminate (0.45 kg)	Blast 9d6 Explosion	+1d6 per +0.45 kg
Nitroglycerin (1 liter)	Blast 12d6 Explosion	+2d6 per +1 liter
PETN (1 liter)	Blast 13d6 Explosion	+2d6 per +1 liter
RDX (0.45 kg)	Blast 12d6 Explosion	+2d6 per +0.45 kg
Plastique (one 0.56 kg block)	Blast 15d6 Explosion	+5d6 per +1 block
TNT (0.45 kg)	Blast 12d6 Explosion	+1d6 per +0.45 kg
Amatol (0.45 kg)	Blast 12d6 Explosion	+1d6 per +0.45 kg
Cyclotol (0.45 kg)	Blast 14d6 Explosion	+1d6 per +0.45 kg
Pentolite (0.45 kg)	Blast 14d6 Explosion	+1d6 per +0.45 kg
Tetrytol (0.45 kg)	Blast 13d6 Explosion	+1d6 per +0.45 kg
Torpex (0.45 kg)	Blast 10d6 Explosion	+1d6 per +0.45 kg
INCENDIARIES		
Fire bottle/Molotov cocktail	RKA 1-2d6, 1m Radius, 1 Turn/Charge	N/A
Gelled gasoline (1 liter)	RKA 3d6, Explosion, 1 Turn/Charge	Increase size of Explosion by roughly a +¼ Advantage for each +2 liters
Incendiary brick	RKA 1d6, 1 Turn/Charge	N/A
Magnesium (0.25 kg)	RKA ½d6, 1 Turn/Charge	RKA +1 point per +.25 kg, to a maximum of +10 points
Napalm (1 liter)	RKA 2d6, Explosion, 1 Turn/Charge	Increase size of Explosion by roughly a +¼ Advantage for each +1 liter
Paraffin-Sawdust	RKA 1½d6, 1 Turn/Charge	
Thermite (one 0.10 kg pellet)	RKA 2d6, Armor Piercing, 1m Radius, 1 Turn/Charge	RKA +1 point per +.10 kg, to a maximum of +10 points
Thermate (one 0.10 kg pellet)	RKA 2½d6, Armor Piercing, 1m Radius, 1 Turn/Charge	RKA +1 point per +.10 kg, to a maximum of +10 points
White Phosphorus (0.25 liter)	RKA 3d6, Armor Piercing; Trigger (on contact with air), 1 Turn/Charge; plus Change Environment (smoke cloud), -3 to Sight Group PER Rolls, AE (4m Radius), 1 Turn/Charge	RKA +1 point per +0.25 liter, to a maximum of +10 points

For explosives, the GM may substitute the equivalent DCs in Killing Damage, if preferred.

Incendiary devices, and many explosives, set flammable objects on fire (sometimes their heat alone ignites nearby objects). The GM can apply the incendiary effect from Incendiary bullets (page 93) if desired.

POISONS

Although not "weapons," precisely, poisons are commonly used in many gaming settings. Besides the threat of venomous animals, characters may have to deal with unscrupulous courtiers introducing poison into their food and drink at the King's feast, assassins wielding poison-smeared blades, jungle tribesmen with poisoned blowgun darts, and the like. See 6E2 210 for general rules about poisons and HSB 32-33 for animal venoms that you can easily adapt as blade poisons.

In *HERO System* terms, lethal poisons are typically built as RKAs, NND Does BODY (the defense being the appropriate Life Support [Immunity]), that typically do Damage Over Time. They're OAF Fragile, No Range, and have Charges. Nonlethal poisons, such as knockout drugs, are usually bought as Drains (often with NND as well), and sometimes lethal poisons have a Linked Drain CON effect (since even if someone survives the poison, it makes him weak and ill). Extra Time is a common Limitation; it represents an onset time before the Damage Over Time starts to occur.

Using Poison

Here's how characters use poisons in the game.

INTRODUCING THE POISON

An attacker can introduce a poison into a character's body in one of three ways.

INJECTED POISONS

The first is *injection* — the poison is violently placed into the body by means of an animal's stinger, a bladed or pointed weapon, or the like. This type of poison takes the Limitation *HKA Must Do BODY Damage* (-½), since it's Linked or related to an HKA of some sort that must pierce the skin. Charges is another common Limitation, representing the contents of a poison reservoir, the amount of poison smeared on a blade, or the like.

Venomous animals obviously don't need to make any Skill Rolls or the like to ready their venoms. Applying poison to a blade for use against an enemy normally doesn' require a Skill Roll, either, provided the character has plenty of time (at least 5 Minutes) and a peaceful environment in which to do the job. If the character has to apply the poison more quickly, crisis conditions exist (such as being in the middle of a battle), or the GM wants to restrict the use of poison, a character who's applying poison to a weapon must make a DEX Roll. If the roll succeeds, he applies the poison without difficulty. If it fails by 1-3, the poison was improperly applied and has no effect; the character has simply wasted the poison. If it fails by 4 or more, the character accidentally poisons himself and takes damage (either full damage, or something less, depending on the GM's judgment).

Animals' venoms do not expire or become weakened as long as the animal lives. However, at the GM's option, a poison placed on a blade or the like wears off if not used (every successful use of it consumes a Charge, of course). For every hour that passes since the poison was applied, either remove one Charge, or reduce all remaining Charges by 1 Damage Class.

In most cases, the poison on a blade is visible, and has an odor; characters may make a PER Roll to perceive it. Poisons built with the *Invisible Power Effects* Advantage don't suffer from this drawback.

INGESTED POISONS

Second, characters can *ingest* a poison, either by eating/drinking it, or in the case of poison gas inhaling it. An attacker has to get the poison to the victim some way — hide it in his wine, pump it into the room he's in — so he can take it into his body. Gaseous poisons take no Limitation (except perhaps one reflecting the fact that they don't work in high winds or rain), but GMs may allow other ingested poisons to take a -½ Limitation, *Must Be Ingested.*

Introducing poison into someone's food requires planning and skill. Either the attacker must have access to the character's food as it's being cooked/prepared, or he has to put the poison in it right before he gives it to the character. To do the latter, he has to hide his actions from the character in some way — either conceal the food/drink behind something for a second, or make a Sleight Of Hand roll (opposed by the character's PER Roll).

When a character confronts food and drink he suspects may be poisoned, he can ask for a PER Roll to try to detect the toxin. (In the case of poisons so strong they're difficult to conceal in food, the GM may allow a PER Roll regardless of whether the character asks for one.) If the poison matches or blends in with the color of the food/drink, the character receives no bonus to his PER Roll (and may even suffer a penalty); if the two don't match, he may receive a +1 or +2 bonus. The character may also taste a tiny amount of the food/drink in the hope of detecting the poison without exposing himself to a damaging dose. If the food/drink has a strong flavor, he receives no bonus (and may even suffer a penalty); if the poison overpowers the flavor of the food/drink, he gets a +1 (or higher) bonus.

CONTACT POISONS

Lastly, some poisons are so lethal that simply touching them can kill a character — even the tiniest amount seeps through the skin and into the body. Contact poisons don't take any unusual Complications, though they sometimes have Trigger (when character touches poisoned object; +¼). Characters can apply and detect contact poisons as they do injected poisons.

CLASSIFYING POISONS

Since the defense against most poisons is Life Support (Immunity), you should classify any poison you create (thus defining the proper Immunity for it). You have two options.

First, you can use the categories already defined for Immunity (see APG 104). Although simple and easy, this method lacks sufficient "flavor" for many campaigns and isn't setting-specific.

Second, you can create categories specific to your campaign based on the source of the poison, who makes it, and other factors. The accompanying text box provides an example system for a Fantasy Hero campaign, using as a guideline a cost of 2 Character Points for poisons specific to a race, group, or location, and 3 Character Points for poisons from specific types of animals or plants.

EFFECTS OF POISON

Typically, the purpose of poison is to kill. However, not all poisons have fatal effects; some just make the victim sick or dizzy, or knock him out.

In the real world, poisons generally make the victim feel ill, then cause cramps, convulsions, and eventually death. Sometimes they have other minor effects, like raising (or lowering) body temperature, causing drowsiness or drunkenness-like effects, impairing the senses slightly, or mildly discoloring some part of the body. But in a gaming setting, poisons can have many horrific effects that heighten the drama of the situation. They could, for example, cause extreme insanity prior to death, strongly discolor the victim's body, make the victim bleed from the pores, or the like. Players and GMs should be fiendishly clever in their descriptions of a poison's effects.

CREATING POISONS

HERO System characters who want to make their own poisons must buy the Professional Skill *Brew Poison.* (Alternaly, the optional *Poisoning* Skill from HSS 367-70 is used for this purpose.) Making poisons requires the proper equipment — kettles, glassware, ingredients, and the like. Many alchemists brew poisons, since they've already got the supplies.

To brew a poison, a character must make a Skill Roll. This takes a minimum of 1 Minute per 10 Active Points in the poison, and may take much longer. The character suffers a penalty of -1 per 10 Active Points to his Skill Roll, but may gain extra time bonuses for taking longer than the prescribed amount of time. The GM may impose other bonuses or penalties as he sees fit.

If the character's roll succeeds, he has brewed the poison properly, and now has a number of "doses" equal to the Charges in the poison's *HERO System* write-up. If the roll fails by 1-3, he fails to create the poison — or, in the GM's discretion, may create a much weaker toxin. If the roll fails by 4 or more, the character not only does not create any poison at all, but in the GM's discretion he may have suffered some calamity (a laboratory explosion or the like).

EXAMPLE FANTASY IMMUNITIES

Cost	Poison
3	Animal Poisons (other than serpent and spider poisons)
2	Deep Elf Poisons
2	Orcish Poisons
3	Plant Poisons of the Eastern Realms
3	Plant Poisons of the Western Realms
3	Serpent Poisons
2	Poisons of the Silverleaf Guild
3	Spider Poisons
2	Tornathian Ingested Poisons
2	Toxins of Thûn
3	Turakian Poisons

HARVESTING POISON

Characters who fight venomous animals and monsters may have the chance to "harvest" poison from the corpses of their defeated foes. The GM must first determine if the creature has any poison left; it may have used it all up in battle, or the characters' attacks could have pierced its reservoir and spilled all the venom. (If necessary, determine this randomly; on a roll of 11-, the animal's venom reservoir is intact.)

To harvest the poison reservoir, a character must make a roll. If he has an appropriate Knowledge Skill (such as KS: Animals), he only has to succeed with a DEX Roll to do the job properly. If he lacks an appropriate KS, he must make an 8- roll (to judge where to find the reservoir) *and* make a DEX Roll. If any of these rolls fail, the character loses all the poison.

Once a character has extracted a venom reservoir, he must store it properly, or else the venom evaporates, expires, or weakens. Use the rules for injected poisons, above, but diminish the venom per *day,* rather than per hour.

POISON IN THE CAMPAIGN

In Heroic-level games, typically characters can buy poisons with money instead of Character Points. This may cause problems in the game. Eager for its potent offensive power, characters may suddenly invest heavily in poisons and use them constantly, throwing off campaign balance.

Gamemasters who want to restrict the use of poison in the campaign have several options. First, make poisons difficult to create and obtain. Lengthen the creation time (and increase the perils of poison-brewing). Make poison so rare that it's difficult to find in the market, and incredibly expensive to purchase. Possession of poison may also be illegal, causing characters further problems when they try to buy or carry it.

HEALING AND POISONS

In most cases, use of the *Paramedics* Skill should have little, if any, effect on a poison that's already in a character's system. The GM should only allow a character to make Paramedics rolls to diminish the effect of poison if he has special knowledge of the subject — such as KS: Poisons or the like. Of course, the GM can always make exceptions; for example, if a character got to a snakebite victim right after he was bit, perhaps he could use his *Paramedics* Skill to put a torniquet on the wound, make an incision, and suck out some of the poison. But once the poison starts to degrade a person's flesh, internal organs, and/or nervous system, the chances of helping him diminish. Usually there's nothing Fantasy-era medicine can do to help him, and even Modern and Science Fiction medical procedures may be useless (at the very least, stopping the poison from continuing to affect the victim and then healing the damage it caused may take a very long time).

A spell or ability using the *Healing* Power can heal damage already taken from poison, but it doesn't stop further damage from accruing if the poison does Damage Over Time. However, at the GM's option, a character could use a Healing-based spell to counteract "future" poison damage from a poison already in the character's system. Alternately, this may require a Transform (poisoned person to non-poisoned person).

Second, make poisons difficult to use. Increase the speed with which they weaken or evaporate. Require a character to make a DEX Roll in every Phase he uses a poisoned weapon, with failure meaning he has accidentally poisoned himself. Give poison-using characters a *Negative Reputation* Complication that makes it hard for them to live or work with folk who object to poison use.

Third, if necessary, forbid characters to use poison altogether. After all, it's not heroic — it's something assassins, thieves, and other Evil people do. While heavy-handed, this method may prove the best and easiest for many campaigns.

Example Fictional Poisons

Here are four example poisons created specifically for use in Fantasy campaigns.

JEKKARA'S WINE

Named for the God of Death, this ingestable poison works well with beer or ale, whose taste it resembles (-2 PER to detect in those substances; +0 to detect in any other food). The victim feels no effect for the first hour, giving the poisoner time to escape. Thereafter he becomes ill, and typically dies within the next few minutes, though a strong (*i.e.*, high BODY) victim may survive.

RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (five increments, one per Minute for 5 Minutes, defense only applies once, cannot be used again on same victim until all increments accrue; +2) (75 Active Points); OAF Fragile (easily spilled or diluted poison; -1¼), No Range (-½), Must Be Ingested (-½), Extra Time (onset time begins 1 Hour after victim consumes poison; -3), 1 Charge (-2). ***Total cost: 9 points.***

RED TEARS

A contact poison typically used for traps, Red Tears takes its name from the effect it has on the victim. Within a few minutes of getting it on his skin or in his bloodstream, the victim becomes violently ill (often vomiting), and blood begins to ooze from his eyes as if he were crying bloody tears (it may also ooze from the mouth, nose, and under the fingernails). Death almost inevitably follows shortly thereafter.

RKA: 1d6, NND: (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (five increments, one per Minute for 5 Minutes, defense only applies once, cannot be used again on same victim until all increments accrue; +2), Trigger (when character touches poisoned object, resetting Trigger requires 1 Turn; +¼) (79 Active Points); OAF Fragile (easily spilled or diluted poison; -1¼), No Range (-½), Extra Time (onset time begins 5 Minutes after victim touches poisoned object; -2), 4 Charges (-1). ***Total cost: 14 points.***

SILVERLEAF CHUMETHA POISON

One of many poisons developed by the feared Silverleaf Guild (a notorious band of assassins), *chumetha* is an injected poison used primarily on throwing blades and daggers. It causes almost instant pain, if not death.

RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (five increments, one per 6 Segments for 30 Segments, defense only applies once, cannot be used again on same victim until all increments accrue; +3) (90 Active Points); OAF Fragile (easily spilled or diluted poison; -1¼), No Range (range, if any, must be supplied by thrown weapon; -½), HKA Must Do BODY (-½), 4 Charges (-1). Total cost: 21 points.

ZAEL DUST

Made by alchemists and assassins from the powdered skulls of skeletons once animated by necromancers, manticore blood, and certain mushrooms from the southern jungles ground into a fine powder, Zael dust (named for its creator) creates a cloud of poisonous fumes lethal enough to kill any who breathe it.

RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Area Of Effect (8m Radius; +½), Constant (+½), Damage Over Time (five increments, one per 6 Segments for 30 Segments, defense only applies once, cannot be used again on same victim until all increments accrue; +3) (105 Active Points); OAF Fragile (easily spilled or diluted poison; -1¼), No Range (range, if any, must be supplied by thrown weapon; -½), 1 Continuing Charge lasting 1 Turn (dust cloud lingers this long, but victims can only be poisoned once; -1¼). ***Total cost: 26 points.***

Example Real-World Poisons

Here are *HERO System* versions of several poisons that exist in the real world.

ABRIN

Abrin is a phytotoxin (poison derived from plants) found in the seeds of a tropical plant variously known as jequirity bean, precatory bean, paternoster pea, or rosary pea (*Abrus precatorius*). The onset of its effects usually occurs within two days, but may take only a few hours; they include vomiting, diarrhea, gastrointestinal problems, convulsions, coma, and death from cardiac failure. Abrin may also cause ulcers in the mouth. Even a single bean from this plant can be fatal to a child or a weak adult. Immunity to abrin costs 1 point.

Abrin: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (4 increments, one every 1.5 hours for 6 Hours, defenses only apply once; +½) (52 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 6 Hours after victim ingests poison; -3½), 4 Charges (-1). Total cost: 7 points.

ACONITE

This phytotoxin comes from the roots of the aconite plant (*Aconitum napellus*), also known as monk's-hood or wolfsbane. It's also found in the leaves and roots of larkspur.

In its pure form, aconitine, this poison is a white crystalline alkaloid. It's extremely virulent and fast-acting — death occurs almost instantaneously following ingestion. Aconitine can also be absorbed through the skin. Symptoms in longer-lasting cases (which usually last no more than an hour or two) include tingly skin (an important "giveaway" symptom in many cases), numbness or burning of the mouth and throat, stomach pain, vomiting, loss of coordination, feeling "cold," diarrhea, convulsions, and death from cardiac and respiratory failure. Doctors cannot detect aconite via an autopsy unless they run special tests. Immunity to aconite costs 2 points.

Aconite: RKA 5d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Invisible Power Effects (can't be detected with autopsy; +¼) (244 Active Points); OAF Fragile (-1¼), No Range (-½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 57 points.

ANTIMONY

Antimony is a silvery-white metallic element that can kill if ingested. It doesn't dissolve in water. Available in many common items (for example, certain kinds of batteries, glass, enamels, and matches), it can be used as an immediate poison or as a chronic (long-term) poison in small doses (such as in someone's food). With a large dose, the onset of the symptoms is immediate; they include depression, violent vomiting, severe diarrhea, gastrointestinal pain, unconsciousness, and spasms. Death follows in 30 minutes to several hours from circulatory and respiratory failure. When used in small doses over a long period, antimony causes extreme depression, nausea, and loss of appetite; it eventually kills through exhaustion. In this case the victim probably won't realize he's being poisoned. Antimony tends to preserve the body and inhibits decomposition. Immunity to antimony costs 2 points.

Antimony (chronic poisoning): RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1) (45 Active Points); OAF Fragile (-1¼), Damage Over Time (4 increments administered to the victim about once per Week for 1 Month, defenses only apply once; -1), No Range (-½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 8 points.

ARSENIC

Arsenic, an element, is one of the poisons most often used by killers in murder mysteries because it's so readily available (it has many uses in industry, gardening, and other fields). In its pure form it's a lustrous, brittle, grey-colored metal with a smell like garlic but no particular taste. In other forms, it may be yellow, white, or red; and a powder (usually odorless), a gas, or a liquid. A concentrated dose can kill within hours once it takes effect, but may not begin taking effect for up to a few days. The symptoms include severe stomach pain, vomiting, diarrhea, thirst, cold and clammy skin, leg cramps, depression, collapse, delirium, convulsions, coma, and death from dehydration and heart failure in 6-12 hours. If the victim survives the attack, he experiences stomach pain, decreased reflexes, and a burning sensation on the soles of his feet.

Arsenic is most often administered in small doses over a long period of time, just like antimony (use that write-up for chronic arsenic poisoning). Long-term effects include loss of appetite and weight, irritability and depression, nausea, numbness and/or itchiness of the skin, mottled pigmentation on the hands and feet, jaundiced skin, and a thickening of the nails. Death eventually occurs from dehydration and heart failure.

Doctors can easily detect arsenic in an autopsy by performing simple tests. The victim's stomach occasionally becomes crimson-colored and/or has small arsenic particles in it. Arsenic is also readily detectable in urine, hair, and other bodily substances. Immunity to arsenic costs 3 points.

Arsenic (concentrated dose): RKA 2d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (3 increments, one per 2 Hours for 6 Hours, defenses only apply once; +0) (90 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 3 Hours after victim ingests poison; -3), 4 Charges (-1). Total cost: 13 points.

ATROPINE

Atropine is an alkaloid derived from the belladonna plant (*Atropa belladonna*). A neurotoxin (a poison that attacks the central nervous system and its functions), it kills within 24 hours after ingestion (sometimes longer) by interfering with the respiratory system. Its initial symptoms appear within three hours, and include a dry mouth, dilated pupils, staggering and loss of coordination, a flushed face and dry skin, increased heartbeat and respiration, and restlessness and manic activity (symptoms similar to drunkenness in some respects). Later, the victim goes into depression and stupor, his face becomes bluish from lack of oxygen, his heartbeat slows, and he dies from asphyxia. Immunity to atropine costs 1 point.

Atropine: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (4 increments, one per 6 Hours for 1 Day, defenses only apply once; +0) (45 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 3 Hours after victim ingests poison; -3), Must Be Ingested (-½), 4 Charges (-1). Total cost: 6 points.

CROTIN

Crotin (or croton) is a phytotoxin derived from the seeds of certain shrubs in the southwest United States, Asia, Africa, and some Pacific islands (for example, *Croton tiglium*, the purging croton). It causes burning pains in the mouth and stomach, vomiting, bloody diarrhea, collapse, and death within 10-15 minutes to a few hours. Immunity to crotin costs 1 point.

Crotin: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (3 increments, one per 20 Minutes for 1 Hour, defenses only apply once; +½) (52 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 10-15 Minutes after victim ingests poison; -2), Must Be Ingested (-½), 4 Charges (-1). Total cost: 8 points.

CURARE

Curare, one of the most infamous poisons, derives from a variety of South American plants. It must be injected into the body (it's harmless if swallowed), so it's frequently used to coat darts, blades, and other weapons. It kills almost immediately by paralyzing the nervous system. Two anaesthetic drugs, Pavulon and succinylcholine, have similar effects. Immunity to curare costs 3 points.

Curare: RKA 4d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1) (180 Active Points); OAF Fragile (-1¼), No Range (-½), HKA Must Do BODY (-½), 4 Charges (-1). Total cost: 42 points.

CYANIDE

Hydrogen cyanide, another common poison, may be used in liquid, powder, or gaseous form. It's a salt of prussic acid and sees wide use in industrial processes such as photography, engraving, gold mining, steel hardening, and electroplating. It's available naturally in the seeds or pits of peaches, apricots, apples, and wild cherries. Its various salts include potassium cyanide, mercuric cyanide, and sodium cyanide. The salts are all whitish, crystalline powders, and are not lethal until dissolved in acid, producing hydrogen cyanide gas (which is colorless). Exposure to cyanide gas (the most common form) causes almost instantaneous death due to paralysis of the nervous system and attacks on the circulatory system. Liquid cyanide is used in "suicide capsules" hidden in fictional spies' teeth; the powdered and liquid forms have been used to poison foods and over-the-counter medicines (50-200 mg are enough to kill an adult in 15 minutes or less).

Cyanide smells like almonds to approximately 40% of the population (the ability to smell it is genetic). Doctors can easily detect its use via autopsy because it turns the skin and blood a bright red or pinkish color, and it may corrode the stomach if ingested. However, these effects dissipate with time as the cyanide in the blood decomposes.

Immunity to cyanide (in all of its forms) costs 3 points.

Cyanide Gas Shell: RKA 4d6, Area of Effect (500m Radius; +2), Constant (+½), NND (defense is LS [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1) (330 Active Points); OAF (-1), No Range (range is provided by shell's launching system; -½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1). Total cost: 88 points.

Cyanide Suicide Tooth: RKA 5d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1) (225 Active Points); OIF (-½), No Range (-½), Self Only (-½), Must Be Ingested (-½), 1 Charge (-2). Total cost: 45 points.

DIGITOXIN

Also known as digoxin, this extremely lethal poison is used in some forms as digitalis, a heart medicine. It derives from the plant foxglove. Its symptoms include loss of appetite, nausea and vomiting, diarrhea, decreased pulse and heartbeat, fatigue, convulsions, and death from respiratory failure. Death may occur almost immediately or take up to about one hour. Immunity to digitoxin costs 1 point.

Digitoxin: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (4 increments, one every 15 Minutes for 1 Hour, defenses only apply once; +1½) (67 Active Points); OAF Fragile (-1¼), No Range (-½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 16 points.

HEMLOCK

This plant comes in two varieties: poison hemlock and water hemlock. Poison hemlock is found in the temperate parts of North and South

America, Europe, Asia, and northern Africa, and is most toxic when flowering. It's an ingested neurotoxin which causes gradual paralysis and weakness, ending in death from respiratory failure. Water hemlock, one of the most toxic plants on Earth, grows in temperate regions and is also an ingested neurotoxin; its symptoms include stomach pains, nausea, vomiting, excessive salivation, diarrhea, convulsions, and death. Immunity to hemlock (both varieties) costs 1 point.

Poison Hemlock: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (6 increments, one per hour for 6 Hours, defenses only apply once; +1) (60 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 1 Minute after victim ingests poison; -1½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 10 points.

Water Hemlock: RKA 2d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (6 increments, one per 10 minutes for 1 Hour, defenses only apply once; +2) (150 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 1 Minute after victim ingests poison; -1½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 26 points.

INSULIN

Insulin is a hormone often used to treat diabetes. In excessive quantities it causes hypoglycemia, fatigue, irreversible brain damage, and death. Doctors can't detect its during an autopsy without the use of sophisticated radioimmunoassay tests. Immunity to insulin costs 1 point.

Insulin: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Invisible Power Effects (can't be detected with autopsy; +¼) (49 Active Points); OAF Fragile (-1¼), Extra Time (onset time begins no earlier than 1 Hour after victim is exposed to poison; -3), Damage Over Time (3 increments, one every eight hours for 1 Day, defenses only apply once; -½), No Range (-½), HKA Must Do BODY (-½), 4 Charges (-1). Total cost: 6 points.

MUSHROOMS

The *Amanita* genus of mushrooms is deadly poisonous to humans. Unfortunately, these mushrooms closely resemble several edible species. If ingested, they cause abdominal pain and cramps, nausea, vomiting, diarrhea, and possibly liver damage or jaundice. The victim seems to improve for about two days, but then ongoing damage to his nervous system finally kills him; there may be weakness or hallucinations prior to death. Death isn't automatic; depending upon the species of mushroom the fatality rate ranges from 15-90%. Immunity to poisonous mushrooms costs 2 points.

Poisonous Mushroom: RKA ½d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (5 increments, one approximately every day for 1 Week, defenses only apply once; +0) (30 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 1 Hour after victim ingests poison; -3), Must Be Ingested (-½), 4 Charges (-1). Total cost: 4 points.

NICOTINE

Nicotine, one of the principal substances in cigarettes (and thus easily obtained by straining it from tobacco), is extremely toxic. It can work if inhaled or ingested; it can also be absorbed through the skin. A few drops of pure nicotine can kill an adult human within an hour by causing respiratory failure; symptoms include nausea, vomiting, diarrhea, confusion, dizziness, and difficulty breathing. Immunity to nicotine costs 2 points.

Nicitine: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (6 increments, one per 10 minutes for 1 Hour, defenses only apply once; +2) (75 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time begins no earlier than 1 Minute after victim ingests poison; -1½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 13 points.

RICIN

Ricin is a phytotoxin derived from the seeds of the castor oil plant (*Ricinus communis*), which is found in the United States and the tropics. Even tiny amounts of pure ricin can be fatal. When used as a poison, it acts slowly, over the course of several days, but its symptoms are indistinguishable from many illnesses. They include: burning of the mouth, throat and stomach; abdominal pain and vomiting; diarrhea; convulsions; paralysis; and death from respiratory failure. Immunity to ricin costs 1 point.

Ricin: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (7 increments, one every day for 1 Week, defenses only apply once; +½) (52 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time of 2 hours to 2 days; -3), Must Be Ingested (-½), 4 Charges (-1). Total cost: 7 points.

ROBIN

Robin is a phytotoxin derived from the bark of the North American locust tree (*Robinia pseudacacia*). It is effective when ingested, and kills within days dues to paralysis of the central nervous system. Immunity to robin costs 1 point.

Robin: RKA 1d6-1, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (7 increments, one every day for 1 Week, defenses only apply once; +½) (42 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time of 2 hours to 2 days; -3), Must Be Ingested (-½), 4 Charges (-1). Total cost: 6 points.

STRYCHNINE

Strychnine is an alkaloid phytotoxin derived from the seeds of the nuxvomica tree (*Strychnos nux-vomica*) of India and Hawaii. Fifty to 100 milligrams is enough to kill a human being (usually by injection or ingestion [it has a bitter taste]). Death can occur in a minute or two, but may take up to two hours.

Strychnine attacks the central nervous system, increasing its sensitivity. Symptoms generally appear within five to 15 minutes. At first, the victim experiences muscle twitches and difficulty breathing, but then suffers extremely violent convulsions in which all the body's muscles contract at once. Convulsive fits last 1-2 minutes, and usually after about three or four of them the victim dies from respiratory and cardiac distress. Any sound or light can trigger another convulsion. The victim remains alert between attacks. After death the facial muscles contort so the victim has a *risus sardonicus*, or sardonic rictus grin. The grin soon fades, and thereafter doctors must perform special blood tests to detect the use of strychnine. Immunity to strychnine costs 3 points.

Strychnine: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Invisible Power Effects (can't be detected with autopsy; +¼), Damage Over Time (5 increments, one per minute for 5 Minutes, defenses only apply once; +2½) (86 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time of 1 Minute to 2 hours; -1½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 15 points.

TETRODOTOXIN

Tetrodotoxin (or tetraodontoxin) is an extremely potent zootoxin derived from the *fugu,* or puffer fish. Puffer fish is a delicacy in Japan, but if improperly prepared is deadly poisonous. The dangers of tetrodotoxin are also known in Haiti, where it is one of the ingredients in the powder used to turn people into "zombies" (see *The Ultimate Mystic,* page 120).

A neurotoxin, tetrodotoxin can kill in mere minutes in even tiny doses (.01 mg) if injected or ingested — but for unknown reasons it's only lethal about 60% of the time (pure tetrodotoxin, such as an assassin might use, might be 100% fatal). The victim experiences tingling sensations, loss of coordination, excessive salivation, weakness, nausea, vomiting, convulsions, and death from respiratory paralysis. There is no known antidote. Immunity to tetrodotoxin costs 1 point (3 points for Japanese people or others who frequently consume puffer fish).

Tetrodotoxin: RKA 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (5 increments, one per minute for 5 Minutes, defenses only apply once; +2½) (82 Active Points); OAF Fragile (-1¼), No Range (-½), Extra Time (onset time of at least 1 Minute; -1½), Must Be Ingested (-½), 4 Charges (-1). Total cost: 14 points.

THALLIUM

Thallium is a poisonous metal. Typically, it's used as a poison after being irradiated, because radiation breaks it down into a microscopic powder that can't be removed from the body once ingested. The victim slowly dies of radiation poisoning. Immunity to thallium costs 1 point.

Thallium: Drain CON and BODY 1d6, Expanded Effect (two Characteristics simultaneously; +½), Delayed Return Rate (points return at the rate of 5 per Month; +2¾), NND (defense is Life Support [appropriate Immunity]; +0), Does BODY (+1), Damage Over Time (6 increments, one approximately every day for 1 Week, defenses only apply once; +0) (52 Active Points); OAF Fragile (-1¼), Extra Time (onset time of at least 1 Minute; -1½), HKA Must Do BODY (-½), 4 Charges (-1). Total cost: 10 points.

Tailoring Poisons

Characters can tailor poisons to their specific needs in many ways.

CONVERTING AN INGESTED POISON TO AN INJECTED POISON

Since *HKA Must Do BODY* (-½) and *Must Be Ingested* (-½) both have the same Limitation value, you can easily change an ingested poison to an injected one (or vice-versa) simply by switching Limitations, if appropriate.

BINARY POISONS

This is a variety of poison the user administers in two or more parts. None of the parts is lethal on its own — they can only kill when brought together. For example, an assassin might feed his victim the first part with dinner, then coat the victim's after-dinner cigar with the other part. In *HERO System* terms, you can build a binary poison by applying the Advantage *Trigger* (poison takes effect when all parts have been successfully administered; +¼) to a standard poison.

DMSO

DMSO (dimethyl sulfoxide) isn't a poison, it's a method of poison delivery. It converts ingested or injectable poisons into contact poisons — it allows such chemicals to transmit through the skin. In game terms, a poison + DMSO "cocktail" changes to a contact poison, which involves adding the *Trigger* Advantage and removing relevant Limitations.

TIME-RELEASE METHODS

It's possible to coat an ingested poison with other chemicals or place it inside tiny beads. This has the effect of delaying the onset of the poison by as much as two days (depending upon the poison and the time-release mechanism used). Characters may buy this as the Advantage *Trigger* (the passage of a specified amount of time; +¼) for the poison.

RESTRAINING AND NON-LETHAL WEAPONS

Not every weapon needs to kill or injure the target. Sometimes it's sufficient — even desirable — to simply incapacitate an enemy.

BLINDING LASER

Effect: Sight Group Flash 4d6
Target: One character
Duration: Instant
Range: 200m
Charges: 12 Charges
Breakability: 4 PD/4 ED

Description: Although portable laser weapons able to deliver enough energy to kill a target are not (yet) technologically feasible in the Modern day, military engineers have developed laser weapons intended to blind an opponent or visual sensor (either temporarily or permanently). There are two models: a small model which mounts underneath the barrel of an assault rifle; and a larger model with much greater range and power.

Game Information: Sight Group Flash 4d6 (20 Active Points); OAF (-1), Real Weapon (-¼), 12 Charges (-¼). Total cost: 8 points.

Options:

1) **Handheld Blinding Laser:** The writeup above is for the underbarrel blinding laser; here's the independent version:

BLINDING LASER

Cost	Power
41	**Blinding Laser:** Multipower, 90-point base, 32 Charges for entire Multipower (+¼); all OAF Bulky (-1½), Real Weapon (-¼)
1f	**1) Dazzling Setting:** Sight Group Flash 6d6, Increased Maximum Range (600m; +¼); OAF Bulky (-1½), Real Weapon (-¼)
3f	**2) Blindness Setting:** Severe Transform 6d6 (sighted person or sensor to blind person or sensor); OAF Bulky (-1½), All Or Nothing (-½), Limited Target (sighted beings/objects; -¼), Real Weapon (-¼)

Total cost: 45 points.

HANDCUFFS

Effect: Entangle 3d6 (standard effect: 3 BODY), 6 PD/6 ED, Takes No Damage From Attacks, Hands Only, Does Not Prevent Use Of Accessible Foci
Target: One character
Duration: Instant
Range: No Range
Charges: 1 Recoverable Charge
Breakability: 6 PD/6 ED

Description: Handcuffs and various related restraints (such as thumbcuffs, legcuffs, and flexible plastic-strip restraints) are bought as Entangles with several Complications. See APG 96-97 or HSS 138 for more information and rules about escaping Entangles with Contortionist.

Game Information: Entangle 3d6 (standard effect: 3 BODY), 6 PD/6 ED, Takes No Damage From Attacks (+½) (67 Active Points); OAF (-1), Set Effect (hands only; -1), Does Not Prevent Use Of Accessible Foci (-1), No Range (-½), Must Follow Grab Or Target Must Be Willing (-½), Can Be Escaped Automatically With Modified Lockpicking Or Contortionist Roll (-½), 1 Recoverable Charge (-1¼). Total cost: 10 points.

Options:

1) **Strong Handcuffs:** These cuffs enclose the hands entirely, making escape much harder. Remove Does Not Prevent Use Of Accessible Foci (-1) and Can Be Escaped Automatically With Modified Lockpicking Or Contortionist Roll (-½). Total cost: 13 points.

MACE/PEPPER SPRAY

Effect: Sight Group Flash 5d6, NND, Delayed Recovery plus Blast 3d6, NND
Target: One character
Duration: Instant
Range: No Range
Charges: 12 Charges
Breakability: 15 PD/15 ED

Description: Mace and pepper spray are chemical agents designed to blind an attacker (and in the process cause some discomfort and pain). They come in small spray canisters, and are often carried by women and corrections officers. The spray may be liquid, or it may be a foam. In either case, it can get around glasses and other forms of eye protection that do not offer total protection; only solid eye coverings, such as goggles or a sealed helmet, offer a defense against this weapon.

Game Information: Sight Group Flash 5d6, NND (defense is solid eye covering, see text; +0), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (75 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 12 Charges (-¼) (total cost: 25 points) **plus** Blast 3d6, NND (defense is solid eye covering; +1) (30 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 12 Charges (-¼) (total cost: 10 points). Total cost: 35 points.

PNUEGUN

Effect: Blast 6d6
Target: One character
Duration: Instant
Range: 44m
Charges: 1 Charge
Breakability: 6 PD/6 ED

Description: The PnueGun is a small tube which uses compressed carbon dioxide to fire a small, hard beanbag up to 150 feet. The force of the impact is enough to stun a man and knock him down.

Game Information: Blast 6d6 (30 Active Points); OAF (-1), Limited Range (44m; -¼), Real Weapon (-¼), 1 Charge (-2). Total cost: 7 points.

SHOCKBATON

Effect: HA +2d6; Blast 8d6, NND
Target: One character
Duration: Instant
Range: No Range
END Cost: 1/12 Charges
Breakability: 16 PD/16 ED

Description: This riot control baton contains a small battery capable of providing a localized high-voltage shock. It also emits a loud crackling noise to frighten off attackers.

Game Information:

Cost	Power
4	**Shockbaton — Baton:** HA +2d6 (10 Active Points); OAF (-1), Hand-To-Hand Attack (-¼), Real Weapon (-¼)
27	**Shockbaton — Incapacitating Touch:** Blast 8d6, NND (defense is insulated ED; +1) (80 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 12 Charges (-¼)

Total cost: 31 points.

SLICKNESS SPRAY

Effect: Change Environment (create slick area), -4 to DEX Rolls to move on
Target: 16m radius horizontal Surface
Duration: Constant
Range: No Range
Charges: 1 Continuing Charge lasting 5 Minutes
Breakability: 5 PD/5 ED

Description: This is a chemical spray or foam, such as the product Riotril, which coats hard surfaces (stairs, roads, floors, and the like) so that they become too slick to stand on. Criminals and rioters can't keep their feet, and cars that drive across slicked-up roads lose traction and control. After the substance dries, it can be peeled up easily.

Game Information: Change Environment (create slick area), -4 to DEX Rolls to move on, Area Of Effect (Surface 16m radius; +1), Personal Immunity (+¼) (27 Active Points); OAF (sprayer; -1), Can Only Be Applied To Horizontal Surfaces (*e.g.,* the ground and floors; -0), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 5 Minutes (-¾). Total cost: 8 points.

SONIC AND ACOUSTIC WEAPONS

Effect: Blast 2d6, NND; RKA ½d6; Drain DEX 1d6
Target: One character
Duration: Constant
Range: 40m
Charges: 100 Charges
Breakability: 9 PD/9 ED

Description: The US military has experimented with sonic weapons and riot-control devices for many years. High-pitched, high-decibel sound can cause headaches, feelings of nausea, confusion, vertigo, and similar symptoms with no visible cause. Sound below the pitch of human hearing is also dangerous — it can shake buildings and rupture internal organs in some cases. Sonic (or acoustic) weapons could be set for low-intensity or high-intensity (in other words, nonlethal or lethal effects). They can be used offensively, or defensively (for example, to set up a "barrier" which would effect anyone walking into it). This sort of sonic weapon can even penetrate buildings to affect the occupants (in *HERO System* terms, they're Indirect).

Game Information:

Cost	Power
15	**Sonic Cannon:** Multipower, 25-point reserve, 100 Charges for entire reserve (+¾); all OAF Bulky (-1½), Limited Range (40m; -¼), Real Weapon (-¼)
1f	**1) Nonlethal Pain Effect:** Blast 2d6, NND (defense is Hearing Flash Defense, earplugs, or solid coverings over the ears; +½), Constant (+½), Indirect (Source Point is always the generator, but Path can change so effect penetrates walls; +½); OAF Bulky (-1½), Limited Range (40m; -¼), Real Weapon (-¼)
1f	**2) Lethal Effect:** RKA ½d6, Constant (+½), Indirect (Source Point is always the generator, but Path can change so effect penetrates walls; +½); OAF Bulky (-1½), Limited Range (40m; -¼), Real Weapon (-¼)
1f	3) **Vertigo Effect::** DEX Drain 1d6, Constant (+½), Indirect (Source Point is always the generator, but Path can change so effect penetrates walls; +½); OAF Bulky (-1½), Limited Range (40m; -¼), Real Weapon (-¼)

Total cost: 18 points.

Options:

1) **Sonic Barrier Generator:** Here's a defensive example of a sonic weapon: Blast 4d6, NND (defense is Hearing Flash Defense, earplugs, or solid coverings over the ears; +½), Area Of Effect (48m Line; +¾), Constant (+½) (55 Active Points); OAF Bulky (-1½), No Range (device generates the line directly from itself; -½), Real Weapon (-¼). Total cost: 17 points.

STICKY FOAM

Effect: Entangle 3d6, 3 PD/3 ED
Target: 2m Radius
Duration: Instant
Range: 10m
Charges: 16 Charges
Breakability: 7 PD/7 ED

Description: Sticky foam, or sprayfoam, is a rapid-hardening foam used to restrain prisoners, rioters, and similar targets. The dispenser is a flamethrower-like backpack tank with a spraygun that attaches to the tank via a hose. The foam is so sticky and quick-setting that it can instantly trap targets; it's virtually impossible to remove without a special liquid solvent. The US Marines used this technology in Somalia in 1995. Potential problems arise include the fact that the solvent is potentially toxic, the spray can be lethal if sprayed directly into the target's face (he suffocates), and the weapon has a very short range and affects an entire area indiscriminately.

Game Information: Entangle 3d6, 3 PD/3 ED, Area Of Effect (2m Radius; +¼) (37 Active Points); OAF Bulky (-1½), Limited Range (10m; -¼), Side Effect (victim can suffocate if sprayed directly in the face; -0), Susceptible (to special solvent; -¼), 16 Charges (-0). Total cost: 12 points.

TASER

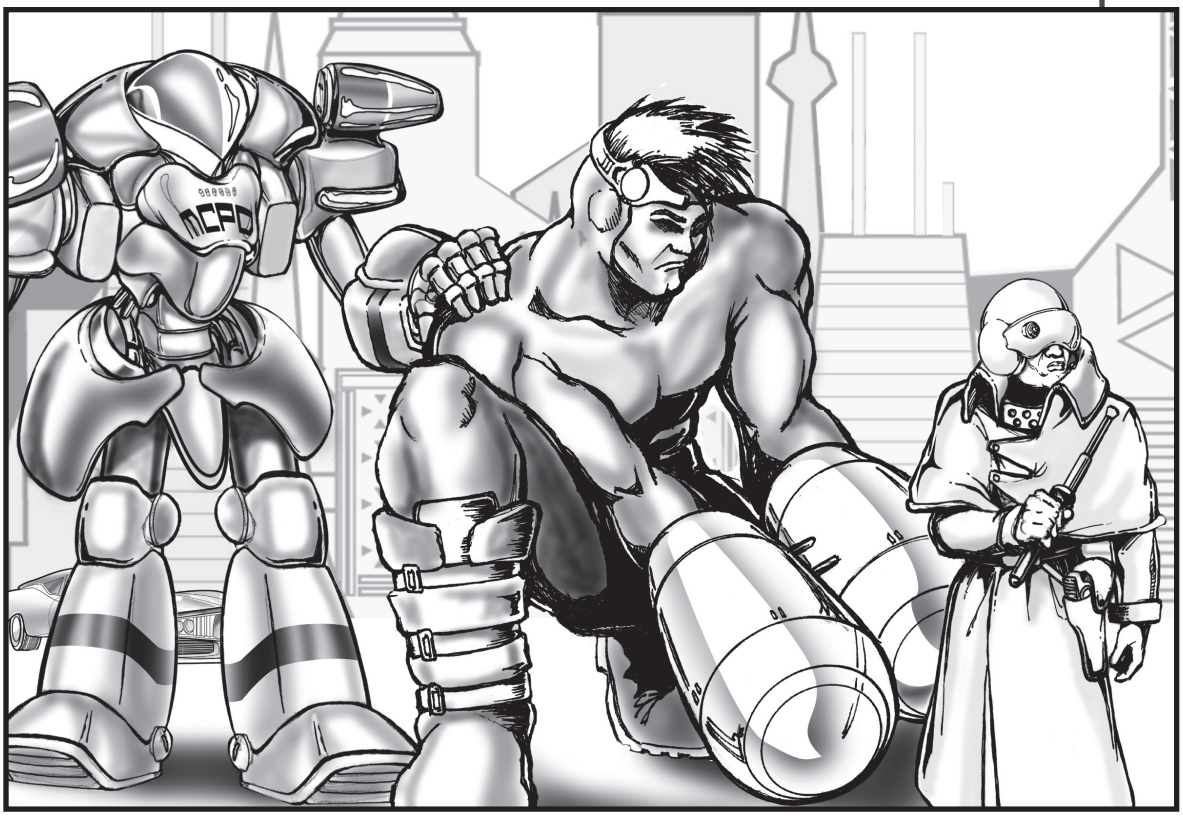
Effect: Blast 8d6, NND (defense is insulated ED)
Target: One character
Duration: Instant
Range: No Range
Charges: 1 Recoverable Charge
Breakability: 16 PD/16 ED

Description: Tasers shock the victim with 2,000 or more volts of electricity — enough to knock him out, but not kill him (though a character could create a taser with lethal levels of voltage). They come in two varieties. The first type, written up here, works over a short range. It projects a small metal dart into the victim; the dart's attached to the weapon via a wire down which the electricity travels. Characters need WF: Small Arms to use this type of taser.

Game Information: Blast 8d6, NND (defense is insulated ED; +1) (80 Active Points); OAF (-1); Limited Range (8m; -¼), 1 Recoverable Charge (-1¼). Total cost: 23 points.

Options:

1) **Non-Ranged Taser:** The other type, used with WF: Fist-Loads, requires the character to touch the target with the device. Blast 8d6, NND (defense is insulated ED; +1) (80 Active Points); OAF (-1); No Range (-½), 12 Charges (-¼). Total cost: 29 points.



WEAPONS OF MASS DESTRUCTION

1

In the Modern world, the most terrifying weapons a nation or group can wield are so-called "weapons of mass destruction": chemical weapons, biological weapons, and nuclear bombs capable of killing thousands or millions of people in mere seconds or hours. They also exist in Science Fiction settings, of course (possibly along with even worse things); the Fantasy equivalent would be spells of mass destruction that call down plagues, rains of fire, and similar deadly disasters over entire kingdoms or continents.

Because of these weapons' incredible destructive capabilities, GMs frequently use them as plot elements in *HERO System* scenarios. Therefore, GMs and players alike may find it helpful to have an understanding of how they work, and how to simulate their effects in game terms. Of course, most of the time the exact effects of the weapon don't matter — it's just a plot device and doesn't need a write-up. But occasionally it could matter — for example, when a PC's base of operations is located on the edges of a nuclear blast's effect and the GM must answer the question of exactly what happens to him and his vital equipment.

CHEMICAL AND BIOLOGICAL WEAPONS

Second only to nuclear weapons (see below) in their capacity for killing large numbers of people, chemical and biological weapons are cheap and relatively easy to make. They're increasingly used in warfare, especially by Third World nations that can't make nuclear weapons. Because of the intrigue that surrounds them, the ease with which they can be manufactured and used, and the vast numbers of deaths they can cause, chemical and biological weapons are likely to be the subject of many scenarios, so this section briefly discusses the major types of them and provides *HERO System* statistics for several.

Biological Weapons

Biological weapons come in four basic types: bacterial infections (which cause plague, anthrax, brucellosis, and typhoid fever); fungal infections (which cause desert fever); rickets infections (which cause typhus, purple fever, and Queensland fever); and viral infections (which cause smallpox, yellow fever, and some of the deadlier kinds of flu).

Discussing various types of diseases, and the biological mechanisms by which they infect people, is beyond the scope of this book. The GM can use the examples given below — which involve the bubonic plague and anthrax, two diseases frequently used as biological weapons — to create other bioweapons if he desires.

These biological weapons are built using Drain with No Range (their range depends on the launching system used to fire them, if any). The listed defense against them is the appropriate Immunity; a character can also protect himself by remaining within a hermetically-sealed, airtight environment during the lifespan of the biological organisms involved — which in some cases may be years or decades (the *Extra Time* Limitations provide a description of the basic course of the disease, but victims may remain infectious for longer periods, and in some cases the biological organisms remain viable for much longer).

BUBONIC PLAGUE ("THE BLACK DEATH")

Typically carried by fleas that live on rats, and passed on to humans when the fleas bite them after the rats come into close contact with people, bubonic plague is often referred to as "the black death" because of the black buboes (swellings) and black skin blotches it causes (from internal bleeding). It attacks quickly, typically killing the victim within five days after exposure. Mere hours after contracting the disease, the victim begins to feel chilled, feverish, nauseous, and eventually delirious. He also experiences severe pain, boils, and black buboes as large as an apple in the armpits and groin which ooze pus and blood. An even more virulent form, pneumonic plague, spreads through the air and causes continuous fever and the spitting of blood instead of swelling.

Curing bubonic plague requires treatment with streptomycin or tetracycline within the first 15 hours of the onset of symptoms. Beyond that point, the disease has progressed too far to save the victim.

Bubonic Plague Bioweapon, First Stage: *Drain CON 1d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [appropriate Immunity]; +0), Reduced Endurance (0 END; +½) (40 Active Points); OAF Bulky (-1½), Activation Roll 14- (-¼), Extra Time (onset time begins one hour after exposure; -3), Damage Over Time (5 increments, one per day for five days, defenses only apply once, cannot be used again on same victim until all increments accrue; -3), No Range (-½), Real Weapon (-¼), 1 Charge (-2). Total cost: 3 points.*

Bubonic Plague Bioweapon, Second Stage (starts after First Stage takes full effect): *Drain STR 1d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [appropriate Immunity]; +0), Reduced Endurance (0 END; +½) (40 Active Points); OAF Bulky (-1½), Extra Time (begins to affect victim one day after First Stage takes full effect; -4), Damage Over Time (5 increments, one per day for five days, defenses only apply once, cannot be used again on same victim until all increments accrue; -3), Linked (to First Stage; -½), No Range (-½), Real Weapon (-¼), 1 Charge (-2). Total cost: 3 points.*

Bubonic Plague Bioweapon, Third Stage (starts after First Stage takes full effect): *Drain Striking Appearance 1d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [appropriate Immunity]; +0), Reduced Endurance (0 END; +½) (40 Active Points); OAF Bulky (-1½), Extra Time (begins to affect victim one day after First Stage takes full effect; -4), Damage Over Time (3 increments, one per day for three days, defenses only apply once, cannot be used again on same victim until all increments accrue; -4), Linked (to First Stage; -½), No Range (-½), Real Weapon (-¼), 1 Charge (-2). Total cost: 3 points.*

Bubonic Plague Bioweapon, Final Stage (starts after Second Stage takes full effect): *Drain BODY 1d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [appropriate Immunity]; +0), Does BODY (+1), Reduced Endurance (0 END; +½) (50 Active Points); OAF Bulky (-1½), Extra Time (begins to affect victim one day after Second Stage takes full effect; -4), Damage Over Time (5 increments, one per day for five days, defenses only apply once, cannot be used again on same victim until all increments accrue; -3), Linked (to First Stage; -¼), No Range (-½), Real Weapon (-¼), 1 Charge (-2). Total cost: 4 points.*

Bubonic Plague Bioweapon, total cost: *13 points.*

For the pneumonic variety of the plague, increase the Drain BODY to 2d6 and make all effects Sticky (representing the ease with which the disease passes from person to person).

INHALATION ANTHRAX

Anthrax is a particularly deadly disease that can contaminate an area for decades, making it totally unfit for human habitation. Different types of anthrax spread by contact, ingestion, or inhalation; this bioweapon uses the inhalation form of the disease. Several days after a person becomes infected, he suffers fever, fatigue, and coughing. Thereafter he often seems to improve slightly, but then experiences shock and dies within 24 hours despite attempts at treatment.

Inhalation Anthrax Bioweapon, First Stage: *Drain CON 1d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [appropriate Immunity]; +0), Reduced Endurance (0 END; +½) (40 Active Points); OAF Bulky (-1½), Extra Time (½d6+1 days' onset time [sometimes more]; -4), Damage Over Time (3 increments, one per two hours for 6 Hours, defenses only apply once, cannot be used again on same victim until all increments accrue; -2), No Range (-½), Real Weapon (-¼), 1 Charge (-2). Total cost: 3 points.*

Inhalation Anthrax Bioweapon, Second Stage (starts after First Stage takes full effect): *Drain END 1d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [appropriate Immunity]; +0), Reduced Endurance (0 END; +½) (40 Active Points); OAF Bulky (-1½), Extra Time (½d6+1 days' onset time [sometimes more]; -4), Damage Over Time (3 increments, one per two hours for 6 Hours, defenses only apply once, cannot be used again on same victim until all increments accrue; -2), Linked (to First Stage; -½), No Range (-½), Real Weapon (-¼), 1 Charge (-2). Total cost: 3 points.*

Inhalation Anthrax Bioweapon, Final Stage (starts after Second Stage takes full effect): *Drain BODY 2d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [appropriate Immunity]; +0), Does BODY (+1), Reduced Endurance (0 END; +½) (100 Active Points); OAF Bulky (-1½), Extra Time (begins to affect victim one day after first effect has taken full effect; -4), Damage Over Time (3 increments, one per two hours for 6 Hours, defenses only apply once, cannot be used again on same victim until all increments accrue; -2), Linked (to First Stage; -¼), No Range (-½), Real Weapon (-¼), 1 Charge (-2). Total cost: 9 points.*

Inhalation Anthrax Bioweapon, total cost: *15 points.*

Chemical Weapons

"Chemical weapons" refers to any sort of gas, lethal or otherwise, that's used as a weapon (some are also used in liquid form). They range from simple irritating and incapacitating gases to gases so lethal that the merest whiff of them causes almost instant unconsciousness and death. They're grouped into two different categories, incapacitating and lethal, based on their effect.

Chemical weapons are built using Powers that have No Range, or take the *No Range* (-½) Limitation. Their range depends on the launching system used to fire them (if any).

INCAPACITATING AGENTS

Incapacitating agents render the target incapable of fighting without killing him. There are two kinds: physical and psychological.

PHYSICAL INCAPACITATING AGENTS

Physical incapacitators affect the target's health and physical ability to fight. Examples include:

CN/CS: CN and CS are lachrymatory gases (tear gases) that cause uncontrollable weeping and coughing. The stronger tear gases used by the military may also sicken and incapacitate the victim (add to CS/CN the effects of ES gas). CS smells something like apple blossoms, CN like pepper.

CN/CS Gas Shell: *Sight Group Flash 8d6, Area Of Effect (32m Radius; +1), Constant (+½), NND (defense is solid, sealed coverings over the eyes or appropriate Life Support [Immunity]; +½), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2) (200 Active Points); OAF (-1), Activation Roll 14- (-¼), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1). Total cost: 50 points.*

ES: ES gas makes the victim extremely nauseous and diarrhetic. The discomfort and weakness last for about a day, give or take.

ES Gas Shell: *Drain CON, END, and STR 4d6, Expanded Effect (3 Characteristics simultaneously; +1), Area Of Effect (32m Radius; +1), Constant (+½), Delayed Return Rate (points return at the rate of 5 per 6 Hours; +2), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +0) (220 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1). Total cost: 59 points.*

Sneezing Powder: Here's an example of a *neutralizing agent,* an incapacitating agent designed to neutralize just one person for a short period of time: a powder that induces uncontrollable sneezing. What's presented here is a dose designed to affect a single person, but you can easily make it a crowd-control weapon or the like by applying Area Of Effect.

Entangle 5d6, 5 PD/5 ED, Takes No Damage From Attacks (+1) (100 Active Points); OAF Fragile (-1¼), No Defense (-1½), Range Based On STR (-¼), Does Not Work In Winds Or Rain (-¼), 1 Charge (-2). Total cost: 16 points.

Vomiting Gases: Vomiting or regurgitant gases, such as some forms of DM (adamsite), induce retching, coughing, sneezing, and similar symptoms that effectively incapacitate the victim In concentrated doses (such as if used indoors), they sometimes prove fatal. The effects of mild exposure usually fade within about 30 minutes; stronger exposures may affect the victim for hours.

Vomiting Gas Shell: *Drain CON 3d6, Area Of Effect (32m Radius; +1), Constant (+½), Delayed Return Rate (points return at the rate of 5 per 20 Minutes; +1½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +0) (120 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1) (total cost: 32 points)* ***plus*** *Entangle 6d6, 6 PD/6 ED, Takes No Damage From Attacks (+1), Area Of Effect (32m Radius; +1), Constant (+½) (210 Active Points); OAF (-1), Does Not Work Against Targets With Life Support (Self-Contained Breathing or appropriate Immunity; -½), Linked (-¼), No Defense (-1½), No Range (-½), Real Weapon (-¼), Susceptible (effects of Entangle end immediately if victim is removed from gas cloud and gets one recovery of Drained points of CON; -1), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1) (total cost: 30 points). Total cost: 62 points.*

PSYCHOLOGICAL INCAPACITATING AGENTS

Psychological incapacitators weaken the victim's mental acumen and often cause hallucinations and psychotic behavior. LSD has been used as a psychological incapacitator; another type is BZ, whose effects are similar to LSD. The problem with these agents is that the victim's actions are not controllable — sometimes, making a soldier hallucinate or become psychotic is the last thing the enemy wants (though a master criminal determined to wreak havoc in a city may think it's just what he needs). Thus, use of these agents is infrequent at best.

LSD/BZ Gas Shell: *Drain INT 2d6, Area Of Effect (32m Radius; +1), Constant (+½), Delayed Return Rate (points return at the rate of 5 per 20 Minutes; +1½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +0) (80 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1) (total cost: 21 points)* ***plus*** *Mental Illusions 8d6, Area Of Effect (32m Radius; +1), Constant (+½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +0) (100 Active Points); OAF (-1), Based On CON (ED applies; -1), Linked (-¼), No Conscious Control (cannot control the hallucinations the*

victim experiences; -1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1) (total cost: 17 points). Total cost: 38 points.

LETHAL AGENTS

Lethal agents come in five types: asphyxiants; blistering agents; haemotoxins; nerve gases; and toxins.

ASPHYXIANTS

Asphyxiant gases kill by disrupting the body' ability to breathe and attacking the respiratory tract. The two best-known ones are chlorine and phosgene. Phosgene is a colorless gas with the odor of new-mown hay. It causes the victim to cough, choke, and drown in his own mucus and bodily fluids.

Phosgene Gas Shell: *RKA 6d6, Area of Effect (2000m; +2½), Constant (+½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1) (540 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1). Total cost: 144 points.*

BLISTERING AGENTS

Blistering agents (also called vesicants) cause horrible burns and blisters to exposed skin. If they contact the eyes, they permanently blind the victim. If directly inhaled, they kill. They can also cause death indirectly if the sores they create become infected or if the suffering victim commits suicide (a not uncommon result).

Victims who survive the initial attack of a blistering agent take months to heal — the ulcerating sores caused by the gas scab over, and then the scabs fall off and the sores ulcerate once more. In addition to the horrible sores, a surviving victim may suffer from bronchopneumonia.

Blistering agents may come in two forms: gas (the most common) or liquid. The best known blistering agent is mustard gas (also known as HD), including distilled mustard (which is colorless and smells like garlic) and nitrogen mustard (which is colorless and smells like fish or soap). Similar to mustard gas is Lewisite, which has similar effects but is stronger (RKA 6d6).

MUSTARD GAS SHELL

Cost	Power
49	**Mustard Gas Shell, First Effect (burns, blisters, and ulcerating sores):** Drain DEX, CON, BODY, and Striking Appearance 2d6, Expanded Effect (four abilities simultaneously; +1½), Area of Effect (1000m Radius; +2¼), Constant (+½), Delayed Return Rate (points return at the rate of 5 per Season; +3), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +0), Does BODY (+1) (185 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1)

115 **Mustard Gas Shell, Second Effect (death from inhalation):** RKA 5d6, Area of Effect (1000m; +2¼), Constant (+½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1) (431 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1)

75 **Mustard Gas Shell, Third Effect (blindness):** Major Transform 8d6 (sighted person to blind person, heals back via eye transplant), Area of Effect (1000m; +2¼), Constant (+½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +0) (300 Active Points); OAF (-1), Limited Target (sighted beings; -¼), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1)

Total cost: 239 points.

HAEMOTOXINS

Haemotoxins attack the blood and the circulatory system. They tend to cause instant unconsciousness, followed by death within seconds from respiratory failure. Cyanide acid and cyanogen gas are the two most common forms; for more information, refer to *Poisons,* above.

NERVE GASES

Nerve gases are among the most feared chemical warfare agents. These colorless and odorless gases attack the central nervous system, disrupting nerve transmissions throughout the body. A single drop of the liquid form or a whiff of the gaseous form can be fatal within five to ten minutes.

Initially, exposure to a nerve agent causes the victim's nose to run and his vision to blur. He has difficulty breathing, and he soon begins to vomit and/or defecate. Mental disturbances come next, followed by coma, spasms, paralysis, and death from respiratory failure. Atropine (a poisonous substance) and oxime are antidotes, but still leave the victim incapacitated for days.

Nerve gases come in two basic types: the "G" and "V" series. The "G" series includes Tabun (GA), Sarin (GB, the gas used in the Aum Shinrikyo subway attacks in Tokyo), and Soman (GD). The faster-acting "V" series includes VE, VM, and VX.

Nerve Gas Shell: *RKA 1d6, Area of Effect (1000m; +2¼), Constant (+½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1), Damage Over Time (8 increments, one per two minutes for 16 minutes, defenses only apply once, cannot reuse power on same victim until all damage increments accrue; +2½) (124 Active Points); OAF (-1), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1). Total cost: 33 points.*

TOXINS

Toxins include phytotoxins and zootoxin (poisons derived from plants and animals, respectively; see *Poisons,* below) and microbe toxins. Microbe toxins are poisons created by microscopic organisms. They include B (an enterotoxin) and TZ (a saxitoxin, frequently found in spoiled mollusks or shellfish; .05 of a gram can kill a human being).

The best-known microbe toxin is botulin, also called X or A, which causes botulism (a lethal form of food poisoning). From .00007-.00015 of a gram of botulin is enough to kill, depending upon whether it's ingested or enters the body via a wound or injection. About 1-2 hours after being infected (*i.e.,* after being exposed to the microbes via a gas or eating contaminated food), the victim begins to suffer from gastrointestinal cramps, vomiting, abdominal pain, dryness of the mouth, and motor and visual disturbances. Death follows from paralysis of the respiratory system.

Botulin Gas Shell: *RKA 1d6, Area of Effect (1000m; +2¼), Constant (+½), NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Does BODY (+1) (86 Active Points); OAF (-1), Damage Over Time (4 increments, one per hour for 4 hours, defenses only apply once, cannot reuse power on same victim until all damage increments accrue; -1½), Extra Time (1-2 hours' onset time; -3), No Range (-½), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (removed by high winds or rain; -1). Total cost: 10 points.*

Not all toxins are designed to affect humans and animals. *Phytotoxic agents* are poisonous substances manufactured for use against plants, to clear away vegetation and allow soldiers to see the enemy. The best-known phytotoxic agent is Agent Orange, used by the United States in Vietnam.

NUCLEAR WEAPONS

Even more terrifying than biological and chemical weapons are nuclear weapons. Whereas chemical and biological warfare agents may have the capacity to affect everyone in a particular area, nuclear weapons can instantaneously wipe out entire cities and kill tens of thousands of people (if not hundreds of thousands or millions). The major nations of the world possess enough nuclear weapons to kill most of Earth's population in a very few minutes (and, according to some theories, condemn the survivors to a slow, painful death from radiation or "nuclear winter"). As of late 2010, countries known to possess nuclear weapons (or nuclear capability and materials) include the United States, several former Soviet states (Russia, Ukraine, Belarus, and Kazakhstan), the United Kingdom, France, China, India, Iran, Israel, North Korea, Pakistan, and South Africa.

How Nuclear Bombs Work

There are two types of nuclear bombs: fission bombs and fusion bombs. Fission bombs work by splitting apart the large atoms of the elements uranium or plutonium. On detonation, the bomb uses high explosives to force two chunks of the fissionable material together, thus splitting one atom, which causes a chain reaction of fissioning atoms and a tremendous release of energy. Scientists refer to the smallest amount of uranium or plutonium needed to achieve this chain reaction as the "critical mass."

Fusion bombs are generally three to four times as powerful as fission bombs. They work by fusing two or more atoms together to form a different element. Usually they fuse deuterium atoms to form helium-3, or deuterium and tritium atoms to form helium-4. To cause this result, a fusion bomb uses a fission bomb as a "trigger."

For either type of bomb, the amount of material needed to produce the nuclear explosion is surprisingly small — approximately 25 kg (55 pounds) of enriched uranium, or a mere 8 kg (18 pounds) of plutonium, are all that's needed to make a bomb as powerful as the one used on Hiroshima (the United States and Russia can make a miniature nuke out of as little as 2.7 kg [6 pounds] of plutonium, but terrorists and criminals do not have such resources). This makes it easy for the GM to run all sorts of scenarios involving the theft or smuggling of uranium or plutonium (both of which are produced in certain types of nuclear reactors).

The construction of the bomb mechanism itself is far easier than acquiring the uranium or plutonium — in the past, college undergraduates have designed workable nuclear devices using only declassified United States government documents and readily available materials. It would certainly be possible for clever terrorists, unscrupulous scientists (including former Soviet nuclear scientists hired by criminals), or master villains to do the same. However, the machinery and technological parts needed to build the bomb may not be so easy to acquire; in many cases they are quite rare and require highly specialized skills to build or use.

Physicists rate the force of a nuclear explosion by comparing it to an equivalent amount of tons of TNT. A kiloton equals a thousand tons of TNT, and a megaton equals a million tons. The smallest American nuclear explosive is .1 kiloton, and various nations have bombs ranging into the tens of megatons or higher. Nuclear warheads have been placed on every type of launch system, from relatively short-range artillery to intercontinental ballistic missiles (ICBMs).

The Effects Of A Nuclear Explosion

This section describes the effects of a one-megaton (1 MT) nuclear bomb using the *HERO System* rules. Common Limitations for the nuclear bomb described below include: OAF Bulky (-1½), 1 Charge which Never Recovers and destroys bomb (-4 or less; in some cases this Charge lasts for more than a single Phase); No Range (the launching system must supply the Range for the bomb; -½); and Requires A Systems Operation Roll (-½) (total -6½, less with a Continuing Charge).

The effects of a nuclear explosion can be roughly summarized as follows:

- initial explosion (immediate release of radiation, thermal blast/flash, electromagnetic pulse [EMP])
- blast wave and wind effects
- fires, and
- lingering radiation and fallout.

Many of a nuke's effects include the Advantage *Area Of Effect (Radius Explosion).*

GROUND BURSTS AND AIR BURSTS

Many of a nuke's effects vary substantially depending upon whether the attack was a "ground burst" or an "air burst."

In a ground burst, some or all of the nuclear fireball touches the ground. A ground burst creates a large mushroom cloud, a crater, and tremors. For example, a 1 MT bomb creates approximately a 200 meter crater 50-70 meters deep (in ordinary soil), and its mushroom cloud may be as much as thirteen miles wide and ten miles high.

In an air burst, the fireball does not touch ground. For a 1 MT bomb, this means it would have to be detonated about 2,000 feet to half a mile above the ground). An air burst nuclear explosion doesn't create a crater or tremors, but has a greater EMP.

NUCLEAR VARIABILITY

Much of the information in this section is subject to change depending on many different factors. The weather, the topography, the accuracy of the bomb, and how perfectly it detonates can all affect the actual explosion and the effects it has. Furthermore, a lot of the information about nuclear explosions (whether public or classified) remains subject to interpretation and debate. This book features what the author deems the best information; in some cases it's been altered slightly to fit the game better. Players who prefer to rely on other data or interpretations can easily recalculate the effects of the bomb to fit their own ideas.

FIRST Effect: IMMEDIATE RADIATION

First, a nuclear explosion releases tremendous amounts of radiation (in the form of neutrons and gamma rays). The radiation doesn't cover as large an area as the heat or blast effects, but is nonetheless deadly (particularly to Desolidified characters who might otherwise survive the explosion). Scientists measure the amount of radiation released in roentgens and Roentgen Absorbed Dose (rads), which describe the effects of radiation on humans (see 6E2 153-55 for more information). A 1 MT bomb irradiates about a 1 mile (1.6 km) radius area with over 19,000 rads, enough to kill humans instantly (if near the blast) or within minutes or hours (if slightly farther away). However, by 2 miles this drops off to about 24 rads, which is not likely to have much effect on humans. People caught between one and two miles are likely to absorb enough radiation to cause them a slow and painful death in days or weeks. Humans lacking special equipment or senses cannot detect radiation (this sort of intense burst doesn't even do STUN damage), but survivors feel its effects for the rest of their lives (however short those lives may be).

Initial Radiation: *Drain BODY 20d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [Safe Environment: High Radiation]; +0), Does BODY (+1), Area Of Effect (2m Radius, but targets in the outer 1m take only half damage; +¼), Affects Desolidified (+½), Constant (+½), Damage Over Time (targets take half the damage immediately, and the remaining 10d6 in ten increments, one per day for 10 days; +½), Invisible to Sight Group (creation of radiation field is perceivable, field itself afterwards is not; +¼), MegaArea (1m = 1 mile wide, deep, and broad; +1¼) (1,050 Active Points); OAF Bulky (-1½), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Continuing Charge which lasts 1 Hour, Never Recovers, and destroys bomb (-2¼) (total cost: 200 points)* ***plus*** *Drain CON 10d6, Delayed Return Rate (points return at the rate of 5 per Week; +2½), NND (defense is Life Support [Safe Environment: High Radiation]; +0), Area Of Effect (2m Radius, but targets in the outer 1m take only half damage; +¼), Affects Desolidified (+½), Constant (+½), Damage Over Time (targets take half the damage immediately, and the remaining 5d6 in five increments, one per day for 5 days; +½), Invisible to Sight Group (creation of radiation field is perceivable, field itself afterwards is not; +¼), MegaArea (1m = 1 mile wide, deep, and broad; +1¼) (525 Active Points); OAF Bulky (-1½), Linked (-½) No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Continuing Charge which lasts 1 Hour, Never Recovers, and destroys bomb (-2¼) (total cost: 91 points). Total cost: 291 points.*

SECOND Effect: FLASH

When a nuclear bomb explodes, it immediately releases about one-third to one-half of its energy in the form of a blast of thermal energy. The nuclear fireball formed by the explosion of a 1 MT bomb is as hot as the heart of the sun and is more than 90m wide less than a thousandth of a second after detonation. It continues to grow (and to rise off the ground) until it's about half a mile (804m) wide. The heat and light energy travel at just under the speed of light, and last for about two seconds.

One of the effects from this release of energy is that persons looking in the direction of the blast suffer flash-blindness or permanent eye damage (retinal burns and possibly total blindness) because of the brightness of the light. Estimates on the reach of this effect range from 13 miles to 27 miles (21 km to 43.2 km) during the day, and 53 miles to 70 miles (112 km) at night (for the effect calculated below, ranges of approximately 50 miles [80,450m] at night and 13 miles [21,000m] in the daytime have been chosen).

This effect is a Transform that covers a smaller area in the daytime. Victims who take twice their BODY from the effect are permanently blinded. Other victims suffer varying degrees of eye injury (with minuses to Sight Group PER Rolls) and heal from them as they would normally. In game terms, the *Partial Transform* Advantage represents this: a victim who suffers a Cosmetic Transform suffers a -2 to all Sight Group PER Rolls; one who suffers a Minor Transform suffers a -4 to all Sight Group PER Rolls.

NUCLEAR WEAPON THERMAL BLAST RADIUS

Minimum Range	Maximum Range	Damage	Effects
0	2.25 miles (3.6 km)	20-16d6	Metals vaporize
1.8 miles (2.9 km)	3.5 miles (5.6 km)	15-10d6	Metals melt
3.25 miles (5.2 km)	7.1 miles (11.4 km)	9-6d6	Rubber and plastic ignites and melts
5.1 miles (8.2 km)	8.0 miles (21.9 km)	5-4d6	Wood and other flammables burst into flame or char
7.5 miles (12 km)	10.2 miles (16.4 km)	4-3d6	Skin suffers third- degree burns
9.25 miles (14.9 km)	13.25 miles (21.3 km)	3-2d6	Skin suffers second-degree burns
11.5 miles (18.5 km)	18.3 miles (29.4 km)	1d6	Skin suffers first- degree burns

Cost Power

25 **Blinding Flash:** Major Transform 12d6 (sighted beings to blind beings, heals back via eye transplantation or the like), Partial Transform (+½) (180 Active Points); OAF Bulky (-1½), Limited Target (sighted beings; -¼), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Charge which Never Recovers and destroys bomb (-4)

25 **Daytime Flash:** Area Of Effect (21m Radius Explosion; +½) and MegaArea (each 1m = 1 km wide, broad, and deep; +1) for Blinding Flash (180 Active Points); OAF Bulky (-1½), Limited Target (sighted beings; -¼), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Charge which Never Recovers and destroys bomb (-4)

8 **Nighttime Flash:** Increase to Area Of Effect (80m Radius Explosion; +1) for Blinding Flash (60 Active Points); OAF Bulky (-1½), Only At Night (-½), Limited Target (sighted beings; -¼), No Range (-½), and Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Charge which Never Recovers and destroys bomb (-4)

Total cost: 58 points

THIRD Effect: THERMAL BLAST

All of the heat and light described above do more than just blind people. The heat energy vaporizes metals, ignites tremendous fires (see below), and burns people. The heat travels at just under the speed of light and lasts for about two seconds.

Thermal Blast: *RKA 20d6, Area Of Effect (32m Radius Explosion, dropoff as indicated in accompanying table; +½), MegaArea (each 1m = 1 km wide, broad, and deep; +1) (750 Active Points); OAF Bulky (-1½), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Charge which Never Recovers and destroys bomb (-4). Total cost: 107 points.*

The accompanying chart (based primarily on one found in the book *Weapons,* by the Diagram Group) summarizes the exact effects and range of a 1 MT thermal blast. An object suffers lesser burns if it's colored white (subtract up to 3 DC), and greater burns if it's black (add up to 3 DC). The same applies to people, based on their clothing. For notes on the possible effects of fires, see below.

FOURTH Effect: ELECTROMAGNETIC PULSE (EMP)

When a nuclear bomb explodes, the radiation it emits ionizes atoms for many miles around (with some airbursts, for more than 50 miles!). This takes mere fractions of a second, but can generate thousands of volts of radio wave-like energy. This energy doesn't affect humans, but it disrupts or destroys electrical circuits.

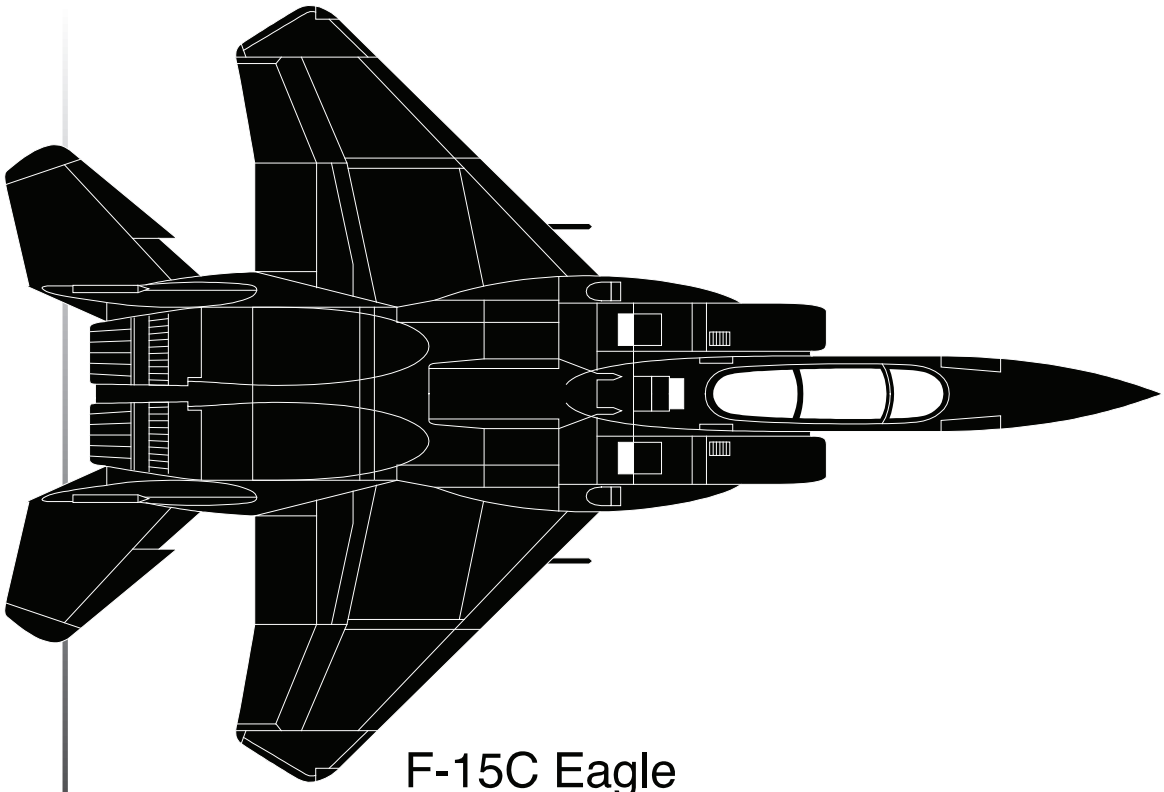
BLAST WAVE TABLE

Range	Damage	Effects
Up to 1.4 miles	20-16d6	30 psi/670 mph winds: total destruction
1.5-1.8 miles	15-11d6	20 psi/470 mph winds: massive structures and reinforced concrete destroyed
1.9-2.0 miles	10-9d6	15 psi/380 mphwinds: multistory buildings damaged and sometimes destroyed
2.1-2.5 miles	8-7d6	10 psi/290 mph winds: factories and commercial structures destroyed
2.6-3.1 miles	6d6	7 psi/225 mph winds: residential structures destroyed
3.2-3.8 miles	5d6	5 psi/160 mph winds: residential and light commercial structures badly damaged or destroyed
3.9-4.8 miles	4d6	3 psi/116 mph winds: walls of steel-framed buildings blown away, dwellings badly damaged, vehicles overturned, persons in the open killed
4.9-5.9 miles	3-2d6	2 psi/70 mph winds: wooden buildings and similar structures damaged
6.0-10.0 miles	2-1d6	1 psi/48 mph winds: little appreciable affect

EMP: *Dispel Electrical Devices 20d6, Expanded Effect + Variable Effect (all Electrical Device powers simultaneously; +4), Area Of Effect (80m Radius; +1½), MegaArea (each 1m = 1 km wide, broad, and deep; +1), Indirect (attacks all parts of objects, such as all walls in a building, +1), Invisible Power Effects (creation of EMP is perceivable, field itself afterwards is not; +¼) (525 Active Points); OAF Bulky (-1½), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Charge which Never Recovers and destroys bomb (-4). Total cost: 75 points.*

FIFTH Effect: BLAST WAVE

The blast wave is probably the most devastating part of a nuclear explosion. The force of the explosion creates massive pressure that travels outward in a wave, accompanied by incredibly strong winds. Sometimes this effect reflects off of the ground, thereby increasing its own power (a "mach wave"). Scientists refer to the blast effect as "static overpressure" (SO), and measure it in pounds per square inch (psi) over the standard atmospheric pressure. The extreme increase in pressure can destroy buildings miles away from the center of the blast because it affects all parts of the building and crushes the structure. Anybody inside when a building collapses is likely to die. But SO has relatively little effect on soft, malleable objects like human beings — as little as 5 psi obliterates the average residential house, but a human can withstand 30 psi before suffering injury. Unless the GM rules otherwise for some reason, the SO shouldn't affect characters, unless the characters are unusually non-resilient (for example, they're made of metal or the like).



F-15C Eagle

However, the intense winds, known as "dynamic pressure" (DP), do affect humans. They pick up all of the rubble, shards of glass, bits of metal, and other debris created by the SO and throw it against everything in their path, such as people. They also overturn cars, uproot trees, pull people out of buildings, and slam people against other objects with lethal force. As a result, one way or another a 1 MT blast kills or injures everyone within about five miles.

The effects of the blast wave can last for several seconds, depending upon the size of the bomb; with a 1 MT bomb, they should last no more than half a Turn. The accompanying table, also adapted from *Weapons,* describes the effects of a 1 MT blast wave.

Cost Power

155 **Blast Wave (Static Overpressure):** RKA 20d6, Area Of Effect (16m Radius Explosion, dropoff as indicated by accompanying table; +¼), MegaArea (each 1m = 1 km wide, broad, and deep; +1), Constant (+½), Indirect (attacks all parts of objects, such as all walls in a building, +1) (1,125 Active Points); OAF Bulky (-1½), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), Little Or No Effect On Soft, Malleable Objects (including living creatures; -1), 1 Continuous Charge lasting 6 Segments which Never Recovers and destroys bomb (-3¼)

156 **Blast Wave (Winds):** RKA 20d6, Area Of Effect (16m Radius Explosion, dropoff as indicated by accompanying table; +¼), MegaArea (each 1m = 1 km wide, broad, and deep; +1), Constant (+½), Double Knockback (+½) (975 Active Points); OAF Bulky (-1½), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Continuous Charge lasting 6 Segments which Never Recovers and destroys bomb (-3¼)

Total cost: 301 points.

SIXTH Effect: NEGATIVE PRESSURE

After the explosion creates the static overpressure and winds blowing outward, air has to rush back in to fill the vacuum left by the outrushing winds. This effect, though much gentler than dynamic pressure, can still cause damage due to blown objects and the like.

Negative Pressure: *RKA 3d6, Area Of Effect (16m Radius Explosion, dropoff as indicated by accompanying table; +¼), MegaArea (each 1m = 1 km wide, broad, and deep; +1), Constant (+½) (124 Active Points); OAF Bulky (-1½), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0), 1 Continuous Charge lasting 1 Turn which Never Recovers and destroys bomb (-3¼). Total cost: 20 points.*

SEVENTH Effect: FIRES

The tremendous heat generated by a nuclear explosion ignites any flammable objects not destroyed outright. The so-called "fire zone" within which this effect occurs covers a 5-10 mile radius for a 1 MT bomb. However, the bomb's blast wave may put out many fires (the GM decides whether this occurs, and to what extent it ameliorates the fire damage).

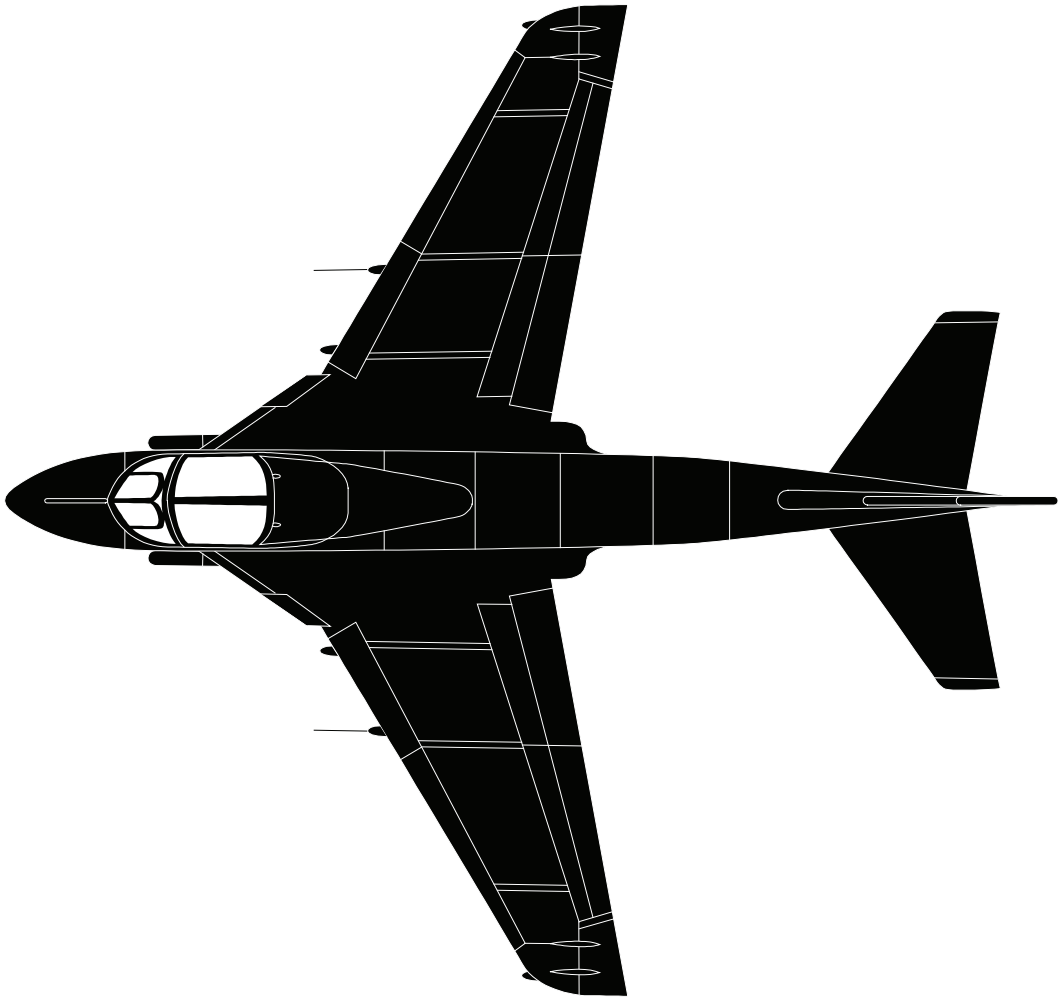
Ignite Flammable Objects: *RKA 1 point, Area Of Effect (16m Radius; +¾), MegaArea (each 1m = 1 km wide, broad, and deep; +1), Constant (+½), Indirect (attacks all parts of objects, such as all walls in a building, +1), Penetrating (+½), Reduced Endurance (0 END; +½), Sticky (only affects flammables; +¼), Uncontrolled (keeps burning until extinguished or fuel is consumed; +½) (30 Active Points); OAF Bulky (-1½), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -0). Total cost: 10 points.*

It's possible for the fires to join together in two ways to cause even more damage. First, there could be a conflagration: the fires spread out of control and devastate many square miles of

NUCLEAR BOMB SUMMARY TABLE

So, here are the total effects and costs for a 1 MT nuclear bomb:

Effect	Effects	Active Points	Real Points
Radiation burst	Drain BODY 20d6 + Drain CON 10d6	1,575	291
Flash	Major Transform 12d6 (to blind person)	390	58
Thermal blast	RKA 20d6	750	107
EMP	Dispel 20d6, all Electrical Device powers	525	75
Blast, SO	RKA 20d6	1,125	155
Blast, winds	RKA 20d6	975	156
Negative pressure	RKA 3d6	124	20
Ignite object	RKA 1 point, Penetrating, Sticky, Uncontrolled	30	10
Firestorm	Aid Fire Powers 4d6	162	54
Total:		**5,656**	**930**



A-6 Intruder

still-standing structures and plant life. Second, and even worse, is the firestorm, in which the fires join together in a central area and begin to suck in oxygen. The inrushing oxygen feeds the fire, turning it into a raging, self-sustaining inferno that only ends when it destroys everything flammable. No one can accurately predict whether a firestorm will start; Hiroshima suffered one but Nagasaki, which is hillier, only experienced a conflagration.

In game terms, this effect is a Constant Aid; for these purposes, assume the bomb has SPD 2.

Firestorm: *Aid Fire Powers 4d6, Expanded Effect (two Fire Powers [the RKA and this Aid] simultaneously; +½), Delayed Return Rate (points fade at the rate of 5 per Hour; +1¾), Area Of Effect (16m Radius; +¾), MegaArea (each 1m = 1 km wide, broad, and deep; +1), Constant (+½), Trigger (when Ignite Flammable Objects takes effect; +¼), Uncontrolled (keeps working until fires burn out or are extinguished; +½), Reduced Endurance (0 END; +½) (162 Active Points); OAF Bulky (-1½), Activation Roll 11- (-½), Requires A Systems Operation Roll (no Active Point penalty; -0). Total cost: 54 points.*

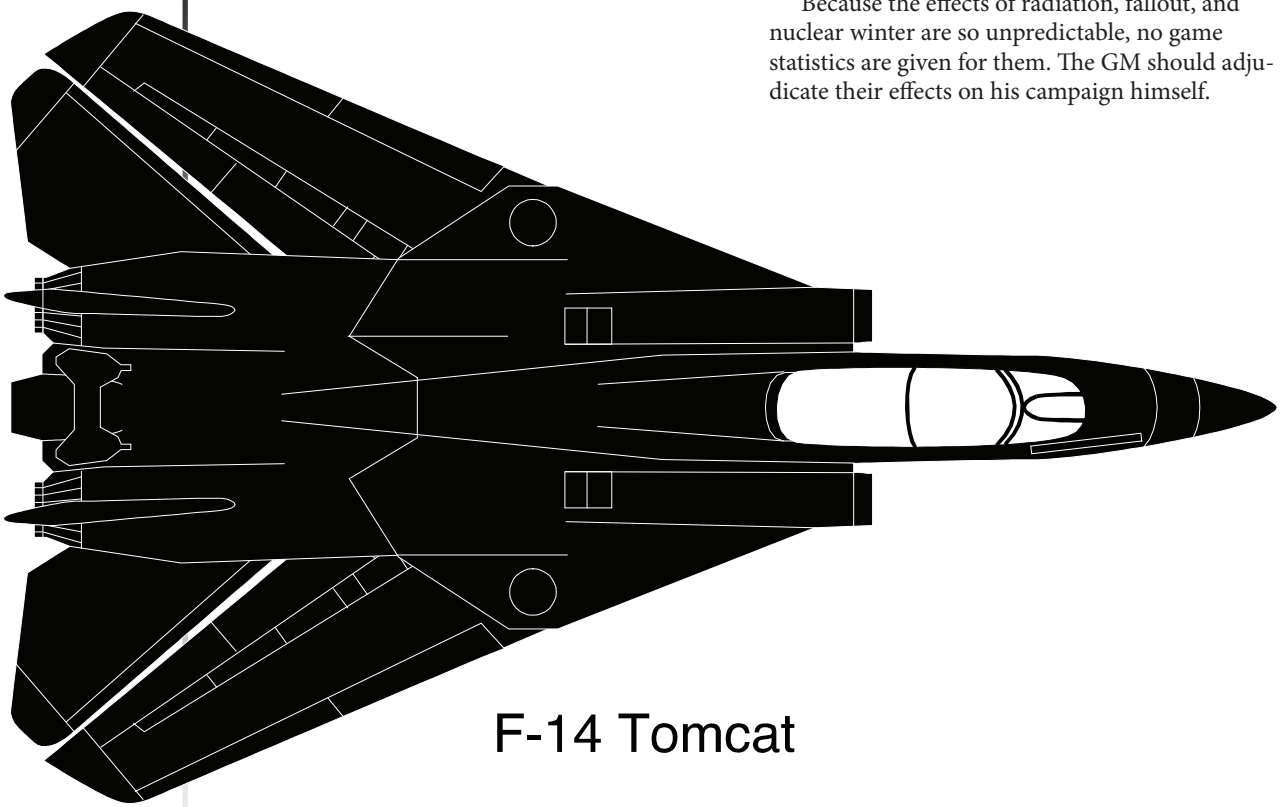
EIGHTH Effect: RADIATION, FALLOUT, AND NUCLEAR WINTER

The lingering radiation created by a nuclear detonation can last weeks, months, or years. It's been estimated that 1 MT explosion would force the evacuation of all people in a 4,900 square mile area around the explosion for at least a week (and in the 1,400 square mile area immediately around the explosion for a month or more). As a basic rule of thumb, GMs can use the seven-tenths rule: seven hours after the explosion, the radiation levels drop to one-tenth of what they were one hour after the explosion; 49 (7 x 7) hours afterwards, 1/100th, and so forth. For the effects of radiation, refer to 6E2 153-55. Remember that in some genres (like Superheroes), radiation can have some unusual effects.

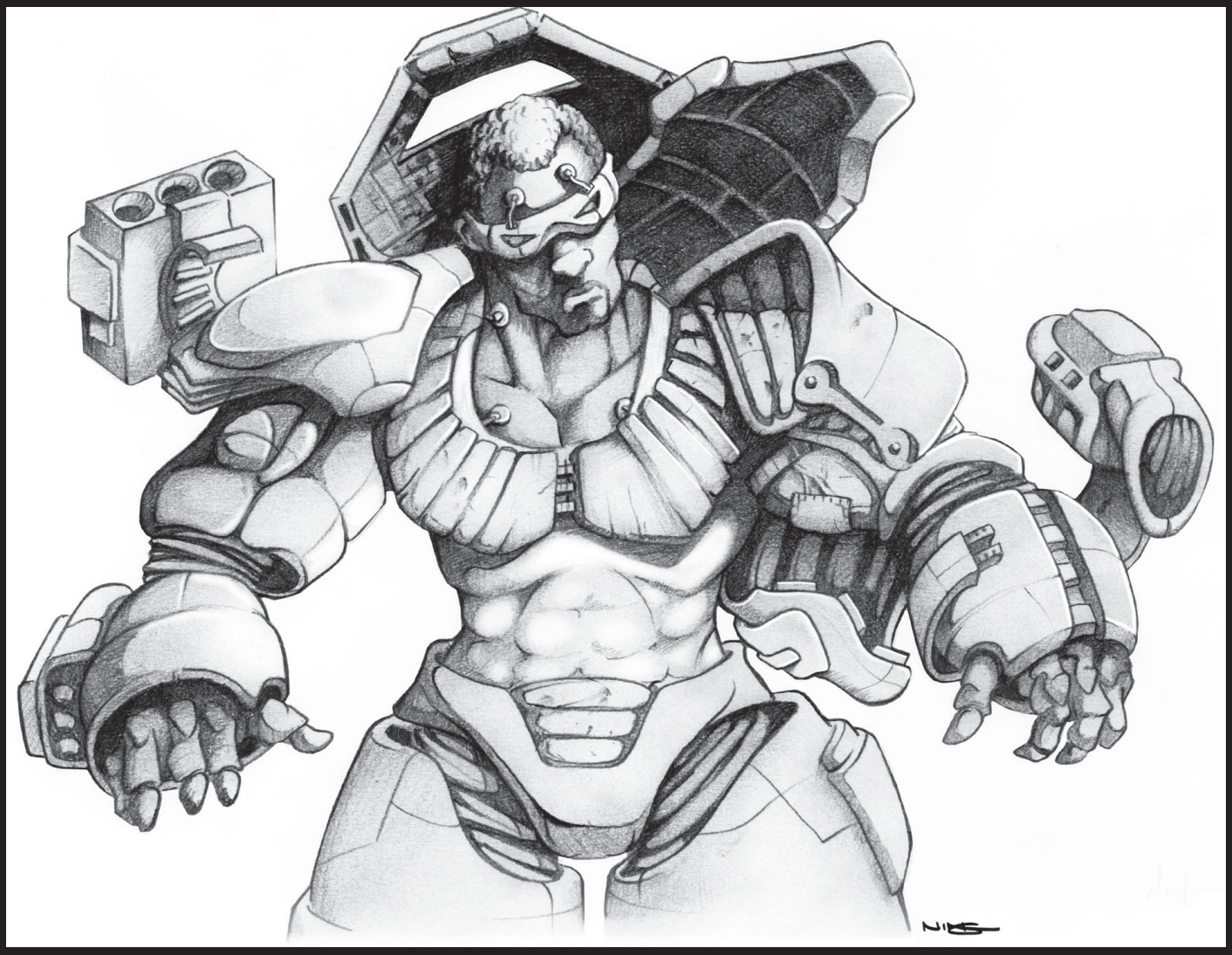
In addition to the localized radiation, the radioactive debris kicked into the atmosphere by a nuclear explosion eventually descends to Earth as fallout. The pattern of fallout from a given nuclear explosion depends mainly on how high it goes and what the prevailing weather conditions (particularly the wind) are like.

Lastly, a few authorities believe a large nuclear exchange would kick so much dust and smoke into the air that it would blot out the sun, creating "nuclear winter." In the worst-case scenario, this would mean the extinction of life on Earth as temperatures dropped below freezing and food production became impossible. However, many experts question these doomsday predictions, and in any event it would require a major nuclear exchange to create this effect (something that's unlikely to happen in most gaming campaigns).

Because the effects of radiation, fallout, and nuclear winter are so unpredictable, no game statistics are given for them. The GM should adjudicate their effects on his campaign himself.



F-14 Tomcat



CHAPTER TWO

DEFENSIVE TECHNOLOGY

FANTASY ARMOR

2

With so many weapons around, it's not surprising that characters look for ways to protect themselves. Armor represents a character's last defense against the damage of an attack (after DCV and such defensive actions as Dodging, Blocking, or using a shield). Armor's defense subtracts from the damage done by attacks like any other form of defense (such as the character's innate PD and ED).

Armor is built using the Power *Resistant Protection* with the Limitations *OIF* (-½), *Real Armor* (-¼), and *Mass* (typically Normal Mass, -1) (see 6E2 210-11 for more information). For the sake of simplicity, it provides both PD and ED in equal amounts. In "realistic" campaigns, armor's ED should be half of its PD (and armor may offer no protection at all against some types of damage, such as falls and gunfire). Imagine, for example, how little protection a suit of plate armor would offer against a wizard's lightning bolt!

The *Real Armor* Limitation signifies that the armor is often uncomfortable, needs maintenance to continue to function properly, and may impede the character. At the GM's option, if the armor has an Activation Roll higher than 11-, the character suffers a -1 penalty on appropriate DEX Rolls and Agility Skill rolls for each point above 11- (for example, an Activation Roll 13- means a -2 penalty) even in campaigns that don't normally impose some restrictions on armor use (see page 234).

ARMOR AND RACE

When a character uses a suit of armor meant for a different race, penalties may apply depending upon the size, shape, and weight of the armor. For example, if a lizard-man puts on a suit of armor made for a human, he'll find it uncomfortable because human armor doesn't accommodate his reptilian tail. An ogre's armor may be too heavy or bulky for smaller races, and a dwarf will have difficulty wearing human Resistant Protection (and vice-versa). At the GM's option, this sort of discomfort or difficulty may result in a negative modifier for the character's actions. Some possibilities include:

- increase the weight of the armor solely for purposes of calculating the character's Encumbrance penalty
- a penalty to all DEX-based Skill Rolls made while wearing the armor
- a penalty to OCV while wearing the armor
- a penalty to DCV, or to Dodge, while wearing the armor
- a reduction in DEX while wearing the armor

You should also consider what Hit Locations armor designed for another race protects. For example, non-tailed races may find that the seat of the pants remains exposed if they wear armor manufactured by races with tails. The GM must determine the exact game effects.

THE SPECIAL EFFECTS OF ARMOR

As with virtually everything else in the *HERO System,* special effects are paramount when it comes to armor. Often a player wants to outfit his character with a particular type of armor that suits the character's appearance or activities — such as leather armor for a ranger or rogue — but ends up choosing heavier Resistant Protection (such as chain mail) to get the higher defense.

Special effects allow you to define your character's armor however you want. As long as you accept the penalties, restrictions, and other rules for a particular type of armor, you can describe it to suit your vision of your character. Thus, a character can have a suit of leather armor that provides PD 6/ED 6, as if it were chainmail. However, it weighs 20 kg just like a suit of chainmail, and imposes the same DCV or DEX penalties as chainmail — even though the leather armor listed in the Armor Table only provides PD 3/ED 3 and weighs 7 kg.

ARMOR TABLE

Armor Type	Defense	A/R Cost	Mass Of A Full Suit
Cloth And Hide Armors			
Heavy Cloth	1	3/1	3.5 kg
Padded Cloth	2	6/2	5 kg
Woven Cord	2	6/2	5 kg
Heavy Animal Hides	3	9/3	7 kg
Leather Armors			
Soft Leather	1	3/1	3.5 kg
Heavy Leather	2	6/2	5 kg
Cuir-Bouilli (Boiled Leather)	3	9/3	7 kg
Reinforced Leather Armors			
Studded Soft Leather	1	3/1	3.5 kg
Ring Resistant Protection (Soft Leather)	3	9/3	7 kg
Bezainted Soft Leather	3	9/3	7 kg
Jazeraint Soft Leather	3	9/3	7 kg
Studded Heavy Leather	2	6/2	5 kg
Ring Resistant Protection (Heavy Leather)	4	12/4	10 kg
Bezainted Heavy Leather	4	12/4	10 kg
Jazeraint Heavy Leather	4	12/4	10 kg
Studded Cuir-Bouilli	3	9/3	7 kg
Ring Resistant Protection (Cuir-Bouilli)	5	15/5	14 kg
Bezainted Cuir-Bouilli	5	15/5	14 kg
Jazeraint Cuir-Bouilli	5	15/5	14 kg
Scale Mails			
Brigandine	4	12/4	10 kg
Lamellar (Splint Armor)	5	15/5	14 kg
Banded Mail	6	18/6	20 kg
Chainmails			
Chainmail	6	18/6	20 kg
Double Mail/Bar Mail	7	21/8	28 kg
Reinforced Chainmail	7	21/8	28 kg
Plate Armors			
Plate And Chain	7	21/8	28 kg
Plate Armor	7	21/8	28 kg
Field Plate Armor	7	21/8	28 kg
Full Plate Armor	8	24/9	40 kg

KEY

Defense: The PD and ED the armor provides, equivalent to Resistant Protection of the same amount.

A/R Cost: The Active Point/Real Point cost of the armor.

Mass: The armor's weight in kilograms. See 6E2 210-12 for further information. Most armors come in "light" and "heavy" versions. A light version provides -1 PD/-1 ED and is somewhat lighter; a heavy version provides +1 PD/+1 ED and is heavier. Since the weights in the table above are standardized by PD/ED, use the weight listed for the appropriate PD/ED (heavy full plate [9 PD/9 ED] weighs 56 kg; 10 PD/10 ED armor would weigh 80 kg.).

TYPES OF ARMOR

The accompanying table lists the types of armor available in most Fantasy games. Gamemasters can add to the list as appropriate for the campaign setting.

Explanation Of Armor Table

CLOTH AND HIDE ARMORS

These forms of "armor" often barely qualify as such.

Heavy Cloth: Various types of heavy woven materials. Heavy Cloth is often indistinguishable from ordinary clothes; and in fact most sturdy clothing (adventurers' and workmen's wear) counts as Heavy Cloth (this does *not* include peasants' everyday garb, courtiers' fancy robes, or the like).

Padded Cloth: Two or more layers of Heavy Cloth with padding sewn in between them to absorb the impact of blows. This looks much less like ordinary clothes than Heavy Cloth, but may be mistaken for clothes at a distance, in bad light, or if well-made.

Woven Cord: Thick cord or rope woven into flat matting and used as protective wear. It's obviously Resistant Protection (as are all heavier armors except for Soft Leather and Heavy Animal Hides).

Heavy Animal Hides: The most protective type of armor available without chemical treatments, reinforcement, or metal, Heavy Animal Hides is just that: thick animal skins. It may be mistaken for clothing when worn by some persons (such as barbarians or shamans).

LEATHER ARMORS

These armors consist of treated or untreated leather without any additional reinforcement.

Soft Leather: Any untreated, medium-weight leather (animal skin). It often resembles ordinary leather clothing, and in fact most leather garb counts as Soft Leather.

Heavy Leather: Like Soft Leather, but thicker, stiffer, and heavier. This looks much less like ordinary clothes than Soft Leather, but may be mistaken for clothes at a distance, in bad light, or if well-made.

Cuir-Bouilli (Boiled Leather): This armor consists of heavy leather boiled, shaped, and hardened to provide more protection (though at the cost of some flexibility). A popular choice among many light fighters, rogues, and non-warrior types... and also among war-leaders who want to equip their soldiers cheaply.

REINFORCED LEATHER ARMORS

These armors are leather armors reinforced with metal. They provide more protection than unaugmented leather, but aren't as protective as metal armors (on the other hand, they weigh less).

Studded Leather: Leather armor reinforced with metal studs, or sometimes metal strips.

Ring Armor: Leather armor with metal rings sewn onto it.

Bezainted Leather: Named after a medieval coin, this is leather armor with metal discs (sometimes overlapping) sewn onto it.

Jazeraint Leather: This is leather armor with metal scales sewn onto it. It's as much a form of scale mail as leather armor.

SCALE MAILS

Scale mails consist of metal scales laced, sewn, or riveted together to form a protective garment. Some versions had a cloth or leather backing as well. In the eyes of many Fantasy characters, they're a "poor man's mail," used by people who want the benefits of metal armor but cannot make, buy, or otherwise obtain chainmail.

Brigandine: This multi-layered armor consists of metal scales (usually horizontal rectangular ones) sewn in between two layers of heavy cloth or leather. The scales usually overlap upwards slightly. The rivets that hold the plates together often show through the upper layer of cloth, and might be gilded or otherwise decorated.

Lamellar Armor: Also called splint armor or laced armor, lamellar has a series of thick metal "splints" or scales, sometimes slightly convex, laced

ARMOR MATERIALS

The rules for metal armor assume that armor's made of steel. However, that may not always be the case. A Bronze Age culture would have bronze armor instead, while a tribe living in a swamp with ironwood trees might carve armor out of wood (since metal would rust so quickly it would become useless).

The table below lists the PD/ED and Weight changes when characters substitute some other substance for steel. This includes replacing metal plates in scale, bezainted, or like armors with some other substance. The GM may alter the results slightly in the interest of common sense, dramatic sense, or game balance. Note that these rules assume that the listed material is replacing steel (or ordinary leather, in the case of hardened leather). Adding metal of any type of non-metallic armor may actually improve it — converting it into some form of reinforced leather armor, typically — though the improvement may not be as much as it would be if steel were used.

Material	PD/ED	Weight
Bronze	-1	x1
Copper	-2	x.8
Dwarven steel	+2	x1
Elven-silver	+1	x.8
Horn	-2	x.7
Iron	-1	x1
Ivory	-3	x.8
Leather (hardened)	-4	x.5
Stone	-1	x1.2
Wood	-2	x.8

HIT LOCATION SECTIONAL ARMOR WEIGHT TABLE

Hit Location	Armor Base Defense							
Name (Roll)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Head (3)	.02	.02	.03	.05	.06	.09	.13	.18
Head (4)	.05	.07	.10	.14	.19	.28	.39	.56
Head (5)	.10	.14	.19	.28	.39	.56	.78	1.11
Hands (6)	.16	.23	.32	.46	.65	.93	1.30	1.85
Arms (7)	.24	.35	.49	.69	.97	1.39	1.94	2.78
Arms (8)	.34	.49	.68	.97	1.36	1.94	2.72	3.89
Shoulders (9)	.41	.58	.81	1.16	1.62	2.32	3.24	4.63
Chest (10)	.44	.63	.88	1.25	1.75	2.50	3.50	5.00
Chest (11)	.44	.63	.88	1.25	1.75	2.50	3.50	5.00
Stomach (12)	.41	.58	.81	1.16	1.62	2.32	3.24	4.63
Vitals (13)	.34	.49	.68	.97	1.36	1.94	2.72	3.89
Thighs (14)	.24	.35	.49	.69	.97	1.39	1.94	2.78
Legs (15)	.16	.23	.32	.46	.65	.93	1.30	1.85
Legs (16)	.10	.14	.19	.28	.39	.56	.78	1.11
Feet (17)	.05	.07	.10	.14	.19	.28	.39	.56
Feet (18)	.02	.02	.03	.05	.06	.09	.13	.18

together (and to a backing of cloth or leather). The size of the splints depends on the part of the body covered; the armorer uses small splints at points of articulation, and larger ones over the chest, thighs, and the like. In areas where metal was scarce, or regarded as too heavy, armorers made the splints out of horn, bone, wood, or other substances (see *Armor Materials,* page 228).

Banded Mail: Overlapping, articulated, rectangular metal scales attached to vertical leather strips. Also known as laminated armor.

CHAINMAILS

Probably the most popular armor among Fantasy characters, chainmail (or just "mail") consists of small metal rings linked together to form a protective yet relatively flexible garment.

Chainmail: Standard chain armor.

Double Mail: Chainmail made with thicker rings more closely interwoven. Similar to double mail is *bar mail,* in which some of the rings have a vertical bar in the middle.

Reinforced Chainmail: Chainmail with strips of leather woven through the links.

PLATE ARMORS

Well known due to its association with the "knight in shining armor," plate armors use large, heavy plates of steel to protect the wearer. Leather straps hold the pieces in place and link them together into a whole suit. Although not as flexible as chainmail, plate armor offers the highest degree of protection of any armor.

Plate And Chain: A suit of chainmail reinforced with sections of plate. It offers greater protection than just chainmail without much extra weight or loss of flexibility.

You can also use Plate And Chain to represent types of armor that consist of metal scales linked together by chainmail rings.

Plate Armor: Standard plate armor.

Field Plate Armor, Full Plate Armor: These types of plate armor consist of heavier, better-fitted, better-made plates attached not just by leather straps, but screws and the like.

Sectional Armor

While characters often wear the same type of armor over their entire bodies, they don't have to. For various reasons — to cut down on weight, to reduce cost, or having to use what's available — they may "mix and match" armor of different types, or even leave some parts of the body unprotected.

THE WEIGHT OF SECTIONAL ARMOR

To determine the weight of sectional armor, which in turn dictates how it affects the character's Encumbrance rating, you can take one of two approaches. The first, and often the simplest in game terms, is to define sectional armor *by Hit Location.* Thus, the character might have PD/ED 4 armor on his Hands (6), Feet (17-18), and lower Legs (16), PD/ED 6 armor on his Arms (7-8), Vitals (13), Thighs (14), and upper Legs (15), and PD/ED 7 armor on his Head (3-5), Shoulders (9), Chest (10-11), and Stomach (12). The Hit Location Sectional Armor Weight Table provides the

HISTORICAL SECTIONAL ARMOR WEIGHT TABLE

Hit Location	Armor Base Defense							
Name (Roll)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Full Helmet (3-5)	.16	.23	.32	.46	.65	.93	1.30	1.85
Coif (4-5,9)	.55	.79	1.10	1.57	2.20	3.15	4.41	6.30
Helm (4-5)	.15	.21	.29	.42	.58	.83	1.17	1.67
Cap (5)	.10	.14	.19	.28	.39	.56	.78	1.11
Gauntlets (6-7)	.41	.58	.81	1.16	1.62	2.31	3.24	4.63
Gloves (6)	.16	.23	.32	.46	.65	.93	1.30	1.85
Brassards (7-8)	.58	.83	1.17	1.67	2.33	3.33	4.67	6.67
Vambraces (7)	.24	.35	.49	.69	.97	1.39	1.94	2.78
Rerebraces (8)	.34	.49	.68	.97	1.36	1.94	2.72	3.89
Pauldrons (9)	.41	.58	.81	1.16	1.62	2.32	3.24	4.63
Hauberk (7-14)	2.85	4.07	5.70	8.15	11.4	16.3	22.8	32.6
Corselet (9-15)	2.43	3.47	4.86	6.94	9.72	13.9	19.4	27.8
Byrnie (9-14)	2.27	3.24	4.54	6.48	9.07	13.0	18.2	25.9
Cuirass (9-13)	2.03	2.89	4.05	5.79	8.10	11.6	16.2	23.2
Vest (10-13)	1.62	2.31	3.24	4.63	6.48	9.26	13.0	18.5
Breastplate (9-11)	1.28	1.83	2.56	3.66	5.12	7.32	10.2	14.6
Skirtplate (12-13)	.75	1.06	1.49	2.13	2.98	4.26	5.96	8.52
Chausses (14-18)	.57	.81	1.13	1.62	2.27	3.24	4.54	6.48
Leggings (14-17)	.55	.79	1.10	1.57	2.20	3.15	4.41	6.30
Skirt (14)	.24	.35	.49	.69	.97	1.39	1.94	2.78
Greaves (16-17)	.15	.21	.29	.42	.58	.83	1.17	1.67
Boots (17-18)	.06	.09	.13	.19	.26	.37	.52	.74
Knee Cops (15)	.16	.23	.32	.46	.65	.93	1.30	1.85
Demigreaves (16)	.10	.14	.19	.28	.39	.56	.78	1.11
Anklets (17)	.05	.07	.10	.14	.19	.28	.39	.56

weight (in kilograms) for pieces covering each part of the body, based on the amount of PD/ED provided.

The second, and somewhat more historically accurate, approach is to buy armor *in predefined pieces.* This isn't quite as precise as going Hit Location by Hit Location, but it's not too dissimilar, and often contributes more to the "feel" of the campaign. The Historical Sectional Armor Weight Table provides the weight (in kilograms) for various pieces of armor used in Europe (consult a reference book if you want to see what the pieces look like).

THE PD/ED OF SECTIONAL ARMOR

If your campaign uses Hit Locations, you can figure out how much PD/ED to apply to an attack based on the location: if a character wearing a PD/ED 6 corselet (Hit Locations 9-15) takes a hit on the Shoulder (9), he applies PD/ED 6 to reduce the damage.

If the campaign doesn't use Hit Locations, or if the GM considers a particular attack so "general" that no one location bears the brunt of the damage, the character must determine his *Average PD/ED.* You can do this in one of two ways. The first method involves 3 steps:

1. Add the PD/ED covering Hit Locations 9, 10, 11, 12, 13, and 14.

2. Add to the total of (1) the PD/ED covering the Head (locations 3, 4, and 5), *provided* that armor protects at least two of those three Hit Locations. If it does not, do not add it in.

3. Divide the total of (1) and (2) by 7. This tells you the *Average PD/ED* protecting the character's body.

The first method, while quick, is also a simplification; it takes into account about 70% of a character's body, including all Hit Locations with better than a x½ BODY multiplier. It assumes the character has at least *some* armor on Hit Locations 6-8 and 15-18; if not, the results may be skewed. If the GM feels a character is abusing this system by heavily armoring the counted parts of the body and leaving the others improperly lightly armored, he can reduce the Average PD/ED by 1-2 to compensate.

HIT LOCATION SECTIONAL BARDING WEIGHT TABLE

Hit Location	Armor Base Defense							
Name (Roll)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Head (3)	.03	.05	.07	.10	.14	.20	.28	.40
Head (4)	.07	.10	.14	.20	.28	.40	.56	.80
Neck (5)	.21	.30	.42	.60	.84	1.2	1.68	2.4
Neck (6)	.35	.50	.70	1.0	1.4	2.0	2.8	4.0
Forelimbs (7)	.50	.70	.98	1.4	1.96	2.8	3.92	5.6
Forelimbs (8)	.70	1.0	1.4	2.0	2.8	4.0	5.6	8.0
Body (9)	.80	1.15	1.6	2.3	3.2	4.6	6.4	9.4
Body (10)	.87	1.25	1.75	2.5	3.5	5.0	7.0	10.0
Body (11)	.87	1.25	1.75	2.5	3.5	5.0	7.0	10.0
Stomach (12)	.80	1.15	1.6	2.3	3.2	4.6	6.4	9.2
Vitals (13)	.70	1.0	1.4	2.0	2.8	4.0	5.6	8.0
Hindlimbs (14)	.50	.70	.98	1.4	1.96	2.8	3.92	5.6
Hindlimbs (15)	.35	.50	.70	1.0	1.4	2.0	2.8	4.0
Hindlimbs (16)	.21	.30	.42	.60	.84	1.2	1.68	2.4
Hindlimbs (17)	.07	.10	.14	.20	.28	.40	.56	.80
Hindlimbs (18)	.03	.05	.07	.10	.14	.20	.28	.40
Full Suit	7	10	14	20	28	40	56	80

HISTORICAL SECTIONAL BARDING WEIGHT TABLE

Hit Location	Armor Base Defense							
Name (Roll)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Chanfron (3-4)	.875	1.25	1.75	2.5	3.5	5.0	7.0	10.0
Crinet (5-6)	.875	1.25	1.75	2.5	3.5	5.0	7.0	10.0
Peytrel (9-10)	1.75	2.5	3.5	5.0	7.0	10.0	14.0	20.0
Flanchard (11-12)	1.75	2.5	3.5	5.0	7.0	10.0	14.0	20.0
Crupper (13-14)	1.75	2.5	3.5	5.0	7.0	10.0	14.0	20.0
Full Suit	7	10	14	20	28	40	56	80

The second method is more comprehensive, but also easier for unscrupulous players to abuse: add up the PD/ED ratings for all 16 Hit Locations, then divide by 16 to determine the Average PD/ED. This system benefits characters who take heavy armor on locations like the Hands and Feet, since they have equal weight in the calculation even though they're hit less frequently than Locations 9-14. However, if a character has reasonably similar types of armor over his body, or a concentration of heavier armor on locations 9-14, this method tends to provide a fairer calculation of Average PD/ED than the first method.

BARDING

Barding is armor for horses and other land mounts or fighting animals, such as elephants or war-dogs (flying and swimming mounts generally cannot wear it; they cannot bear the weight). It can come in just about any form that armor for people can, and provides the same PD/ED. Depending on how well it's made, and how much of the mount it covers, it may weigh only a little more than a full suit of the same armor for a person, or considerably more.

The two accompanying tables list the weight of different types of barding, based on either the Hit Locations covered (using the Equine Hit Location Table on HSB 42) or the predefined pieces purchased. Note that historically, even the most comprehensive suits of barding leave the horse's lower legs exposed; the Hit Location Sectional Barding Table ignores this reality and lists armor values for all Hit Locations (in case magic or some other means allows characters to create leg armor for horses).

In addition to the listed pieces of armor, some horses had an *escutcheon,* or decorative spike,

attached to the chanfron (faceplate). It adds no PD/ED, but might allow the horse to do 1 point of Killing Damage with a head-butt.

All rules that apply to armor for characters apply to animals in barding as well (such as Encumbrance or DCV penalties), unless the GM prefers not to use them for some reason.

HIGH- AND POOR-QUALITY ARMOR

Just like characters can buy weapons that are better or worse than average, they can buy armor that's better or worse than a standard suit of the same type armor. In game terms, characters can have *fine* and *poor* armor. The armors listed in the tables earlier in this chapter are "average" versions — they have the PD/ED and other qualities of typical armors of their type.

At the GM's option, characters can use the following rules and guidelines to create exceptional armors, or to represent below-average versions of armor. Gamemasters are, of course, free to change the Character Point costs of these improvements (or drawbacks) to suit their campaigns, or even to give them to characters' armor for free to represent events that occur during game play. Additionally, where the rules provide Character Point totals for unusual abilities that aren't built using the standard *HERO System* rules, *those abilities apply only to armor.* Characters may *not* buy them as personal abilities.

Note that the abilities do *not* represent enchantment or magical enhancement, but rather improved quality of materials, crafting, or the like. Additionally, these abilities sometimes represent "legendary" attributes possessed by famous or noteworthy armors. They're a great way to distinguish a special or wondrous suit of armor from typical armors without having to resort to the catch-all explanation of "magic." But of course, they can also represent enchantments (minor or otherwise) placed on a suit of armor if you want.

BUYING FINE AND POOR ARMOR

When designing a fine or poor suit of armor, you should use the Character Point costs listed below to re-calculate the overall Active and Real Point costs of the armor. Since Fantasy Hero characters don't pay Character Points for their armor, making a suit of armor "fine" or "poor" generally only affects the armor's monetary cost (see *Fantasy Hero,* page 175). The Active and Real Point costs usually just help the GM evaluate whether the suit of armor is balanced for the campaign. However, to prevent fine armors from becoming too common in the game, the GM may require characters to pay Character Points for them, using one of two methods:

- the cost of improvements themselves, calculated as (improved suit of armor's Real Point cost) - (normal suit of armor's Real Point cost), with some predefined minimum cost (such as 3 Character Points)
- a flat cost, such as 5 Character Points

In either case, if the character loses the suit of armor, he permanently loses the points spent on it... though the GM may allow him to go on a quest to regain the armor, reforge it, or have another one made, and spend the "lost" points on that.

FINE ARMORS

Fine armor may have one or more of the following abilities, or any other the GM sees fit to allow. The GM should evaluate any improvements a character wants to apply to armor carefully, to ensure they're balanced for the campaign.

Less Blinding: The armor is so cunningly crafted that it doesn't restrict the character's Sight or other senses as much as most suits do. You can buy this as Enhanced Perception to overcome some or all of the PER Roll penalties associated with the Resistant Protection (see page 235).

Less Restrictive: In campaigns that impose a DCV, DEX Roll, or DEX restrictions on wearing armor, the armor is so well-made that it doesn't inhibit the character's movement as much as a normal suit does. You can buy this as Armor Skill Levels for the wearer (see page 235).

Less Tiring: In games that impose an END cost on wearing Resistant Protection (see below), the armor is less tiring to wear. You can buy this by applying the *Reduced Endurance* cost to Resistant Protection (possibly even the variant on *antasy Hero,* page 275, that doesn't reduce the END paid but extends the time period over which a character has to pay END).

Lightweight: The armor is made of an unusual material that's lighter than normal, or is so well-made that it rides on the character's body in a less encumbering fashion. Recalculate the cost of the armor using a version of the *Mass* Limitation less than Normal Mass (-1) — typically Half Mass (-½).

More Protective: The armor provides +1 PD/ED, bought in the manner described on page 232.

Noble Appearance: The armor inspires loyalty and bravery in the wielder's allies, fear and dread in his foes. You can buy this as +5 PRE (sometimes more); OIF (-½), Real Armor (-¼), Only For Making Presence Attacks While The Armor Is Worn (-1) (total cost: 2 points).

Quickly Donned: A wearer can put on or take off the armor in half the time it normally takes. You can buy this as: Teleportation 1m, Usable As Attack (+1¼) (2 Active Points); Only To Don Resistant Protection (-2), Extra Time (at least two Phases, more for plate armors; -¾) (total cost: 1 point).

Sturdy: The armor is harder to break or damage. It has +1 (or more) BODY, and perhaps some Power Defense to resist Dispels and Drains. Each +1 BODY costs 1 Character Point; and each point of Power Defense costs 1 Character Point (appropriate Limitations apply, of course).

Unreal Armor: The weapon doesn't have the *Real Armor* Limitation, meaning it always stays clean and ready for action without any effort on the wearer's part.

Other Improvements: Some other possible improvements, that cost no Character Points but help to make armor distinctive, include:

- **Ornamentation:** gilding or silvering; inlaid gems; sculpted plates or pieces; carved designs on the plates; and so forth
- **Unrustable:** regardless of how much moisture it's exposed to, the armor never rusts (magical rusting attacks can still affect it, though)
- **Distinctive ring:** when struck by a weapon, the armor emits a distinctive ring or tone if the wielder wants it to

POOR ARMOR

Poor armor may have one or more of the following drawbacks (most of which are just the reverse of Fine armor qualities), or any other the GM sees fit to impose.

Heavy: The armor is made of an unusual material that's heavier than normal, or is so poorly-made that it rides on the character's body in a more encumbering fashion. Recalculate the cost of the armor using a special version of the *Mass* Limitation, Double Mass (-1½).

Ignoble Appearance: The armor inspires scorn or fear in the wielder's allies, contempt or pity in his foes. You can buy this as a Side Effect (-5 PRE for Presence Attacks while wearing armor, always occurs; -½).

Less Protective: The armor provides -1 PD/ED, bought in the manner described on page 232.

More Blinding: The armor is so badly made that it's even harder to see out of. You can buy this as a Side Effect (double all PER Roll penalties for wearing armor, always occurs; -½).

More Restrictive: In campaigns that impose a DCV, DEX Roll, or DEX restrictions on wearing armor, the armor inhibits the wearer's movement more than a normal suit does. You can buy this as a Side Effect (double all DCV/DEX Roll penalties for wearing armor, always occurs; -½).

More Tiring: In games that impose an END cost on wearing Resistant Protection (see below), the armor is more tiring than normal to wear. You can buy this by applying the *Increased Endurance Cost* Limitation to armor.

Weak: The armor is easier to break or damage. It has -1 (or more) BODY. Each -2 BODY reduces the armor's cost by 1 Character Point (minimum cost of 1 Character Point).

Other Drawbacks: Some other possible negative qualities, which save no Character Points but still make armor less enjoyable to wear, include:

- **Poor appearance:** the armor is rusty or dented; has numerous visible repairs; it looks as badly-made as it is.
- **Ill repute:** The armor has a poor reputation. Perhaps an evil man once committed foul deeds while wearing it, it supposedly carries a curse that makes its wearer less intelligent, or the like.

USING ARMOR

In many Fantasy games, characters tend to treat armor as if it were no different than clothing — they ignore the difficulties associated with wearing it, and only pay attention to how much protection it gives them. While this certainly simplifies the game, it's not very realistic... and what's worse, it may cause game balance problems. The following guidelines and rules help to make armor both more balanced and more "realistic."

PRACTICAL CONSIDERATIONS

In the real world, armor brings with it a host of problems and drawbacks. These may have little (or no) effect in game terms, but you should keep them in mind when considering how characters use armor in the game. To the extent you want to incorporate them into your game, the *Real Armor* Limitation reflects them.

First, Resistant Protection (particularly metal armor) is heavy. While the weight is spread over the body somewhat, it's still a lot of kilograms to carry, and the weight does stress some areas of the body more than others (such as the shoulders). The longer a warrior wears his armor, the heavier it seems to become.

Second, armor is hot and stuffy to wear, and tends to overheat the character quickly. Some medieval commentators noted that their armies lost nearly as many men to heat exhaustion as to injuries. The longer one had to wear armor, and the hotter or more humid the weather, the worse this problem was.

Third, armor is restrictive. It doesn't significantly hinder movement — modern tests have shown that untrained men can put on a suit of plate armor and then do things like lie down and stand back up, run, jump, and so on. After all, it would be suicidal to put on a suit of armor, no matter how protective, that limited basic movement abilities in combat. But armor's obviously less flexible and more confining than clothing — and the heavier/more rigid the armor, the more restrictive it tends to be. Additionally, some types of helmets restricted the wearer's field of vision, at least slightly.

Fourth, armor is uncomfortable if worn too long. For short periods, it's not particularly difficult to wear, especially if it's properly fitted and put on. But if worn for long periods, particularly during strenuous activities like riding, it could chafe or otherwise discomfort the wearer. Sleeping in armor, particularly heavy armor, was rarely even contemplated, much less engaged in. A character who sleeps in his armor will probably wake up stiff and sore (-3 DEX for several hours after awakening).

Fifth, armor requires maintenance. If dinged or cut in battle, it needs repairs. After being worn, it requires cleaning. If it contains metal, it needs regular oiling and polishing to prevent rust. At the GM's option, if a character doesn't take the time to maintain his armor after a period of strenuous use — two days of travel or routine adventuring, one day of battle or adventuring featuring combat — the armor loses 1 PD/ED per week of lack of maintenance (and perhaps quicker if he continues using it), down to half its PD/ED. Alternately, the GM may increase other penalties, such as END cost or time to don.

DONNING ARMOR

Putting on (or removing) armor takes time — and sometimes helpers.

Picking up a shield, or putting on a very simple piece of Resistant Protection (such as a helmet), takes a Half Phase Action.

Putting on a simple piece of Resistant Protection (such as a leather, reinforced leather, scale, or chain corselet or hauberk) takes a Full Phase Action. However, this may leave some parts of the body (primarily the limbs and head) at least partly exposed. To put armor on this quickly, the character just grabs the largest, most convenient piece of a suit of armor and gets it on his body as quickly as he can, without fastening every single lace, strap, or buckle.

Putting on an entire suit of cloth/hide, leather, leather, reinforced leather, scale, or chain armor takes four Phases. Typically a character can do this by himself.

Putting on plate armor takes time, and often requires the assistance of a squire or the like. Donning an entire suit of plate takes 5 Minutes — 1 Minute for the torso, and 1 Minute for each limb. If the character doesn't have at least one helper, triple these times.

Removing armor takes the same amount of time. In an emergency, a character with a dagger or similar Short bladed weapon can cut himself free more quickly — one step up the Time Chart — but this makes the armor useless until repaired.

Balancing Armor Use

Armor provides a tremendous benefit in game terms. The PD/ED it offers goes a long way toward keeping a character unharmed (or at least less harmed), and it doesn't cost any Character Points. As a result, most characters — even characters who shouldn't be wearing heavy (or any) armor — tend to have it. Moreover, since armor is so "cheap," heavy fighters can often find ways to wear lots of it and yet still come close to matching light fighters in terms of DEX and SPD.

Many GMs who consider this a problem in their games institute rules to make wearing armor less attractive. In other words, they change armor so the benefits it provides come with drawbacks. If you've found "armor balance" to be a problem in your campaign, you may want to consider one or more of the following solutions (or use them as guidelines to create some of your own).

ENCUMBRANCE

First, look at the *HERO System* rules for Encumbrance (6E2 45-46). A character who's too heavily loaded down suffers penalties to DCV, DEX Rolls, and movement, and has to spend END every Turn. However, because the rules allow characters with high STR to lift a lot of weight, armor may not hinder them much. For example, a suit of full plate (40 kg) only counts as 10% of the weight limit for a 20 STR character. Even allowing for the weight of his other equipment, his armor doesn't restrict him too much.

If you think armor should be more encumbering, you have several options. First, you can double (or otherwise increase) the weight of armor solely for Encumbrance purposes. For example, a suit of chainmail may only weigh 20 kilograms when put on the scales, but when a character wearing chainmail calculates his Encumbrance, he counts it as weighing 40 kg.

Second, you can change the Encumbrance thresholds. Perhaps penalties start to accumulate at 5% lower than indicated in the table on 6E2 46. Or, perhaps the Encumbrance thresholds depend on *Casual STR* — the amount the character can lift with half his STR — rather than his full STR. Using that system, a character with 20 STR becomes 40% Encumbered just by putting on a suit of full plate, or 20% Encumbered when wearing chainmail.

Third, you can increase the Encumbrance penalties so that even a little bit of Encumbrance proves extremely troublesome. Maybe a character who's 11-24% Encumbered suffers -1 DCV/DEX Rolls and spends 1 END per Turn, with penalties increasing proportionately from there.

ENDURANCE

As mentioned above, by all accounts armor, particularly heavy armor, is tiring to wear. Besides the sheer weight of it, it's extremely hot, which only tires the character out more quickly.

You can represent this "armor fatigue factor" in several ways. First, you can rely on Encumbrance END costs. Because those costs are relatively mild, this is unlikely to make armor unattractive to many characters, but combined with some other penalties it may prove an effective balance to armor's benefits.

Second, you can impose a specific END cost for wearing armor. Typically this means an END cost per Turn, not per Phase (much like Encumbrance). The main issue is how much END to charge, and that depends on how much balancing you think armor needs. For example, perhaps 1-3 PD/ED armor cost 1 END per Turn, 4-6 PD/ED armor costs 2 END per Turn, 7-9 PD/ED armor costs 3 END per Turn, and so forth.

Third, you can treat the END spent to wear armor as particularly tiring. For example, you could rule that Post-Segment 12 Recoveries do not allow characters to Recover END spent to wear armor. The only way to Recover that END is to spend a Phase in combat taking a Recovery, or to wait until the battle is over. Similarly, you could use the Long-Term Endurance rules (6E2 132) to make it tiring to wear armor for long periods of time. In addition to the per Turn END cost, wearing armor during strenuous activity (like combat) costs a character 1 (or more) LTE per Turn.

DCV AND DEX ROLLS

Perhaps the simplest, and most effective, way to balance armor is to penalize the DEX and DCV of characters who wear it. As noted above, armor, while not overly restrictive, is still more restrictive than clothing — and the heavier the armor, the more restrictive it's likely to be.

Gamemasters who use this method of balancing armor usually establish a penalty to DCV and DEX Rolls (including Agility Skill rolls) based on the amount of PD/ED the armor provides. For example, perhaps every 3 PD/ED or fraction thereof imposes -1 DCV/DEX Rolls: 1-3 PD/ED equals -1; 4-6 equals -2; 7-9 equals -3; and so on.

Other GMs like to introduce a little more variety, or use the type of armor to determine the penalty. For example: cloth and hide armors, -1; leather and reinforced leather armors, -2; scale and chain mails, -3; and plate armors, -4.

Another possibility is to limit the amount of DEX a character can use while armored. For example, a character wearing cloth and hide armors can use his full DEX, regardless of how high it is. A character wearing leather armors can only use DEX up to DEX 20. One wearing reinforced leather armor can use DEX up to 18, one wearing scale or chain mails can use up to DEX 15, and one using plate armor can use up to DEX 13. This affects both initiative and Skill Rolls.

Armor Skill Levels: If the GM imposes DCV and DEX Roll penalties, characters can buy extra DCV to overcome the restrictions, representing their skill and training for fighting in armor. To counteract the DCV penalty, buy Defensive PSLs costing 2 Character Points each (see 6E1 85). To counteract the DEX Roll penalty, buy Agility Skill Levels (6 Active Points each), Only To Counteract Armor Penalties (-1), for 3 Character Points each.

If the campaign limits how much DEX a character can use while armored, each Armor Skill Level raises that threshold by 1 for any armor the character wears.

PERCEPTION ROLLS

At the GM's option, armor's penalty to DCV and DEX Rolls — either as derived from Encumbrance, or using a direct modifier like the one above — also applies to a character's PER Rolls unless he removes (or does not put on) an appropriate piece of Resistant Protection (the helmet for Sight, the gauntlets for Touch, and the like). To eliminate the Sight PER penalty, a character must doff his helmet; to remove the Touch PER penalty, he must take off his gauntlet; and so forth.

Wearing Multiple Armors

While some armors (such as Plate And Chain) combine types of protective wear, in general a character cannot wear two types of armor at once. If he somehow mixes two together, he must either define it as a new type of a single suit of Resistant Protection (like Plate And Chain), or use the sectional armor rules. A character cannot wear two types of armor and add their PDs/EDs together. (Heavy armors, such as scale, chain, and plate, usually came with padded undergarments to minimize discomfort and chafing, but this doesn't count as wearing Heavy Cloth or Padded Cloth armor in addition to the outer armor.)

Armor Breakage

For the sake of quick and easy game play, armor generally doesn't break. Attacks may pierce it, of course, but characters don't have to keep track of a suit of armor's BODY to determine whether it falls apart in mid-battle.

Gamemasters desiring greater "realism" should consider a suit of armor to have BODY equal to three times the armor's PD/ED. Every attack that inflicts BODY damage on the character (in other words, BODY damage accruing to the character after he applies his armor's PD/ED) inflicts the same amount of damage to the armor. Once the armor takes all of its BODY in damage, it's useless — either it falls apart, or it's too full of holes to do any good. At the GM's option, a suit of armor that loses one-third its BODY provides only two-thirds of its PD/ED; one that loses two-thirds of its BODY provides only one-third PD/ED.

As a default rule, characters cannot target armor specifically (*i.e.,* with the intent of damaging it without hurting the person wearing it). However, the GM may allow this at a substantial OCV penalty (-5 or more).

If a character wants to target a hole in his enemy's armor caused by a previous attack that inflicted BODY damage on that enemy, he can do so, but suffers an OCV penalty based on the size of the hole. A large hole (for example, caused by a long cut from a sword) imposes a -4 to -5 OCV modifier. A medium-sized hole (for example, caused by a single axe-blow) imposes a -5 to -7 OCV modifier. A small hole (for example, caused

SHIELD TABLE

Type Of Shield	DCV	HA	STR Min	BODY	Def	Mass	Cost
Wooden Shields							
Buckler	+1*	1d6 N	3	2	3	1 kg	4
Spiked Buckler	+1*	1d6 N/½d6 K	5	3	3	2 kg	7
Small	+1	1d6 N	5	3	3	2 kg	4
Medium	+2	2d6 N	10	4	3	4 kg	6
Large	+3	3d6 N	15	6	3	6 kg	7
Tower	+4	3d6 N	18	7	3	8 kg	9
Metal Shields							
Buckler	+1*	1d6 N	4	2	5	2 kg	4
Spiked Buckler	+1*	1d6 N/½d6 K	6	3	5	3 kg	7
Small	+1	1d6 N	6	3	5	3 kg	4
Medium	+2	2d6 N	13	4	5	5 kg	6
Large	+3	3d6 N	18	6	5	7 kg	7
Tower	+4	3d6 N	20	7	5	10 kg	9

KEY

K: Killing Damage

N: Normal Damage

DCV: The DCV bonus provided by the shield. Bonuses marked with an asterisk (*) require the character to make a DEX Roll to obtain them (this counts as an Action that takes no time).

HA: The HA (and, for spiked bucklers, HKA) damage the shield does with a shield bash maneuver.

STR Min: STR Minimum.

BODY, Def: The BODY, PD, and ED of the shield, used primarily with the shield breakage rules (page 47).

Mass: The shield's weight in kilograms.

Total Cost: The total cost of the shield as a Multipower (see text).

by an arrow, or a stab wound from a dagger) imposes a -7 to -12 OCV modifier. These modifiers take the place of the Hit Location modifiers normally used for Placed Shots (in effect the hole becomes a separate target). If the character succeeds with this attack, the enemy does not get the benefit of his armor's PD/ED against the attack.

SHIELDS

A shield is a large piece of wood and/or metal, usually roughly disc- or rectangular-shaped, worn by a fighter on his off arm (typically his left arm). The fighter uses it to block attacks and protect himself from harm.

In game terms, a shield is bought as a two-slot Multipower. The first slot provides bonuses to DCV, bought as DCV Levels with the *OAF* (-1), *Real Armor* (-¼), *Mass* (Normal Mass; -1), and *STR Minimum* Limitations. For every 5 points (or fraction thereof) a shield's user's STR is below the shield's STR Minimum, reduce the DCV bonus it provides by 1. Additionally, the wielder may apply his shield's DCV bonus as a bonus to his OCV for purposes of Blocking (see 6E2 58).

The second slot allows the character to perform a "shield bash" maneuver. It's a Hand-To-Hand Attack with the *OAF* (-1), *Hand-To-Hand Attack* (-¼), *Real Weapon* (-¼), and *STR Minimum* Limitations. It also has a -½ *Side Effects* Limitation, signifying the fact that the character suffers an OCV penalty equal to the shield's DCV bonus (since shields, especially large ones, aren't primarily intended as weapons and thus awkward to use as such). The spiked buckler also has an HKA slot. Shields and spiked bucklers are a 1-point subcategory of the *Common Melee Weapons* Weapon Familiarity group; characters without an appropriate WF suffers the standard Unfamiliar Weapon penalty.

Shields also have BODY and PD/ED ratings, for use with the weapon and shield breakage rules (page 47). The shield's materials and size determine its BODY and PD/ED; you can use the *Durable* (+0) and *Fragile* (-0, since shields have more than 1 BODY) modifiers to Focus to simulate differences from the standard Focus breakability rules.

OTHER USES FOR SHIELDS

At the GM's option, a shield that's not in use, but which a character is currently carrying (typically by slinging it on his back) might add +1 (wooden shield) or +2 (metal shield) PD/ED to the character's armor for attacks against the location(s) the shield covers. If characters try to take advantage of this optional rule by carrying extra shields or other such "power gaming" tactics, the GM shouldn't use it.

Fast-thinking characters may come up with other clever uses for a shield. For example, a metal shield might make a useful cooking platter, or a character with a smooth-faced large shield could turn it into an impromptu sled to escape from an enemy during snowy weather.

MARTIAL ARTS ARMOR

Though body armor isn't very common in Martial Arts adventures, a few types do show up with some regularity: samurai armor, kendo armor, and body armor for full-contact karate sparring, for example. Samurai armor would also be appropriate for some Asian-inspired cultures in Fantasy games.

FULL-CONTACT KARATE ARMOR

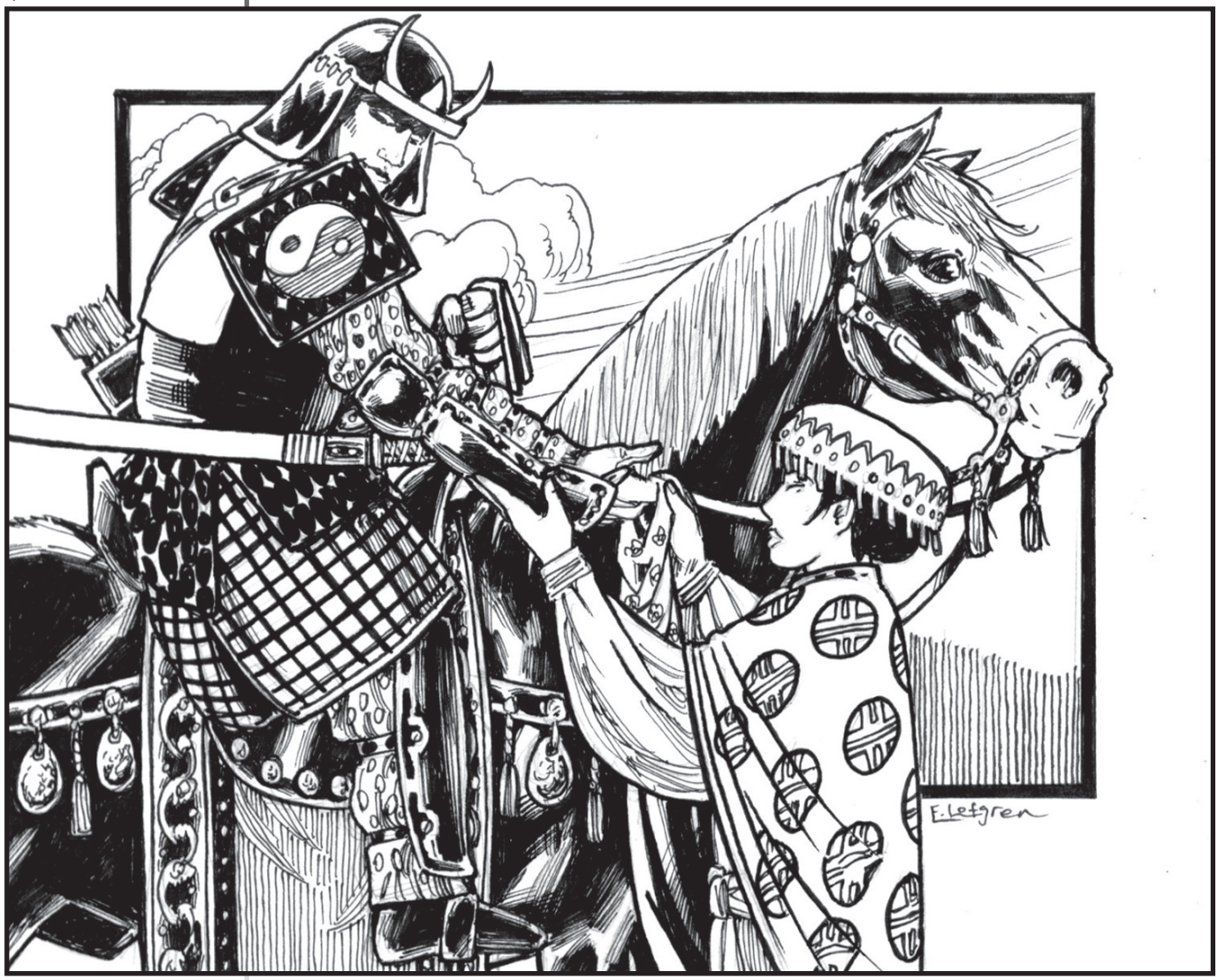
This is a set of vinyl or leather-covered padding designed to minimize risk of injury while characters spar or train. It primarily provides Normal Defense; only the part listed in parentheses is Resistant.

You cannot "stack" the parts of Karate armor; a character cannot wear a Face Guard and a Full Face Guard and get the benefits of both. He only gets the benefit of the greater of the two.

HAND-WRAPPINGS

Practitioners of ancient boxing (see *Boxing, Ancient* on HSMA 24) protected their hands by wrapping them in leather strips; this was the sort of protection that ultimately evolved into the boxing glove. A character who wraps his hands in this fashion has a piece of equipment that provides +4 PD that only protects his hands and weighs .2 kg (this costs 1 Character Point if the character has to purchase hand-wrappings).

Rawhide hand-wrappings are just like leather hand-wrappings, with one exception. Rather like the cestus (see page 17), rawhide wrappings can cause a little extra Killing Damage to the target. With each punch that successfully hits a target, the character with rawhide hand-wrappings should make a 3d6 roll. On an 8-, the rawhide do 1 point of Killing Damage in addition to the regular damage of the attack. If the character has rawhide wrappings but uses some sort of NND or Killing Damage attack, the rawhide adds nothing.



MARTIAL ARTS ARMOR TABLE

Armor Type	Defense	A/R Cost	Location	Mass
Full-Contact Karate Armor		***8/3***		***3.3***
Face Guard	6 (2)		4-5	.1
Full Face Guard	6 (2)		3-5	.2
Gloves (2)	6 (2)		6	.2
Forearm Guards (2)	6 (2)		7	.1
Torso Guard	6 (2)		9-11	.8
Chest Guard	6 (2)		10-11	.7
Rib Guard	6 (2)		12	.4
Athletic Cup	6 (2)		13	.2
Shin Guards, Sm (2)	6 (2)		16	.1
Shin Guards, Lg (2)	6 (2)		16-17	.2
Leg Guard (2)	6 (2)		15-17	.3
Kendo Armor		***8/2***		***4.6***
Men (Helmet)	6 (0)		3-5, 9	1.8
Kote (Sleeves)	4 (2)		6-7	.5
Do (Breastplate)	4 (2)		10-11	1.1
Keikogi (Jacket)	1 (1)		8-11	.6
Tare (Apron)	2 (2)		12-13	.6
Samurai Armor		***18/6***		***17.25***
Hachi/Shikoro (Helm/Shoulders)	6		4-5	1
Happuri (Facemask)	6		3	.5
Kote (Sleeves)	4		6-7	1
O-Sode (Shoulders)	6		9	2
Tateage (Breastplate)	6		10-13	9.5
Haidate (Apron)	6		14-15	2.5
Sune-ate (Greaves)	4		16-17	.75

KEY

Defense: The PD and ED provides, equivalent to Resistant Protection of the same amount.

A/R Cost: The Active Point/Real Point cost of the armor.

Locations: The Hit Locations covered by a particular piece of the armor.

Mass: The weight of each piece of armor (in kilograms); the amount listed at the top (on the same line as the name of the armor) indicates the weight of a full suit. See 6E2 210-12 for further information.

KENDO ARMOR

The armor used by kendoka (practitioners of Kendo, the modern sport form of Kenjutsu) consists of several items. It primarily provides Normal Defense; only the part listed in parentheses is Resistant.

The *men,* or helmet, has a wire-frame mask and padded armor which covers the top and back of the head and the throat. Accompanying this are a heavy chest-plate and gloves which cover the forearms, both made of resilient padded material; a padded apron; and a lighter protective jacket.

The *Men* provides no PD versus firearms. The *Kote* and *Do* only provide half their PD versus firearms. In other words, bullets automatically bypass the armor of the helmet, and are automatically Armor Piercing attacks against the *Kote* and *Do.*

SAMURAI ARMOR

This armor is arranged much like the Kendo armor described above, except that it's designed to provide protection in real warfare (*i.e.,* all the defense is Resistant, though it provides only half defense versus firearms as discussed on page 48). It's made of metal and hardened leather plates, usually brightly ornamented with decorative enamels.

MODERN DEFENSIVE EQUIPMENT

With all the bullets, knives, clubs, explosives, and other dangers they're likely to encounter, characters want gear to defend themselves with almost as much as they want weapons.

2

REALISM AND BODY ARMOR

The *HERO System* rules aren't design to precisely model how body armor works "realistically" – as always, the rules err on the side of dramatic action. If you want body armor to function a little more "realistically," consider all handgun rounds to have the *Reduced Penetration* Limitation when used against body armor. That way heavy rifle rounds still have a good chance to get through the lighter armors, but less powerful handgun rounds do not.

BODY ARMOR

Modern science offers soldiers and law enforcement officers high-tech body armor which is as effective as any suit of metal armor worn by the knights of old. The Body Armor Table lists some sample armors for characters to use.

Body armor is typically bought as PD and ED Resistant Protection with the following Limitations: OIF (-½), Activation Roll (roll and value vary), Mass (typically Half Mass (-½) for the sake of dramatic action; Normal Mass (-1) is a better approximation of "realistic," if you prefer that), and Real Armor (see page 226; -¼). The different entries for Activation Roll (which represent how much of the body the armor protects; see 6E2 212) reflect varying levels of realism/cinematic action.

Characters can make soft body armor concealable (under sufficiently bulky clothes) by converting it from an OIF to an IIF (-¼). Hard body armor cannot realistically be made concealable.

BODY ARMOR TYPES

Roughly speaking, body armor comes in two types: soft and hard. Soft body armor is made of Kevlar or other substances (see below) that are tightly woven so they spread the impact of the bullet and prevent it from penetrating. Hard body armor is made of plates of ceramic, metal, or other substances, usually contained in pockets in soft armor.

BODY ARMOR SUBSTANCES

Typical soft body armor is made from Kevlar, a name trademarked by DuPont for products made with aramid fibers. Kevlar 29, the form most often used in body armor, is five times as strong as steel and does not burn (though it carbonizes at temperatures about 800° Fahrenheit). Although Kevlar body armor is less effective against bladed weapons than against bullets, it's still approximately 98% effective against such attacks (in game terms, its PD doesn't take any sort of Limitation). Kevlar deteriorates over time from exposure to ultraviolet light or human sweat. It's also less effective when wet (-1 PD and ED) unless waterproofed. It can be woven with fiberglass, graphite fibers, or metal fibers to increase its strength, or chemically treatened to make it tougher.

Other materials currently used to make body armor include Spectra and Vectran. Spectra, an ultradense plastic, is about ten times as strong as steel, or approximately twice as strong as Kevlar. Vectran is an artificial fiber that's five to ten times as strong as steel, or up to twice as strong as Kevlar.

As of 2010, several other substances are being developed for potential use in soft body armor; they're listed on the Body Armor Table for GMs interested in running "near future" games, or games in which the PCs have technology more advanced than standard. Biosteel is a spider silk fiber that's genetically produced using goats; it's up to 20 times as strong as steel (or as much as four times as strong as Kevlar). Another possibility is carbon nanotube fibers, which are even stronger than biosteel. And some researchers are currently exploring the armor potential of nacre (mother of pearl), hoping to duplicate its highly-durable structure with even stronger materials.

Another interesting possibility for near-future protective gear is so-called *liquid body armor,* which contains pockets or layers of special oils laced with particles of metal or other protective substances. When affected by an electrical field or significant pressure, the particles of metal line up and "solidify" within milliseconds, forming a highly protective barrier.

Hard body armors protect the wearer with plates made of steel, ceramic, or polyethylene. Steel loses its protective ability less quickly after multiple hits, and is cheaper. But ceramics and polyethylene provide better protection for only a third to half the weight of steel. The plates are typically inserted into pockets in soft body armor, and thus are defined in game terms as adding PD/ED to the PD/ED of soft armor. (If a character wears a plate by itself, consider it to provide PD/ED equal to 8 + its bonus over Hit Locations 10-11.)

Body armor can be treated to reduce the wearer's heat signature, making him harder to see with thermal scopes (*i.e.,* with Infrared Perception).

BODY ARMOR RATINGS

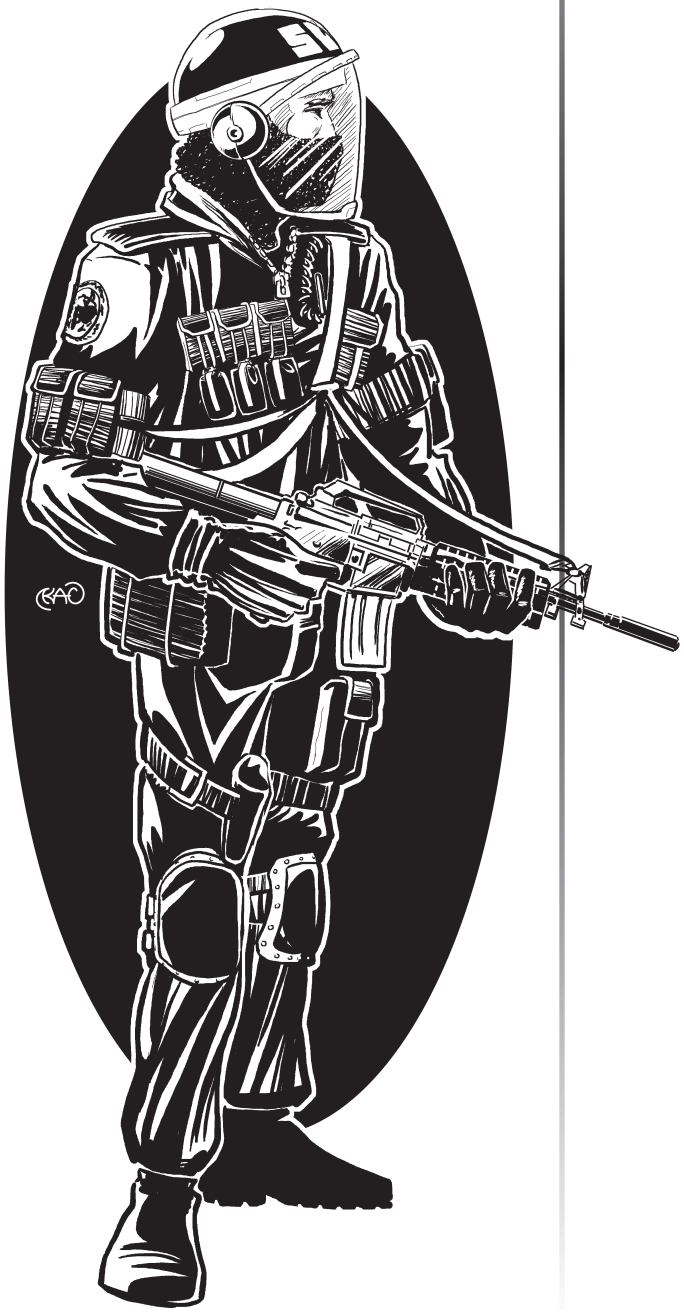
The Body Armor Table uses a system developed by the National Institute of Justice for ranking body armor. Here are the ratings and some of the types of bullets they're supposed to stop:

Rating	Resists These Rounds
Level I	.22 LR, .32, .38
Level II-A	.45 ACP, low-velocity .357 Magnum, low-velocity 9mm, 12 gauge buckshot
Level II	High-velocity .357 Magnum, low-velocity .44 Magnum, 10mm
Level III-A	High-velocity 9mm, high-velocity .44 Magnum, .308 Win
Level III	12 gauge slugs, 7.62mm, .308 Win, .30 carbine
Level IV	.30-06 AP

Levels I to III-A are soft body armor; levels III-IV are hard body armor.

These ratings are used to determine the PD/ED the armor provides based on the average damage of the major rounds in question — not the maximum damage, since sometimes body armor doesn't work as well as expected (and sometimes it works better). Body armor's effectiveness depends on many factors.

The accompanying Body Armor Table lists the types of body armor available to Modern characters. Each type of armor has a listing for "full suit" (meaning an Activation Roll 14-) and "partial suit" (Activation Roll 11-) for purposes of determining cost and weight. Characters may of course wear sectional body armor if desired. For example, a character might have a suit of Level II body armor protecting most of his person (Activation Roll 14-), but Level IV ceramic plates around his torso (Hit Locations 10-13, Activation Roll 10-). Standard rules for sectional defenses (see page 229) apply.



HISTORICAL BODY ARMOR

NINETEENTH-CENTURY BODY ARMOR

Generally speaking, body armor isn't available to Wild West or Victorian characters, though there are a few historical or fictional incidents of people adapting Fantasy-era types of armor to modern circumstances. For example, the Australian outlaw Ned Kelly and his gang all wore a heavy (44 kg) suit of plate armor-like body armor to protect themselves from bullets during the June 27, 1880 Glenrowan shoot-out (though it also significantly restricted their ability to move and to shoot accurately). And of course Clint Eastwood's character protects himself from gunfire with a metal plate under his clothing in the movie *A Fistful Of Dollars.*

PULP BODY ARMOR

Compared to later periods, the Pulp era offers relatively little in the way of personal protection for characters — but early forms of body armor are available. Typically they consist of small, overlapping steel plates sewn into a leather or canvas vest. Perhaps the most successful was the *Wisbrod vest,* invented by Eliot Wisbrod, which encased the steel plates in rubberized plastic. Wisbrod claimed it could withstand a bullet from a .45 Thompson submachine gun. He promoted the vest heavily, including with frequent live demonstrations using himself as a target!

Pulp-Era Bulletproof Vest: Resistant Protection (8 PD) (12 Active Points); OIF (-½), Normal Mass (-1), Real Armor (-¼), Activation Roll 11- (covers Hit Locations 9-13; -½). Total cost: 4 points.

MODERN BODY ARMOR

Type Of Armor	DEF	A/R Cost	Mass	Notes
Soft Body Armor				
Kevlar (normal)				
Level I (full suit)	3	9/4	3.0	Activation Roll 14-
Level I (partial suit)	3	9/3	2.2	Activation Roll 11-
Level II-A (full suit)	6	18/7	8.75	Activation Roll 14-
Level II-A (partial suit)	6	18/6	6.25	Activation Roll 11-
Level II (full suit)	7	21/8	12.25	Activation Roll 14-
Level II (partial suit)	7	21/8	8.75	Activation Roll 11-
Level III-A (full suit)	8	24/10	17.5	Activation Roll 14-
Level III-A (partial suit)	8	24/9	12.5	Activation Roll 11-
Kevlar (enhanced), Spectra, Vectran				
Level I (full suit)	4	12/5	4.4	Activation Roll 14-
Level I (partial suit)	4	12/4	3.15	Activation Roll 11-
Level II-A (full suit)	7	21/8	12.25	Activation Roll 14-
Level II-A (partial suit)	7	21/8	8.75	Activation Roll 11-
Level II (full suit)	8	24/10	17.5	Activation Roll 14-
Level II (partial suit)	8	24/9	12.5	Activation Roll 11-
Level III-A (full suit)	9	27/11	24.5	Activation Roll 14-
Level III-A (partial suit)	9	27/10	17.5	Activation Roll 11-
Biosteel, carbon nanotubes, liquid body armor				
Level I (full suit)	5	15/6	6.15	Activation Roll 14-
Level I (partial suit)	5	15/5	4.4	Activation Roll 11-
Level II-A (full suit)	8	24/10	17.5	Activation Roll 14-
Level II-A (partial suit)	8	24/9	12.5	Activation Roll 11-
Level II (full suit)	9	27/11	24.5	Activation Roll 14-
Level II (partial suit)	9	27/10	17.5	Activation Roll 11-
Level III-A (full suit)	10	30/12	35.0	Activation Roll 14-
Level III-A (partial suit)	10	30/11	25.0	Activation Roll 11-
Hard Body Armor				
Ceramic or polyethylene plates				
Level III				
Chest and back	+3	9/3	1.3	Hit Locations 10-11 (Activation Roll 9-)
Chest, sides, back	+3	9/3	1.75	Hit Locations 10-11, including sides (Activation Roll 10-)
Level IV				
Chest and back	+3	11/3	1.3	Hardened (+¼), Hit Locations 10-11 (Activation Roll 9-)
Chest, sides, back	+3	11/4	1.75	Hardened (+¼), Hit Locations 10-11, including sides (Activation Roll 10-)
Metal plates				
Level III				
Chest and back	+2	6/2	0.95	Hit Locations 10-11 (Activation Roll 9-)
Chest, sides, back	+2	6/2	1.25	Hit Locations 10-11, including sides (Activation Roll 10-)
Level IV				
Chest and back	+2	7/2	0.95	Hardened (+¼), Hit Locations 10-11 (Activation Roll 9-)
Chest, sides, back	+2	7/2	1.25	Hardened (+¼), Hit Locations 10-11, including sides (Activation Roll 10-)
Other Options				
Anti-IR Coating	—	7/2	—	Change Environment (-2 to Infrared Perception PER Rolls), 0 END, Persistent; No Range, Self Only
Armored Clothing	2	6/2	2.0	Activation Roll 14-

KEY

Defense: The PD and ED the body armor provides, equivalent to Resistant Protection of the same amount.

A/R Cost: The Active Point/Real Point cost of the armor.

Mass: The armor's weight in kilograms. See 6E2 210-12 for further information. The example armor is built with the Limitation *Half Mass* (-½); GMs desiring greater realism can change this to Normal Mass (-1).

COMBAT WEAR

Uniforms and body armor aren't the only things Modern-day characters might wear into combat to protect themselves or make their jobs easier. (See also *Survival Equipment* on page 331.)

Headgear

Some protective gear is available to cover a character's head and/or face.

HELMETS AND FACE SHIELDS

Effect: Resistant Protection (8 PD/8 ED) on the head
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 8 PD/8 ED

Description: None of the suits of body armor described above protect the head; for that, a character needs to wear a helmet. The PASGT helmet (used by the US military until 2003) and the ACH helmet and Lightweight Helmet (used by the Army and Marines as of 2010) are made of Kevlar, making them more protective than the older steel helmets but lighter in weight. Some versions are shaped to allow the wearer to easily mount a nightvision device or communications equipment.

Game Information: Resistant Protection (8 PD/8 ED) (24 Active Points); OIF (-½), Activation Roll 8- (protects Locations 3-4; -1¾), Half Mass (-½), Real Armor (-¼). Total cost: 6 points.

Options:

1) **Face Shields:** Some soldiers and police officers also wear ballistic face shields — large plates of transparent protective material designed to protect the wearer's face. They offer relatively little resistance to bullets; their main purpose is to keep thrown rocks and debris from hitting the wearer in front (this also counts as a defense against NND Sight Group Flashes defined as thrown mud, powder, or the like). Some model face shields are worn on their own, others attach to a helmet. Character also, or alternately, buys: Resistant Protection (3 PD/3 ED) (9 Active Points); OIF (-½), Activation Roll (protects Location 4 when attacked from the front; -2), Half Mass (-½), Real Armor (-¼). Total cost: 2 points.

Holsters

Most holsters just do what the typical holster is designed to: carry a gun safely. But some types provide other benefits.

CONCEALMENT HOLSTER

Effect: +1 to Concealment for a particular handgun
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: A Concealment holster is specially designed to help a character conceal a particular type of handgun.

Game Information: +1 to Concealment (2 Active Points); IIF (-¼), Only For Hiding A Particular Handgun (-2). Total cost: 1 point.

FAST DRAW HOLSTER

Effect: +1 to Fast Draw
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: This type of holster is specially designed to allow the shooter to draw his gun quickly. First developed by Wild West gunslingers in the late 1800s, they remain popular today.

Game Information: +1 to Fast Draw (Small Arms) (2 Active Points); OIF (-½). Total cost: 1 point.

Options:

1) **Swivelling/Pivoting Holster:** Used by some Wild West gunfighters, this holster is attached to the wearer's belt by a stud and has an opening cut at the bottom. Instead of drawing his pistol, the shooter swivels the gun so that it's pointing at the target, then pulls the trigger. Buy this as: +2 to Fast Draw (Small Arms) (4 Active Points); OIF (-½), Requires A Fast Draw Roll (-½), Side Effects (if the roll fails, on a 13- roll the character shoots himself in the leg or foot; -¼). Total cost: 2 points.

2) Springsleeve Holster: This holster, popular with Wild West gamblers in the movies, allows a character to conceal a small gun (*i.e.,* one with a PER Mod of +1 or less, unless the GM wants to be really "dramatic") up his sleeve. A spring built into the holster thrusts the gun right into the wearer's hand when he flexes his wrist a certain way. Buy this as: +2 to Fast Draw (Small Arms) (4 Active Points); IIF (-¼), Requires A DEX Roll (-½), Side Effects (if the roll fails, the character fails to grab the gun and it goes sailing 1d6 meters away; -¼). Total cost: 2 points.

Tactical Vests And Clothing

CAMOUFLAGE CLOTHING

Effect: +1 to Stealth in appropriate settings
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: The military has camouflage uniforms for all sorts of environments (for example, arctic, desert, forest/jungle, mountains, and urban). The GM determines when camo clothing offers a bonus to its wearer.

Game Information: +1 to Stealth (2 Active Points); OIF (-½), Only Works In Appropriate Settings (-1). Total cost: 1 point.

COMBAT VEST

Effect: Resistant Protection (4 PD/4 ED) plus various weapons
Target: Self/Varies
Duration: Persistent/varies
Range: Self/varies
END Cost: 0/varies
Breakability: 4 PD/4 ED

Description: This vest not only provides the wearer with protection in the torso region, it allows him to carry several weapons and gadgets easily. Characters can design their own vests with individualized selections of equipment.

Game Information:

Cost	Power
4	**Armored Vest:** Resistant Protection (4 PD/4 ED); OIF (-½), Activation Roll 11- (-1), Half Mass (-½), Real Armor (-¼)
17	**Combat Vest Weapons:** Multipower, 25-point reserve; all OIF (multiple OAFs, -½)
1f	**1) .41 Handgun:** RKA 1½d6; OAF (-1), Beam (-¼), Real Weapon (-¼), STR Minimum (10; -½), 2 clips of 12 Charges each (-0)
1f	**2) Combat Knife:** HKA 1d6 (plus STR); OAF (-1), Real Weapon (-¼)
1f	**3) Smoke Grenades:** Change Environment, -3 to Sight Group PER Rolls, Area Of Effect (4m Radius; +¼); OAF (-1), Activation Roll 14- (-¼), Range Based On STR (-¼), Real Weapon (-¼), 1 Continuing Charge lasting 3 Turns (-1)
1f	**4) Flashlight:** Sight Group Images, +3 to PER Rolls; OAF (-1), Only To Create Light (-1), 1 Continuing Fuel Charge lasting 1 Hour (-0)

Total cost: 25 points.

POLICEMAN'S BELT

Effect: Various weapons and useful tools
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: 1 PD/1 ED

Description: This is a slight variation on the traditional "Sam Browne" belt worn by police officers. Characters can also design their own belts with individualized selections of equipment.

Game Information:

Cost	Power
70	**Policeman's Belt:** Multipower, 105-point reserve; all OIF (-½)
1f	**1) .41 Handgun:** RKA 1½d6; OAF (-1), Beam (-¼), Real Weapon (-¼), STR Minimum (10, STR Minimum Doesn't Add/Subtract Damage; -1), 2 clips of 12 Charges each (-0)
1f	**2) Handcuffs:** Entangle 3d6 (standard effect: 3 BODY), 6 PD/6 ED, Takes No Damage From Attacks (+½); OAF (-1), Set Effect (hands only; -1), Does Not Prevent Use Of Accessible Foci (-1), No Range (-½), Must Follow Grab Or Target Must Be Willing (-½), Can Be Escaped Automatically With Modified Lockpicking Or Contortionist Roll (-½), 1 Recoverable Charge (-1¼)
1f	**3) Tonfa:** HA +3d6, Reduced Endurance (0 END; +½); OAF (-1), Hand-To-Hand Attack (-½), Real Weapon (-¼)
3f	**4) Pepper Foam Spray:** Sight Group Flash 5d6, NND (defense is solid eye covering, see text; +0), Delayed Recovery (each BODY equals 1 Turn of effect, see APG 99; +2); OAF (-1), No Range (-½), Real Weapon (-¼), 12 Charges (-¼) (total cost: 25 points) plus Blast 3d6, NND (defense is solid eye covering; +1); OAF (-1), No Range (-½), Real Weapon (-¼), 12 Charges (-¼)
1f	**5) Flashlight:** Sight Group Images, +3 to PER Rolls; OAF (-1), Only To Create Light (-1), 1 Continuing Fuel Charge lasting 1 Hour (-0)
1f	**6) Walkie-Talkie:** Radio Listen and Transmit (Radio Group); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼)

Total cost: 78 points.

SUPERHERO DEFENSIVE EQUIPMENT

2

Defensive equipment really comes into its own when Weird and Super Technology are available to the PCs. Suddenly they're not limited to wearing materials that can protect them — they can use gadgets that generate force-fields, take pills that harden their skin to the consistency of steel, or devise other sorts of amazing protective gear.

WEIRD SCIENCE DEFENSIVE GADGETS

Weird Science doesn't offer as much in the way of protection as it does in weaponry, but it can still do a lot to preserve a character's life and health in dangerous situations.

BULLETPROOF UNDERSHIRT

Effect: Resistant Protection (6 PD), Activation Roll 11-
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 6 PD/6 ED

Description: Characters who can't, or won't, wear a Wisbrod vest (see page 241) can sometimes get their hands on this marvelous Weird tech defense: an undershirt (or similar garment) that's been chemically treated and/or made of special substances so it can stop bullets!

Game Information: Resistant Protection (6 PD) (9 Active Points); OIF (-½), Activation Roll 11- (covers Hit Locations 9-13; -1). Total cost: 4 points.

Options:

1) **Strong Bulletproof Undershirt:** Increase to Resistant Protection (8 PD). 12 Active Points; total cost 5 points.
2) **Weak Bulletproof Undershirt:** Decrease to Resistant Protection (4 PD). 6 Active Points; total cost 2 points.
3) **Bulletproof Clothing:** Most of the character's clothing is bulletproof, giving him a greater range of protection. Change to Activation Roll 14- (-¼). Total cost: 5 points.

DEATH RAY-RESISTANT SUIT

Effect: Resistant Protection (2 ED), Only Works Against Variant Death Ray
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This special protective suit is woven with platinum fibers and treated with special chemicals so that it allows the wearer to resist the effects of the awesome Variant Death Ray (see page 118).

Game Information: Resistant Protection (2 ED) (3 Active Points); OIF (-½), Only Works Against Variant Death Ray (see above; -2). Total cost: 1 point.

IRONSKIN ELIXIR

Effect: Resistant Protection (8 PD/8 ED)
Target: Self
Duration: Constant
Range: Self
Charges: 4 Continuing Charges lasting 1 Hour each
Breakability: 1 PD/1 ED

Description: When drunk, this marvelous product of Weird chemistry causes the imbiber's skin to take on the consistency of steel while remaining as flexible as one's normal integument.

Game Information: Resistant Protection (8 PD/8 ED), 4 Continuing Charges lasting 1 Hour each (+0) (24 Active Points); OAF Fragile (-1¼), Concentration (0 DCV throughout brewing; -1), Extra Time (6 Hours to brew; -3½), Requires A Weird Science Roll (to brew; -½). Total cost: 3 points.

SUPERHERO DEFENSIVE GADGETS

The full range of defensive technology, from ordinary body armors to devices that blithely defy logic, science, and common sense, are available in the Superheroes genre. Many of these gadgets, particularly the powered armor, are also appropriate for many types of Science Fiction campaigns.

POWERED ARMOR

The concept of "powered armor" — a suit of armor, usually (but not necessarily) high-tech, that provides a character with various abilities in addition to protecting him from attacks — is a favorite one for superheroes. It encompasses a wide variety of special effects and potential abilities. Many of the devices in this book could be incorporated into a suit of powered armor, for example.

This section describes various powered armor gadgets, and provides a system for creating powered armor suits quickly and easily. For the sake of simplicity, it makes certain assumptions about how much technology a character can fit into a suit of powered armor. You can easily change the numbers involved if you prefer, or ignore the restrictions entirely. Furthermore, it's not comprehensive, so you can easily substitute other gadgets if desired.

This system establishes a limit on the number of Active Points' worth of gadgets a character can build into various parts of a powered armor suit (the helmet, the gauntlets, and so forth) in addition to basic systems (a Protection System, life support, communications, power systems). When a character randomly rolls up a suit of powered armor, it's possible for him to end up with more than 400 Total Points' worth of systems for his armor. In that case he needs to find a way to reduce those points, either by getting rid of some systems, choosing less effective versions of those systems, or combining systems into Power Frameworks — the tables just indicate the maximum amount of gadgets that could fit into a suit, so it's up to the character to decide which of them to buy, and how. For example, a character could buy the weapons in his armor's chestplate and gauntlets as a single Multipower for much less than their individual Real Costs.

For purposes of this system, a suit of powered armor consists of five main assemblies, sections, or parts:

- Helmet
- Chestplate (including the "trunks" or skirt" protecting the waist/groin area)
- Gauntlets (including armpieces)
- Boots (including legpieces)
- External Modules

POWERED ARMOR AND EXOSKELETON SUBSYSTEMS

Active Points Of Gadgets In...

Type Of Suit	*Helmet*	*Chestplate*	*Gauntlet*	*Boots*
Powered Armor	60	120	75 each	60
Exoskeleton (14-)	45	75	50 each	45
Exoskeleton (11-)	30	50	30 each	30

Powered armor suits are usually built with either of two Limitations — Obvious Inaccessible Focus or Only In Alternate Identity — to simulate the nature of the suit. Since OIF is the most common (and usually the most appropriate) Limitation, it's used as the default below, but the options include OIAID versions of the gadgets.

Powered Armor Basics

All suits of armor come with four basic systems: protection; life support; communications; and power.

PROTECTION SYSTEMS

First and foremost, a suit of powered armor protects its wearer from harm. How it does this — the strength of its high-tech materials, the force-field it generates, or the like — depends on special effects, player preference, and other considerations. In game terms, the basic protection is usually defined as Resistant Protection, though some suits use Damage Negation or other Defense Powers instead.

POWERED ARMOR STANDARD PROTECTION SYSTEM

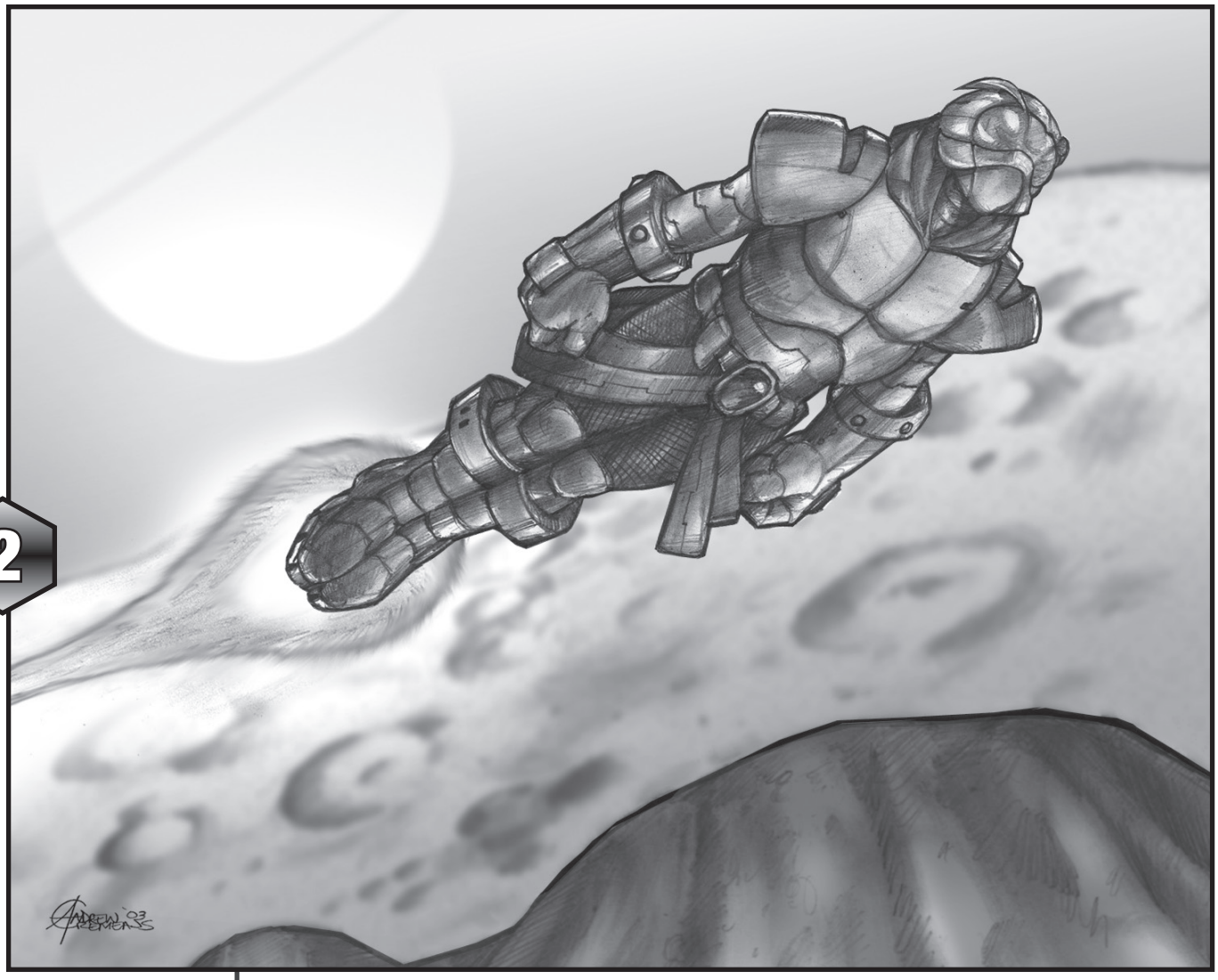
Effect: Resistant Protection (15 PD/15 ED)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 15 PD/15 ED

Description: The materials of the powered armor suit, perhaps reinforced by an internal force-field or the like, protect the wearer.

Game Information: Resistant Protection (15 PD/15 ED) (45 Active Points); OIF (-½). Total cost: 30 points.

Options:

1) **Strong Armor:** Increase to Resistant Protection (20 PD/20 ED). 60 Active Points; total cost 40 points.
2) **Stronger Armor:** Increase to Resistant Protection (25 PD/25 ED). 75 Active Points; total cost 50 points.
3) **Really Strong Armor:** Increase to Resistant Protection (30 PD/30 ED). 90 Active Points; total cost 60 points.



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4) **Weak Armor:** Decrease to Resistant Protection (10 PD/10 ED). 30 Active Points; total cost 20 points.

5) **Hardened Armor:** Add Hardened (+¼) to Resistant Protection:

Standard: 56 Active Points; total cost 37 points.

Strong: 75 Active Points; total cost 50 points.

Weak: 37 Active Points; total cost 25 points.

6) **Impenetrable Armor:** Add Impenetrable (+¼) to Resistant Protection:

Standard: 56 Active Points; total cost 37 points.

Strong: 75 Active Points; total cost 50 points.

Weak: 37 Active Points; total cost 25 points.

7) **Hardened, Impenetrable Armor:** Add Hardened (+¼) and Impenetrable (+¼) to Resistant Protection:

Standard: 67 Active Points; total cost 45 points.

Strong: 90 Active Points; total cost 60 points.

Weak: 45 Active Points; total cost 30 points.

8) **Variant Armor I:** Substitute OIAID (-¼) for OIF (-½):

Standard: 45 Active Points; total cost 36 points.

Strong: 60 Active Points; total cost 48 points.

Weak: 30 Active Points; total cost 24 points.

9) **Variant Armor II:** Change to Damage Negation:

Standard: -5 DCs Physical and Energy. 50 Active Points; total cost 33 points.

Strong: -6 DCs Physical and Energy. 60 Active Points; total cost 40 points.

Weak: -4 DCs Physical and Energy. 40 Active Points; total cost 27 points.

OIAID: Standard: -5 DCs Physical and Energy. 50 Active Points; total cost 40 points.

10) **Exoskeleton:** Instead of having a full-fledged suit of powered armor, the character has an exoskeleton — a partial suit that augments his natural abilities and/or provides him with advanced personal weaponry, but which doesn't fully enclose his body or offer as much protection as powered armor. To create a basic exoskeleton, apply the Limitation Activation Roll to the Standard Protection System:

OIF, Activation Roll 14- (-¼):

Standard: 45 Active Points; total cost 26 points.

Strong: 60 Active Points; total cost 34 points.

Weak: 30 Active Points; total cost 17 points.

OIAID, Activation Roll 14- (-¼):

Standard: 45 Active Points; total cost 30 points.

Strong: 60 Active Points; total cost 40 points.

Weak: 30 Active Points; total cost 20 points.

OIF, Activation Roll 11- (-½):

Standard: 45 Active Points; total cost 22 points.

Strong: 60 Active Points; total cost 30 points.

Weak: 30 Active Points; total cost 15 points.

OIAID, Activation Roll 11- (-½):

Standard: 45 Active Points; total cost 26 points.

Strong: 60 Active Points; total cost 34 points.

Weak: 30 Active Points; total cost 17 points.

Since an exoskeleton has less space for installed systems, it can't carry as many Active Points' worth of gadgets as a true powered armor suit can. The table on page 247 lists the suggested guidelines for the amount of gadgetry a character can install.

POWERED ARMOR COMBINED PROTECTION SYSTEM

Effect: Physical and Energy Damage Reduction, Resistant, 50%
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 12 PD/12 ED

Description: This form of powered armor combines both high-tech materials and variable-yield force-fields to provide excellent protection against a wide spectrum of attacks.

A similar system used in some powered armor suits creates a dimensional shunt field that surrounds the wearer. The field transfers the energy of an attack into an uninhabited adjacent dimension so that it causes the wearer less harm.

Game Information: Physical and Energy Damage Reduction, Resistant, 50% (60 Active Points); OIF (-½). Total cost: 40 points.

Options:

1) **Strong Protection:** Increase to Physical and Energy Damage Reduction, Resistant, 75%. 120 Active Points; total cost 80 points.
2) **Weak Protection:** Decrease to Physical and Energy Damage Reduction, Resistant, 25%. 30 Active Points; total cost 20 points.
3) **Realistic Protection:** Add Costs Endurance (-½). Total cost: 30 points.
4) **Variant Armor:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 60 Active Points; total cost 48 points.

   Strong: 120 Active Points; total cost 96 points.

   Weak: 30 Active Points; total cost 24 points.

POWERED ARMOR COOLING SYSTEM

Effect: Resistant Protection (10 ED), Only Versus Fire/Heat
Target: Self
Duration: Constant
Range: Self
Charges: 12
Breakability: 2 DEF (or 10 ED)

Description: To protect the wearer against extreme heat, fire, and the like, this armor system generates a cooling effect throughout the armor. It's so powerful the cooling effect surrounds the armor with a thin coating of ice.

Game Information: Resistant Protection (10 ED) (15 Active Points); OIF (-½), Only Versus Fire/Heat (-½), 12 Charges (-¼). Total cost: 7 points.

Options:

1) **Strong Cooling System:** Increase to Resistant Protection (14 ED). 21 Active Points; total cost 9 points.
2) **Weak Cooling System:** Decrease to Resistant Protection (6 ED). 9 Active Points; total cost 4 points.
3) **Realistic Cooling System:** The icy coating makes it harder for the character to move his limbs. Add Side Effects (-3 DEX, always occurs; -½). Total cost: 5 points.
4) **Experimental Cooling System:** The Cooling System is a prototype and sometimes fails to work properly. Add Activation Roll 14- (-¼). Total cost: 6 points.
5) **Advanced Cooling System:** This form of Cooling System works so well that it generates a coating of ice around the armor thick enough to provide physical protection. The ice also makes the character heavier. Change to: Resistant Protection (6 PD/10 ED) (24 Active Points); OIF (-½), 12 Charges (-¼) (total cost: 15 points) plus Knockback Resistance -2m (2 Active Points); OIF (-½), Linked (-½), 12 Charges (-¼) (total cost: 1 point). Total cost: 16 points.
6) **Variant Armor:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 21 Active Points; total cost 10 points.

   Strong: 21 Active Points; total cost 10 points.

   Weak: 9 Active Points; total cost 4 points.

POWERED ARMOR EXOTIC DEFENSE SYSTEM

Effect: Power Defense (12 points)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This system generates a low-level, variable amplitude force-field that offers protection against many types of exotic attacks, such as Drains and Transforms.

Game Information: Power Defense (12 points) (12 Active Points); OIF (-½). Total cost: 8 points.

Options:

1) **Strong Protection:** Increase to Power Defense (18 points). 18 Active Points; total cost 12 points.
2) **Weak Protection:** Decrease to Power Defense (8 points). 8 Active Points; total cost 5 points.
3) **Realistic System:** Add Costs Endurance (-½). Total cost: 6 points.
4) **Variant System:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 12 Active Points; total cost 10 points.

   Strong: 18 Active Points; total cost 14 points.

   Weak: 8 Active Points; total cost 6 points.

POWERED ARMOR FIRE SUPPRESSION SYSTEM

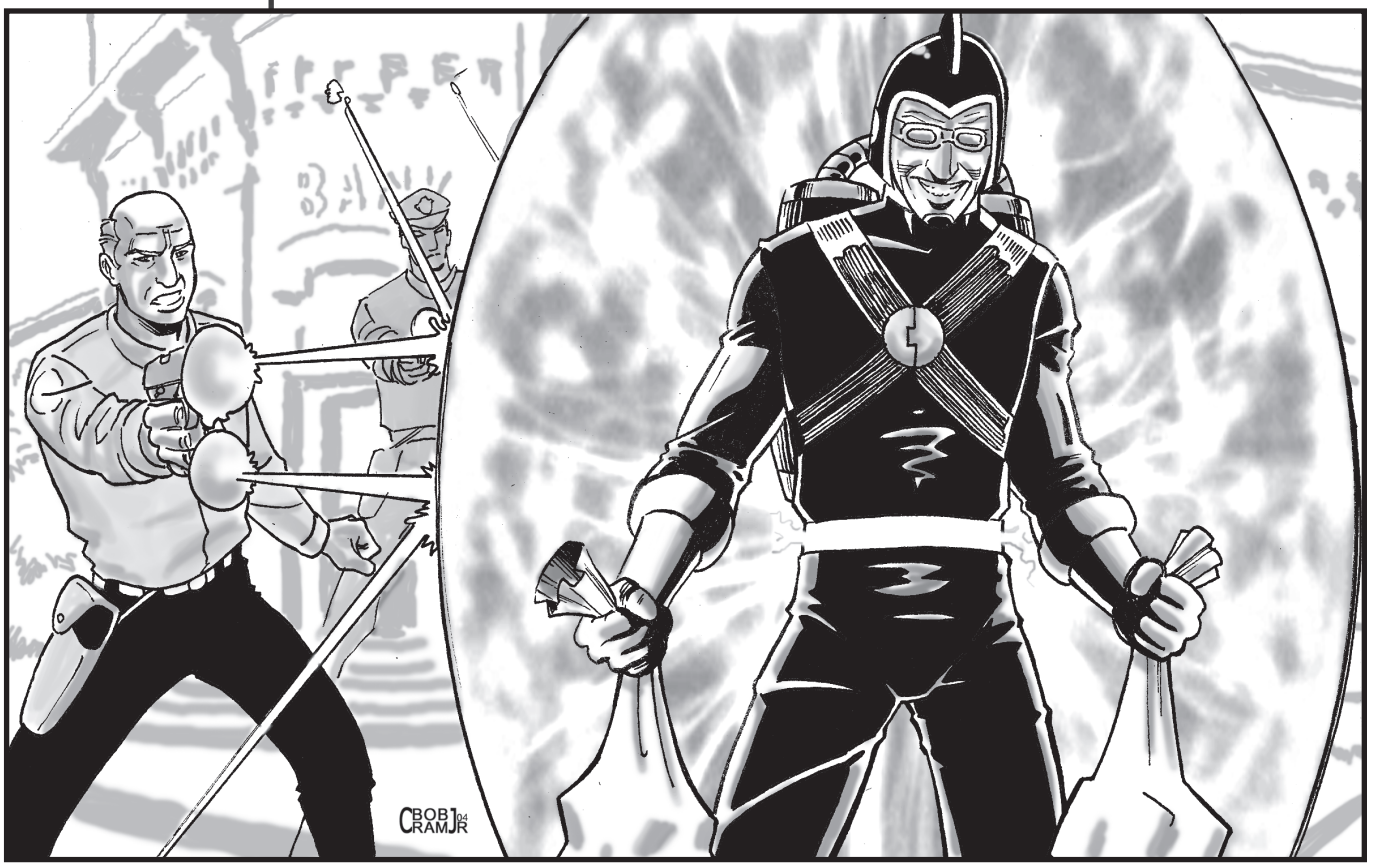
Effect: Dispel 16d6, any one Fire power
Target: One fire
Duration: Instant
Range: 10m
Charges: 4
Breakability: 14 PD/14 ED

Description: The character's armor contains ducts filled with fire-retarding foam. If his suit catches on fire, he can release the foam to snuff the flames. If necessary, he can even project the foam over short distances to put out other fires.

For fire powers possessed by characters, use the Active Points in the power to determine whether the Dispel works. At the GM's option, separate fires caused by a character's power may also use this rule, instead of the one for natural fires.

For natural fires, if a fire fills a 1m radius area or less, use its Active Points (typically for an RKA, Constant) to determine whether the Dispel works (see 6E2 150 for suggested damage ranges for fires). If it fills a larger area, the character can either extinguish it in 1m radius area sections, or in larger "pieces." To determine the Active Points for a large fire, apply an appropriate Advantage (Area Of Effect, typically) to the Powers used to create the fire.

Extinguishing a fire doesn't get rid of the smoke it generated, or reverse any effects it may already have caused (like heating an area or weakening the structure of a building).



Game Information: Dispel 16d6, Variable Effect (any one Fire/Heat Power at a time; +½) (72 Active Points); OIF (-½), Limited Range (10m; -¼), 4 Charges (-1). Total cost: 26 points.

Options:

1) **Strong Suppression System:** Increase to Dispel 20d6. 90 Active Points; total cost 33 points.
2) **Weak Suppression System:** Decrease to Dispel 12d6. 54 Active Points; total cost 20 points.
3) **Realistic Suppression System:** The ducts in the armor really can't hold much foam. Decrease to 2 Charges (-1½). Total cost: 22 points.
4) **Experimental Suppression System:** Sometimes the foam, an experimental substance, clogs up the ducts. Add Activation Roll 14- (-¼). Total cost: 24 points.
5) **More Foam:** Increase to 8 Charges (-½). Total cost: 32 points.
6) **Enhanced Suppression System I:** Change to Expanded Effect + Variable Effect (any two Fire/Heat Powers simultaneously; +1). 96 Active Points; total cost 35 points.
7) **Enhanced Suppression System II:** Change to Expanded Effect + Variable Effect (any two Fire/Heat Powers simultaneously; +2). 144 Active Points; total cost 52 points.
8) **Enhanced Suppression System III:** Change to Expanded Effect + Variable Effect (all Fire/Heat Powers simultaneously; +4). 240 Active Points; total cost 87 points.
9) **Variant Armor:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 72 Active Points; total cost 24 points.

   Strong: 90 Active Points; total cost 36 points.

   Weak: 54 Active Points; total cost 22 points.

POWERED ARMOR FORCE-FIELD GENERATOR

Effect: Resistant Protection (20 PD/20 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 6
Breakability: 20 PD/20 ED

Description: Some types of powered armor protect the wearer not because the materials used to build them are inherently strong, but because they contain devices that generate a powerful force-field. While this offers more protection than the Armor version, as a Constant Power it shuts off if the character is Stunned or Knocked Out (unless the END comes from an Endurance Reserve, such as the Powered Armor Standard Battery).

Game Information: Resistant Protection (20 PD/20 ED) (60 Active Points); OIF (-½), Costs Endurance (-½). Total cost: 30 points.

RANDOM POWERED ARMOR DEFENSE SYSTEMS TABLE

Roll 2d6 to choose a package of defensive systems. This table assumes most powered armor suits have about 70-80 Active Points' worth of defensive abilities.

Roll (2d6)	Defense Devices
2-3	Standard Protection System, Resilience Augmentation, Standard Cooling System (75 Active Points; Real Points 45 [OIF] or 54 [OIAID])
4-6	Weak Force-Field Generator, Weak Combined Protection System (75 Active Points; Real Points 42 [OIF] or 50 [OIAID])
7-8	Standard Protection System, Weak Combined Protection System (75 Active Points; Real Points 50 [OIF] or 60 [OIAID])
9-10	Strong Standard Protection System, Exotic Defense System (72 Active Points; Real Points 48 [OIF] or 58 [OIAID])
11-12	Standard Force Shield Generator, Exotic Defense System (80 Active Points; Real Points 42 [OIF] or 49 [OIAID])

Options:

1) **Strong Force-Field:** Increase to Resistant Protection (25 PD/25 ED). 75 Active Points; total cost 37 points.
2) **Weak Force-Field:** Decrease to Resistant Protection (15 PD/15 ED). 45 Active Points; total cost 22 points.
3) **High-Energy Force-Field I:** Add Hardened (+¼) to Force-Field:

   Standard: 75 Active Points; total cost 37 points.

   Strong: 94 Active Points; total cost 47 points.

   Weak: 56 Active Points; total cost 28 points.
4) **High-Energy Force-Field I:** Add Impenetrable (+¼) to Force-Field:

   Standard: 75 Active Points; total cost 37 points.

   Strong: 94 Active Points; total cost 47 points.

   Weak: 56 Active Points; total cost 28 points.
5) **Extensible Force-Field:** The wearer of the armor can extend the Force-Field to protect carried objects and persons. Add Protects Carried Items to Force-Field:

   Standard: 70 Active Points; total cost 35 points.

   Strong: 85 Active Points; total cost 42 points.

   Weak: 55 Active Points; total cost 27 points.
6) **Self-Powered Force-Field:** The force-field has its own power source, or can draw on other sources (such as sunlight) to keep itself functioning even when the person wearing the armor is unconscious or Stunned. Remove Costs Endurance (-½):

Standard: 60 Active Points; total cost 40 points.

Strong: 75 Active Points; total cost 50 points.

Weak: 45 Active Points; total cost 30 points.

7) **Variant Force-Field:** Substitute OIAID (-¼) for OIF (-½):

Standard: 60 Active Points; total cost 34 points.

Strong: 75 Active Points; total cost 43 points.

Weak: 45 Active Points; total cost 26 points.

8) **Advanced Force-Field:** This form of the device offers a much wider range of protection, Change to: Resistant Protection (16 PD/16 ED/9 Mental Defense/9 Power Defense). 75 Active Points; total cost 37 points.

9) **Tunable Force-Field:** Add Allocatable (+¼). 75 Active Points; total cost 37 points.

POWERED ARMOR FORCE SHIELD GENERATOR

Effect: Barrier 10 PD/10 ED, 10 BODY (up to 8m long, 4m high, and ½m thick)

Target: Varies

Duration: Constant

Range: 690m

END Cost: 7

Breakability: 14 PD/14 ED

Description: This system, most commonly built into powered armor that generates a force-field to protect the wearer, allows the wearer to create a movable barrier of force at range. In addition to its many defensive uses, the wearer can use it to englobe an enemy.

Game Information: Barrier 10 PD/10 ED, 10 BODY (up to 8m long, 4m high, and ½m thick), Non-Anchored, Dismissable (68 Active Points); OIF (-½), Costs Endurance (to maintain; -½). Total cost: 34 points.

Options:

1) **Strong Force Shield:** Increase to Barrier 12 PD/12 ED, 12 BODY. 76 Active Points; total cost 38 points.

2) **Weak Force Shield:** Decrease to Barrier 8 PD/8 ED, 8 BODY. 60 Active Points; total cost 30 points.

3) **High-Energy Force Shield:** Add Hardened (+¼) to Barrier:

Standard: 85 Active Points; total cost 42 points.

Strong: 95 Active Points; total cost 47 points.

Weak: 75 Active Points; total cost 37 points.

4) **Opaque Force Shield:** The Force Shield is opaque, thus shielding the user from sight as well as attacks. Add Opaque (Sight Group) to Barrier:

Standard: 78 Active Points; total cost 39 points.

Strong: 86 Active Points; total cost 43 points.

Weak: 70 Active Points; total cost 35 points.

5) **Variant Armor:** Substitute OIAID (-¼) for OIF (-½):

Standard: 68 Active Points; total cost 39 points.

Strong: 76 Active Points; total cost 43 points.

Weak: 60 Active Points; total cost 34 points.

POWERED ARMOR RESILIENCE AUGMENTATION

Effect: +20 CON

Target: Self

Duration: Persistent

Range: Self

END Cost: 0

Breakability: 4 PD/4 ED

Description: To reflect a suit of powered armor's ability to protect its wearer from the stunning effect of impacts and the like, designers give it the power to enhance its wearer's CON.

Game Information: +20 CON (20 Active Points); OIF (-½), Does Not Apply To CON Rolls (-¼). Total cost: 11 points.

Options:

1) **Strong Augmentation:** Increase to +25 CON. 25 Active Points; total cost 14 points.

2) **Weak Augmentation:** Decrease to +15 CON. 15 Active Points; total cost 8 points.

3) **Variant Augmentation:** Substitute OIAID (-¼) for OIF (-½):

Standard: 20 Active Points; total cost 13 points.

Strong: 25 Active Points; total cost 17 points.

Weak: 15 Active Points; total cost 10 points.

LIFE SUPPORT SYSTEMS

"Defense" doesn't just include protecting a wearer from the direct physical harm caused by attacks, weapons, collisions, and the like. It also refers to preserving his life and health in the face of dangerous environmental conditions. Thus, most suits of powered armor come equipped with one or more forms of Life Support. A built-in air supply (Self-Contained Breathing) is the primary form of Life Support incorporated into armors, but many others are possible.

The random powered armor generation system assumes all powered armor suits have the full 22 Real Points' worth of Life Support listed below.

POWERED ARMOR LIFE SUPPORT SYSTEMS

Effect: Life Support (various types)
Target: Self
Duration: Persistent
Range: Self
Charges: Varies
Breakability: Varies

Description: The powered armor has one or more systems designed to protect the wearer's life and health in hostile environments. A character may buy any of these for his suit of armor that he wishes; he doesn't have to buy some as a prerequisite for buying others.

Game Information:

Cost	Power
7	**Internal Oxygen Supply:** Life Support (Self-Contained Breathing) (10 Active Points); OIF (-½), 1 Continuing Fuel Charge (replacement oxygen supply, Easy to obtain; 6 Hours; -0)
6	**Environmental Protection Systems:** Life Support (Safe Environments: High Pressure, High Radiation, Intense Cold, Intense Heat, Low Pressure/Vacuum) (9 Active Points); OIF (-½)
2	**Food Concentrate Capsules:** Life Support (Diminished Eating: no need to eat) (3 Active Points); OIF (-½), 1 Continuing Fuel Charge (replacement food capsules, Easy to obtain; 1 Week; -0)
7	**NBC-Proof Sealed System:** Immunity (all terrestrial poisons, diseases, and biological and chemical warfare agents) (10 Active Points); OIF (-½)

Options:

1) **Variant Life Support Systems:** Substitute OIAID (-¼) for OIF (-½):

Cost	Power
8	Internal Oxygen Supply
7	Environmental Protection Systems
2	Food Concentrate Capsules
8	NBC-Proof Sealed System

COMMUNICATIONS SYSTEMS

Even the earliest powered armor suits had basic radios, and most modern ones have sophisticated communications equipment.

The random powered armor generation system does not include any communications systems.

POWERED ARMOR COMMUNICATIONS SUITE

Effect: HRRP (Radio Group)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This communications suite, commonly found (in various configurations) in twenty-first century powered armors, provides both audio and video transmission and reception capabilities across the broadcast spectrum.

Game Information: HRRP (Radio Group) (12 Active Points); OIF (-½), Affected As Sight And Hearing Group As Well As Radio Group (-½). Total cost: 6 points.

Options:

1) **Strong Communications Suite:** Add +3 PER. 15 Active Points; total cost 7 points.
2) **Weak Communications Suite:** Change to Radio Perception/Transmission (Radio Group) and Affected As Hearing Group As Well As Radio Group (-¼). 10 Active Points; total cost 6 points.
3) **Really Weak Communications Suite:** The character can receive radio broadcasts, but cannot transmit his own. Change to Radio Perception (Radio Group) and Affected As Hearing Group As Well As Radio Group (-¼). 8 Active Points; total cost 4 points.
4) **Realistic Communications Suite:** The communications suite draws on the armor's power supply. Add Costs Endurance (-½). Total cost: 5 points.
5) **Variant Communications Suite:** Substitute OIAID (-¼) for OIF (-½). Total cost: 7 points.

POWERED ARMOR CLOSED COMMUNICATIONS SYSTEM

Effect: Mind Link, specific group of any 8 minds
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 8 PD/8 ED

Description: To ensure secure communications among a group of characters, some forms of powered armor come equipped with a closed communication system. This device can only transmit and receive information from other such systems, so some forms of powered armor have both it and a Communications Suite.

Game Information: Mind Link, specific group of up to any 8 minds, No LOS Needed (35 Active Points); OIF (-½), Only With Others Who Have Mind Link (-1), Affected As Radio And Hearing

Groups, Not Mental Group (-½). Total cost: 12 points.

Options:

1) **Strong CCS:** Increase to any 16 minds. 40 Active Points; total cost 13 points.
2) **Weak CCS:** Decrease to 4 minds. 30 Active Points; total cost 10 points.
3) **Realistic CCS:** The CCS draws on the armor's power supply. Add Costs Endurance (-½). Total cost: 10 points.
4) **Variant CCS:** Substitute OIAID (-¼) for OIF (-½). Total cost: 13 points.

POWER SYSTEMS

As the name indicates, *powered* armor requires a power source to function — it's full of systems (be they electronic, techno-organic, or something else) that don't work on their own. In game terms, there are several ways to address the need for power.

First, you can build the powered armor so that all of its systems are self-contained. Either they only have a limited number of uses per day (Charges), or they have their own independent power supplies (*i.e.,* they're bought with the Advantage *Reduced Endurance* (0 END; +½)). In short, they don't cost END; the special effect of not costing END is that the armor is built to supply them with power.

Second, the powered armor can somehow draw its power straight from the wearer's body. This makes the most sense for suits defined as being made of "organic technology" or the like, though some cybernetically-commanded electronic armors could fatigue the user because of the mental effort required to run them. In game terms, this means many systems cost END, and the character himself pays that END.

Third, the armor may have its own power source — a battery, fuel cell, or the like. In game terms, this typically means the armor has an Endurance Reserve (or possibly more than one). Some examples are described below.

The random powered armor generation system does not include any power systems.

POWERED ARMOR STANDARD BATTERY

Effect: Endurance Reserve (160 END, 15 REC)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 10 PD/10 ED

Description: This system represents a typical power source — known among armor designers simply as a "battery" — for a suit of powered armor. It can supply power to all of the armor's systems.

Game Information: Endurance Reserve (160 END, 15 REC) (50 Active Points); OIF (-½). Total cost: 33 points.

Options:

1) **Strong Battery I:** Increase to Endurance Reserve (200 END, 21 REC). 64 Active Points; total cost 43 points.
2) **Strong Battery II:** Increase to Endurance Reserve (160 END, 51 REC). 74 Active Points; total cost 49 points.
3) **Weak Battery:** Decrease to Endurance Reserve (100 END, 12 REC). 33 Active Points; total cost 22 points.
4) **Realistic Battery:** This form of battery has a much larger initial power supply, but can only replenish its power when plugged into an electrical socket or similar source of electricity. Change to Endurance Reserve (300 END) (75 Active Points); OIF (-½) (total cost: 50 points) plus Endurance Reserve (15 REC) (10 Active Points); OIF (-½), Limited Recovery (only when plugged into a source of electricity; -1) (total cost: 4 points). Total cost: 53 points.
5) **Backup Battery:** Some powered armor suits have a smaller secondary battery that activates only if the primary battery is depleted. (The GM may allow a character to make an Electronics roll to tap the battery's power before that time, if appropriate.) Character also buys: Endurance Reserve (60 END, 6 REC) (19 Active Points); OIF (-½), Only Works If Primary Battery Has 0 END (-1). Total cost: 8 points.
6) **Individual System Battery:** Some powered armor suits have batteries that power only a single system. Either every system in the armor has its own battery, or some systems have a battery of their own in addition to the main battery. In the latter case, the character can choose which battery to draw END from when he uses the system. The strength of the battery (i.e., its END and REC) depends on the END requirements of the individual system; this example assumes a system that could use a maximum of 30 END per Turn (without Pushing or the like). Endurance Reserve (60 END, 12 REC) (23 Active Points); OIF (-½), Only Powers One System (defined when Reserve is purchased; -0). Total cost: 15 points.
7) **Variant Battery:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 50 Active Points; total cost 40 points.
   Strong I: 64 Active Points; total cost 51 points.
   Strong II: 74 Active Points; total cost 59 points.
   Weak: 33 Active Points; total cost 26 points.

Helmet Systems

In addition to a powered armor suit's communications systems, which are usually installed in the suit's helmet, a helmet can contain up to *60 Active Points*' worth of devices. Here are some possibilities:

DEFENSIVE HELMET GADGETS

POWERED ARMOR PSIONIC SHIELDING

Effect: Mental Defense (10 points)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: Many powered armor helmets have built-in shielding that creates "psionic interference" to protect the wearer against Mental Powers.

Game Information: Mental Defense (10 points) (10 Active Points); OIF (-½). Total cost: 7 points.

Options:

1) **Strong Shielding:** Increase to Mental Defense (15 points). 15 Active Points; total cost 10 points.
2) **Weak Shielding:** Decrease to Mental Defense (5 points). 5 Active Points; total cost 3 points.
3) **Realistic Shielding:** The Shielding draws on the armor's power supply. Add Costs Endurance (-½). Total cost: 5 points.
4) **Variant Shielding:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 10 Active Points; total cost 8 points.
   Strong: 15 Active Points; total cost 12 points.
   Weak: 5 Active Points; total cost 4 points.

POWERED ARMOR POLARIZED LENSES

Effect: Sight Group Flash Defense (10 points)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: Many powered armor helmets have polarized lenses over the eyes, or entire polarized faceplates, that shield the wearer's eyes from bright lights.

Game Information: Sight Group Flash Defense (10 points) (10 Active Points); OIF (-½). Total cost: 7 points.

Options:

1) **Strong Lenses:** Increase to Sight Group Flash Defense (15 points). 15 Active Points; total cost 10 points.
2) **Weak Lenses:** Decrease to Sight Group Flash Defense (5 points). 5 Active Points; total cost 3 points.
3) **Variant Lenses:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 10 Active Points; total cost 8 points.
   Strong: 15 Active Points; total cost 12 points.
   Weak: 5 Active Points; total cost 4 points.
4) **Other Sensory Shields:** You can substitute any other Sense Group for the Sight Group if desired, or buy it in addition to the Polarized Lenses. *Audio Dampers* (Hearing Group) are particularly popular.

RANDOM POWERED ARMOR HELMET TABLE

Roll 1d6 to choose a 60 Active Point package of Helmet devices:

Roll (1d6)	Helmet Devices
1	Polarized Lenses (10 points), Audio Dampers (10 points), 360 Vision, Radar Array, Standard Thermalvision, UV Vision (60 Active Points; Real Points 37 [OIF] or 43 [OIAID])
2	Psionic Shielding (10 points), Polarized Lenses (10 points), Audio Dampers (10 points), Parabolic Hearing System, Sensory Augmentation Systems, Telescopic Lenses, Ultrasonic Hearing (60 Active Points; Real Points 41 [OIF] or 47 [OIAID])
3	Polarized Lenses (10 points), Audio Dampers (10 points), Sight Magnification System, Telescopic Lenses, Thermalvision (Standard and Heat Trace-Tracking), UV Vision (1 point unspent) (59 Active Points; Real Points 39 [OIF] or 47 [OIAID])
4	Psionic Shielding (10 points), Polarized Lenses (5 points), Audio Dampers (5 points), Nightsight, Radar Array, Sensory Augmentation Systems, Standard Thermalvision (1 point unspent) (59 Active Points; Real Points 35 [OIF] or 42 [OIAID])
5	Psionic Shielding (10 points), Polarized Lenses (10 points), Audio Dampers (10 points), 360 Vision, Thermalvision (Standard and High-Powered) (60 Active Points; Real Points 37 [OIF] or 43 [OIAID])
6	Polarized Lenses (10 points), Audio Dampers (5 points), Radar Array, Thermalvision (Standard and High-Powered), UV Vision (60 Active Points; Real Points 32 [OIF] or 38 [OIAID])

SENSORY HELMET GADGETS

Virtually all powered armor suits provide some form of additional or enhanced senses for the wearer.

POWERED ARMOR SENSORY ENHANCEMENTS

Effect: Various Enhanced Senses
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: Breakable; DEF varies

Description: Most powered armor designers incorporate one or more sensory devices into their suits. A character can buy as many of these devices as he wishes; he doesn't have to buy some as a prerequisite for buying others.

Game Information:

Cost Power (OIF)

7 **360 Vision:** Increased Arc Of Perception (Sight Group) (10 Active Points); OIF (-½)

3 **Nightsight:** Nightvision (5 Active Points); OIF (-½)

6 **Parabolic Hearing System:** +6 versus Range Modifier for Hearing Group (9 Active Points); OIF (-½)

10 **Radar Array:** Radar (Radio Group), Increased Arc Of Perception (360 Degrees) (20 Active Points); OIF (-½), Affected As Sight Group As Well As Radio Group (-½)

6 **Sensory Augmentation Systems:** +3 PER with all Sense Groups (9 Active Points); OIF (-½)

10 **Sight Magnification System:** Microscopic (x1,000) for Sight Group (15 Active Points); OIF (-½)

10 **Sonar Array:** Active Sonar (Hearing Group), Increased Arc Of Perception (360 Degrees) (20 Active Points); OIF (-½), Affected As Sight Group As Well As Hearing Group (-½)

6 **Telescopic Lenses:** +6 versus Range Modifier for Sight Group (9 Active Points); OIF (-½)

3 **Thermalvision, Standard:** Infrared Perception (Sight Group) (5 Active Points); OIF (-½)

6 **Thermalvision, High-Powered:** Fully Penetrative for Sight Group (stopped by walls or like objects 1m thick or thicker, force-fields, or anything that would block the ability to sense heat) (15 Active Points); OIF (-½), Limited Effect (can only see what could be seen with Infrared Perception; -1)

3 **Thermalvision, Heat Trace-Tracking:** Tracking for Infrared Perception (5 Active Points); OIF (-½)

2 **Ultrasonic Hearing:** Ultrasonic Perception (Hearing Group) (3 Active Points); OIF (-½)

3 **UV Vision:** Ultraviolet Perception (Sight Group) (5 Active Points); OIF (-½)

Cost Power (OIAID)

8 360 Vision
4 Nightsight
7 Parabolic Hearing System
11 Radar Array
7 Sensory Augmentation Systems
12 Sight Magnification System
11 Sonar Array
7 Telescopic Lenses
4 Thermalvision, Standard
7 Thermalvision, High-Powered
4 Thermalvision, Heat Trace-Tracking
2 Ultrasonic Hearing
4 UV Vision

Chestplate Systems

A chestplate can contain up to *120 Active Points'* worth of devices. Here are some possibilities:

POWERED ARMOR ELECTRONIC WARFARE SYSTEM

Effect: Variable Power Pool (60 points) for Electronic Warfare Systems
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: 18 PD/18 ED

Description: Some suits of powered armor come equipped with powerful electronic warfare (EW) systems — radar jammers and spoofers, broadcast interference fields, electronic countermeasures and counter-countermeasures, and so forth. Because there are so many ways to create such systems in game terms, this power is represented as a Variable Power Pool (the character changes the Pool with Systems Operation). Possible powers the character could buy with it include, but aren't limited to, Suppress Radar (or Electronic Warfare Systems), Radio Sense Group Images, Enhanced Perception for the Radio Sense Group, Change Environment or Darkness to inhibit the use of Radio Senses.

Game Information: Electronic Warfare System: Variable Power Pool, 60 Pool + 60 Control Cost; OIF (-½), Only For EW Systems (-½). Total cost: 75 points.

Options:

1) *Strong EW:* Increase to Variable Power Pool, 90 Pool + 90 Control Cost. Total cost: 112 points.
2) **Weak EW:** Decrease to Variable Power Pool, 45 Pool + 50 Control Cost. Total cost: 57 points.
3) **Experimental EW:** Miniaturizing such complex technology makes it prone to failure. Add Activation Roll 14- (-¼). Total cost: 73 points.
4) **Variant EW:** Substitute OIAID (-¼) for OIF (-½):

   Standard: Total cost 77 points.

   Strong: Total cost 116 points.

   Weak: Total cost 59 points.

RANDOM POWERED ARMOR CHESTPLATE TABLE

Roll 1d6 to choose a 120 Active Point package of Chestplate devices:

Roll (1d6)	Chestplate Devices
1	Strong Tangleweb Sprayer, Weak Vari-Beam Projector (120 Active Points; Real Points 74 [OIF] or 88 [OIAID])
2	Strong Strength Augmentation I, Standard Vari-Beam Projector (120 Active Points; Real Points 72 [OIF] or 86 [OIAID])
3	Standard Holo-Generator, Weak Strength Augmentation, Weak Vari-Beam Projector (120 Active Points; Real Points 75 [OIF] or 89 [OIAID])
4	Weak Smokescreen Generator, Spotlight, Weak Vari-Beam Projector (7 points unspent) (113 Active Points; Real Points 60 [OIF] or 70 [OIAID])
5	Weak Strength Augmentation, Strong Vari-Beam Projector (120 Active Points; Real Points 75 [OIF] or 89 [OIAID])
6	Strong Holo-Generator, Spotlight, Standard Tangleweb Sprayer (120 Active Points; Real Points 66 [OIF] or 76 [OIAID])

POWERED ARMOR HOLO-GENERATOR

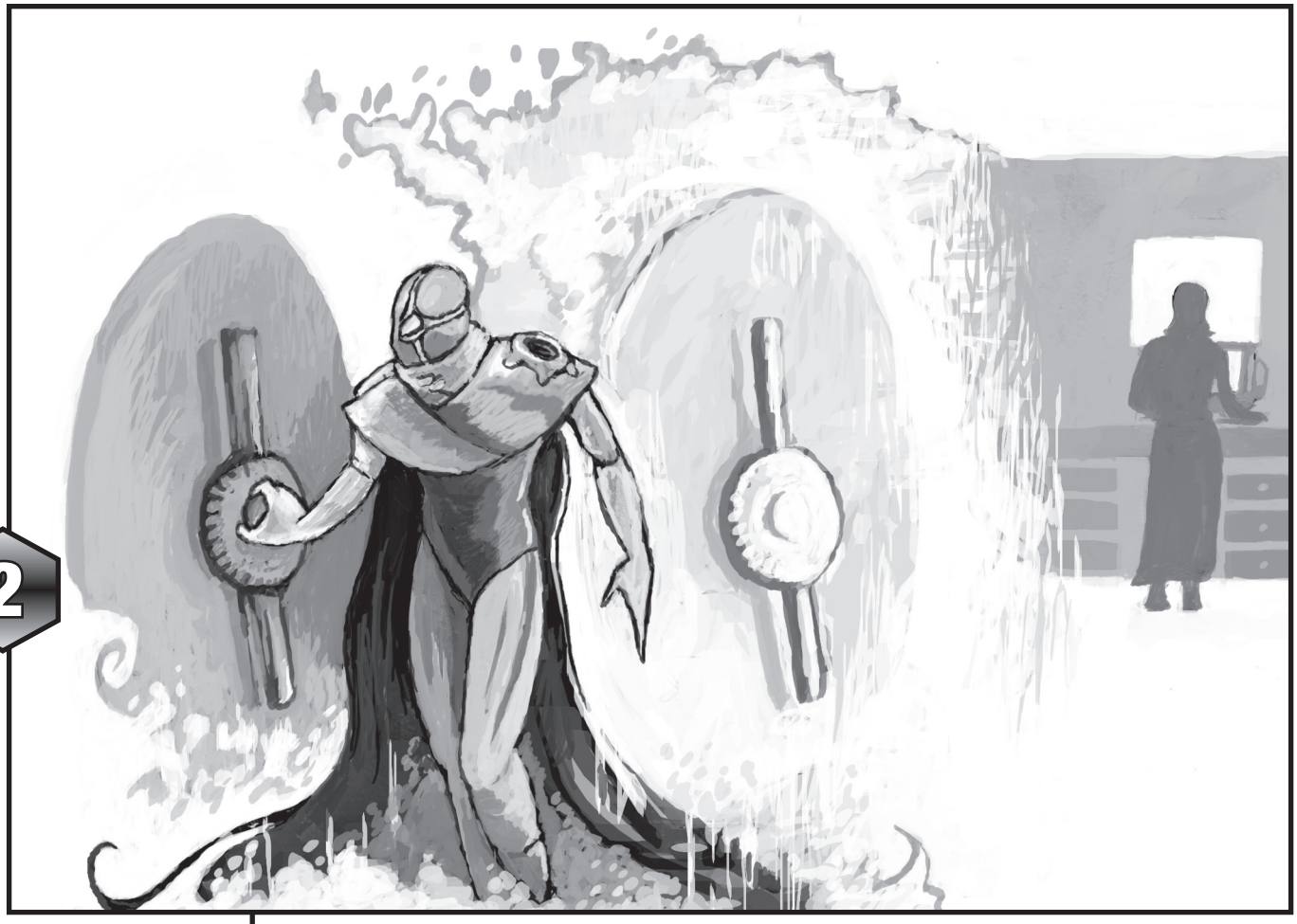
Effect: Sight and Hearing Group Images, -3 to PER Rolls
Target: 4m Radius
Duration: Constant
Range: 300m
END Cost: 3
Breakability: 6 PD/6 ED

Description: This device allows the wearer to project realistic holograms that affect others' senses of sight and hearing. In addition to its tactical uses, a Holo-Generator can cover the powered armor itself with an illusion that makes it look like ordinary clothing or the like. (When the wearer uses a Holo-Generator to "disguise" himself this way, the GM should allow the Image to move with him as he moves.)

Game Information: Sight and Hearing Group Images, -3 to PER Rolls, Area Of Effect (4m Radius; +¼) (30 Active Points); OIF (-½). Total cost: 20 points.

Options:

1) **Strong Holo-Generator:** Increase to -5 to PER Rolls. 37 Active Points; total cost 25 points.
2) **Weak Holo-Generator:** Decrease to -2 to PER Rolls. 26 Active Points; total cost 17 points.
3) **Realistic Holo-Generator:** This form of Holo-Generator can only make the armor look like ordinary clothing and the like. Add No Range (-½) and Set Effect (see text; -½). 12 points.



4) **Experimental Holo-Generator:** The Holo-Generator is a prototype that doesn't always work. Add Activation Roll 14- (-¼). Total cost: 17 points.

5) **Variant Holo-Generator:** Substitute OIAID (-¼) for OIF (-½):

Standard: 30 Active Points; total cost 24 points.

Strong: 37 Active Points; total cost 30 points.

Weak: 26 Active Points; total cost 21 points.

POWERED ARMOR SMOKESCREEN GENERATOR

Effect: Darkness to Sight Group
Target: 6m Radius
Duration: Constant
Range: No Range
Charges: 4 Continuing Charges
Breakability: 6 PD/6 ED

Description: The armor has a system of micro-ducts that contain two chemicals. Normally these chemicals remain separate, and thus inert. On cybernetic command, the system mixes the two, generating a thick cloud of smoke around the wearer. The smokescreen moves with the wearer as he moves, but blinds him as it does everyone else if he doesn't have sensory equipment that can "see" through it.

Game Information: Darkness to Sight Group 6m radius (30 Active Points); OIF (-½), No Range (-½), 4 Continuing Charges lasting 1 Turn each (removed by winds or rain; -½). Total cost: 12 points.

Options:

1) **Strong Smokescreen:** Increase to Darkness to Sight Group 8m radius. 40 Active Points; total cost 16 points.

2) **Weak Smokescreen:** Decrease to Darkness to Sight Group 4m radius. 20 Active Points; total cost 8 points.

3) **Experimental Smokescreen:** The Smokescreen Generator is experimental technology and doesn't always work. Add Activation Roll 14- (-¼). Total cost: 11 points.

4) **Tuned Smokescreen:** The character's helmet has lenses that are specially "tuned" to the smoke so the wearer can see through it. Add Personal Immunity (+¼). 37 Active Points; total cost 15 points.

5) **Variant Smokescreen Generator:** Substitute OIAID (-¼) for OIF (-½):

Standard: 30 Active Points; total cost 13 points.

Strong: 40 Active Points; total cost 18 points.

Weak: 20 Active Points; total cost 9 points.

POWERED ARMOR SPOTLIGHT

Effect: Sight Group Images, +4 to PER Rolls
Target: 2m Radius
Duration: Constant
Range: 60m
END Cost: 3
Breakability: 7 PD/7 ED

Description: With this device installed, the wearer of a suit of powered armor never has to worry about not seeing clearly at night.

Game Information: Sight Group Images, +4 to PER Rolls, Area Of Effect (2m Radius; +¼) (33 Active Points); OIF (-½), Limited Range (60m; -¼), Only To Create Light (-1). Total cost: 12 points.

Options:

1) **Variant Spotlight:** Substitute OIAID (-¼) for OIF (-½). Total cost: 13 points.

POWERED ARMOR STRENGTH AUGMENTATION

Effect: +40 STR
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 8 PD/8 ED

Description: The motors and hydraulic systems built into the chestplate of a suit of powered armor, in conjunction with subsidiary motors located in the arms and legs, enhance the wearer's strength.

Game Information: +40 STR (40 Active Points); OIF (-½). Total cost: 27 points.

Options:

1) **Strong Augmentation I:** Increase to +45 STR. 45 Active Points; total cost 30 points.
2) **Strong Augmentation II:** Increase to +50 STR. 50 Active Points; total cost 33 points.
3) **Weak Augmentation:** Decrease to +30 STR. 30 Active Points; total cost 20 points.
4) **Variant Augmentation:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 40 Active Points; total cost 32 points.
   Strong I: 45 Active Points; total cost 36 points.
   Strong II: 50 Active Points; total cost 40 points.
   Weak: 30 Active Points; total cost 24 points.

POWERED ARMOR TANGLEWEB SPRAYER

Effect: Entangle 5d6, 5 PD/5 ED
Target: One character
Duration: Instant
Range: 60m
Charges: 10 Boostable Charges
Breakability: 10 PD/10 ED

Description: This device consists of a supply of tangleweb stored within the armor and one or more projection points in the chestplate of the armor. When cybernetically activated, the weapon sprays the target with tangleweb; the user can control how much is sprayed, using extra to more firmly Entangle the victim if necessary.

Game Information: Entangle 5d6, 5 PD/5 ED (50 Active Points); OIF (-½), Limited Range (60m; -¼), 10 Boostable Charges (-0). Total cost: 28 points.

Options:

1) **Strong Sprayer:** Increase to Entangle 6d6, 6 PD/6 ED. 60 Active Points; total cost 34 points.
2) **Weak Sprayer:** Decrease to Entangle 4d6, 4 PD/4 ED. 40 Active Points; total cost 23 points.
3) **Experimental Sprayer:** This system isn't yet perfected; sometimes the tangleweb doesn't project properly and gums it up. Add Activation Roll 14- Jammed (-½). Total cost: 22 points.
4) **Variant Sprayer:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 50 Active Points; total cost 33 points.
   Strong: 60 Active Points; total cost 40 points.
   Weak: 40 Active Points; total cost 27 points.

POWERED ARMOR VARI-BEAM PROJECTOR

Effect: Blast 10d6, Variable Special Effects
Target: One character
Duration: Instant
Range: 750m
END Cost: 7
Breakability: 15 PD/15 ED

Description: This device is a variable-phase weapon that can project a wide variety of energy beams — from concussive blasts, to ice bolts, to heat jets, to magnetic bolts, to force beams... and everything in between. It's typically built so that it has a projecting lens in the center of the chestplate, or two tandem lenses located over the collarbones.

Game Information: Blast 10d6, Variable Special Effects (+½) (75 Active Points); OIF (-½). Total cost: 50 points.

Options:

1) **Strong Vari-Beam:** Increase to Blast 12d6. 90 Active Points; total cost 60 points.

2) **Weak Vari-Beam:** Decrease to Blast 8d6. 60 Active Points; total cost 40 points.
3) **Experimental Vari-Beam:** The Vari-Beam was only invented recently and thus doesn't always work as intended. Add Activation Roll 14- (-¼). Total cost: 43 points.
4) **Advanced Vari-Beam:** This form of the Vari-Beam can create different energy beams with even greater precision, resulting in a more effective attack. Decrease to Blast 9d6 and add Variable Advantage (+½ Advantages; +1). 112 Active Points; total cost 75 points.
5) **Variant Vari-Beam:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 75 Active Points; total cost 60 points.

   Strong: 90 Active Points; total cost 72 points.

   Weak: 60 Active Points; total cost 48 points.

Gauntlet Systems

A gauntlet can contain up to *75 Active Points'* worth of devices. Since a powered armor suit has two gauntlets, it can of course have two such gadgets if desired; alternately, the GM could allow one gauntlet device of greater power (say, 90 Active Points, or perhaps more) defined as both gauntlets working together to generate an effect of greater power. Here are some possibilities:

POWERED ARMOR GAUNTLET-MOUNTED CLAWS

Effect: HKA 1d6, Armor Piercing
Target: One character
Duration: Instant
Range: Touch
END Cost: 0
Breakability: 6 PD/6 ED

Description: These gauntlets have claw-like blades in recessed housings at various places. Depending on the angle of a punch, the wearer cybernetically makes one set of blades emerge (or "pop," in combat parlance) so he can inflict vicious cutting wounds.

Game Information: HKA 1d6 (plus STR), Armor Piercing (+¼), Reduced Endurance (0 END; +½) (26 Active Points); OIF (-½). Total cost: 17 points.

Options:

1) **Large Claws:** Increase to HKA 1½d6. 44 Active Points; total cost 29 points.
2) **Small Claws:** Decrease to HKA ½d6. 17 Active Points; total cost 11 points.
3) **Variant Claws:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 26 Active Points; total cost 21 points.

   Strong: 44 Active Points; total cost 35 points.

   Weak: 17 Active Points; total cost 14 points.

POWERED ARMOR GAUNTLET CONCUSSOR BEAM

Effect: Blast 8d6 (physical), Double Knockback
Target: One character
Duration: Instant
Range: 400m
END Cost: 6
Breakability: 12 PD/12 ED

Description: This gauntlet-mounted energy weapon strikes with a powerful concussive impact that not only injures the victim but usually knocks him back for a considerable distance.

Game Information: Blast 8d6 (physical), Double Knockback (+½) (60 Active Points); OIF (-½). Total cost: 40 points.

Options:

1) **Strong Concussor Beam:** Increase to Blast 10d6. 75 Active Points; total cost 50 points.
2) **Weak Concussor Beam:** Decrease to Blast 6d6. 45 Active Points; total cost 30 points.
3) **Experimental Concussor Beam:** This form of Concussor Beam doesn't work reliably. Add Activation Roll 14- (-¼). Total cost: 34 points.
4) **Variant Concussor Beam:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 60 Active Points; total cost 48 points.

   Strong: 75 Active Points; total cost 60 points.

   Weak: 45 Active Points; total cost 36 points.

POWERED ARMOR GAUNTLET ELECTRO-BLASTER

Effect: Blast 8d6
Target: 1m Radius
Duration: Instant
Range: 400m
END Cost: 3
Breakability: 12 PD/12 ED

Description: The Electro-Blaster, usually mounted on the back of the gauntlet so that the wearer makes a fist when firing it, produces a powerful blast of electricity large enough to affect multiple targets at once if they're standing close together.

Game Information: Blast 8d6, Area Of Effect (1m Radius; +¼), Reduced Endurance (½ END; +¼) (60 Active Points); OIF (-½). Total cost: 40 points.

Options:

1) **Strong Electro-Blaster:** Increase to Blast 10d6. 75 Active Points; total cost 50 points.
2) **Weak Electro-Blaster:** Decrease to Blast 6d6. 45 Active Points; total cost 30 points.
3) **Realistic Electro-Blaster I:** The electric blast created by this weapon only works over a short range; beyond that the electricity dissipates and/or grounds out. Add Limited Range (40m; -¼). Total cost: 34 points.

4) **Realistic Electro-Blaster II:** This form of Electro-Blaster has the Limitation Real Electricity, meaning it inflicts its listed damage to targets defined as "poorly grounded," half damage to "insulated" characters, and converts to the equivalent DCs in Killing Damage against "well grounded" characters (see Champions Powers, page 114, and 6E2 148-50 for more information about these terms and the behavior of electrical current). Add Real Electricity (-¼). Total cost: 34 points.
5) **Experimental Electro-Blaster:** As an experimental device, the Electro-Blaster sometimes fails to work. Add Activation Roll 14- (-¼). Total cost: 34 points.
6) **Wide-Angle Electro-Blaster:** Change to Area Of Effect (16m Cone; +½) and add No Range (-½). 70 Active Points; total cost 35 points.
7) **Variant Electro-Blaster:** Substitute OIAID (-¼) for OIF (-½):

Standard: 60 Active Points; total cost 48 points.
Strong: 75 Active Points; total cost 60 points.
Weak: 45 Active Points; total cost 36 points.

POWERED ARMOR FINGERTIP TOOLKIT

Effect: +4 with Technology Skills
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 3 PD/3 ED

Description: Mounted inside the gauntlet is a group of small but extremely sophisticated tools that can function as a lockpick, welding torch, computer systems analyzer, and more. They project from the gauntlet's fingertips, allowing the wearer to perform technical tasks more easily.

Game Information: +4 with Technology Skills (16 Active Points); OIF (-½). Total cost: 11 points.

Options:

1) **Enhanced Toolkit:** Increase to +6 with Technology Skills. 24 Active Points; total cost 16 points.
2) **Limited Toolkit I:** Decrease to +2 with Technology Skills. 8 Active Points; total cost 5 points.
3) **Limited Toolkit II:** Decrease to +1 with Technology Skills. 4 Active Points; total cost 3 points.
4) **Realistic Toolkit:** Using these tiny tools is tricky and requires a lot of attention. Add Concentration (½ DCV throughout; -½). Total cost: 8 points.
5) **Experimental Toolkit:** The tools don't always work; some things just can't be miniaturized and still function well. Add Activation Roll 12- (-¼). Total cost: 9 points.
6) **Variant Toolkit:** Substitute OIAID (-¼) for OIF (-½):

Standard: 16 Active Points; total cost 13 points.
Enhanced: 24 Active Points; total cost 19 points.
Limited I: 8 Active Points; total cost 6 points.
Limited II: 4 Active Points; total cost 3 points.

RANDOM POWERED ARMOR GAUNTLETS TABLE

Roll 2d6 to choose to choose a 75 Active Point package of Gauntlet devices:

Roll (2d6)	Gauntlet Devices
2	Standard Laser, Standard Reaction Augmentation System, Limited Fingertip Toolkit I, Weak Reach Extenders I (1 point unspent) (74 Active Points; Real Points 44 [OIF] or 51 [OIAID])
3	Standard Laser, Enhanced Fingertip Toolkit, Weak Magna-Gauntlets II (+1 point spent) (76 Active Points; Real Points 48 [OIF] or 56 [OIAID])
4	Weak Concussor Beam, Weak Punch Augmentation II, Reach Extenders (74 Active Points; Real Points 44 [OIF] or 53 [OIAID])
5	Standard Electro-Blaster, Weak Punch Augmentation II (75 Active Points; Real Points 48 [OIF] or 58 [OIAID])
6	Strong Electro-Blaster (75 Active Points; Real Points 50 [OIF] or 60 [OIAID])
7	Standard Concussor Beam, Weak Magna-Gauntlets II (75 Active Points; Real Points 47 [OIF] or 55 [OIAID])
8	Strong Pulson Blaster, Weak Magna-Gauntlets II (75 Active Points; Real Points 47 [OIF] or 55 [OIAID])
9	Standard Pulson Blaster, Weak Magna-Gauntlets II, Weak Punch Augmentation I (75 Active Points; Real Points 45 [OIF] or 52 [OIAID])
10	Weak Pulson Blaster, Standard Magna-Gauntlets (75 Active Points; Real Points 40 [OIF] or 46 [OIAID])
11	Strong Laser, Weak Gauntlet-Mounted Claws (2 points unspent) (73 Active Points; Real Points 48 [OIF] or 59 [OIAID])
12	Standard Pulson Blaster, Limited Fingertip Toolkit II, Weak Magna-Gauntlets II, Weak Punch Augmentation II (1 point unspent) (74 Active Points; Real Points 45 [OIF] or 52 [OIAID])

POWERED ARMOR GAUNTLET LASER

Effect: RKA 2d6, Armor Piercing
Target: One character
Duration: Instant
Range: 300m
END Cost: 4
Breakability: 7 PD/7 ED

Description: This weapon fires an intense laser beam capable of inflicting lethal injuries.

Game Information: RKA 2d6, Armor Piercing (+¼) (37 Active Points); OIF (-½). Total cost: 25 points.

Options:

1) **Strong Laser:** Increase to RKA 3d6. 56 Active Points; total cost 37 points.
2) **Weak Laser:** Decrease to RKA 1d6. 19 Active Points; total cost 13 points.
3) **Realistic Laser:** Too much particulate matter in the air can "soak up" the power of the laser beam. Add Blocked By Smoke Or Steam (-¼). Total cost: 21 points.
4) **Experimental Laser:** The laser generator doesn't always work properly because the focusing crystal sometimes becomes temporarily misaligned. Add Activation Roll 14- (-¼). Total cost: 21 points.
5) **Variant Laser:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 37 Active Points; total cost 30 points.
   Strong: 56 Active Points; total cost 45 points.
   Weak: 19 Active Points; total cost 15 points.

POWERED ARMOR MAGNA-GAUNTLETS

Effect: Telekinesis (30 STR), Only Works On Ferrous Metals
Target: One character
Duration: Constant
Range: 450m
END Cost: 4
Breakability: 9 PD/9 ED

Description: These gauntlets contain powerful magnets whose force the wearer can channel in a beam, allowing him to attract or repulse metal objects.

Game Information: Telekinesis (30 STR) (45 Active Points); OIF (-½), Only Works On Ferrous Metals (-½), Affects Whole Object (-¼). Total cost: 20 points.

Options:

1) **Strong Magna-Gauntlets:** Increase to Telekinesis (40 STR). 60 Active Points; total cost 27 points.
2) **Weak Magna-Gauntlets I:** Decrease to Telekinesis (20 STR). 30 Active Points; total cost 13 points.
3) **Weak Magna-Gauntlets II:** Decrease to Telekinesis (10 STR). 15 Active Points; total cost 7 points.
4) **Realistic Magna-Gauntlets:** The gauntlets' magnetic power weakens quickly over a distance. Add Reduced By Range (-6 STR per Range Increment; -¼). Total cost: 18 points.
5) **Experimental Magna-Gauntlets:** The gauntlets were only invented recently, and all the bugs haven't quite been worked out yet. Add Activation Roll 14- (-¼). Total cost: 18 points.
6) **Variant Magna-Gauntlets:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 45 Active Points; total cost 22 points.
   Strong: 60 Active Points; total cost 30 points.
   Weak I: 30 Active Points; total cost 15 points.
   Weak II: 15 Active Points; total cost 7 points.

POWERED ARMOR PALM PULSON BLASTER

Effect: Blast 8d6
Target: One character
Duration: Instant
Range: 400m
END Cost: 4
Breakability: 8 PD/8 ED

Description: Mounted in the palm of a powered armor gauntlet, this weapon employs pulson technology to create a powerful Blast.

Game Information: Blast 8d6 (40 Active Points); OIF (-½). Total cost: 27 points.

Options:

1) **Strong Pulson Blaster:** Increase to Blast 12d6. 60 Active Points; total cost 40 points.
2) **Weak Pulson Blaster:** Decrease to Blast 6d6. 30 Active Points; total cost 20 points.
3) **Realistic Pulson Blaster:** Low-strength pulson bursts such as the one emitted by the Palm Blaster have relatively little physical impact. Add No Knockback (-¼). Total cost: 23 points.
4) **Experimental Pulson Blaster:** Despite widespread use over the years, pulson technology remains somewhat unreliable. Add Activation Roll 14- (-¼). Total cost: 23 points.
5) **Palm Pulson Autoblaster:** This form of Palm Blaster can emit a fusillade of beams at one time. Add Autofire (5 shots; +½). 60 Active Points; total cost 40 points.
6) **Focused Palm Pulson Blaster:** This version of the Palm Blaster uses magnetic fields to more tightly focus the pulson beam for a more intense impact. Add Armor Piercing (+¼). 50 Active Points; total cost 33 points.
7) **Wide-Beam Pulson Blaster:** The focusing lens in this form of Palm Blaster spreads the beam out significantly with no loss of power. Add Area Of Effect (1m Radius; +¼). 50 Active Points; total cost 33 points.

8) **High-Impact Pulson Blaster:** This form of pulson blaster uses highly-energized pulsons, which strike with a much greater physical impact. Add Double Knockback (+½). 60 Active Points; total cost 40 points.
9) **Variant Pulson Blaster:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 40 Active Points; total cost 32 points.
   Strong: 60 Active Points; total cost 48 points.
   Weak: 30 Active Points; total cost 24 points.

POWERED ARMOR PUNCH AUGMENTATION GAUNTLETS

Effect: HA +6d6
Target: One character
Duration: Instant
Range: Touch
END Cost: 3
Breakability: 6 PD/6 ED

Description: This gauntlet contains built-in power cells that surround it with an electrification field upon cybernetic command. This increases the effective force of the wearer's punch.

Game Information: HA +6d6 (30 Active Points); OIF (-½), Hand-To-Hand Attack (-¼). Total cost: 17 points.

Options:

1) **Strong Augmentation:** Increase to HA +8d6. 40 Active Points; total cost 23 points.
2) **Weak Augmentation I:** Decrease to HA +4d6. 20 Active Points; total cost 11 points.
3) **Weak Augmentation II:** Decrease to HA +3d6. 15 Active Points; total cost 8 points.
4) **Experimental Augmentation:** Sometimes the electrification field misfires, preventing the device from properly enhancing the wearer's punch. Add Activation Roll 14- (-¼). Total cost: 15 points.
5) **Variant Augmentation:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 30 Active Points; total cost 20 points.
   Strong: 40 Active Points; total cost 27 points.
   Weak I: 20 Active Points; total cost 13 points.
   Weak II: 15 Active Points; total cost 10 points.

POWERED ARMOR REACH EXTENDERS

Effect: Stretching 10m
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 3 PD/3 ED

Description: The gauntlets and arm assemblies of the wearer's armor contain "telescoping" systems that allow him to project the gauntlet up to 10m away to grab an object, punch a foe, or the like.

Game Information: Stretching 10m, Reduced Endurance (0 END; +½) (15 Active Points); OIF (-½), Always Direct (-¼), No Noncombat Stretching (-¼), Limited Body Parts (hands/arms; -¼), Range Modifier Applies (-¼). Total cost: 6 points.

Options:

1) **Strong Extenders:** Increase to Stretching 12m. 18 Active Points; total cost 7 points.
2) **Weak Extenders I:** Decrease to Stretching 6m. 9 Active Points; total cost 4 points.
3) **Weak Extenders II:** Decrease to Stretching 2m. 2 Active Points; total cost 1 point.
4) **Experimental Extenders:** The Extender system is experimental, and sometimes fails to project or retract. Add Activation Roll 14- (-¼). Total cost: 5 points.
5) **Targeted Extenders:** The armor's targeting systems always keep the Extenders on track. Remove Range Modifier Applies (-¼). Total cost: 7 points.
6) **Variant Extenders:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 15 Active Points; total cost 7 points.
   Strong: 18 Active Points; total cost 8 points.
   Weak I: 9 Active Points; total cost 4 points.
   Weak II: 2 Active Points; total cost 1 point.

POWERED ARMOR REACTION AUGMENTATION SYSTEM

Effect: +2 SPD
Target: Self
Duration: Persistent
Range: Self
END Cost: 2
Breakability: 4 PD/4 ED

Description: This system, based primarily in the gauntlets but also requiring minor subsystems throughout the armor, enhances the wearer's reaction time and speed. However, forcing his body to move more quickly than normal can tire the wearer out.

Game Information: +2 SPD (20 Active Points); OIF (-½), Costs Endurance (-½). Total cost: 10 points.

Options:

1) **Strong Augmentation:** Increase to +3 SPD. 30 Active Points; total cost 15 points.
2) **Weak Augmentation:** Decrease to +1 SPD. 10 Active Points; total cost 5 points.
3) **Experimental Augmentation:** Sometimes the delicate and complicated technology required to make the Reaction Augmentation System work don't function properly. Add Activation Roll 14- (-¼). Total cost: 9 points.
4) **Variant Augmentation:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 20 Active Points; total cost 11 points.

   Strong: 30 Active Points; total cost 17 points.

   Weak: 10 Active Points; total cost 6 points.

Boot Systems

A pair of boots can contain up to *60 Active Points'* worth of devices. Since boot devices involve movement, they have to be installed in both boots for the sake of balance and steering. If a character only has one boot of a pair for some reason, he can use it to move a maximum of half of the meters of movement bought for the gadget, but he must make a DEX Roll at -1 per 4m of movement every Phase. For every point by which he misses the roll, he drifts 1m off his intended course, or suffers some other steering mishap that seems appropriate to the GM.

POWERED ARMOR BOOTJETS

Effect: Flight 30m
Target: Self
Duration: Constant
Range: Self
END Cost: 3
Breakability: 6 PD/6 ED

Description: Built into the soles and/or sides of this pair of boots are jets that allow the wearer to fly.

Game Information: Flight 30m (30 Active Points); OIF (-½). Total cost: 20 points.

Options:

1) **Faster Bootjets I:** Increase to Flight 40m. 40 Active Points; total cost 27 points.
2) **Faster Bootjets II:** Increase to x8 Noncombat. 40 Active Points; total cost 27 points.
3) **Faster Bootjets III:** Increase to Flight 60m. 60 Active Points; total cost 40 points.
4) **Slower Bootjets:** Decrease to Flight 20m. 20 Active Points; total cost 13 points.
5) **Realistic Bootjets:** The bootjets have a small supply of high-efficiency fuel; once it's used up, the wearer has to refuel it before he can fly again. Add 1 Continuing Fuel Charge (2 Minutes, Difficult to obtain fuel; -¾). Total cost: 13 points.
6) **Variant Bootjets:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 30 Active Points; total cost 24 points.

   Faster I: 40 Active Points; total cost 32 points.

   Faster II: 40 Active Points; total cost 32 points.

   Faster III: 60 Active Points; total cost 48 points.

   Slower: 20 Active Points; total cost 16 points.

POWERED ARMOR HOVERPADS

Effect: Running +24m
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 7 PD/7 ED

Description: These boots have antigravity pads built into the soles. When activated, they allow the wearer to "skate" along the ground at high speed. They cost no END to use, but the wearer must still pay END for his base 12m Running (he cannot use the +24m without using the base meters).

Game Information: Running +24m, Reduced Endurance (0 END; +½) (36 Active Points); OIF (-½). Total cost: 24 points.

Options:

1) **Faster Hoverpads I:** Increase to Running +36m. 54 Active Points; total cost 36 points.
2) **Faster Hoverpads II:** Increase to x8 Noncombat. 51 Active Points; total cost 34 points.
3) **Slower Hoverpads:** Decrease to Running +12m. 18 Active Points; total cost 12 points.
4) **Realistic Hoverpads:** The hoverpads have a small supply of high-efficiency fuel; once it's used up, the wearer has to refuel it before he can "run" again. Add 1 Continuing Fuel Charge (2 Minutes, Difficult to obtain fuel; -¾). Total cost: 16 points.
5) **Experimental Hoverpads:** Antigravity technology is new, and difficult to miniaturize to boot size, so the hoverpads don't always work. Add Activation Roll 14- (-¼). Total cost: 20 points.
6) **Variant Hoverpads:** Substitute OIAID (-¼) for OIF (-½):

   Standard: 36 Active Points; total cost 29 points.

   Faster I: 54 Active Points; total cost 43 points.

   Faster II: 51 Active Points; total cost 41 points.

   Slower: 18 Active Points; total cost 14 points.

POWERED ARMOR ROCKETSKATES

Effect: Flight 24m, Only In Contact With A Relatively Smooth Flat Solid Surface
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 5 PD/5 ED

Description: These boots have built-in wheels (similar to roller skates or inline skates) that project from the soles on cybernetic command along with small rockets facing backward. When activated, they allow the wearer to skate along the ground at high speed, but they only work on reasonably firm surfaces, such as tile, pavement, or packed earth.

Game Information: Flight 24m (24 Active Points); OIF (-½), Only In Contact With A Relatively Smooth, Flat, Solid Surface (-½). Total cost: 12 points.

Options:

1) **Faster Rocketskates I:** Increase to Flight 40m. 40 Active Points; total cost 20 points.
2) **Faster Rocketskates II:** Add x8 Noncombat. 34 Active Points; total cost 17 points.
3) **Slower Rocketskates:** Decrease to Flight 18m. 18 Active Points; total cost 9 points.
4) **Realistic Rocketskates:** The skates have a small supply of high-efficiency fuel; once it's used up, the wearer has to refuel it before he can skate again. Add 1 Continuing Fuel Charge (2 Minutes, Difficult to obtain fuel; -¾). Total cost: 9 points.
5) **Experimental Rocketskates:** Unfortunately, the skates don't always work properly; they're prone to not deploying properly and jamming up once in use. Add Activation Roll 14- (-¼). Total cost: 11 points.
6) **Variant Rocketskates:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 24 Active Points; total cost 14 points.
   Faster I: 40 Active Points; total cost 23 points.
   Faster II: 34 Active Points; total cost 19 points.
   Slower: 18 Active Points; total cost 10 points.

POWERED ARMOR SPRINGBOOTS

Effect: Leaping +20m
Target: Self
Duration: Constant
Range: Self
END Cost: 1
Breakability: 2 PD/2 ED

Description: These boots, not often built into powered armor because they tend to make the otherwise imposing armored hero look silly, use electronically-augmented springs to allow the wearer to make long leaps (though the weight of the armor itself keeps these leaps from being as long as they might otherwise be).

Armored characters who want enhanced leaping ability, but in a more dignified form, can simply redefine this gadget as "mobility servos," "compressed-air jump-jets," or the like.

Game Information: Leaping +20m (10 Active Points); OIF (-½). Total cost: 7 points.

Options:

1) **Strong Springboots I:** Increase to Leaping +30m. 15 Active Points; total cost 10 points.
2) **Strong Springboots II:** Add x8 Noncombat. 20 Active Points; total cost 13 points.
3) **Weak Springboots I:** Decrease to Leaping +16m. 8 Active Points; total cost 5 points.
4) **Weak Springboots II:** Decrease to Leaping +12m. 6 Active Points; total cost 4 points.
5) **Experimental Springboots:** The power feed to the springs doesn't always function properly. Add Activation Roll 14- (-¼). Total cost: 6 points.
6) **Variant Springboots:** Substitute OIAID (-¼) for OIF (-½):
   Standard: 10 Active Points; total cost 8 points.
   Strong I: 15 Active Points; total cost 12 points.
   Strong II: 20 Active Points; total cost 16 points.
   Weak I: 8 Active Points; total cost 6 points.
   Weak II: 6 Active Points; total cost 5 points.

RANDOM POWERED ARMOR BOOTS TABLE

Roll 1d6 to choose a 60 Active Point package of Boot devices:

Roll (1d6)	Chestplate Devices
1	Standard Bootjets, Standard Rocketskates, Weak Springboots II (60 Active Points; Real Points 36 [OIF] or 43 [OIAID])
2	Faster Bootjets III (60 Active Points; Real Points 40 [OIF] or 48 [OIAID])
3	Faster Bootjets II, Strong Springboots II (60 Active Points; Real Points 40 [OIF] or 48 [OIAID])
4	Faster Hoverpads I, Weak Springboots II (60 Active Points; Real Points 40 [OIF] or 48 [OIAID])
5	Faster Rocketskates I, Slower Bootjets (60 Active Points; Real Points 33 [OIF] or 39 [OIAID])
6	Faster Rocketskates I, Strong Springboots II (60 Active Points; Real Points 33 [OIF] or 39 [OIAID])

External Modules

In addition to systems built *into* a suit of powered armor, characters can also attach additional systems *to* the exterior of the armor and hook them up to the armor's power sources and the like. While systems built into a suit of powered armor should generally receive the protection of the armor's defenses (unless their own PD/ED are higher), external modules rely solely on their own defenses (or the Defense Power they're built with).

In theory the number of Active Points' worth of external modules a character can attach to a suit of armor is practically limitless; the only restrictions are how much weight the wearer can carry, how bulky the designer wants the suit of armor to look, and so forth. (And in some campaign settings, where miniaturization and nanotechnology are prevalent, even those considerations might not matter.) In practice, the GM may want to establish some limit for the sake of game balance; 120 or 150 Active Points would be appropriate for most campaigns. The random powered armor creation system doesn't include any external modules.

The most common external module is probably the Jetpack (page 290), and many other gadgets in this book could be turned into external modules easily. Here are a few others:

ARTIFICIAL LIMBS

Effect: Extra Limbs (as many as desired)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: This external module provides the character with one or more additional manipulatory limbs. Examples include two extra arms (making it easy for the character to hold onto an enemy and hit him with his other two fists) or a tail.

Game Information: Extra Limbs (as many as desired) (5 Active Points); OIF (-½). Total cost: 3 points.

Options:

1) **Strong Artificial Limbs:** Since the designer doesn't have to worry about a flesh-and-blood interior, the artifical limbs are stronger than the character's normal limbs. Add +20 STR (20 Active Points); OIF (-½), Only With Extra Limb (-½). Total cost: 10 points. Total cost of entire gadget: 13 points.
2) **Realistic Limbs:** The character's artificial limbs aren't nearly as deft as his real ones. Add Limited Manipulation (-¼). Total cost: 3 points.
3) **Detachable Limbs:** The artificial limbs aren't firmly attached to the armor. Change OIF (-½) to OAF (-½). Total cost: 2 points.

GAUNTLET-MOUNTED MACHINE GUN

Effect: RKA 1½d6, Armor Piercing
Target: One character
Duration: Instant
Range: 750m
Charges: 250
Breakability: 15 PD/15 ED

Description: Mounted on the back of a powered armor gauntlet, or perhaps along the arm, this weapon is a miniaturized machine gun that feeds ammo from a backpack- or belt-mounted magazine.

Game Information: RKA 1½d6, Armor Piercing (+¼), Autofire (5 shots; +½), 250 Charges (+1) (69 Active Points); OIF (-½). Total cost: 45 points.

Options:

1) **Strong Machine Gun:** Increase to RKA 2d6. 82 Active Points; total cost 55 points.
2) **Weak Machine Gun:** Decrease to RKA 1d6. 41 Active Points; total cost 27 points.
3) **Realistic Machine Gun:** Having a gun attached to the back of one's hand makes it hard to use that hand sometimes. Add Side Effects (-2 to DEX Rolls, always occurs; -½). Total cost: 34 points.
4) **Experimental Machine Gun:** The miniaturization and customization processes necessary to make this weapon work as part of a suit of powered armor leave it prone to failure and jamming. Add Activation Roll 14- Jammed (-½). Total cost: 37 points.
5) **Faster Fire:** Increase to Autofire (10 shots; +1). 81 Active Points; total cost 54 points.
6) **Ammo Belt:** This form of the Machine Gun has an exposed, free-swinging ammo belt leading from the magazine to the gun, making it easy for an attacker to stop the weapon from working. Change OIF (-½) to OAF (-1). Total cost: 34 points.

SHOULDER-MOUNTED BLASTER

Effect: Blast 10d6
Target: One character
Duration: Instant
Range: 500m
END Cost: 5
Breakability: 10 PD/10 ED

Description: This weapon is a standard blaster attached to the shoulder of a suit of powered armor on a universal swivel mount (the weapon's software prevents it from accidentally shooting the wearer).

With the GM's permission, a character could increase his firepower by buying a Computer as part of this weapon to fire it.

Game Information: Blast 10d6 (50 Active Points); OIF (-½). Total cost: 33 points.

Options:

1) **Strong Blaster:** Increase to Blast 12d6. 60 Active Points; total cost 40 points.
2) **Weak Blaster:** Decrease to Blast 8d6. 40 Active Points; total cost 27 points.
3) **Realistic Blaster:** The blaster can't link to the armor's power systems; it has to rely on its own, much more limited, battery. Add 12 Charges (-¼). Total cost: 28 points.
4) **Experimental Blaster:** This weapon is a prototype, with targeting software that's not yet fully bug-free; sometimes it malfunctions and shoots the wearer. Add Activation Roll 14- (-¼) and Side Effects (character suffers Blast 12d6; -1). Total cost: 18 points.

SHOULDER-MOUNTED GRENADE LAUNCHER

Effect: Blast 10d6
Target: Explosion
Duration: Instant
Range: 500m
Charges: 60
Breakability: 20 PD/20 ED

Description: This weapon is a sort of backpack containing a grenade launcher and supply of grenades. The muzzle of the launcher attaches to the shoulder of the powered armor suit.

This particular version of the SMGL is loaded with concussion grenades, but many others, or even multiple types at once, are possible (see option 8).

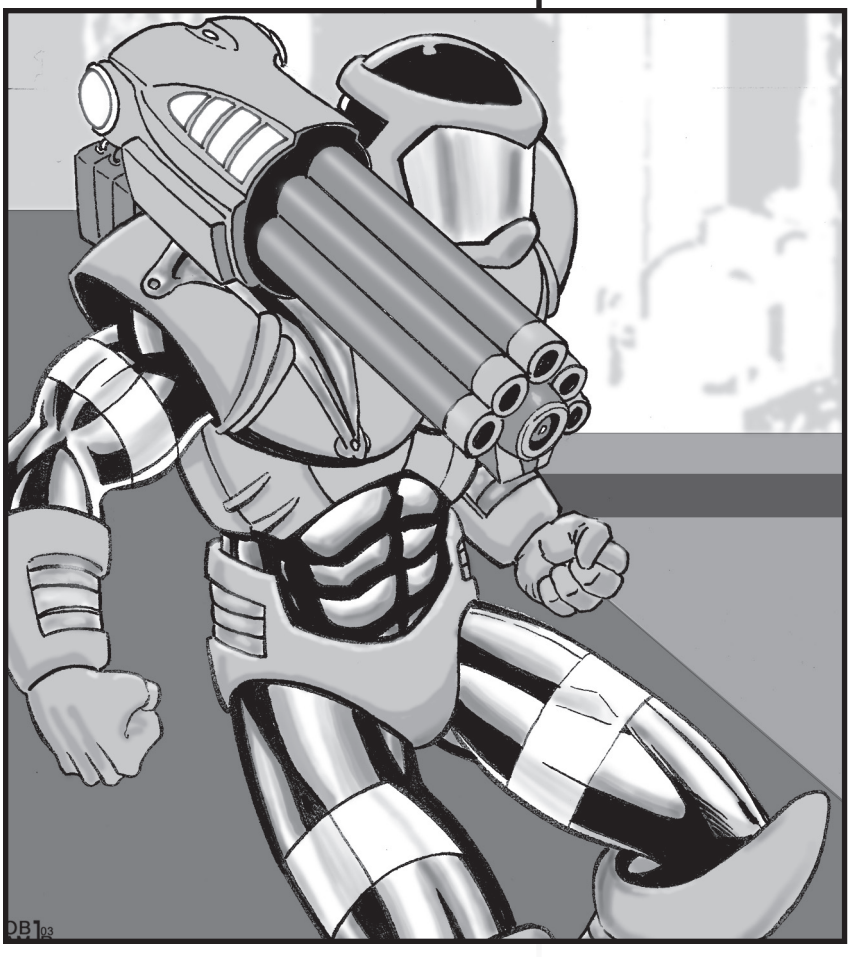
Game Information: Blast 10d6 (22m Radius Explosion; +½), 60 Charges (+½) (100 Active Points); OIF (-½). Total cost: 67 points.

Options:

1) **Strong Grenade Launcher:** Increase to Blast 12d6. 120 Active Points; total cost 80 points.
2) **Weak Grenade Launcher:** Decrease to Blast 8d6. 80 Active Points; total cost 53 points.
3) **Realistic Grenade Launcher:** The launcher impedes the wearer's ability to turn his head and his peripheral vision. Add Side Effects (-1 to Sight Group PER Rolls, always occurs; -½). Total cost: 50 points.
4) **Experimental Grenade Launcher:** Sometimes the grenade launcher, an advanced prototype, fails to work as expected. Add Activation Roll 14- (-¼). Total cost: 57 points.
5) **Delicate Mechanism:** The Grenade Launcher is easy to foul or remove from the powered armor suit. Change OIF (-½) to OAF (-1). Total cost: 50 points.
6) **Larger Magazine:** This Grenade Launcher holds more grenades. Change to 100 Charges (+¾). 112 Active Points; total cost 75 points.
7) **Rapid-Fire Launcher:** This form of the weapon has automatic fire capability. Add Autofire (5 shots; +1½). 175 Active Points; total cost 117 points.
8) **Multiple Grenade Types:** This form of the Grenade Launcher carries six different types of grenades which the character selects through cybernetic command. Change to:

Cost	Power
50	**Shoulder-Mounted Grenade Launcher:** Multipower, 75-point reserve; all OIF (-½)
4f	**1) Concussion Grenade:** Blast 10d6 (22m Radius Explosion; +½); OIF (-½), 8 Charges (-½)
3f	**2) Fragmentation Grenade:** RKA 3d6 (20m Radius Explosion; +½); OIF (-½), 8 Charges (-½)
4f	**3) Glue Grenade:** Entangle 5d6, 5 PD/5 ED, Area Of Effect (22m Radius Explosion; +½); OIF (-½), 8 Charges (-½)
4f	**4) Flare Grenade:** Sight Group Flash 10d6 (22m Radius Explosion; +½); OIF (-½), 8 Charges (-½)
4f	**5) Smoke Grenade:** Darkness to Sight Group 12m radius, Personal Immunity (+¼); OIF (-½), 4 Continuing Charges lasting 1 Turn each (-½)
4f	**6) Knockout Gas Grenade:** Blast 6d6, NND (defense is Life Support [Self-Contained Breathing or appropriate Immunity]; +1), Area Of Effect (18m Radius Explosion; +½); OIF (-½), 8 Charges (-½)

Total cost: 73 points.



OTHER DEFENSIVE GADGETS

Powered armor isn't the only way for characters to protect themselves. Here are some other defensive gadgets:

Concealment And Stealth Devices

These devices protect a character by concealing or hiding him from those who would harm him. See also the Mist Generator (page 178) and the Powered Armor Smokescreen Generator (page 258), which serve similar functions.

CAMOUFLAGE SUIT

Effect: Sight Group Images, -6 to PER Rolls, Set Effect (camouflage)
Target: Self
Duration: Constant
Range: Self
END Cost: 3
Breakability: 6 PD/6 ED

Description: This suit uses sophisticated video technology to make it look like the wearer isn't there. Miniaturized cameras on each side film the character's surroundings and broadcast the footage to the flexible flat screens that make up most of the suit. Thus, other people "look right through" the character at what's beyond him. This "camouflage" is difficult to penetrate if the character remains still; if he moves it becomes easier to see him... and of course the suit doesn't cover his noises or smells.

Game Information: Sight Group Images, -6 to PER Rolls (28 Active Points); IIF (-¼), No Range (-½), Set Effect (only to camouflage wearer; -½). Total cost: 12 points.

Options:

1) **Strong Suit:** Increase to -10 to PER Rolls. 40 Active Points; total cost 18 points.
2) **Weak Suit:** Decrease to -4 to PER Rolls. 22 Active Points; total cost 10 points.
3) **Experimental Suit:** The miniaturized cameras and flexible screen technology used with this suit are highly experimental and don't always work. Add Activation Roll 14- (-¼). Total cost: 11 points.
4) **Built-In Battery:** The suit has a built-in power source strong enough to keep it functioning indefinitely... even if the wearer is unconscious. Add Reduced Endurance (0 END; +½) and Persistent (+¼). 49 Active Points; total cost 22 points.
5) **Alternate Camouflage Suit:** With the GM's permission, characters could instead build a Camouflage Suit this way: Change Environment (camouflage character), -6 to Sight Group PER Rolls (18 Active Points); IIF (-¼), No Range (-½), Sely Only (-½). Total cost: 8 points.

INVISIBILITY SUIT

Effect: Invisibility to Sight Group
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 4 PD/4 ED

Description: This suit generates a field around the wearer that bends light, rendering him invisible. However, persons near him can see the "fringe" as the lightwaves arc around his body.

Game Information: Invisibility to Sight Group (20 Active Points); IIF (-¼). Total cost: 16 points.

Options:

1) **Strong Suit:** Add No Fringe. 30 Active Points; total cost 24 points.
2) **Weak Suit:** Add Bright Fringe (-¼). Total cost: 13 points.
3) **Realistic Suit:** The suit only works if the character remains still. Add Chameleon (-½). Total cost: 11 points.
4) **Experimental Suit:** The suit is a prototype that has an unfortunate tendency to go on the fritz. Add Activation Roll 14- (-¼). Total cost: 13 points.
5) **Built-In Battery:** The suit has a built-in power source strong enough to keep it functioning indefinitely... even if the wearer is unconscious. Add Reduced Endurance (0 END; +½) and Persistent (+¼). 35 Active Points; total cost 28 points.

6) **Silence Suit I:** This form of the suit doesn't hide a character from being seen; it emits counter-frequency sound waves that hide him from other peoples' hearing (unless, of course, he speaks or otherwise deliberately makes noise). Change to Invisibility to Hearing Group. 10 Active Points; total cost 8 points.
7) **Silence Suit II:** This suit masks the wearer from both sight and hearing. Change to Invisibility to Sight and Hearing Groups. 25 Active Points; total cost 20 points.

STEALTH SUIT

Effect: +8 to Stealth
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 3 PD/3 ED

Description: This suit, a primitive gadget compared to the Camouflage and Invisibility suits, augments the wearer's ability to hide in shadows and move silently. It adds to his Stealth roll (either the one he's paid for, or his natural 8- Everyman roll in the Skill).

Game Information: +8 to Stealth (16 Active Points); IIF (-¼). Total cost 13 points.

Options:

1) **Strong Suit:** Increase to +10 to Stealth. 20 Active Points; total cost 16 points.
2) **Weak Suit:** Decrease to +6 to Stealth. 12 Active Points; total cost 10 points.
3) **Experimental Suit:** The suit's technology is so cutting-edge it's prone to malfunction. Add Activation Roll 14- (-¼). Total cost: 11 points.

Force-Field Gadgets

Force-fields — fields of energy that surround and protect a character — are popular among gadgeteers, since they're not as bulky or obvious as powered armor. A clever gadgeteer can built a force-field generator into just about any object; for example, in addition to the devices described here, see the Personal Force Screen (page 280).

FORCE-FIELD DEVICE

Effect: Resistant Protection (18 PD/18 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 5
Breakability: 18 PD/18 ED

Description: This device, worn as part of a character's costume, could be nearly any sort of OIF: a belt, harness, ring, necklace, bracers, vest, or just about anything else. It generates a protective force-field around the wearer. It uses the character's body heat and kinetic motion to power itself.

Game Information: Resistant Protection (18 PD/18 ED) (54 Active Points); OIF (-½), Costs Endurance (-½). Total cost: 27 points.

Options:

1) **Strong Field:** Increase to Resistant Protection (21 PD/21 ED). 63 Active Points; total cost 31 points.
2) **Weak Field:** Decrease to Resistant Protection (15 PD/15 ED). 45 Active Points; total cost 22 points.
3) **Built-In Battery:** This form of the device has a built-in internal battery that keeps it functioning until the character turns it off (it even remains "up" if the wearer's Knocked Out!). Remove Costs Endurance (-½). Total cost: 36 points.
6) **Broad-Spectrum Force-Field:** This device generates an enhanced force-field that protects against more types of attacks. Change to Resistant Protection (12 PD/12 ED/8 Sight Group Flash Defense/8 Mental Defense/10 Power Defense) (75 Active Points); OIF (-½), Costs Endurance (-½). Total cost: 37 points.
7) **Concealed Harness:** This form of the Device can be woven into a costume or clothing so that onlookers don't know the character's wearing it. Change OIF (-½) to IIF (-¼). Total cost: 31 points.
8) **Expandable Resistant Protection:** Some versions of the Resistant Protection Harness have the capacity to expand out to protect persons and large objects carried by the wearer. Add Protects Carried Items. 64 Active Points; total cost 32 points.
9) **Tactical Force-Field Device:** The character can alter the force-field's protection to better preserve him from injury. Add Allocatable (+¼). 67 Active Points; total cost 33 points.

FORCE-FIELD PROJECTOR

Effect: Barrier 8 PD/8 ED, 8 BODY (up to 12m long, 4m high, and ½m thick)
Target: Varies
Duration: Constant
Range: 640m
END Cost: 6
Breakability: 13 PD/13 ED

Description: This device, which may be hand-held or loosely attached to a costume, creates a protective barrier of force. Normally the character uses it protect himself, but he can generate the barrier at a distance to protect other people.

Game Information: Barrier 8 PD/8 ED, 8 BODY (up to 12m long, 4m high, and ½m thick), Non-Anchored, Dismissable (64 Active Points); OAF (-1), Costs Endurance (to maintain; -½). Total cost: 26 points.

Options:

1) **Strong Field:** Increase to Increase to Barrier 10 PD/10 ED, 10 BODY (up to 12m long, 4m

high, and ½m thick). 72 Active Points; total cost 29 points.

2) **Weak Field:** Decrease to Barrier 6 PD/6 ED, 6 BODY (up to 8m long, 3m high, and ½m thick). 51 Active Points; total cost 20 points.

3) **Realistic Field:** The Projector can only create the wall immediately in front of the character. Add No Range (-½) and Self Only (-½). Total cost: 18 points.

4) **Experimental Field:** Force-field technology remains highly experimental, so the barrier sometimes deactivates unexpectedly. Add Activation Roll 14- (-¼). Total cost: 23 points.

5) **Attached Projector:** This form of the Projector isn't so easy to take away from the character. Change OAF (-1) to OIF (-½). Total cost: 32 points.

FORCE SHIELD BRACER

Effect: Resistant Protection (12 PD/12 ED), Activation Roll 14-
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 5 PD/5 ED

Description: This device is a bracer worn on the character's wrist. At the character's cybernetic command it generates a disk-shaped shield of force he can use to protect himself. If he fails to interpose the shield properly, or if an attack comes from an unexpected direction (such as from behind), the shield does not protect him (hence the Activation Roll).

Game Information: Resistant Protection (12 PD/12 ED) (36 Active Points); OIF (-½), Activation Roll 14- (-¼). Total cost: 20 points.

Options:

1) **Strong Field:** Increase to Resistant Protection (15 PD/15 ED). 45 Active Points; total cost 26 points.

2) **Weak Field:** Decrease to Resistant Protection (10 PD/10 ED). 30 Active Points; total cost 17 points.

3) **Experimental Field:** Force-field technology remains highly experimental, so the field sometimes flickers off unexpectedly. With the GM's permission, add a second Activation Roll 14- (-¼). Total cost: 18 points.

4) **Variant Force Shield Bracer:** This form of the Bracer doesn't provide Resistant Protection, it makes the character harder to hit. Change to: +4 DCV (20 Active Points); OIF (-½), Activation Roll 14- (-¼). Total cost: 11 points.

Helmets

CEREBROHELM

Effect: Resistant Protection (4 PD/4 ED), +20 INT
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 4 PD/4 ED

Description: This helmet contains special "cerebral circuitry" that augments the wearer's intelligence even as it protects his head from injury.

Game Information:

Cost	Power
4	**Cerebrohelm:** Resistant Protection (4 PD/4 ED) (12 Active Points); OIF (-½), Activation Roll 8- (only protects Hit Locations 3-5; -1¾)
13	**Cerebrohelm:** +20 INT (20 Active Points); OIF (-½)

Total cost: 17 points.

Options:

1) **Strong Cerebrohelm:** Increase to +30 INT. 30 Active Points; total cost 20 points; total cost of device 24 points.

2) **Weak Cerebrohelm:** Decrease to +10 INT. 10 Active Points; total cost 7 points; total cost of device 11 points.

3) **Realistic Cerebrohelm:** The helmet's battery has a limited power supply, so the character should only activate it when he knows he needs enhanced brainpower to solve some problem. Add 15 Charges (-0). Total cost 13 points; total cost of device 17 points.

4) **Experimental Cerebrohelm:** Cerebral circuitry is a new and unreliable form of technology. Add Activation Roll 14- (-¼). Total cost 11 points; total cost of device 14 points.

5) **Sense-Augmenting Cerebrohelm:** This form of Cerebrohelm also enhances the wearer's vision. Character also buys:

Cost	Power
7	**360 Vision:** Increased Arc Of Perception (Sight Group) (10 Active Points); OIF (-½)
6	**Telescopic Lenses:** +6 versus Range Modifier for Sight Group (9 Active Points); OIF (-½)
3	**Thermalvision:** Infrared Perception (Sight Group) (5 Active Points); OIF (-½)
3	**UV Vision:** Ultraviolet Perception (Sight Group) (5 Active Points); OIF (-½)

Total cost: 19 points; total cost of device 36 points.

FISHBOWL HELMET

Effect: Various Defense and Sensory Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0 (1 Continuing Charge for Air Supply)
Breakability: Varies

Description: The character's helmet is a sphere made of some substance that permits one-way viewing — the character can see out, but no one can see in. Due to its size and shape, it incorporates devices that not only protect the wearer's head, but provide an oxygen supply and various sensory enhancements.

Game Information:

Cost	Power
4	**Fishbowl Helmet:** Resistant Protection (4 PD/4 ED) (12 Active Points); OIF (-½), Activation Roll 8- (only protects Hit Locations 3-5; -1¾)
7	**Air Supply:** Life Support (Self-Contained Breathing) (10 Active Points); OIF (-½), 1 Continuing Fuel Charge (1 Hour, easily refueled; -0)
7	**360 Vision:** Increased Arc Of Perception (Sight Group) (10 Active Points); OIF (-½)
6	**Telescopic Lenses:** +6 versus Range Modifier for Sight Group (9 Active Points); OIF (-½)
3	**Thermalvision:** Infrared Perception (Sight Group) (5 Active Points); OIF (-½)
3	**UV Vision:** Ultraviolet Perception (Sight Group) (5 Active Points); OIF (-½)

Total cost: 30 points.

NEUROHELM

Effect: Resistant Protection (4 PD/4 ED), Mind Control 10d6
Target: Self/One character
Duration: Persistent/Instant
Range: Self/LOS
END Cost: 0/5
Breakability: 10 PD/10 ED

Description: This helmet contains psionic circuitry that allows the wearer to take control of another person's mind.

Game Information:

Cost	Power
4	**Neurohelm:** Resistant Protection (4 PD/4 ED) (12 Active Points); OIF (-½), Activation Roll 8- (only protects Hit Locations 3-5; -1¾)
33	**Neurohelm:** Mind Control 10d6 (50 Active Points); OIF (-½)

Total cost: 37 points.

Options:

1) **Strong Neurohelm:** Increase to Mind Control 12d6. 60 Active Points; total cost 40 points; total cost of device 44 points.
2) **Weak Neurohelm:** Decrease to Mind Control 8d6. 40 Active Points; total cost 27 points; total cost of device 31 points.
3) **Experimental Neurohelm:** The helmet's neurotechnology is prone to failure due to its highly experimental nature. Add Activation Roll 14- (-¼) to Mind Control. Total cost 28 points; total cost of device 32 points.
4) **Telepathic Neurohelm:** The helmet's neurotechnology also lets the wearer transmit orders directly into the victim's brain. Add Telepathic (+¼). 62 Active Points; total cost 41 points; total cost of device 45 points.

PULSON PROJECTOR HELMET

Effect: Resistant Protection (6 PD/6ED), Blast 8d6
Target: Self/One character
Duration: Persistent/Instant
Range: Self/400m
END Cost: 0/12 Charges
Breakability: 8 PD/8 ED

Description: This helmet, designed to fit snugly yet comfortably on the head, contains a built-in pulson beam projector, enabling the wearer to fire energy bolts through the helmet's visor. The helmet's hard shell and interior padding protect the wearer's head.

Game Information:

Cost	Power
5	**Pulson Projector Helmet:** Resistant Protection (6 PD/6 ED) (18 Active Points); OIF (-½), Activation Roll 8- (only protects Hit Locations 3-5; -1¾)
23	**Pulson Beam Projector:** Blast 8d6 (40 Active Points); OIF (-½), 12 Charges (-¼)

Total cost: 28 points.

Options:

1) **Stronger Beam:** Increase Blast to 12d6. 60 Active Points; total cost of Projector 34 points; total cost of Helmet 39 points.
2) **Weaker Beam:** Decrease Blast to 6d6. 30 Active Points; total cost of Projector 17 points; total cost of Helmet 22 points.
3) **Realistic Helmet:** The pulson beam projector interferes with the character's ability to see whenever it's fired. To the Projector, add Side Effect (-2 PER Rolls until next Phase, always occurs; -½). Total cost of Projector 18 points; total cost of Helmet 23 points.
4) **Enhanced Battery:** The helmet's built-in battery has more energy. Increase to 20 Charges (+¼). 50 Active Points; total cost of Projector 33 points; total cost of Helmet 38 points.
5) **Tinted Visor And Ear Padding:** The helmet offer some protection against blindingly bright lights

and deafeningly loud sounds. Add Sight Group Flash Defense (5 points) (5 Active Points); OIF (-½) (total cost: 3 points) and Hearing Group Flash Defense (5 points) (5 Active Points); OIF (-½) (total cost: 3 points). Total cost 6 points; total cost of Helmet 34 points.

6) **Nightsight And Telescopic Lenses:** The helmet augments the wearer's visual senses. Add Infrared Perception (Sight Group) (5 Active Points); OIF (-½) (total cost: 3 points) and +6 versus Range Modifier for Sight Group (9 Active Points); OIF (-½) (total cost: 6 points). Total cost 9 points; total cost of Helmet 37 points.

RHINO-HELM

Effect: Resistant Protection (8 PD/8 ED) for the Head and Shoulders; HA +8d6, Only With Move Throughs
Target: Self/One character
Duration: Persistent/Instant
Range: Self/Touch
END Cost: 0/4
Breakability: 8 PD/8 ED

Description: This weapon, actually more of a full headpiece than a helmet, fits over the character's head and shoulders. It has padding and a rhino-like horn on the top of the head, allowing the wearer to run into and smash his enemies, walls, and the like.

Game Information:

Cost	Power
8	**Rhino-Helm:** Resistant Protection (8 PD/8 ED) (24 Active Points); OIF (-½), Activation Roll 9- (only protects Hit Locations 3-5, 9; -1½)
14	**Rhino-Helm:** HA +8d6 (40 Active Points); OIF (-½), Hand-To-Hand Attack (-¼), Only With Move Throughs (-1)

Total cost: 22 points.

Options:

1) **Strong Rhino-Helm:** Increase to HA +10d6. 50 Active Points; total cost 18 points; total cost of device 26 points.
2) **Weak Rhino-Helm:** Decrease to HA +6d6. 30 Active Points; total cost 11 points; total cost of device 19 points.

UTILITY HELMET

Effect: Various Sensory and Defense Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 6 PD/6 ED

Description: This helmet provides the wearer with a variety of minor but useful sensory and defensive powers. Other devices may also be installed.

Game Information:

Cost	Power
5	**Utility Helmet:** Resistant Protection (6 PD/6 ED) (18 Active Points); OIF (-½), Activation Roll 8- (only protects Hit Locations 3-5; -1¾)
5	**Auditory Dampers:** Hearing Group Flash Defense (8 points) (8 Active Points); OIF (-½)
7	**Polarized Lenses:** Sight Group Flash Defense (10 points) (10 Active Points); OIF (-½)
6	**Telescopic Lenses:** +6 versus Range Modifier for Sight Group (9 Active Points); OIF (-½)
3	**Thermalvision:** Infrared Perception (Sight Group) (5 Active Points); OIF (-½)
3	**UV Vision:** Infrared Perception (Sight Group) (5 Active Points); OIF (-½)

Total cost: 29 points.

Miscellaneous Defensive Gadgets

ARMORED COSTUME

Effect: Resistant Protection (6 PD/6 ED)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 6 PD/6 ED

Description: A staple of superheroing, the Armored Costume looks like it's made of normal skin-tight cloth — but in fact it's a form of armored cloth that protects the wearer without adding significant weight or impeding his ability to move in any way!

Game Information: Resistant Protection (6 PD/6 ED) (18 Active Points); OIF (-½). Total cost: 12 points.

Options:

1) **Stronger And Weaker Armored Costume:** Here are the costs for other amounts of Resistant Protection on Armored Costumes. Above 8 PD/8 ED the costume usually gets notably bulkier, with lots of noticeable pads and other features that enhance its protectiveness.

Resistant Protection (4 PD/4 ED): 12 Active Points; total cost 8 points.

Resistant Protection (5 PD/5 ED): 15 Active Points; total cost 10 points.

Resistant Protection (7 PD/7 ED): 21 Active Points; total cost 14 points.

Resistant Protection (8 PD/8 ED): 24 Active Points; total cost 16 points.

Resistant Protection (9 PD/9 ED): 27 Active Points; total cost 18 points.

Resistant Protection (10 PD/10 ED): 30 Active Points; total cost 20 points.

Resistant Protection (11 PD/11 ED): 33 Active Points; total cost 22 points.

Resistant Protection (12 PD/12 ED): 36 Active Points; total cost 24 points.

2) **Realistic Armored Costume:** This form of costume gets worn away by attacks. Add Ablative (-½). Total cost: 9 points.

3) **Partial Coverage Armored Costume:** This type of costume doesn't have the armored cloth throughout, leaving the character partly vulnerable. Add Activation Roll 14- (-¼). Total cost: 10 points.

BATTLE VEST

Effect: Resistant Protection (10 PD/10 ED), Activation Roll 11-, plus other devices
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: 12 PD/12 ED

Description: Popular among some gadgeteers, this device is a technological vest. In addition to protecting the victim's torso, the vest comes with several built-in devices: a jetpack; a micro-grenade launcher; and a shoulder holstered blaster. A clever gadgeteer could easily build other devices (an invisibility harness, a teleporter, a Force-Field generator) into a Battle Vest, or even other weapons (see Vest Blaster, page 135).

Game Information:

Cost	Power
15	**Battle Vest:** Resistant Protection (10 PD/10 ED) (30 Active Points), OIF (-½), Activation Roll 11- (covers Hit Locations 9-13; -½)
16	**Battle Vest Jetpack:** Flight 24m (24 Active Points); OIF (-½)
25	**Battle Vest Micro-Grenade Launcher:** Blast 8d6, Area Of Effect (1m Radius; +¼) (50 Active Points); OIF (-½), Limited Range (40m; -¼), 12 Charges (-¼)
23	**Battle Vest Holstered Blaster:** RKA 2d6, Armor Piercing (+¼), Penetrating (+½) (52 Active Points); OAF (-1), Beam (-¼), 15 Charges (-0)

Total cost: 79 points

Options:

1) *Battle Vest Defensive Field:* This type of Battle Vest doesn't just protect the torso — it generates a low-level Force-Field that covers the entire body. Remove Activation Roll (-½) from Battle Vest. Total cost: 20 points (overall cost of Battle Vest 84 points).

DEFENSIVE CAPE

Effect: Resistant Protection (6 PD/6 ED), Activation Roll 11-
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 6 PD/6 ED

Description: This cape, woven of impact-, blade-, and fire-proof fibers, protects the wearer... provided it comes between him and an attack. In game terms, the Activation Roll 11- represents the chance of this happening, but the GM should keep common sense in mind. In most cases the cape will protect the wearer against an attack from behind automatically, but the Activation Roll for attacks directly from in front of the character might drop to as little as 8-.

Game Information: Resistant Protection (6 PD/6 ED) (18 Active Points); OAF (-1), Activation Roll 11- (-½). Total cost: 7 points.

Options:

1) **Strong Cape:** Increase to Resistant Protection (8 PD/8 ED). 24 Active Points; total cost 10 points.

2) **Weak Cape:** Decrease to Resistant Protection (4 PD/4 ED). 12 Active Points; total cost 5 points.

DEFENSIVE MASK

Effect: Various Defense Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: Varies

Description: Incorporated into the character's mask are one or more protective devices designed to shield his eyes, mind, brain, or skull from harm. A character may buy any or all of these gadgets, as desired; he doesn't have to buy some as a prerequisite for buying others.

Game Information:

Cost	Power
3	**Armored Mask:** Resistant Protection (3 PD/3 ED) (9 Active Points); OIF (-½), Activation Roll 8- (only protects Hit Locations 3-5; -1¾)
5	**Audial Dampers:** Hearing Group Flash Defense (8 points) (8 Active Points); OIF (-½)
5	**Mindshield:** Mental Defense (8 points) (8 Active Points); OIF (-½)
5	**Polarized Lenses:** Sight Group Flash Defense (8 points) (8 Active Points); OIF (-½)

Options:

1) **Strong Mask:** Increase to:

Cost	Power
4	Resistant Protection (4 PD/4 ED)
8	Hearing Group Flash Defense (12 points)

7 Mental Defense (10 points)
8 Sight Group Flash Defense (12 points)

2) Weak Mask: Decrease to:

Cost Power
2 Resistant Protection (2 PD/2 ED)
3 Hearing Group Flash Defense (5 points)
3 Mental Defense (5 points)
3 Sight Group Flash Defense (5 points)

DEFLECTION ORB

Effect: Deflection
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 9 PD/9 ED

Description: This device is a small orb with built-in graviton manipulation technology or mini-rockets that allow it to fly. It orbits the character, using specialized tractor beams, energy beams, and force projectors to protect the character (and his friends) from Ranged attacks.

Game Information: Deflection (20 Active Points); OAF (-1), Will Not Work Against Heavy Missiles (-¼). Total cost: 9 points.

Options:

1) Experimental Orb: The orb's systems sometimes malfunction. Add Activation Roll 14- (-¼). Total cost: 8 points.

DIMENSIONAL SHUNT FIELD

Effect: Damage Negation (-6 DCs Physical and Energy)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 12 PD/12 ED

Description: A powerful piece of defensive technology, this device (usually built into a suit of powered armor, a belt, or the like) creates a field around the wearer that acts as a low-level opening into a pocket dimension. Any force directed at the wearer is partly shunted into the pocket dimension.

Game Information: Damage Negation (-6 DCs Physical and Energy) (60 Active Points); OIF (-½). Total cost: 40 points.

Options:

1) Strong Field: Increase to Increase to Damage Negation (-12 DCs Physical and Energy). 120 Active Points; total cost 80 points.

2) Weak Field: Decrease to Increase to Damage Negation (-3 DCs Physical and Energy). 30 Active Points; total cost 20 points.

3) Realistic Field: The field requires an enormous amount of energy, and its built-in batteries can only power it for a short period. Although 30 Charges is normally a +¼ Advantage, in this case it's reduced to -0 because the benefit offered by lots of Charges — not using END — is one that doesn't apply to this Power (since it already costs no END). Add 30 Charges (-0). 60 Active Points; total cost 40 points.

4) Experimental Field: Dimension-breeching technology is difficult to create and maintain; it often fails, sometimes for no readily discernible reason. Add Activation Roll 14- (-¼). Total cost: 34 points.

ENTOMOBELT

Effect: Shrinking (.032 m tall)
Target: Self
Duration: Constant
Range: Self
END Cost: 6
Breakability: 12 PD/12 ED

Description: Also known as a Microbelt or Shrinker Belt, this gadget emits an energy field or gas that causes the wearer to shrink down to as little as 1 inch tall. As the name indicates, it's a favorite for insect-themed superheroes.

Game Information: Shrinking (.032 m tall [about 1 inch], .0004 kg mass, -12 to PER Rolls to perceive character, +12 DCV, takes +36m KB) (36 Active Points); OIF (-½). Total cost: 24 points.

Options:

1) Strong Entomobelt: Increase to Shrinking (.008 m tall [about .25 inch], .0000063 kg mass, -16 to PER Rolls to perceive character, +16 DCV, takes +48m KB). 48 Active Points; total cost 32 points.

2) Weak Entomobelt: Decrease to Shrinking (.125 m tall [about 4 inches], .025 kg mass, -8 to PER Rolls to perceive character, +8 DCV, takes +24m KB). 24 Active Points; total cost 16 points.

3) Realistic Entomobelt: By reducing the character's size, the belt also reduces his ability to lift things and to move. Add Side Effects (reduces character's STR and Running by one-sixth per10 points of Shrinking used [minimum of Running 1m], always occurs; -½). Total cost: 18 points.

4) Experimental Entomobelt: The energies (or gas) that allow this belt to function don't always interface properly with the human biosystem; fluctuations may cause the character to spontaneously revert to full size on occasion. Add Activation Roll 14- (-¼). Total cost: 20 points.

INTANGIBILITY COSTUME

Effect: Desolidification
Target: Self
Duration: Constant
Range: Self
END Cost: 4
Breakability: 8 PD/8 ED

Description: This costume, which powers itself via the wearer's body heat and motion, allows the wearer to become intangible by cybernetic command. While intangible, the wearer can still be affected by magic and some other attack forms.

Game Information: Desolidification (affected by magic) (40 Active Points); OIF (-½). Total cost: 27 points.

Options:

1) **Realistic Costume:** The costume has a built-in battery with a limited power supply. Add 12 Charges (-¼). Total cost: 23 points.
2) **Experimental Costume:** The intangibility-generating circuitry in the costume is highly experimental and doesn't always work. Add Activation Roll 14- (-¼). Total cost: 23 points.
3) **Self-Renewing Battery:** The costume comes with its own power supply that replenishes itself via the character's body heat and movement, solar power, and the like. Add Reduced Endurance (0 END; +½). 60 Active Points; total cost 40 points.

PSI-STATIC GENERATOR

Effect: Mental Defense (15 points), Usable By Nearby
Target: 4m Radius sphere around character
Duration: Constant
Range: No Range
END Cost: 3
Breakability: 6 PD/6 ED

Description: This device generates a field of "psychic static" in a 4m radius zone around the wearer. The wearer and anyone else inside the zone have extra protection against psionic attacks from outside the zone. A character inside the zone may attack another character inside the zone without difficulty (due to proximity), but suffers the effects of the psi-static if he tries to mentally attack targets outside the zone.

Game Information: Mental Defense (15 points), Usable By Nearby (people within 4m of character; +1) (30 Active Points); OAF (-1), Costs Endurance (-½), Limited Power (reduces effects of Mental attacks used by those inside field against targets outside it, and has no effect on attacks made by characters within the field against targets who are also inside it; -¼). Total cost: 11 points.

Options:

1) **Strong Generator:** Increase to Mental Defense (20 points). 40 Active Points; total cost 14 points.
2) **Weak Generator:** Decrease to Mental Defense (10 points). 20 Active Points; total cost 7 points.
3) **Realistic Generator:** The Generator has an internal power supply that can only sustain the field for a short period of time before it requires recharging. Add 1 Continuing Fuel Charge (easily-replaced fuel; 30 seconds; -¾). Total cost: 8 points.
4) **Experimental Generator:** Psionic technology is rare, difficult to create, and prone to malfunction. Add Activation Roll 14- (-¼). Total cost: 10 points.
5) **Attached Generator:** The Generator is difficult to take away from the character; it may be built into a costume, bracer, helmet, or the like. Change OAF (-1) to OIF (-½). Total cost: 13 points.
6) **Long-Lasting Generator:** The Generator's internal power supply is so strong that it's effectively unlimited (though it does require periodic recharging). Remove Costs Endurance (-½). Total cost: 13 points.

QUESTIONITE-AUGMENTED SKELETON

Effect: Armor to protect the bones; Knockback Resistance -4m; HA +2d6
Target: Self/Self/One character
Duration: Persistent/Persistent/Instant
Range: Self/Self/Touch
END Cost: 0
Breakability: Unbreakable

Description: The character's bones have been coated, laced, and/or partially replaced with questionite, making them virtually unbreakable. That means his knuckles hurt someone more when he punches, and he weighs a lot more than you'd expect based on his height and build.

Like the Returning Throwing Weapon (page 153), this is a rare example of a gadget that doesn't take the *Focus* Limitation. The bone lacings are an object, but it requires highly complicated surgery to install or remove them, so they don't function like a Focus in game terms.

Game Information:

Cost	Power
3	**Questionite Bone Lacing (Increased Sturdiness):** Resistant Protection (1 PD/1 ED)
18	**Questionite Bone Lacing (Unbreakable Bones):** Resistant Protection (30 PD/30 ED) (90 Active Points); Only Works Against BODY Damage (-1), Only To Protect Against Breaking Bones (-3)
8	**Questionite-Laced Knuckles:** HA +2d6 (10 Active Points); Hand-To-Hand Attack (-¼)
4	**Questionite Bone Lacing (Heavier):** Knockback Resistance -4m

Total cost: 33 points

QUESTIONITE SHIELD

Effect: Resistant Protection (50 PD/50 ED), Hardened (x2), Impenetrable (x2); plus other abilities
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: Unbreakable

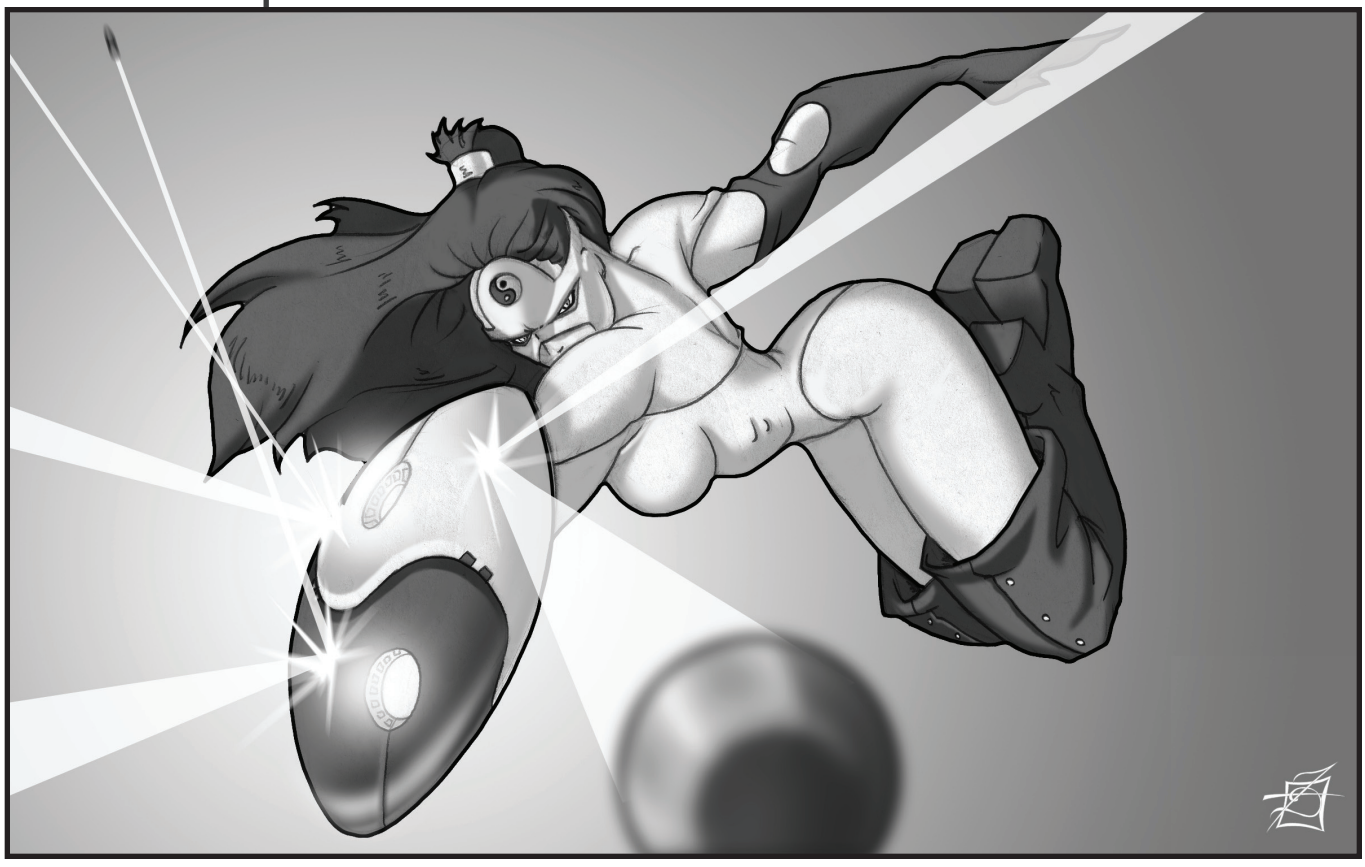
Description: This defensive device is a round shield made from a mysterious, unduplicatable alloy of the uncanny super-metal questionite. It's unbreakable by any means yet tested, though it hasn't been exposed to disintegration powers, the detonation of a nuclear weapon, or a nega-beam. Using it properly requires a Power: Use Questionite Shield roll (a DEX-based form of the Power Skill; at the GM's option a character can use the shield with just a DEX Roll, but at a minimum -2 penalty).

The shield's shape and composition allow the wielder to do many things with it. First, he can protect himself. In most cases he simply holds it between himself and an attack; he can also use it to shield one other person whom he holds close, or a person standing right next to him. In game terms, the shield's primary defensive power is a huge amount of Resistant Protection. To protect someone with it rather than himself, a character must succeed with a Power: Use Questionite Shield roll at no penalty. To protect *both* himself and another person at the same time, he must Grab that other person and succeed with a Power: Use Questionite Shield roll at a -2 penalty. The character can also throw the shield so that it gets in the way of a Ranged attack, thus protecting another person from being hit by that attack.

The wielder can also use the shield as a weapon. He can bash someone with it (an HA), or use its edge to cut through objects (an HKA). Thanks to its aerodynamic shape, he can also throw it (an Blast or RKA), but that means he cannot use the Multipower again until he recovers it (typically a wielder uses one Combat Skill Level when they throw the shield to make it "bounce" or boomerang back to his hand in the same Phase when he throws it). If the targets line up right, the wielder can hit several of them at once; he can also ricochet it off one target to hit another (though this takes some skill).

Game Information:

Cost	Power
150	**Questionite Shield:** Multipower, 300-point reserve; all OAF (-1)
13f	**1) Protection:** Resistant Protection (50 PD/50 ED), Hardened (x2; +½), Impenetrable (x2; +½); OAF (-1), Nonpersistent (-¼), Requires A Use Questionite Shield Roll (no Active Point penalty; -0)
1f	**2) Protection II:** Deflection; OAF (-1), Lockout (cannot use other Multipower slots while using this one, and not until thrown shield is retrieved; -½)
1f	**3) Shield-Bash:** HA +6d6; OAF (-1), Hand-To-Hand Attack (-¼)
1f	**4) Shield Edge:** HKA 1d6 (plus STR); OAF (-1)



1f **5) Thrown Shield I:** Blast 10d6; OAF (-1), 1 Recoverable Charge (-1¼), Lockout (cannot use Multipower until shield is retrieved; -½), Range Based On STR (-¼)

2f **6) Thrown Shield II:** Blast 10d6, Area Of Effect (40m Line; +1); OAF (-1), Lockout (cannot use Multipower until shield is retrieved; -½), Range Based On STR (-¼), 1 Recoverable Charge (-1¼)

2f **7) Thrown Shield III:** Blast 10d6, Area Of Effect (16m Radius Selective; +1); OAF (-1), Lockout (cannot use Multipower until shield is retrieved; -½), Range Based On STR (-¼), Requires A Use Questionite Shield Roll (-1 per 20 Active Points; -¼), 1 Recoverable Charge (-1¼)

1f **8) Thrown Shield IV:** HKA 1d6 (plus STR), Range Based On STR (+¼); OAF (-1), Lockout (cannot use Multipower until shield is retrieved; -½), Range Based On STR (-¼), 1 Recoverable Charge (-1¼)

1f **9) Cover Your Eyes!:** Sight Group Flash Defense (20 points), Hardened (+¼); OAF (-1), Activation Roll 14- (-¼), Nonpersistent (-¼), Lockout (cannot use other Multipower slots while using this one; -½)

Total cost: 173 points.

Options:

1) Force Shield: Instead of being made of questionite, this shield is made out of pure force energy held in place by a permanent magnetic field or the like. It functions similarly to the Questionite Shield, but lacks a few of its uses. Remove slots 5 to 9. Total cost: 166 points.

SILHOUETTE-DISTORTING CAPE

Effect: +3 DCV, Activation Roll 11-
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 3 PD/3 ED

Description: This large, billowing cape makes it difficult for attackers to perceive the outline of the wearer's body. As a result, they often aim their attacks incorrectly, firing through the cape instead of at the character's body.

Game Information: +3 DCV (15 Active Points); OAF (-1), Activation Roll 11- (-½). Total cost: 6 points.

Options:

1) Weak Distortion: Decrease to +1 DCV. 5 Active Points; total cost 2 points.

2) Realistic Distorting Cape: Also known as a "McFarlane Mantle," this cape is so large and flowing that it tends to interfere with the character's ability to walk, run, and jump. (You can add this drawback to virtually any cape bought as a gadget.) Add Side Effects (-2 on all DEX-based rolls involving walking, running, jumping, and like activities, always occurs; -½). Total cost: 5 points.

SPACE RING

Effect: Life Support (exist in space safely); Flight 10m
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: A team that journeys into outer space frequently — particularly if it has a space-based headquarters — might develop a device like this to protect its members.

Space Rings help keep their wearers alive in hard-space situations. They're not intended to be a member's sole source of life support, since the air and flight thrust they supply only last one minute before being recharged. But if a character is suddenly exposed to the cold, the vacuum, and the hard radiation of space, this ring protects him — long enough for him to reach a pressurized area, hopefully.

The device is built as a finger-ring, the logic being that a character is unlikely to take off something this small and convenient. It uses the character's body heat to project a force-field that insulates the character (allowing him to preserve his body heat), reflects radiation, and holds tight against his flesh (preventing explosive decompression). The device also carries a tiny canister of pure oxygen which it can release once the wearer throws a tiny switch under the ring's flip-up stone; it's sufficient to allow the character to breathe for one minute. In addition, the character can flip another switch under the stone to vent excess pressure from an aperture in the force-field that's situated at his back, allowing him to propel himself forward. The thrust is so gentle that this only works in microgravity situations (such as outer space), and it, too, lasts for only one minute after being activated.

Game Information:

Cost Power

6 **Life Support Field:** Life Support (Expanded Breathing: Vacuum, Safe Environment: High Radiation, Intense Cold, Intense Heat, Low Pressure/Vacuum) (13 Active Points); IIF (-¼), 1 Continuing Charge lasting 1 Minute (deactivated by any attack that inflicts STUN or BODY damage to the character; -1)

2 **Pressure Vent Propulsion:** Flight 10m (10 Active Points); IIF (-¼), Only In Microgravity (-2), 1 Continuing Charge lasting 1 Minute (deactivated by any attack that inflicts STUN or BODY damage to the character; -1)

Total cost: 8 points

SCIENCE FICTION DEFENSIVE EQUIPMENT

2

In Science Fiction periods and settings, defense continues to race with offense, with the journey eventually leading into such rubber science areas as force-fields and ultra-powerful battle armors. Many of these are, in effect, covered in the *Superhero Defensive Gear* section above, and aren't reprinted here; similarly, the more advanced body armors from the *Modern Defensive Equipment* section are suitable to near-future Science Fiction, some Post-Apocalyptic games, and the like. At most all you need to do is give "earlier" a more Science Fiction-appropriate name and perhaps appearance, and you're set. The equipment described below generally only appears in Science Fiction settings.

The prevalence of powerful force-fields and similar defensive technology in Science Fiction campaigns may alter the way warfare is conducted, especially in the sort of close-quarters tactical situations that crop up so often in gaming. Rather than staying at a distance and launching now-futile all-or-nothing attacks from concealment, characters may once again have to revert to stand-up slugfests more reminiscent of fistfights or superhero battles than gunfights. For example, in the novel *Dune* the commonality of personal force-fields has led to the development of melee combat styles that train a fighter to strike in ways that get through "shields," and to the use of weapons designed with the existence of force-fields in mind.

CLARKE'S LAW

Famed science fiction author Arthur C. Clarke once said something that SF fans have come to call *Clarke's Law.* It states: "Any sufficiently advanced technology is indistinguishable from magic." In other words, when technology becomes high enough, most people — particularly "primitive" people — can't really tell it apart from "magic." Eventually, the two sort of become one.

Beyond the classic impress-the-natives-with-a-cigarette-lighter trick, Clarke's Law has some interesting ramifications GMs could explore. At what point *does* technology become magic? Could a Star Hero campaign really be, or become, a Fantasy Hero campaign... or vice-versa? Were the magicians of ancient legend actually time travelers? Could a Star Hero setting feature "tech-mages" commanding technology far more advanced than the campaign norm, but cloaked in a veneer of mysticism?

ABLATIVE AND REFLECTIVE ARMORS

As energy weapons become more common, synthetic materials like Kevlar get vulnerable. One solution is to cover the armor with a layer of ablative material that absorbs and disperses the energy of a beam weapon attack. The disadvantage to ablative armor is that each shot burns away a little more protection.

Related to ablative armor, but without the drawback of being removed by attacks, are reflective armors. These are ordinary body armors with a layer of thin mirror-finish plastic which reflects much of the energy of laser, ultraviolet laser, and plasma attacks. Unfortunately, wearing a bright shiny suit makes one very visible.

ABLATIVE FOAM

Effect: Resistant Protection (+8 ED), Ablative
Target: One character or like object (see text)
Duration: Constant
Range: Self (see text)
Charges: 3 Continuing Charges lasting 1 Hour each
Breakability: 3 PD/3 ED

Description: A cheap way to get some anti-laser protection, ablative foam sprays onto a person or vehicle, forming a thick, flexible layer. It's packaged in cans holding enough foam to coat 3 men (or, at the GM's discretion, a single vehicle no larger than an automobile). Unfortunately ablative foam isn't waterproof.

Game Information: Resistant Protection (+8 ED), 3 Continuing Charges lasting 1 Hour each (removed by water or being shot off; +¼) (12 Active Points); OIF (-½), Ablative (-1). Total cost: 5 points.

ABLATIVE VEST

Effect: Resistant Protection (6 PD/6 ED) **plus** Resistant Protection (+12 ED), Ablative
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 6 PD/6 ED

Description: This is a standard armored vest coated with ablative material to better resist energy attacks... until it's all shot off.

Game Information: Resistant Protection (6 PD/6 ED) (18 Active Points); OIF (-½), Activation Roll 11- (covers Hit Locations 9-13; -½), Mass (half mass; -½), Real Armor (-¼) (total cost: 6 points) **plus** Resistant Protection (+12 ED) (18 Active Points); OIF (-½), Activation Roll 11- (covers Hit Locations 9-13; -½), Ablative (-1), Mass (half mass; -½), Real Armor (-¼) (total cost: 5 points). Total cost: 11 points.

Options:

1) **Strong Ablative Vest I:** Increase to Resistant Protection (9 PD/9 ED) and Resistant Protection (+18 ED). 27 + 27 = 54 Active Points; total cost 10 + 7 = 17 points.
2) **Strong Ablative Vest II:** The ablative coating on this vest is particularly thick and durable. Increase to Resistant Protection (+24 ED). 36 Active Points; total cost 10 points; total cost of Vest 16 points.
3) **Weak Ablative Vest:** Decrease to Protection (4 PD/4 ED) and Resistant Protection (+8 ED). 12 + 12 = 24 Active Points; total cost 4 + 3 = 7 points.
4) **Full Body Ablative Armor:** Change to Activation Roll 14- (-¼) for both parts.
   Standard: Total cost 7 + 5 = 12 points.
   Strong I: Total cost 11 + 8 = 19 points.
   Weak: Total cost 5 + 3 = 8 points.
5) **Reflective Undervest:** This is a small vest covering Hit Locations 9-12 only, worn by dignitaries or secret agents who want a little protection but can't wear combat gear. As Weak Ablative Vest, but change Activation Roll and change OIF (-½) to IIF (-¼). Total cost 5 + 3 = 8 points.

REFLECTIVE COVERALL

Effect: Resistant Protection (+12 ED), Only Protects Against Laser Attacks
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 4 PD/4 ED

Description: This is worn over other armor by combat personnel who have to face laser-armed opponents but aren't already wearing ablative/reflective armor. It's a light hooded coverall big enough to fit over body armor that provides protection only against lasers.

Game Information: Resistant Protection (+12 ED) (18 Active Points); OIF (-½), Activation Roll 15- (-¼), Only Protects Against Laser Attacks (-1), Real Armor (-¼). Total cost: 6 points.

SUPERCONDUCTING SURFACE

Effect: Energy Damage Reduction, Resistant, 75%
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 12 PD/12 ED

Description: A more high-tech way to defeat energy weapons comes from developments in superconductive materials. These are substances which instantly conduct electricity or heat with no resistance. A suit of superconducting armor spreads an attack over the entire surface of the suit, radiating it harmlessly away. Characters can add a superconducting surface to any other armor.

Game Information: Energy Damage Reduction, Resistant, 75% (60 Active Points); OIF (-½) plus other Limitations appropriate to armor being coated. Total cost: varies.

FORCE-FIELD TECHNOLOGY

In Space Opera Science Fiction and other stories involving extremely advanced technology, force-fields usually replace physical defenses such as body armor. Ranging from personal "force screens" to large force shields configurable into a variety of shapes, their generating equipment often weighs little. However, they require some source of power to keep functioning, and thus are vulnerable to attacks which deplete their energy reserves.

DEFENSIVE NANOBOTS

Effect: Resistant Protection (6 PD), Impenetrable (x2)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 6 DEF (see text)

Description: While not precisely a force-field, this device functions similarly to one. Since conventional defenses are meaningless against nanotechnology attacks, scientists developed "defensive" nanobots whose job is to seek out and destroy attacking nanobots. Typically the nanobots live in and on a suit of clothing or Resistant Protection (or even on and in flesh) until they're needed. They can use destroyed attack nanobots to build more of themselves, so only an attack that wipes them all out at once (such as a flamethrower) can get rid of them.

BATTLE ARMOR

Powered armor is common in many Science Fiction settings; novels like Joe Haldeman's *The Forever War,* John Steakley's *Armor,* and Robert Heinlein's magnificent *Starship Troopers* revolve around it. The *Powered Armor* section beginning on page 247 can be used to create battle armors for Science Fiction characters... though depending on the setting's technology, the armors characters can obtain may be weaker or even more powerful than what's depicted in this book.

Game Information: Resistant Protection (6 PD), Impenetrable (x2; +½), Uncontrolled (removed by fire, any other area-affecting damage-causing phenomenon; +½) (25 Active Points); Only Versus Nanotech Attacks (-1). Total cost: 12 points.

Options:

1) **Protective Nanoswarm:** Instead of living on the character, the nanobots swarm around him in a cloud, patrolling the air around the character, checking for enemy nanomachines, germs, and pests. Character also buys: Life Support (Immunity: all terrestrial diseases and biowarfare agents) (5 Active Points); Only Versus Airborne Diseases/Agents (-½), Linked (-½). Total cost 2 points; total cost of gadget 14 points

FORCE DOME

Effect: Barrier 8 PD/8 ED, 8 BODY (50m long, 4m high, and ½m thick), Restricted Shape (8m radius dome)
Target: Area
Duration: Constant
Range: No Range
Charges: 1 Continuing Fuel Charge (1 Hour)
Breakability: 17 PD/17 ED

Description: This portable but bulky device creates an 8-meter radius force dome. The dome is airtight, and the life support unit in the device creates a temporary habitat in hazardous environments (though the more people that are within the dome, the quicker the air gets used up).

Game Information: Barrier 8 PD/8 ED, 8 BODY (50m long, 4m high, and ½m thick) (87 Active Points); OAF Bulky (-1½), Costs Charges (to maintain; -½), No Range (only works in radius around generator; -½), Restricted Shape (8m radius dome only; -¼), 1 Continuing Fuel Charge (fueled by electricity, recharge is easily obtained; 1 Hour; -0) (total cost: 23 points) plus Life Support (Self-Contained Breathing; Safe Environments: Intense Cold, Low Pressure/Vacuum), Area Of Effect (fills entire area beneath dome; +½) (21 Active Points); OAF Bulky (-1½), Linked (-½), 1 Continuing Fuel Charge (fueled by air supply, resupply is easily obtained; 1 Hour; -0) (total cost: 6 points). Total cost: 29 points.

FORCE SHIELD PROJECTOR

Effect: Barrier 8 PD/8 ED, 8 BODY (up to 3m long, 3m high, and ½m thick)
Target: Area
Duration: Instant
Range: No Range RBS
Charges: 1 Continuing Fuel Charge (20 Minutes)
Breakability: 11 PD/11 ED

Description: A force shield projector is usually arm-mounted, and creates a force barrier in front of the user.

Game Information: Barrier 8 PD/8 ED, 8 BODY (up to 3m long, 3m high, and ½m thick), Non-Anchored, Dismissable (54 Active Points); OIF (-½), Costs Charges (to maintain; -½), No Range (-½), 1 Continuing Fuel Charge (fueled by electricity, recharge is easily obtained; 20 Minutes; -¼). Total cost: 20 points.

Options:

1) **Strong Projector:** Increase to Barrier 10 PD/10 ED, 10 BODY. 62 Active Points; total cost 22 points.
2) **Weak Projector:** Decrease to Barrier 6 PD/6 ED, 6 BODY. 46 Active Points; total cost 17 points.

PERSONAL FORCE SCREEN

Effect: Resistant Protection (10 PD/10 ED), Protects Carried Items
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge (20 Minutes)
Breakability: 10 PD/10 ED

Description: This device is a belt that creates a force-shield that hugs the user and stops incoming attacks. Early in its development cycle the belt is bulky, uncomfortable, and only available to military personnel. Eventually technology and society develop to the point where it's much more comfortable and widely available.

Game Information: Resistant Protection (10 PD/10 ED), Protects Carried Items (40 Active Points); OIF (shield belt; -½), 1 Continuing Fuel Charge (fueled by electricity, recharge is easily obtained; 20 Minutes; -¼). Total cost: 23 points.

Options:

1) **Strong Personal Force Screen:** Increase to Resistant Protection (12 PD/12 ED). 46 Active Points; total cost 26 points.
2) **Weak Personal Force Screen:** Decrease to Resistant Protection (8 PD/8 ED). 34 Active Points; total cost 19 points.
3) **Advanced Personal Force Screen:** his version of the shield belt creates a field strong enough to hold in atmosphere. Combined with a small air purifier and oxygen tank, it works just like a space suit. Add: Life Support (Self-Contained

Breathing; Safe Environments: Intense Cold, Low Pressure/Vacuum) (14 Active Points); OIF (-½), Linked (-½), 1 Continuing Fuel Charge (fueled by air supply, resupply is easily obtained; 20 Minutes; -¼). Total cost 6 points; total cost for device 29 points.

4) **Variant Personal Force Screen:** This form of the force-field only blocks high-speed projectiles and energy beams, leaving the wearer free to engage in melee combat. Add Only Works Against Ranged Attacks (-½). Total cost: 18 points.

PLASTIC ARMORS

The advanced materials science of many Science Fiction settings can make functional armor out of plastics.

BIOPLASTIC ARMOR

Effect: Resistant Protection (20 PD/20 ED) plus Life Support
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 20 PD/20 ED

Description: Instead of the rigid armor beloved o early Science Fiction (see below), this is organic-looking bioplastic, made of materials spawned from the meeting of nanotechnology and genetic engineering. It's a deceptively thin and flexible suit of smart nanofibers which can react instantly to impacts or energy attacks, going rigid or reflective as needed. Elastic fibers and liquid microtubules rapidly disperse the energy of an attack, and semi-autonomous nanomachines can actually "heal" damage to the suit. The suit is fully capable of operating in space or underwater and features an adaptive life-support system.

Game Information:

Cost	Power
34	**Protective Armor:** Resistant Protection (20 PD/20 ED) (60 Active Points); OIF (-½), Real Armor (-¼)
9	**Limited Life Support:** Life Support (Self-Contained Breathing; Safe Environments: Intense Cold, Low Pressure/Vacuum) (14 Active Points); OIF (-½)

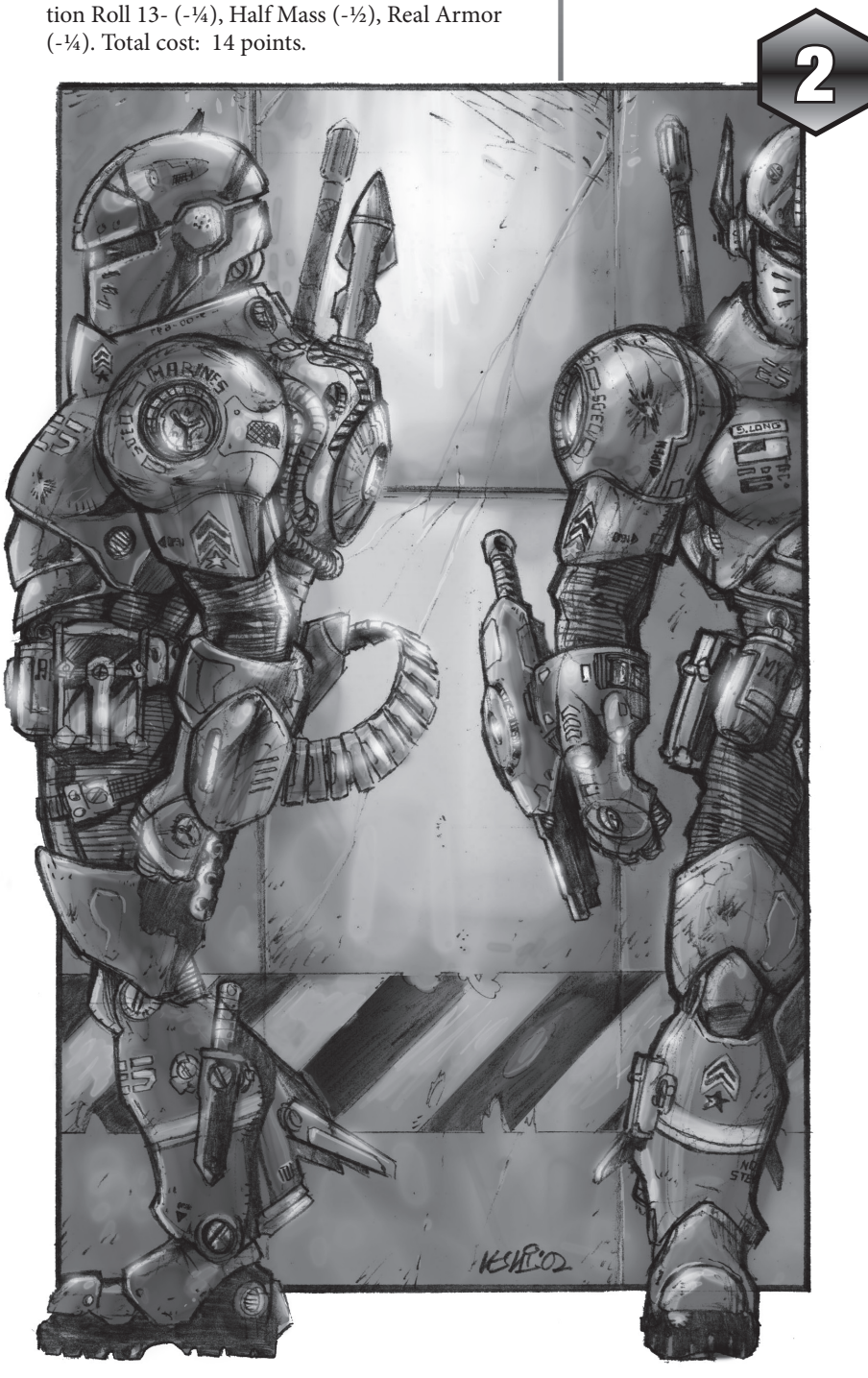
Total cost: 43 points.

EARLY PLASTIC ARMOR

Effect: Resistant Protection (12 PD/12 ED), Activation Roll 13-
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 12 PD/12 ED

Description: In early Science Fiction, characters are often shown wearing plastic armor that to some extent mimics the armor of the knights of old: breastplate, greaves, vambraces, and more, all stylishly shaped and colored to match the wearer's uniform.

Game Information: Resistant Protection (12 PD/12 ED) (36 Active Points); OIF (-½), Activation Roll 13- (-¼), Half Mass (-½), Real Armor (-¼). Total cost: 14 points.



DEFENSIVE DRUGS

As mentioned on page 196, combat drugs are a part of some Science Fiction settings. Here are two examples:

MIND FLEX

Effect: Aid EGO 3d6
Target: One character
Duration: Instant
Range: No Range
Charges: 4 Charges
Breakability: 1 PD/1 ED

Description: Boosting one's willpower is important when dealing with enemies who possesses psionic abilities. By taking Mind Flex, the user increases his mental strength... but after it runs out he becomes more vulnerable to psionics than normal.

Game Information: Aid EGO 3d6, Delayed Return Rate (points fade at the rate of 5 per Minute; +1) (36 Active Points); OAF Fragile (-1¼), Side Effects (-5 EGO for 24 hours after Charge stops working, automatically occurs; -½), 4 Charges (-1). Total cost: 10 points.

Options:

1) **Strong Serum:** Increase to Aid EGO 4d6. 48 Active Points; total cost 13 points.
2) **Weak Serum:** Decrease to Aid EGO 2d6. 24 Active Points; total cost 6 points.
3) **Long-Lasting Serum:** Increase to Delayed Return Rate (points fade at the rate of 5 per 20 Minutes; +1¼). 40 Active Points; total cost 11 points.

ROCKSTEADY

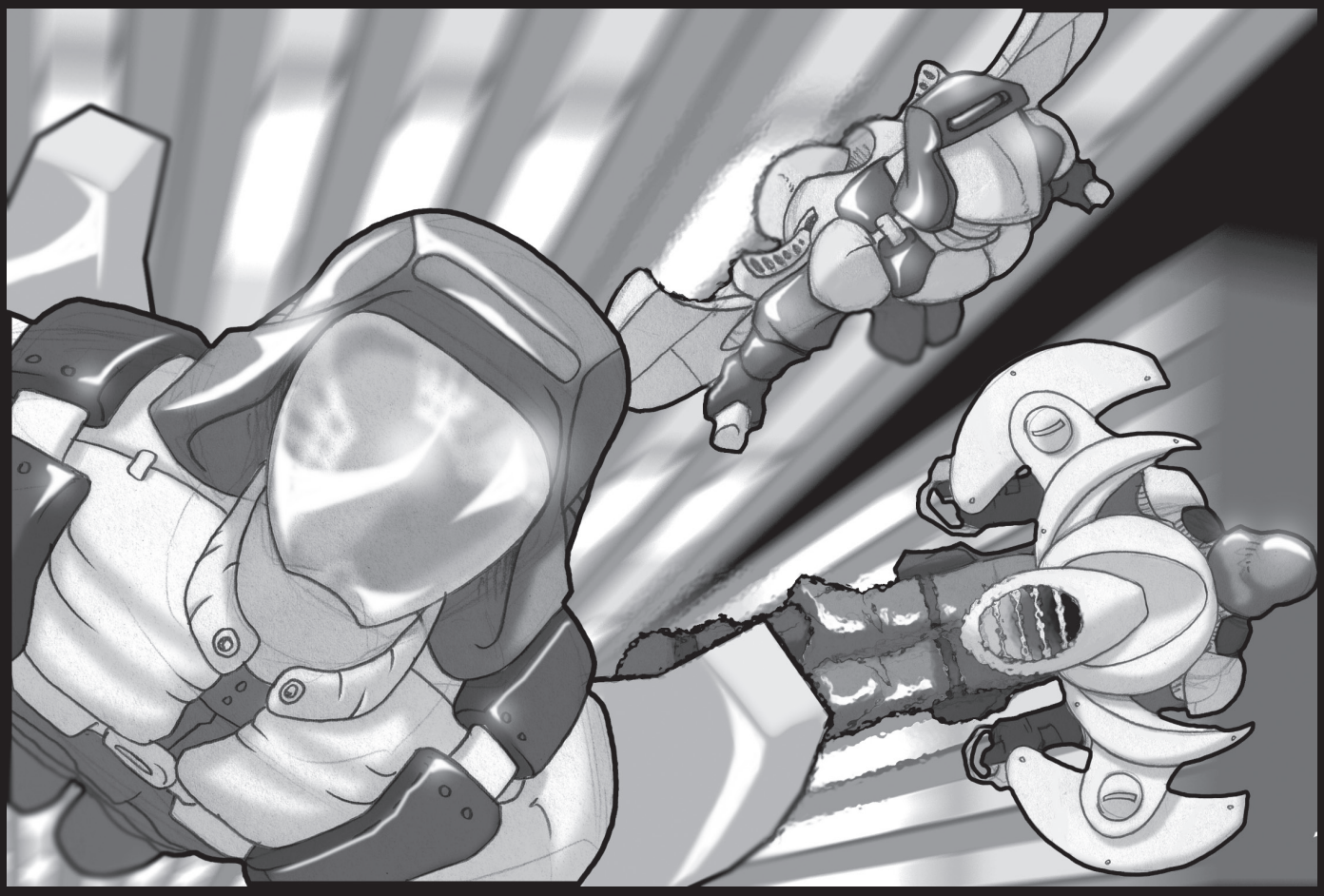
Effect: Aid PRE 3d6
Target: One character
Duration: Instant
Range: No Range
Charges: 4 Charges
Breakability: 1 PD/1 ED

Description: This injection increases a person's bravery and confidence, making him able to withstand shocks that would ordinarily cause him to flee or break down. While it has no direct side effects, it's known to be physically and psychologically addictive (in game terms, each use adds ½d6 points' worth of Transform to give the user the appropriate Physical and Psychological Complications).

Game Information: Aid PRE 3d6, Delayed Return Rate (points fade at the rate of 5 per 20 Minutes; +1½) (45 Active Points); OAF Fragile (-1¼), Only To Protect Against Presence Attacks And PRE Drains (-1), Side Effect (½d6 Major Transform into addicted person; -0), 4 Charges (-1). Total cost: 10 points.

Options:

1) **Strong Serum:** Increase to Aid PRE 4d6. 60 Active Points; total cost 14 points.
2) **Weak Serum:** Decrease to Aid PRE 2d6. 30 Active Points; total cost 7 points.
3) **Long-Lasting Serum:** Increase to Delayed Return Rate (points fade at the rate of 5 per Hour; +1¾). 49 Active Points; total cost 11 points.



CHAPTER THREE

MOVEMENT EQUIPMENT

SUPERHEROIC MOVEMENT EQUIPMENT

3

Movement equipment is gadgets that help a character move in some way without actually being vehicles. Unlike earlier chapters, this one starts (and ends) with Superheroic rather than Fantasy or Modern equipment for the simple reason that until technology rises to the level of the fantastic, there are few (if any) movement gadgets. Fantasy and Modern characters who want to move faster than normal, or move in unusual ways, either have to ride in vehicles (which are covered in *HERO System Vehicles,* not this book), or resort to spells, enchanted items, and the like (which also aren't covered in this book). Even in Science Fiction settings movement gadgets aren't necessarily that common — if you need some, simply adapt appropriate ones from the Superheroic section to suit your campaign.

WEIRD SCIENCE MOVEMENT GADGETS

Compared to the true Superhero devices below, Weird Science movement gadgets may not seem particularly impressive... but in a Pulp world where horses and camels are still the most common mode of transportation in many places they can seem pretty amazing!

CLIMBING SUCTION CUPS

Effect: Clinging (normal STR), Maximum Movement Is 2m/Phase
Target: Self
Duration: Constant
Range: Self
END Cost: 1
Breakability: 2 PD/2 ED

Description: This Weird gadget consists of two to four extremely strong suction cups. By holding them in his hands (and wearing them on his feet), the character can scale sheer walls like a spider... though he can't move quickly while he's doing it.

Game Information: Clinging (normal STR) (10 Active Points); OIF (-½), Costs Endurance (-½), Maximum Movement Speed While Clinging Is 2m Per Phase (-½), Cannot Resist Knockback (-0). Total cost: 4 points.

COLLAPSIBLE GRAPNEL AND LINE

Effect: Swinging 16m, Extra Time (Extra Phase)
Target: Self
Duration: Constant
Range: Self
END Cost: 1
Breakability: 2 PD/2 ED

Description: This device is a thin, but extremely strong, length of cord and a small, collapsible grapnel. Designed for concealment and easy carrying, it takes a couple of seconds to prepare and use when the character first pulls it out.

Game Information: Swinging 16m (8 Active Points); IAF (-½), Extra Time (Extra Phase [one Phase to prepare to use and then one to use it the first time it's activated, but later uses don't take additional time]; -½). Total cost: 4 points.

Options:

1) **Longer Line:** Increase to Swinging 24m. 12 Active Points; total cost 6 points.
2) **Shorter Line:** Decrease to Swinging 10m. 5 Active Points; total cost 2 points.

CONCEALABLE PARACHUTE

Effect: Flight 12m, Gliding, Limited Movement
Target: Self
Duration: Constant
Range: Self
Charges: 1 Recoverable Continuing Charge
Breakability: 2 PD/2 ED

Description: Unlike the typical Pulp-era parachute, this one isn't big, awkward to wear, and obvious — in fact, it's so small and lightweight it fits under a jacket or coat without being noticeable!

Game Information: Flight 12m (12 Active Points); IAF (-½), Gliding (-1), Limited Movement (character cannot gain altitude, and must move at least 24m downward for every 2m forward; -½), 1 Recoverable Continuing Charge (lasts until character hits the ground or 'chute is fouled; -¾). Total cost: 3 points.

ROCKET PACK

Effect: Flight 20m
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge
Breakability: 4 PD/4 ED

Description: This amazing gadget, not much larger than a typical backpack, allows the wearer to fly! And it uses ordinary gasoline for fuel, making it easy to refuel in mid-adventure if necessary.

Game Information: Flight 20m (20 Active Points); OIF (-½), 1 Continuing Fuel Charge lasting 2 Hours (gasoline, Easy to obtain; -0). Total cost: 13 points.

Options:

1) **Strong Rocket Pack:** Increase to Flight 30m. 30 Active Points; total cost 20 points.
2) **Weak Rocket Pack:** Decrease to Flight 12m. 12 Active Points; total cost 8 points.
3) **Clumsy Rocket Pack:** Steering with a rocket strapped to your back isn't exactly easy. Add Increased Turn Mode (Flight with the Rocket Pack always has a +4m Turn Mode; -¼). Total cost: 11 points.
4) **Dangerous Rocket Pack:** Wearing a rocket and a tank of gas on your back isn't exactly safe. If the Rocket Pack takes even a single point of BODY damage past its defenses from an energy attack (or any other attack that could ignite the fuel), it bursts into flame, causing the user to take 2d6 damage every Phase (no defense) until the flames are extinguished. You can represent this with a -¼ Side Effect. Total cost: 11 points.
5) **One Hand On The Controls At All Times:** The way the Rocket Pack works, the character has to keep at least one hand on a control rod, hand control, or chest control panel to maintain his ability to fly. Add Gestures (throughout; -½). Total cost: 10 points.
6) **We Have Takeoff:** The character has to spend a Full Phase turning the Rocket Pack on, then another Full Phase launching himself into the sky. Add (Extra Phase to activate [see text]; -½). Total cost: 10 points.
7) **Winged Rocket Pack:** The character's Rocket Pack has large wings on it to give him lift. If he goes too slowly, he may stall and crash. Add Stall Velocity (10m; -¼). Total cost: 11 points.
8) **Experimental Rocket Pack:** Miniaturizing a rocket to fit into a backpack and not become hot enough to burn the wearer is difficult; as a result, sometimes the rocket stops working. Add Activation Roll 14- (-¼). Total cost: 11 points.

RUBBER-SOLED SHOES

Effect: +2 to Stealth, Only For Stealthy Movement
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: The character's shoes or boots have special rubber soles that allow him to move much more quietly than someone with leather-soled shoes can.

Game Information: +2 to Stealth (4 Active Points); OIF (-½), Only For Stealthy Movement (-½). Total cost: 2 points.

SUPERHERO MOVEMENT GADGETS

This section has personal movement gadgets — devices designed using Movement Powers but which aren't built as Vehicles. (For those, see *HERO System Vehicles*). In addition to the gadgets listed here, see the *Boots* section of the powered armor devices (page 264) for Bootjets, Hoverpads, Rocketskates, and Springboots.

ARM-WINGS

Effect: Flight 24m, Gestures
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 5 PD/5 ED

Description: The character's costume has wings attached underneath the arms. By moving his arms, the character can fly. However, he has to keep moving at least one of his arms to keep flying; if he stops to perform other actions with both of his arms or hands, he starts to fall.

Game Information: Flight 24m (24 Active Points); OAF (-1), Gestures (throughout; -½). Total cost: 10 points.

Options:

1) **Strong Wings:** Increase to Flight 32m. 32 Active Points; total cost 13 points.
2) **Weak Wings:** Decrease to Flight 16m. 16 Active Points; total cost 6 points.
3) **Realistic Wings:** The character must keep both his arms moving constantly if he wants to remain in the air. Change to Gestures (both hands throughout; -1). Total cost: 8 points.
4) **Agile Wings:** The character's wings provide him so much control over his Flight that he can turn on a dime. Add No Turn Mode (+¼). 30 Active Points; total cost 12 points.
5) **Wing-Blades:** The edges of the character's wings are so sharp that he can cut people with them

as he flies by. Character also buys HKA 1½d6, Armor Piercing (+¼), Reduced Endurance (0 END; +½) (44 Active Points); OIF (-½), Only With Move Bys (-1), No Velocity Damage Bonus (-½), No Knockback (-¼). Total cost 13 points; total cost of Arm-Wings 23 points.

CLING-BOOTS

Effect: Clinging (normal STR)
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: These boots use vacuum technology, super-adhesives, or some other method to allow the wearer to stand and walk on walls as if they were normal ground.

Game Information: Clinging (normal STR) (10 Active Points); OIF (-½). Total cost: 7 points.

Options:

1) **Strong Boots:** Increase to +15 STR. 15 Active Points; total cost 10 points.
2) **Weak Boots:** Add Cannot Resist Knockback (-¼). Total cost: 6 points.
3) **Realistic Boots:** Clinging to walls is tiring work. Add Costs Endurance (-½). Total cost: 5 points.
4) **Experimental Boots:** Sometimes the boots' technology fails to work — a real problem if the character is already far up a wall. Add Activation Roll 14- (-¼). Total cost: 6 points.

COPTERPACK

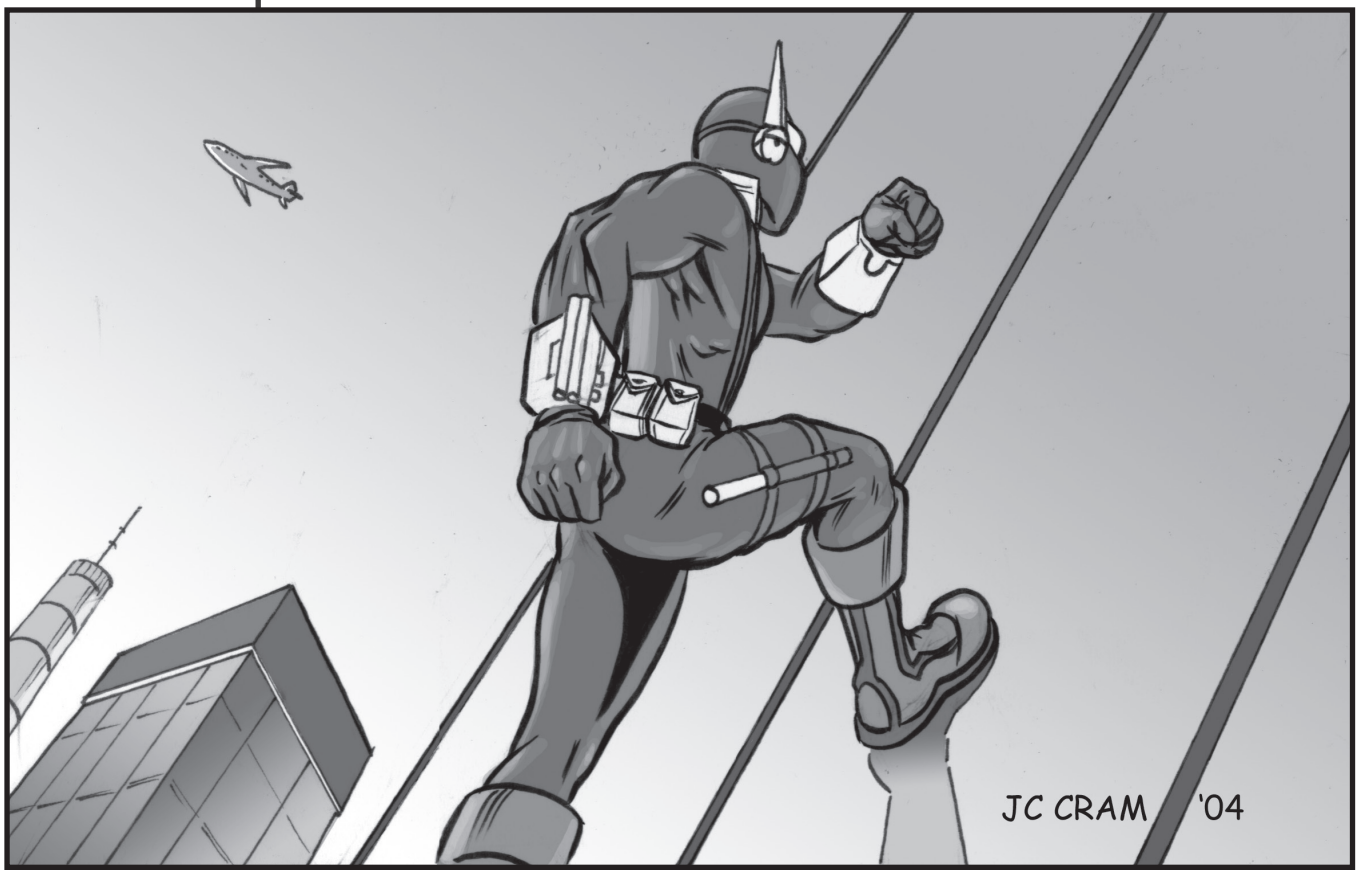
Effect: Flight 24m, No Turn Mode, Sideways Maneuverability
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge lasting 1 Hour
Breakability: 8 PD/8 ED

Description: Similar to a Jetpack, this backpack-like device contains a rotor and set of helicopter blade that fold up to fit within. When the wearer activates the 'Pack (which takes time), the blades unfold, allowing him to fly away.

Game Information: Flight 24m, No Turn Mode (+¼), Sideways Maneuverability (+½) (42 Active Points); OIF (-½), Extra Time (Extra Phase to activate; -½), Side Effects (KA ½d6, Area Of Effect (4m Radius) around character, automatically occurs when Flight is in use, only affects environment around character; -0), 1 Continuing Fuel Charge lasting 1 Hour (requires specially-refined jet fuel, Difficult to obtain; -¼). Total cost: 19 points.

Options:

1) **Strong Copterpack:** Increase to Flight 30m. 52 Active Points; total cost 23 points.
2) **Weak Copterpack:** Decrease to Flight 18m. 31 Active Points; total cost 14 points.
3) **Realistic Copterpack I:** Using the Copterpack tires the character out. Add Costs Endurance (-½). Total cost: 15 points.



4) **Realistic Copterpack II:** The character has to keep at least one hand on the Copterpack's controls at all times. Add Gestures (throughout; -½). Total cost: 15 points.
5) **Experimental Copterpack:** Sometimes the rotor and blades fail to unfold properly, or lock up in mid-flight. Add Activation Roll 14- Jammed (-½) and increase Side Effects to -½. Total cost: 13 points.

COSMIC FLYER

Effect: FTL Travel (1 LY/hour)
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: Unbreakable

Description: This device, the product of alien super-science or the powers of some cosmically-powerful entity, allows the rider to travel through space at eight thousand times the speed of light! Since it's a ridden device, it provides no life support; the character has to have some way to survive in the vacuum of space while using it.

The designer can make this device look like any rideable object he wants: a bizarre, alien-tech motorcycle; a surfboard; a high-tech platform; an altar; a flying Buick, or the like. The chosen appearance usually depends on the character's costume, name, or powers.

Game Information: FTL Travel (1 LY/hour) (36 Active Points); OAF (-1). Total cost: 18 points.

Options:

1) **Faster Cosmic Flyer:** Increase to FTL Travel (4 LY/hour). 40 Active Points; total cost 20 points.
2) **Slower Cosmic Flyer:** Decrease to FTL Travel (1 LY/4 hours). 32 Active Points; total cost 16 points.
3) **Realistic Cosmic Flyer I:** It takes training and skill to ride a Cosmic Flyer. Add Requires A Power: Use Cosmic Flyer Roll (-½). Total cost: 14 points.
4) **Realistic Cosmic Flyer II:** Though the Cosmic Flyer is self-powered, riding and steering one takes a lot of the user. Add Costs Endurance (-½). Total cost: 14 points.
5) **Realistic Cosmic Flyer III:** One of the major problems with using the Cosmic Flyer in combat is that if the rider takes Knockback, he often gets knocked off the Flyer! Add Side Effects (if character takes Knockback, must make a DEX Roll at -1 per full 4m of Knockback or he falls off the Flyer; -¼). Total cost: 16 points.
6) **Ungrabbable Flyer:** Not only is the Cosmic Flyer unbreakable, but it's so thoroughly under the character's control that no one can take it away from him — if anyone tries, it simply comes to him at his mental command. Remove OAF (-1). Total cost: 36 points.
7) **Flyer As Weapon:** If the character takes the Ungrabbable Flyer option, he can also use the Flyer as a weapon by sending it away from him to smash into his enemies. Change to:

Cost	Power
60	**Cosmic Flyer:** Multipower, 60-point reserve
4f	**1) Flight:** FTL Travel (1 LY/hour)
6f	**2) Weapon:** Blast 12d6

Total cost: 70 points.

DRILL GAUNTLETS

Effect: Tunneling 12m through DEF 12 materials
Target: Self
Duration: Constant
Range: Self
END Cost: 5
Breakability: 7 PD/7 ED

Description: This device is a set of metal gauntlets with special drill bits attached to them so the character can burrow through earth, stone, walls, and just about anything else.

Game Information: Tunneling 12m through PD 12 materials (36 Active Points); OIF (-½). Total cost: 24 points.

Options:

1) **Strong Gauntlets:** Increase to Tunneling 16m. 40 Active Points; total cost 27 points.
2) **Weak Gauntlets:** Decrease to Tunneling 8m. 32 Active Points; total cost 21 points.
3) **Realistic Gauntlets I:** The drill bits on the Gauntlets severely hinder the character's ability to use his hands. Add Side Effects (-4 to DEX Rolls involving manual dexterity, always occurs and applies as long as gauntlets are worn; -½). Total cost: 18 points.
4) **Realistic Gauntlets II:** The batteries in the Gauntlets have a limited power supply. Add 12 Charges (-¼). Total cost: 20 points.
5) **Experimental Gauntlets:** Due to their experimental nature, the Gauntlets break down easily. Add Activation Roll 14- (-¼). Total cost: 20 points.

FLIGHT DISK

Effect: Flight 20m
Target: One character
Duration: Constant
Range: Touch
END Cost: 0
Breakability: 6 PD/6 ED

Description: This device, a disk about two inches in diameter and half an inch thick, uses sophisticated antigravity technology to allow the person it's attached to to fly. It's a Universal Focus, so the owner can give it to another person and allow that person to fly instead.

Game Information: Flight 20m, Reduced Endurance (0 END; +½) (30 Active Points); OAF (-1). Total cost: 15 points.

Options:

1) **Strong Disk I:** Increase to Flight 30m. 45 Active Points; total cost 22 points.
2) **Strong Disk II:** Increase to x4 Noncombat. 37 Active Points; total cost 18 points.
3) **Weak Disk:** Decrease to Flight 16m. 24 Active Points; total cost 12 points.
4) **Realistic Disk:** Flying via the Disk tires the user out because he constantly has to alter his body attitude to steer. Remove Reduced Endurance (+½). 20 Active Points; total cost 10 points.
5) **Experimental Disk:** Even the most skilled gadgeteers have difficulty miniaturizing antigravity technology and getting it to work properly all the time. Add Activation Roll 14- (-¼). Total cost: 13 points.
6) **Maneuverable Disk:** The Disk grants the user a great deal of aerobatic maneuverability. Add No Turn Mode (+¼). 35 Active Points; total cost 17 points.
7) **Many Disks:** The character has several Disks he can give to his comrades or use as weapons. Character also buys x8 Flying Disks for an additional 15 Character Points (total cost: 30 points).
8) **Attached Disk:** The Disk attaches to the character's costume or body so firmly that enemies cannot take it away in combat. Change OAF (-1) to OIF (-½). Total cost: 20 points.
9) **Flight Disk Attack:** The character can attach a Flight Disk to someone and force him to fly against that person's will. Removing an "attack disk" takes 1 Turn, and if possible the character puts it somewhere that the victim has trouble reaching (e.g., between the victim's shoulder-blades). Character buys:

Cost	Power
55	**Flight Disk:** Multipower, 55-point reserve
1f	**1) Personal Use:** Flight 20m, Reduced Endurance (0 END; +½); OAF (-1)
4f	**2) Attack Use:** Flight 20m, Usable As Attack (does not work against targets who have their own Flight or gravity-manipulation powers; +1¼), Reduced Endurance (0 END; +½); OIF (-½)

Total cost: 60 points.

FLIGHT PLATFORM

Effect: Flight 30m, Usable By Nearby
Target: Two characters
Duration: Constant
Range: Self/Touch
END Cost: 7
Breakability: 7 PD/7 ED

Description: This is a small platform, big enough to hold maybe two people at most, with handles on either side. It uses hover technology (or like systems) to fly. Ordinarily it would qualify as a Bulky Focus, but its built-in gravity negators make it extremely easy to carry.

Game Information: Flight 30m, Reduced Endurance (½ END; +¼) (37 Active Points); OAF (-1) (total cost: 18 points) **plus** Usable By Nearby (allows character to carry one additional human-sized passenger; +1) for Flight (30 Active Points); OAF (-1) (total cost: 15 points). Total cost: 33 points.

Options:

1) **Strong Platform:** Increase to Flight 40m. 50 + 40 = 90 Active Points; total cost 25 + 20 = 45 points.
2) **Weak Platform:** Decrease to Flight 20m. 25 + 20 = 45 Active Points; total cost 12 + 10 = 22 points.
3) **Realistic Platform:** The platform needs fuel to function. Add to Flight 1 Continuing Fuel Charge lasting 1 Hour (requires specially-refined jet fuel, Difficult to obtain; -¼). 37 + 30 = 55 Active Points; total cost 16 + 15 = 31 points.
4) **Experimental Platform:** The technology that powers the Platform isn't as reliable as it should be. Add Activation Roll 14- (-¼) to Flight. Total cost 16 + 15 = 31 points.
5) **Larger Platform:** Increase the amount of people the Platform can carry (but it shouldn't exceed four human-sized passengers at most; beyond that it makes more sense to buy the Platform as a Vehicle instead).

FLIGHT RING

Effect: Flight 40m
Target: Self
Duration: Constant
Range: Self
END Cost: 4
Breakability: 8 PD/8 ED

Description: A team where every character is expected to have the ability to fly at a certain minimum speed, even if it's not part of his natural or usual repertoire of abilities, might develop and issue flight gadgets to its members. To keep the device from interfering with or spoiling a character's costume, it's built into an inconspicuous ring. The ring is loaded with microcircuitry and an antigravity engine powered by the wearer's body heat and kinetic motion.

In campaigns lacking technology this advanced, these devices should be larger than finger-rings, and probably as some other type of Focus (*i.e.,* OAF, IAF, or OIF).

Game Information: Flight 40m (40 Active Points); IIF (-¼). Total cost: 32 points.

Options:

1) **Strong Flight Ring:** Increase to Flight 50m. 50 Active Points; total cost 40 points.
2) **Weak Flight Ring:** Decrease to Flight 30m. 30 Active Points; total cost 24 points.
3) **Realistic Flight Ring:** The ring has an internal power source that limits how long a character can use it each day. Add 1 Continuing Fuel Charge lasting 5 Minutes (recharged via special electrical ring-recharging device; -½). Total cost: 23 points.
4) **Experimental Flight Ring:** Technology this advanced doesn't always work properly — a bad thing when you're way up in the air. Add Activation Roll 14- (-¼). Total cost: 27 points.
5) **Glowing Ring:** This form of Flight Ring is larger and glows when used, making it obvious where the character's ability to fly comes from. Change IIF (-¼) to OIF (-½). Total cost: 27 points.

GLIDER CAPE

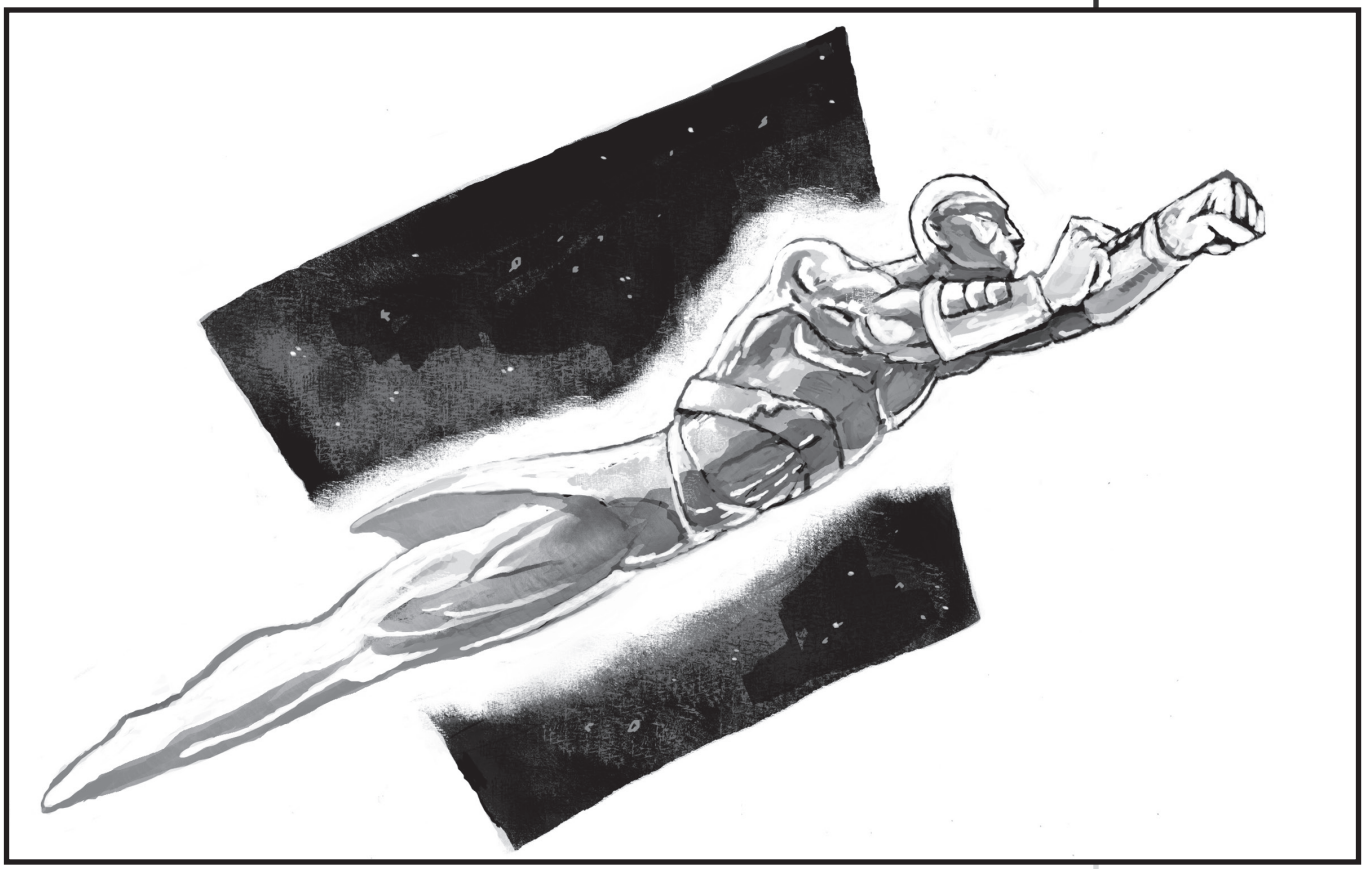
Effect: Flight 24m, Gliding
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 5 PD/5 ED

Description: The character's cape is designed with a special aerodynamic shape, and is cleverly reinforced, so he can glide through the air while wearing it.

Game Information: Flight 24m (24 Active Points); OAF (-1), Gliding (-1), Costs Endurance (-½). Total cost: 7 points.

Options:

1) **Faster Glider Cape:** Increase to Flight 30m. 30 Active Points; total cost 8 points.
2) **Slower Glider Cape:** Decrease to Flight 16m. 16 Active Points; total cost 4 points.
3) **Realistic Glider Cape:** The character's ability to glide depends on his holding his body a certain way; if he moves the wrong way or tries to perform other actions than just gliding, he falls to earth. Add Requires A PS: Use Glider Cape Roll (-¼) and Gestures (throughout; -½). Total cost: 6 points.



4) **Parachute Cape:** The character cannot actually glide, but his cape can act as a parachute to keep him from hurting himself in falls. Add Limited Movement (character cannot gain altitude, and must move at least 24m downward for every 2m forward; -½). Total cost: 6 points.
5) **Concealable Hangglider:** The character's cape doesn't normally allow him to glide, but it (or his costume) conceals a hangglider-like device that lets him glide once it's activated. Change OAF (-1) to IAF (-½) and add Extra Time (Full Phase to activate; -¼). Total cost: 7 points.

GLIDER-WINGS

Effect: Flight 16m
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 3 PD/3 ED

Description: Attached to the undersides of the character's costume's arms and the sides of the costume's torso are panels of high-tech fabric (or some similar substance) that allow him to glide through the air. However, he has to hold his arms just right for the device to work; otherwise he plummets to the ground.

Game Information: Flight 16m (16 Active Points); OAF (-1), Gliding (-1), Costs Endurance (-½), Gestures (throughout; -½). Total cost: 4 points.

Options:

1) **Strong Glider-Wings:** Increase to Flight 24m. 24 Active Points; total cost 6 points.
2) **Weak Glider-Wings:** Decrease to Flight 12m. 12 Active Points; total cost 3 points.
3) **Improved Glider-Wings:** The character's glider-wings don't impair his ability to use his arms and hands. Remove Gestures (-½). Total cost: 4 points.

HOVERSHOES

Effect: Flight 12m, No Turn Mode
Target: Self
Duration: Constant
Range: Self
END Cost: 1
Breakability: 3 PD/3 ED

Description: This device is a set of shoes or boots with powerful anti-gravity plates on the bottom. When activated, the plates allow the wearer to "walk on air." He can climb as if he were climbing stairs, run as if he were on the ground, and so forth. There's a limit to how fast he can go, though — no more than half his Combat Movement with Running, up to a maximum of 12m. (If you prefer, you can simply re-calculate the cost of the Hovershoes with the appropriate meters of Running for the character.)

Game Information: Flight 12m, No Turn Mode (+¼) (15 Active Points); OIF (-½), Cannot Move Faster Than Half Wearer's Combat Movement With Running Or 12m, Whichever Is Less (-0). Total cost: 10 points.

Options:

1) **Strong Hovershoes:** Increase to Flight 18m. 22 Active Points; total cost 15 points.
2) **Weak Hovershoes:** Decrease to Flight 6m. 7 Active Points; total cost 5 points.
3) **Realistic Hovershoes:** The power packs built into the Hovershoes have a very limited life before they need recharging. Add 12 Charges (-¼). Total cost: 8 points.
4) **Experimental Hovershoes:** The anti-gravity technology in the Hovershoes is experimental. Best not to walk too far above the ground. Add Activation Roll 14- (-¼). Total cost: 8 points.

JETBOOTS

Effect: Flight 16m
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 3 PD/3 ED

Description: These boots come equipped with small rockets built into the heel or on the sides, enabling the wearer to fly. (See also Powered Armor Bootjets, page 264.)

Game Information: Flight 16m (16 Active Points); OIF (-½). Total cost: 11 points.

Options:

1) **Fast Jetboots:** Increase to Flight 20m. 20 Active Points; total cost 13 points.
2) **Slow Jetboots:** Decrease to Flight 12m. 12 Active Points; total cost 8 points.
3) **Realistic Jetboots:** The jetboots have a small supply of high-efficiency fuel; once it's used up, the wearer has to refuel them before he can fly again. Add 1 Continuing Fuel Charge (30 seconds, Difficult to obtain fuel; -1). Total cost: 6 points.
4) **Experimental Jetboots:** The jetboots are new technology, and don't always work — so don't fly too high above the ground. Add Activation Roll 13- (-¼). Total cost: 9 points.

JETPACK

Effect: Flight 30m
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge
Breakability: 6 PD/6 ED

Description: A common gadget among powered armor wearers and gadgeteers, this backpack-like device has a built-in rocket system that allows the wearer to fly. It uses a form of specially-refined

and enhanced jet fuel. At the GM's option, a character could refuel with ordinary gasoline (which reduces the Flight to 24m, or even less).

If a Jet*pack* is not to a character's taste, you can use this write-up to represent any similar type of gadget: a Jetbelt; Jetbracers; Jet-Boots; Jet-Harness; and so on.

Game Information: Flight 30m (30 Active Points); OIF (-½), 1 Continuing Fuel Charge lasting 2 Hours (requires specially-refined jet fuel, Difficult to obtain; -0). Total cost: 20 points.

Options:

1) **Strong Jetpack:** Increase to Flight 40m. 40 Active Points; total cost 27 points.
2) **Weak Jetpack:** Decrease to Flight 20m. 20 Active Points; total cost 13 points.
3) **Realistic Jetpack I:** Steering with a rocket strapped to your back isn't exactly easy. Add Increased Turn Mode (Flight with the Jetpack always has a +4m Turn Mode; -¼). Total cost: 17 points.
4) **Realistic Jetpack II:** Unfortunately, the Jetpack can be dangerous to the user. If it takes even a single point of BODY damage past its defenses from an energy attack (or any other attack that could ignite the fuel), it bursts into flame, causing the user to take 2d6 damage every Phase (no defense) until the flames are extinguished. You can represent this with a -¼ Limitation. Total cost: 17 points.
5) **Realistic Jetpack III:** The character has to keep at least one hand on the Jetpack's controls at all times. Add Gestures (throughout; -½). Total cost: 15 points.
6) **Experimental Jetpack:** Miniaturizing a rocket to fit into a backpack and not become hot enough to burn the wearer is difficult; as a result, sometimes the rocket stops working. Add Activation Roll 14- (-¼). Total cost: 17 points.
7) **Self-Powered Jetpack:** Instead of using fuel, this form of the Jetpack draws on the character's own energy. Remove Charges (-0). Total cost: 20 points.
8) **Jet-Staff:** Instead of being a worn backpack-like device, this is a metallic staff that projects a rocket blast, graviton manipulation wave, or the like out of the bottom end so the person holding it can fly. Change OIF (-½) to OAF (-1) and add Gestures (throughout; -½). Total cost: 12 points.
9) **Mach Speed Jetpack:** This powerful form of the Jetpack allows a character to fly at extremely high speeds, possibly Mach 10 or higher (assuming he has the ability to breathe at that speed, and resist the G-forces generated). Add MegaScale (1m = 1 km; +1). 60 Active Points; total cost 40 points.

LINEGUN

Effect: Swinging 40m and other powers
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies
Breakability: 6 PD/6 ED

Description: A linegun is a device of some sort — usually pistol-like, but possibly built into a billy club, bracer, or similar device — that can project a thin, strong line of cord. It's primarily a transportation device, since it allows the character to swing, hoist himself up to rooftops, and so on, but can also be used as a winch or bolo.

Game Information:

Cost	Power
15	**Linegun:** Multipower, 30-point reserve; all OAF (-1)
1f	**1) Swingline I:** Swinging 40m, x4 Noncombat; OAF (-1)
1f	**2) Swingline II:** Leaping 40m (20m upward); OAF (-1), Only To Carry User Upward (-½), No Non-Combat Multiple (-¼)
1f	**3) Swingline III:** +5 to Climbing; OAF (-1)
1f	**4) Winch:** Telekinesis (10 STR); OAF (-1), Only To Pull Objects Towards User (-½), Affects Whole Object (-¼), Limited Range (30m; -¼)
1f	**5) Bola-Line:** Entangle 3d6, 3 PD/3 ED; OAF (-1), Lockout (cannot use Linegun's other powers until Charge is recovered; -½), Limited Range (30m; -¼), 1 Recoverable Charge (-1 ¼)

Total cost: 20 points

Options:

1) **Line-Bracer:** This form of the Linegun isn't so easy to take away from the character. Change to OIF (-½) throughout. Total cost: 26 points.

MECHANO-STILTS

Effect: Stretching 40m plus Running +20m
Target: Self
Duration: Constant
Range: Self
END Cost: 0/2
Breakability: 12 PD/12 ED

Description: This device is a set of retractable tubes that fit over the wearer's legs and function like mechanized stilts. They can extend up to 40m, allowing the character to reach objects far off the ground and walk at incredible speed (he gains +1m Running for every 2m of Stretching he uses). If he positions himself properly, he can also kick distant targets (sometimes by fully retracting one stilt, aiming his leg at the target, and then extending the stilt so it smashes right into the target).

The *Limited Body Parts* Limitation receives a higher value for this power than it normally does, since the ability to Stretch only the legs is much less useful than the ability to Stretch just the hands or arms.

Game Information: Stretching 40m, Reduced Endurance (0 END; +½) (60 Active Points); OIF (-½), Always Direct (-¼), No Noncombat Stretching (-¼), Limited Body Parts (legs only; -1) (total cost: 20 points) plus Running +20m (32m total) (20 Active Points); OIF (-½), Linked (-½) (total cost: 10 points). Total cost: 30 points.

Options:

1) **Long Stilts:** Increase to Stretching 48m and Running +24m. 72 + 24 = 96 Active Points; total cost 24 + 12 = 36 points.
2) **Short Stilts:** Decrease to Stretching 32m and Running +16m. 48 + 16 = 64 Active Points; total cost 16 + 8 = 24 points.
3) **Realistic Stilts:** Walking on 130 foot-tall stilts, much less fighting in them, requires special training. Add Requires A Power: Use Mechano-Stilts Roll (-½) to both powers. Total cost 17 + 8 = 25 points.
4) **Experimental Stilts:** The technology required to make the Mechano-Stilts work is still experimental; sometimes they don't activate properly, or spontaneously retract without warning. Add Activation Roll 14- (-¼). Total cost 18 + 9 = 27 points.

ROCKETBOARD

Effect: Flight 40m, Only In Contact With A Relatively Smooth Solid Surface
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 10 PD/10 ED

Description: This super-tech skateboard not only travels with microjet-assisted speed, it has special tires that let it ride straight up walls! With a rocketboard beneath his feat, there's almost nowhere a character can't go in an urban environment (but the board won't work on rough surfaces, include bare or plant-covered earth in most circumstances, or on any surface less firm than loosely-packed earth). The GM may require a PS: Skateboarding roll if the character wants to perform unusual stunts, like wall-riding or jumps.

Game Information: Flight 40m, Reduced Endurance (½ END; +¼) (50 Active Points); OAF (-1), Only In Contact With A Relatively Smooth Solid Surface (-¼). Total cost: 22 points.

Options:

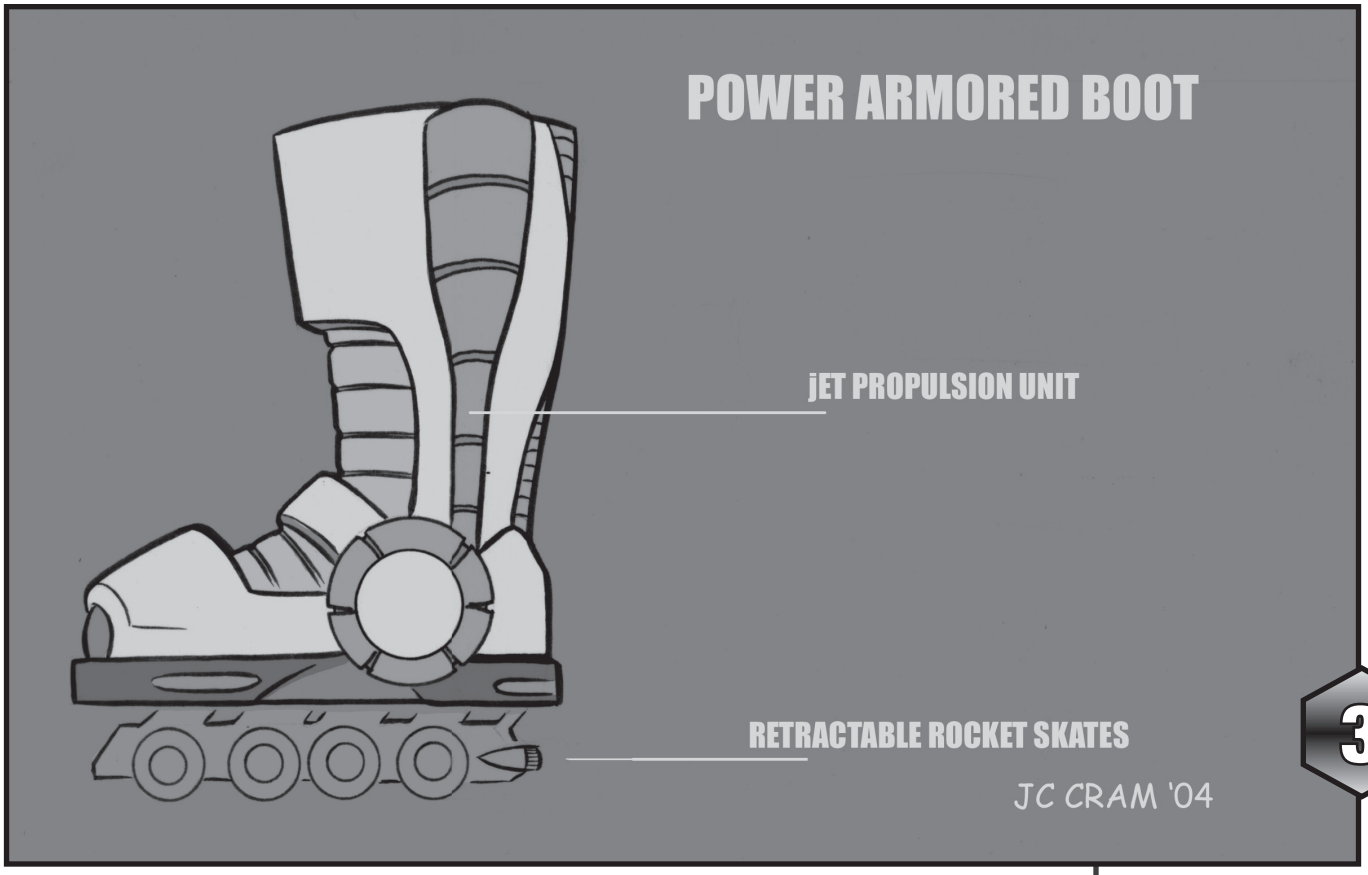
1) **Faster Rocketboard I:** Increase to Flight 50m. 62 Active Points; total cost 27 points.
2) **Faster Rocketboard II:** Add x4 Noncombat. 56 Active Points; total cost 25 points.
3) **Slower Rocketboard:** Decrease to Flight 30m. 37 Active Points; total cost 16 points.
4) **Realistic Rocketboard I:** This form of Rocketboard moves quickly along the ground, but cannot climb walls or the like. Change to Running 40m, Reduced Endurance (½ END; +¼) (50 Active Points); OAF (-1), Does Not Add To Base Running (-¼), Only On Appropriate Terrain (-¼). Total cost: 20 points.
5) **Realistic Rocketboard II:** The rocketboard has a small supply of high-efficiency fuel; once it's used up, the wearer has to refuel it before he can ride again. Add 1 Continuing Fuel Charge (30 seconds, Difficult to obtain fuel; -1). Total cost: 15 points.
6) **Realistic Rocketboard III:** Riding a rocketboard is difficult; many users lose their balance and fall off... then watch helplessly as the Rocketboard zooms away from them. Add Requires A DEX Roll (-½) and Side Effects (character falls to the ground and loses the rest of his Phase, but the rocketboard keeps traveling in the same direction for the rest of the Segment, plus 1d6 more Phases [at the character's SPD] or until stopped; -½). Total cost: 15 points.
7) **Experimental Rocketboard:** Unfortunately, this form of the Rocketboard doesn't always work properly... which can really be a problem if the character's several stories up a wall when the engine conks out. Add Activation Roll 14- (-¼). Total cost: 20 points.
8) **Armed Rocketboard:** The character's Rocketboard mounts a small rack of mini-missiles that it can fire at targets directly in front of it. Character also buys RKA 3d6 (20m Radius Explosion; +½) (67 Active Points); OAF (-1), Limited Arc Of Fire (2m wide Line, only on same horizontal level as Rocketboard; -1), 4 Charges (-1). Total cost: 17 points.

ROCKET FLYER

Effect: Flight 40m, No Turn Mode
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge
Breakability: 10 PD/10 ED

Description: This flight device is, essentially, a jet engine the character can ride by standing on it or straddling it. The character steers it through posture and body attitude, making it extremely maneuverable — it can literally turn on a dime when operated by a trained user. The downside is that it's relatively easy to misdirect the device or take it away from the rider.

The designer can make this device look like any sort of flying creature or object: a bat; a bird of prey; a V-wing; a pterosaur; or the like. The chosen appearance usually depends on the character's costume, name, or powers.



Game Information: Flight 40m, No Turn Mode (+¼) (50 Active Points); OAF (-1), 1 Continuing Fuel Charge lasting 2 Hours (requires specially-refined jet fuel, Difficult to obtain; -0). Total cost: 25 points.

Options:

1) **Faster Rocket Flyer I:** Increase to Flight 50m. 62 Active Points; total cost 31 points.
2) **Faster Rocket Flyer II:** Add x4 Noncombat. 56 Active Points; total cost 28 points.
3) **Slower Rocket Flyer:** Decrease to Flight 30m. 37 Active Points; total cost 18 points.
4) **Realistic Rocket Flyer I:** It takes training and skill to ride a Rocket Flyer. Add Requires A PS: Operate Rocket Flyer Roll (-¼). Total cost: 22 points.
5) **Realistic Rocket Flyer II:** Though the Rocket Flyer is self-powered, riding and steering one takes a lot out of the user. Add Costs Endurance (-½). Total cost: 20 points.
6) **Realistic Rocket Flyer III:** One of the major problems with using the Rocket Flyer in combat is that if the rider takes Knockback, he often gets knocked off the Flyer! Add Side Effects (if character takes Knockback, must make a DEX Roll at -1 per full 4m of Knockback or he falls off the Flyer; -¼). Total cost: 22 points.
7) **Experimental Rocket Flyer:** Unfortunately, miniaturizing a jet engine for riding purposes requires some technological innovations that don't always function properly. Add Activation Roll 14- (-¼). Total cost: 22 points.
8) **Armed Rocket Flyer:** The character's Rocket Flyer mounts a small rack of mini-missiles that it can fire at targets directly in front of it. Character also buys RKA 3d6 (20m Radius Explosion; +½) (67 Active Points); OAF (-1), Limited Arc Of Fire (2m wide Line, only on same horizontal level as Rocket Flyer; -1), 4 Charges (-1). Total cost: 17 points.
9) **Fuel Cell:** This form of the Rocket Flyer has a built-in fuel cell or other power source that never needs replenishing. Remove 1 Continuing Fuel Charge (-0). Total cost: 25 points.
10) **Smokescreen Generator:** The Rocket Flyer has a smokescreen generator mounted in back so that its exhaust blinds and confuses anyone who tries to follow. Character also buys Darkness to Sight Group 20m radius (40m long and 4m wide Line; +¼) (125 Active Points); OAF (-1), No Range (-½), Limited Arc Of Fire (0 Degrees behind Rocket Flyer, only on same horizontal level; -1), 4 Charges lasting 1 Turn each (-½). Total cost: 31 points.
11) **Bladed Flyer:** The Rocket Flyer has some sharp edges or points, or comes equipped with bladed edges, so that the rider can kill people by flying past or into them. Character also buys HKA 1d6 (15 Active Points); OAF (-1), No STR Bonus (-½), Only Works With Move By/Through (-½). Total cost: 5 points.

ROCKETSKATES

Effect: Flight 20m, Only In Contact With A Relatively Smooth Solid Surface
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 4 PD/4 ED

Description: When the character activates these boots, small wheels drop out of the soles, and tiny jet engines project from the back of the heel. He can then rocket-skate along the ground much more quickly than he could run. (See also Powered Armor Rocketskates, page 265.)

Game Information: Flight 20m (20 Active Points); OIF (-½), Only In Contact With A Relatively Smooth, Flat, Solid Surface (-½). Total cost: 10 points.

Options:

1) **Faster Rocketskates:** Increase to Flight 28m. 28 Active Points; total cost 14 points.
2) **Slow Rocketskates:** Decrease to Flight 12m. 12 Active Points; total cost 6 points.
3) **Realistic Rocketskates I:** Maintaining one's footing while wearing Rocketskates is difficult; many users fall down before they really get going. Add Requires A PS: Use Rocketskates Roll (-¼), Side Effects (character falls down 1d6 meters into his movement and loses the rest of his Phase; -¼). Total cost: 8 points.
4) **Realistic Rocketskates II:** The Rocketskates have a small supply of high-efficiency fuel; once it's used up, the wearer has to refuel them before he can skate again. Add 1 Continuing Fuel Charge (30 seconds, Difficult to obtain fuel; -1). Total cost: 7 points.
5) **Experimental Rocketskates:** Sometimes the Rocketskates don't work properly; the wheels fail to drop or the jets sputter ineffectually. Add Activation Roll 14- (-¼). Total cost: 9 points.

SPACE IMPELLER

Effect: FTL Travel (1 LY/2 hours)
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 7 PD/7 ED

Description: This device is a backpack-like module that generates a field that allows the wearer to travel at thousands of times the speed of light — fast enough to travel from Earth to Alpha Centauri in about eight hours. It also generates a force-field around him that shields him from the harmful effects of space.

Game Information: FTL Travel (1 LY/2 hours) (34 Active Points); OIF (-½) (total cost: 23 points) plus Life Support (Self-Contained Breathing; Safe Environments: High Radiation, Intense Cold, Intense Heat, Low Pressure/Vacuum) (18 Active Points); OIF (-½) (total cost: 12 points). Total cost: 35 points.

Options:

1) **Faster Space Impeller:** Increase to FTL Travel (1 LY/hour). 36 + 18 = 54 Active Points; total cost 24 + 12 = 36 points.
2) **Slower Space Impeller:** Decrease to FTL Travel (1 LY/8 hours). 30 + 18 = 48 Active Points; total cost 20 + 12 = 32 points.
3) **Realistic Space Impeller:** Though the Space Impeller is self-powered, using one takes a lot of the user. Add Costs Endurance (-½) to FTL Travel. Total cost: 17 + 12 = 29 points.
4) **Grabbable Space Impeller:** This form of Space Impeller isn't worn; it's held in the hands; it resembles a bizarre-looking set of bicycle handles, or the like. Change OIF (-½) to OAF (-1). Total cost: 17 + 9 = 26 points.

SPRINGBOOTS

Effect: Leaping +40m
Target: Self One character
Duration: Constant
Range: Self
END Cost: 2
Breakability: 4 PD/4 ED

Description: These boots have electronically-augmented springs on the bottom of the soles, allowing the wearer to leap prodigious distances. (See also *Powered Armor Springboots,* page 265.)

Game Information: Leaping +40m (20 Active Points); OIF (-½). Total cost: 13 points.

Options:

1) **Stronger Boots I:** Increase to Leaping +60m. 30 Active Points; total cost 20 points.
2) **Stronger Boots II:** Increase to x4 Noncombat. 25 Active Points; total cost 17 points.
3) **Weaker Boots:** Decrease to Leaping +24m. 12 Active Points; total cost 8 points.
4) **Accurate Boots:** These boots have a built-in guidance system to ensure the wearer always lands where he intends to. Add Accurate. 25 Active Points; total cost 17 points.
5) **Experimental Boots:** Sometimes the Springboots don't quite have the spring. Add Activation Roll 14- (-¼). Total cost: 11 points.
6) **Compressed Airjet Boots:** This form of the boots uses jets of compressed air instead of springs to enhance the wearer's ability to leap. Add 12 Charges (-¼). Total cost: 11 points.
7) **Jumpboots:** Instead of using springs, this form of boots has small rockets that aren't strong enough to allow for true flight, but do assist the wearer's leaping. Increase to x4 Noncombat and add 12 Charges (-¼). Total cost: 14 points.

SUBMARINE IMPELLER

Effect: Swimming +16m, Only When Fully Underwater
Target: Self
Duration: Constant
Range: Self
END Cost: 1
Breakability: 2 PD/2 ED

Description: This device, worn on the back similar to a Jetpack, uses tiny propellers to drive the wearer through the water much faster than he can swim naturally.

Game Information: Swimming +16m (8 Active Points); OIF (-½), Only Works When Wearer Is Fully Underwater (-0). Total cost: 5 points.

Options:

1) **Strong Impeller:** Increase to Swimming +24m. 12 Active Points; total cost 8 points.
2) **Weak Impeller:** Decrease to Swimming +10m. 5 Active Points; total cost 3 points.
3) **Realistic Impeller:** The Impeller requires fuel. Add 1 Continuing Fuel Charge lasting 1 Hour (gasoline, Easy to obtain; -0). Total cost: 5 points.
4) **MHD Impeller:** Instead of having propellers, this Impeller uses magnetohydrodynamic technology to move the wearer swiftly and silently. Add Invisible To Hearing Group (+¼). 10 Active Points; total cost 7 points.
5) **Grabbable Impeller:** Some types of Impeller aren't built as backpacks, but as large objects the user has to hold onto with at least one hand. Change OIF (-½) to OAF (-1) and add Gestures (throughout; -½). Total cost: 3 points.

SUPERCHUTE

Effect: Flight 16m, Gliding, Limited Movement (downward only)
Target: Self
Duration: Constant
Range: Self
Charges: 1 Recoverable Continuing Charge
Breakability: 3 PD/3 ED

Description: This device is similar to a standard parachute, but with two important differences. First, it's much smaller; a character could wear it underneath a cape without distorting the cape's lines significantly. Second, it allows for a more rapid descent and greater maneuverability than standard parachutes.

Game Information: Flight 16m (16 Active Points); OAF (-1), Gliding (-1), Limited Movement (character cannot gain altitude, and must move at least 12m downward for every 2m forward; -¼), 1 Recoverable Continuing Charge (lasts until character hits the ground or 'chute is fouled; -¾). Total cost: 4 points.

Options:

1) **Strong Superchute:** Increase to Flight 20m. 20 Active Points; total cost 5 points.
2) **Weak Superchute:** Decrease to Flight 12m. 12 Active Points; total cost 3 points.
3) **Experimental Superchute:** Sometimes the Superchute fails to open.... Add Activation Roll 14- (-¼). Total cost: 4 points.

TELEPORTATION CAPE

Effect: Teleportation 60m
Target: Self plus one person
Duration: Instant
Range: Self
END Cost: 6
Breakability: 13 PD/13 ED

Description: This voluminous cape is interwoven with circuitry that allows it to open a small dimensional portal. The wearer of the cape, and possibly also one other person who he wraps the cloak around, get carried through the portal and then ejected back into this dimension at another point within 60m of where they started. The trip stresses the metabolism of the cloak's wearer, tiring him out.

Game Information: Teleportation 60m, x2 Increased Mass (65 Active Points); OAF (-1). Total cost: 32 points

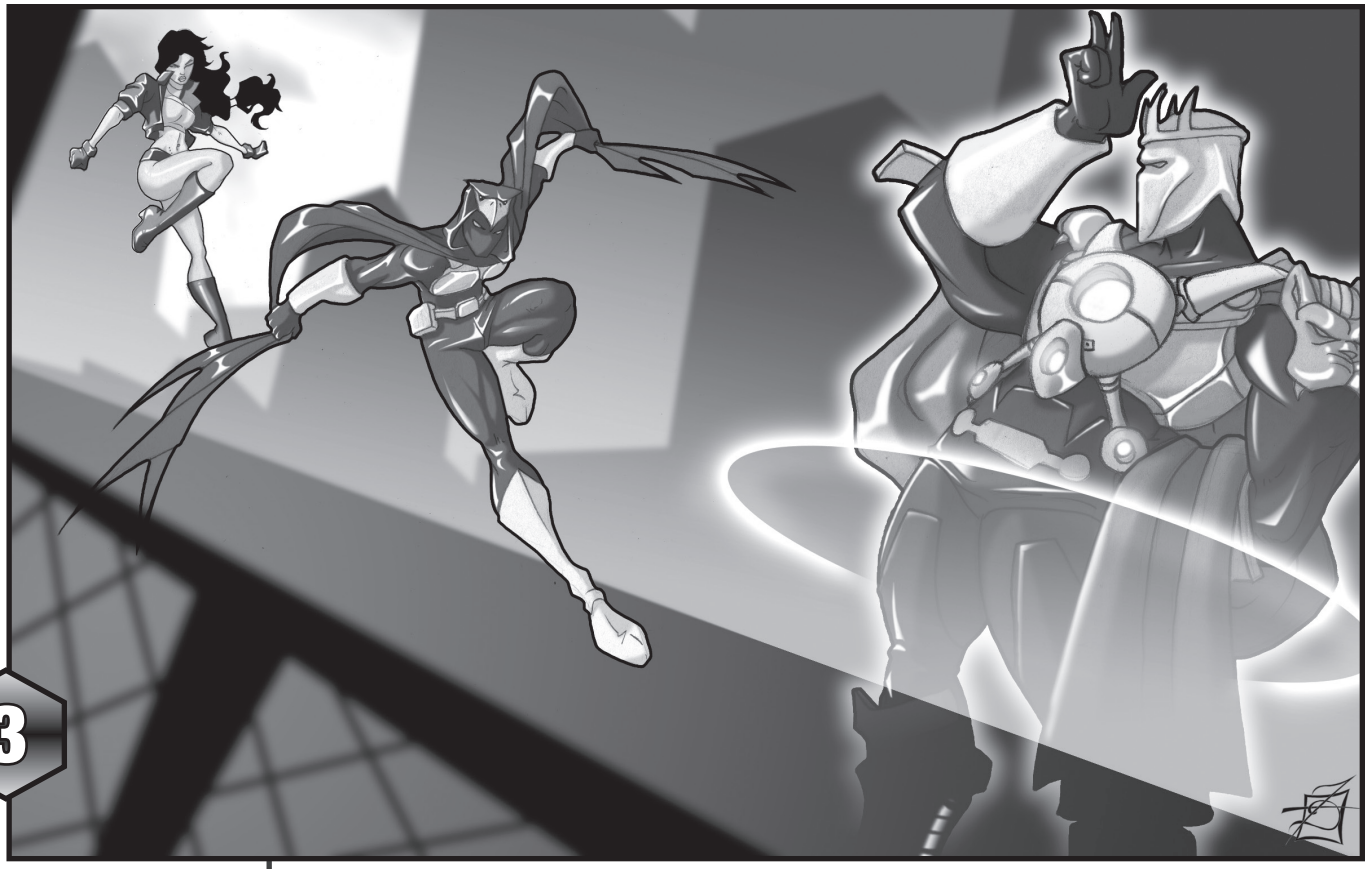
Options:

1) **Farther Teleportation:** Increase to Teleportation 80m. 85 Active Points; total cost 42 points.
2) **Shorter Teleportation:** Decrease to Teleportation 40m. 45 Active Points; total cost 22 points.
3) **Experimental Teleportation Cape:** Unfortunately, the Teleportation Cape is an experimental device; it doesn't always work. Add Activation Roll 11- (-½). Total cost: 26 points.
4) **Onboard Battery:** The cape has a built-in battery so that using it doesn't tire the wearer out. Add 12 Charges (-¼). Total cost: 29 points.
5) **MegaPortation Cape:** The cape can not only carry the wearer (and his passenger) short distances, it can transport them up to 300 kilometers if necessary. Change to:

Cost	Power
39	**Teleportation Cape:** Multipower, 79-point reserve; all OAF (-1)
3f	**1) Standard Teleportation:** Teleportation 60m, x2 Increased Mass; OAF (-1)
4f	**2) Long-Distance Teleportation:** Teleportation 30m, x2 Increased Mass, MegaScale (1m = 10 km; +1¼); OAF (-1)

Total cost: 46 points.

6) **Small Teleportation Cape:** This form of the cape isn't large enough to carry another person along. Remove x2 Increased Mass. 60 Active Points; total cost 30 points.



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TELEPORTATION CORRIDOR GENERATOR

Effect: Teleportation 80m (or 20m MegaScaled)
Target: Self
Duration: Instant
Range: Self or Touch
END Cost: 8
Breakability: 16 PD/16 ED

Description: This strange device, possibly the product of highly-advanced alien science, is an object about the size of a large grapefruit; usually it's a sphere or a cube. It may be monochromatic, polychromatic, or carved/engraved/painted with elaborate decorations. It has the ability to open a "hyperspace corridor" and move the holder through it, thus transporting him instantly over billions of kilometers.

Game Information:

Cost	Power
45	**Teleportation Corridor Generator:** Multipower, 90-point reserve; all OAF (-1)
4f	1) **Standard Corridor:** Teleportation 80m; OAF (-1)
4f	2) **Long-Distance Corridor:** Teleportation 20m, MegaScale (1m = 10 billion km; +3½); OAF (-1)

Total cost: 53 points.

Options:

1) **Realistic Generator:** The Generator's energy supply isn't infinite; the owner can only use it so many times per day. Add 12 Charges for entire Multipower (-¼). Total cost: 48 points.
2) **Experimental Generator:** The device's function is not fully understood; sometimes it fails to work for unknown reasons. Add Activation Roll 14- (-¼) to reserve and both slots. Total cost: 47 points.
3) **Group Corridor:** The user of the device can carry up to another 700 kg worth of persons or goods with him. Increase Multipower reserve to 157 points and add x8 Increased Mass to both slots. Total cost: 91 points.
4) **Attached Generator:** Instead of being a held object, the Generator is built into a suit of powered armor or other device that's not so easy to take away from the character. Change OAF (-1) to OIF (-½) throughout. Total cost: 71 points.
5) **All Space And Time:** This form of the device can also send the user to other dimensions, or allow him to travel through time. Add a slot, Extra-Dimensional Movement (any location in any dimension, and any point in time). Total cost of slots 2f and 4f, total cost of device 59 points.

TELEPORTATION DISKS

Effect: Teleportation 40m, x250 Noncombat, Only To Floating Fixed Locations
Target: Self
Duration: Instant
Range: Self
Charges: 4 Recoverable Charges
Breakability: 15 PD/15 ED

Description: This device is a set of four disks about the size of a human hand. Each contains powerful teleportation technology cybernetically linked to the owner's bio-signature (or the like). The user places a disk in a place he thinks he might want to Teleport to; the Disk is a Floating Fixed Location. When the user activates a Disk by cybernetic command, the Disk Teleports him to itself (he has to be within 10 kilometers of it, or about six miles, for this to work). After Teleporting, the character can retrieve a Disk for later placement, or leave it where it is for the time being.

If a character wants to Teleport in a situation where he hasn't had time to place any Disks, he can, with the GM's permission, throw a Disk into a target area; this counts as an Attack Action. He can then activate the Disk on his next Phase to Teleport to it. Each Disk weighs .25 kg for these purposes.

Game Information:

Cost	Power
25	**Teleportation Disks:** Teleportation 40m, x250 Noncombat (about 6 miles) (75 Active Points); OAF (-1), Only To Floating Fixed Locations (-½), 4 Recoverable Charges (-½)
10	**Teleportation Disks:** Four Floating Fixed Locations; OAF (-1)

Total cost: 35 points.

Options:

1) **Strong Disks I:** Increase to x4,000 Noncombat (about 100 miles) (95 Active Points for Teleportation). Total cost: 32 + 10 = 42 points.
2) **Strong Disks II:** Increase to x32,000 Noncombat (about 800 miles) (110 Active Points for Teleportation). Total cost: 37 + 10 = 47 points.
3) **Strong Disks III:** Increase to x500,000 Noncombat (about 12,400 miles) (130 Active Points for Teleportation). Total cost: 43 + 10 = 53 points.
4) **Weak Disks:** Decrease to x64 Noncombat (about 1.6 miles) (65 Active Points for Teleportation). Total cost: 22 + 10 = 32 Active Points.
5) **Experimental Disks:** Teleportation technology is often fickle, especially when crammed into as small a device as this. Add Activation Roll (11-; -½). Total cost: 21 + 8 = 29 points.
6) **More Disks:** Increase to 8 Recoverable Charges (-0). Total cost: 30 + 10 = 40 points.

TELEPORTATION HARNESS

Effect: Teleportation 40m
Target: Self
Duration: Instant
Range: Self
END Cost: 4
Breakability: 8 PD/8 ED

Description: This device, worn as part of a costume or perhaps even woven into the fabric of a costume or article of clothing (see option 5), can breach the dimensional barrier and transport the character up to 40m without his having to physically cross the intervening space.

Game Information: Teleportation 40m (40 Active Points); OIF (-½). Total cost: 27 points.

Options:

1) **Strong Harness I:** Increase to Teleportation 50m. 50 Active Points; total cost 33 points.
2) **Strong Harness II:** Add x4 Noncombat. 45 Active Points; total cost 30 points.
3) **Weak Harness:** Decrease to Teleportation 30m. 30 Active Points; total cost 20 points.
4) **Experimental Harness:** Sometimes the fragile, cutting-edge systems of the Harness don't work right. Add Activation Roll 14- (-¼). Total cost: 23 points. (At the GM's option, a failed Activation Roll might still result in Teleportation — just to a location very different from the one the character intended....)
5) **Inobvious Harness:** This form of the Harness is worked into clothing or a costume, concealing it — as far as most observers can tell, the character's Teleportation power is natural, not the result of technology. Change OIF (-½) to IIF (-¼). Total cost: 32 points.
6) **Damageable Harness:** This form of the Harness is so fragile and easy for an opponent to grab that it's easy for someone to take it away from him or deny him the use of it. Change OIF (-½) to OAF (-1). Total cost: 20 points.
7) **Let's Go For A Ride:** The character can take one human-sized person along with him by wrapping his arms around that person. Add x2 Increased Mass. 45 Active Points; total cost 30 points.
8) **Built-In Battery I:** The Harness has a built-in battery and operates so smoothly that using it doesn't tire the character out at all. Add Reduced Endurance (0 END; +½). 60 Active Points; total cost 40 points.
9) **Built-In Battery II:** The Harness has an internal power source strong enough to operate it eight times before it needs recharging. Add 8 Charges (-½). Total cost: 20 points.
10) **Long-Range Harness:** The Harness can also transport the wearer over long distances. Add

MegaScale (1m = 1 km; +1). 80 Active Points; total cost 53 points.

11) **Panic Ring:** A "Panic Ring" is a form of Teleportation Harness that's usually built into a ring (or similar piece of jewelry). It allows the character to Teleport great distances, but only once per day... and only to a specific, predefined location. Master villains usually use them to escape to a hideout or other place of safety when their plans go awry and the heroes are about to capture them, hence the name. Here's an example of one: Teleportation 40m, MegaScale (1m = 1,000 km; +1¾), Invisible To Tracing (other characters cannot track the "teleportation beam" back to its source; +¼), Trigger (mental command, activating Trigger takes no time; +½) (130 Active Points); IIF (-¼), Can Only Teleport To Fixed Location (-1), 1 Charge (-2) (total cost: 30 points) plus Fixed Location (defined when Ring is purchased) (1 Active Point); IIF (-¼) (total cost: 1 point). Total cost: 31 points.

12) **Supervillain Getaway Teleporter:** Similar to a Panic Ring, this device gives ulcers to superheroes. It's a small apparatus, concealed on a supervillain's costume, that automatically teleports him to a predefined location from one to twenty kilometers away when certain conditions are met. Those conditions include the villain speaking a certain keyword or not subvocalizing a word at least once per thirty seconds after speaking another keyword indicating imminent danger. Teleportation 20m, MegaScale (1m = 1 km; +1), Trigger (Trigger can change each time power is used, activating Trigger takes no time, Trigger requires 1 Turn to reset; +¼) (45 Active Points); IIF (-¼), 1 Charge (-2) (total cost: 14 points) plus 1 Floating Fixed Location (5 Active Points); IIF (-¼) (total cost: 4 points). Total cost: 18 points.

WING HARNESS

Effect: Flight 24m, Restrainable
Target: Self
Duration: Constant
Range: Self
END Cost: 2
Breakability: 5 PD/5 ED

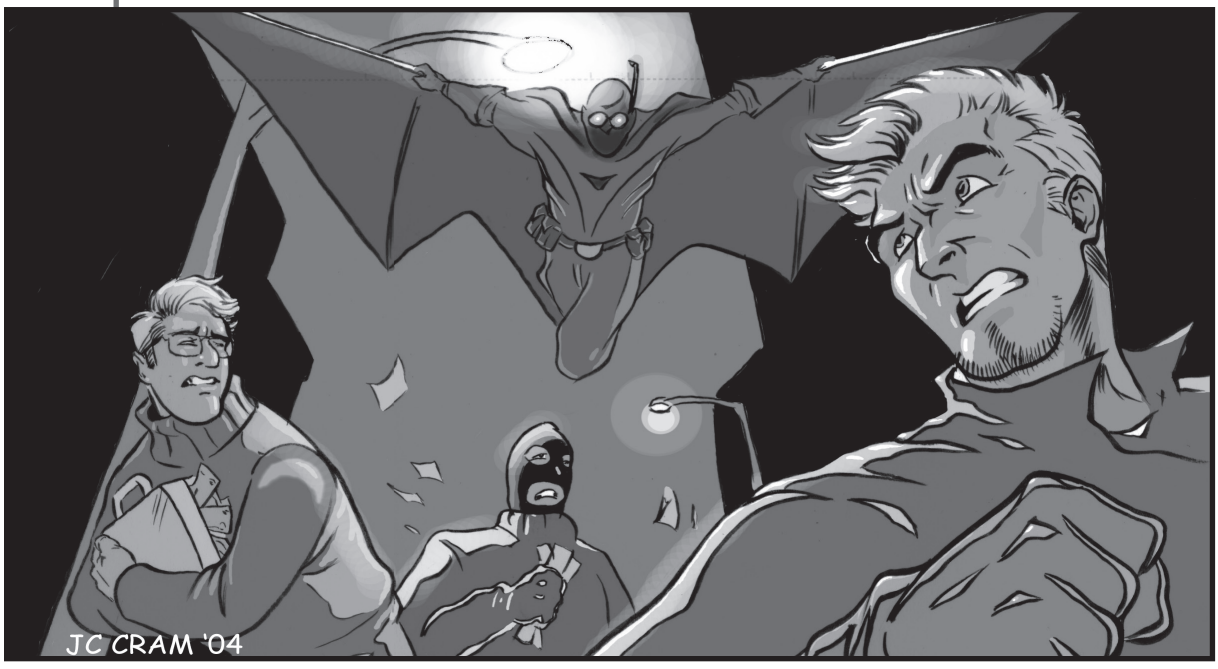
Description: This device is a vest-like harness with technological wings built into the back; it lets the wearer fly like a bird. You can also use this write-up for "jetpacks" that work not through rocketry but by deploying a set of wings, such as some insect- or bird-themed characters might wear.

This device is a rare example of a gadget that has both the *Focus* and *Restrainable* Limitations. In most cases, it's just as easy to interfere with as if it were an Accessible Focus, but it can't be taken away from the character unless someone spends a Turn removing it.

Game Information: Flight 24m (24 Active Points); OIF (-½), Restrainable (-½). Total cost: 12 points.

Options:

1) **Strong Harness:** Increase to Flight 30m. 30 Active Points; total cost 15 points.
2) **Weak Harness:** Decrease to Flight 18m. 18 Active Points; total cost 9 points.
3) **Experimental Harness:** Because they're made with experimental technology, sometimes the Harness's wings lock up, which may cause real problems if the character's in midair.... Add Activation Roll 14- (-¼). Total cost: 11 points.



CHAPTER FOUR

SENSORY AND COMMUNICATIONS EQUIPMENT

MODERN SENSORS & COMMUNICATIONS

Sometimes he who perceives the enemy first lives longest. These devices help characters perform reconnaissance, communicate with each other, detect enemies and other threats, and in general perceive the world around themselves.

COMMUNICATIONS GEAR

A group of Modern characters — such as a team of PC heroes — needs a way to stay in touch with each other. Proper battlefield communications often contributes more to winning battles and ensuring the success of a mission than heavy firepower or the best body armor.

RADIO

Effect: Radio Perception/Transmission
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: The typical communications gear for the modern era is the radio, which characters can buy in several different forms, as described below.

Game Information:

Radio Handset: Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 4 points.

Radio Headset: Radio Perception/Transmission (Radio Group) (10 Active Points); OIF (-½), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 6 points.

Concealed Radio Headset: Radio Perception/Transmission (Radio Group) (10 Active Points); IIF (-¼), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 7 points.

Options:

1) **Advanced Radios:** In campaigns focusing on advanced technology, the GM might allow characters to substitute High-Range Radio Perception for Radio Perception/Transmission:

   HRRP Handset: HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 5 points.

   HRRP Headset: HRRP (Radio Group) (12 Active Points); OIF (-½), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 7 points.

   Concealed HRRP Headset: HRRP (Radio Group) (12 Active Points); IIF (-¼), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 8 points.

2) **Cell Phones:** Alternately, in a game that takes place in an urban area, characters may rely on cellular phones instead of radios. Many modern cell phones allow characters to send images as well as sound. (However, as noted on 6E1 32, many GMs let characters have such mundane equipment for free, but free gear is easier for a character to lose.)

   Cellular Phone: HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½), Cellular Phone-Band Communications Only (-1), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 3 points.

ENCRYPTED COMMUNICATIONS

Sometimes the ability to communicate doesn't do characters much good if they can't conceal what they're saying. In the *HERO System,* there are several ways to represent encrypting and decrypting transmissions:

CONCEALED

The first is to apply the *Concealed* Sense Modifier to the Sense doing the transmitting. In this case the special effect of the Sense Modifier could be one of two things: either "the transmission cannot be detected" (which is what Concealed is normally used for); or "even if detected, the

transmission cannot be understood." The end result is the same — the enemy doesn't have a transmission he can comprehend (though in the latter case, intercepting the transmission may be enough for the enemy to determine the point of transmission). Decrypting this sort of encryption requires decoding equipment built with an Enhanced Sense that can "perceive" through the encryption. If a character buys a set of radios (or the like) which all have Concealed, it's safe to assume each of them can understand (decrypt) the transmissions of the others — the encryption/decryption process is programmed or hardwired into the devices.

Encrypted Radio Handsets: *Radio Perception/Transmission (Radio Group), Concealed (-5 to Radio Group PER Rolls), Usable Simultaneously (up to eight persons at once; +1) (30 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 13 points.*

Improved Encrypted Radio Handsets: *Radio Perception/Transmission (Radio Group), Concealed (-10 to Radio Group PER Rolls), Usable Simultaneously (up to eight persons at once; +1) (40 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 18 points.*

Alternately, instead of relying on the fallible (but more "realistic") Concealed, characters can buy Invisible Power Effects (invisible to tracing) for their radios. That way, no matter how much an enemy's Systems Operation roll succeeds by, he won't be able to perceive the transmission (he may not receive it at all, or at best it sounds like meaningless static from which he can determine nothing).

Ultimate Encrypted Radio Handsets: *Radio Perception/Transmission (Radio Group), Invisible To Tracing (+¼), Usable Simultaneously (up to eight persons at once; +1) (22 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 10 points.*

LANGUAGE VARIABLE POWER POOL

Another way to scramble transmissions is a Variable Power Pool for Languages. Only a person with another radio device, programmed with the same "language," can understand what's being sent. This method requires the GM's permission, since characters can't buy Skills in Power Frameworks without the GM's approval — but since this is an intriguing, fun, and not especially abusive construct, most GMs allow it.

To encrypt a transmission, the characters simply agree on which Language their radios will use. They don't necessarily have to be real languages; the characters can simply call them Language A, Language B, and so on. Identifying the language precisely doesn't matter; the Languages are just a way to represent the special effect of "encrypted communications" in *HERO System* terms.

The Language VPP method is cheap and easy, but it has some drawbacks. A successful Cryptography roll can decrypt a scrambler "language,"

but the users can counter the cryptographer by changing the computer-generated "language" at frequent intervals. This constitutes changing the Pool and requires 1 Minute. To change the Pool in just a Full Phase, the character must buy a Skill to do so, though GMs could let characters use Cryptography or Systems Operation instead of making them buy a separate Skill.

Radio Handset with Scrambled Transmission Option: *Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0) (total cost: 4 points) plus Variable Power Pool (Scrambler Pool), 4 Pool + 4 Control Cost; OAF (-1), Only For One Language At A Time (-1), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0) (total cost: 5 points). Total cost: 9 points.*

This sort of scrambling is also vulnerable to certain types of decryption equipment. In game terms, you can represent that equipment with Universal Translator that Requires A Systems Operation Roll.

MIND LINK

Another way to create a closed, untappable communications system is Mind Link. The character defines the number of radios he has, and that tells him how many people he can communicate with at once. (Alternately, he can buy Mind Link to Link with one other person who has bought the same power.) For true privacy/encryption, leave the Mind Link as a Mental Power, meaning that only other characters with appropriate Mental Powers, or decryption devices built with those Mental Powers, can penetrate the communications net. More realistically, characters should apply the Limitation *Affected As Radio And Hearing Groups, Not Mental Group* (-½) — that way things like Darkness to the Radio Group can block their transmissions.

Closed Radio Link (Type 1): *Mind Link, specific group of up to any 8 minds, No LOS Needed (35 Active Points); OAF (-1), Affected As Radio And Hearing Groups, Not Mental Group (-½), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 14 points.*

Closed Radio Link (Type 2): *Mind Link, any one mind, No LOS Needed (25 Active Points); OAF (-1), Only Can Be Maintained With Others Who Have Mind Link (-1), Affected As Radio And Hearing Groups, Not Mental Group (-½), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0). Total cost: 7 points.*

CRYPTOGRAPHY

The fourth method is to give the radio equipment its own *Cryptography* Skill to represent its ability to encrypt its transmissions (and to decrypt those it receives, though as long as two users agree on the form of encryption the decryption is automatic). Decrypting this sort of encryption requires decoding equipment built with its own *Cryptography* Skill to crack the code in a Skill Versus Skill Contest; Systems Operation may serve as a Complementary Skill.

Radio Handset with Encryption System: *Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0) (total cost: 4 points) plus Cryptography 20- (25 Active Points); OAF (-1), Only To Encrypt/Decrypt Its Own Transmissions (-1), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0) (total cost: 8 points). Total cost: 12 points.*

SYSTEMS OPERATION

Similarly, a radio could be built with its own *Systems Operation* Skill. The character trying to send an encrypted transmission makes a Systems Operation roll to reflect his ability to hide/encrypt the transmission; a character trying to intercept the transmission makes a competing roll to locate/decrypt it. In either case, Computer Programming, Cryptography, and/or Electronics may act as Complementary Skills.

Radio Handset with Encryption System: *Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0) (total cost: 4 points) plus Systems Operation 20- (25 Active Points); OAF (-1), Only To Encrypt/Decrypt Its Own Transmissions (-1), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0) (total cost: 8 points). Total cost: 12 points.*

BATTLE CODES

Another way for characters to keep their communications secret is to develop their own unique language — a "battle code," if you will. When used with an encryption system, a unique language (or a very rare real-world one, such as Navajo) provides a double layer of security. However, it may be vulnerable to characters or equipment with the *Universal Translator* Talent.

SENSORY DEVICES

Sight Enhancement Gear

Mankind has long sought for ways to improve peoples' ability to see. Here are some Modern devices that do just that.

BINOCULARS

Effect: +6 versus the Range Modifier for Sight Group
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: Binoculars increase a character's ability to see over a distance by magnifying the subject viewed. They range from small versions (including monoculars) that provide only slight amplification, to larger military and hunting models that also have electronic readouts on distance, direction, and the like.

Game Information: +6 versus the Range Modifier for Sight Group (9 Active Points); OAF (-1). Total cost: 4 points.

Options:

1) **Large Binoculars:** Increase to +10 versus the Range Modifier for Sight Group (15 Active Points); OAF (-1) (total cost: 7 points) plus Absolute Range Sense (3 Active Points); OAF (-1) (total cost: 1 point) plus Bump Of Direction (3 Active Points); OAF (-1) (total cost: 1 point). Total cost: 9 points.

NIGHTSIGHT DEVICES

Effect: +2 to +4 to Sight Group PER Rolls, Only To Counteract Darkness Penalties
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge
Breakability: 2 PD/2 ED

Description: Nightsight devices, sometimes known as night vision devices (NVDs), allow a character to see at night by amplifying ambient light (such as starlight). The user, who suffers from a slightly decreased field of vision, sees the world in a monochrome green, but he can see much more clearly in darkened conditions than someone without such enhancement. A nightsight device also allows the user to see infrared light (not heat patterns; that requires a thermal vision device [see below]), and may have a short-range infrared "flashlight" attached to improve visibility, allow him to read maps, and so forth. However, an NVD won't function in total darkness (it needs light to amplify). Nightsight devices emit ultrasonic sound (which animals, and characters with proper equipment, can hear).

Nightsight devices come in three "generations," and the higher the generation, the more sophisticated (and expensive) the device. (As of mid-2010, a fourth generation is in development but has not yet been finalized by the US Army; it features greater sensitivity and the ability to instantly adapt to changing light conditions.) In campaigns featuring more advanced (perhaps fictionally advanced) technology, it may be possible to shrink these often bulky devices down to much smaller sizes — perhaps even to lenses that would fit in the eyeholes of a mask.

Game Information:

Nightsight Goggles (Generation 1): +2 to Sight Group PER Rolls (4 Active Points); OAF (-1), Only To Counteract Darkness Penalties (-½), Requires Ambient Light (it won't work in total darkness; -¼), Side Effect (character suffers a 2 x Effect Vulnerability to Sight Group Flashes based on bright light while looking through the scope, and may experience a minor Sight Group Flash from looking at a bright light, always occurs; -½), 1 Continuing Fuel Charge (battery, Easy to obtain; 3 Hours; -0) (total cost: 1 point) plus Detect Infrared Light (Sight Group) (3 Active Points); OAF (-1), Linked (-½), 1 Continuing Fuel Charge (battery, Easy to obtain; 3 Hours; -0) (total cost: 1 point). Total cost: 2 points.

Nightsight Goggles (Generation 2): As above, but +3 to Sight Group PER Rolls (6 Active Points for the first power). 9 Active Points; total cost 3 points.

Nightsight Goggles (Generation 3): As above, but +4 to Sight Group PER Rolls (8 Active Points for the first power). 11 Active Points; total cost 3 points.

Nightsight Goggles (Generation 4): As Generation 3, but remove the Side Effect (-½) (8 Active Points for the first power). 11 Active Points; total cost 4 points.

Infrared "Flashlight": Sight Group Images, +3 to PER Rolls (19 Active Points); OAF (-1), Limited Range (4m; -¼), Only To Create Infrared Light (-1½), 1 Continuing Fuel Charge (easily refueled, 1 Hour; -0). Total cost: 5 points.

SURVEILLANCE SCOPE

Effect: Adjacent for Normal Sight
Target: Self
Duration: Constant
Range: Limited Range (a few inches)
Charges: 1 Continuing Fuel Charge
Breakability: 4 PD/4 ED

Description: A surveillance scope is a viewing device consisting of a flexible fiber optic cable with a miniaturized camera on one end. The other end connects to a viewing system (a device similar in size and shape to a laptop computer or portable television set, or possibly smaller). The user can insert the cable under doors, through holes in walls, around corners, or the like to see into other areas without exposing himself to attack (or, in some cases, letting the persons being viewed know they're under surveillance). A similar device, the borescope, can be drilled through a wall or door to look beyond it (characters can also use borescopes to look inside locked briefcases and other closed objects without having to open them). The user can make a Stealth roll to keep the people under surveillance from detecting the scope's presence, if appropriate.

Game Information: Adjacent for Normal Sight (3 Active Points); OAF (-1), Limited Perspective (character has a limited range of vision when using scope; -¼), Limited Range (just a few inches; -¼), 1 Continuing Fuel Charge (battery, Easy to obtain; 1 Hour; -0). Total cost: 1 point.

Options:

1) **Nightsight Surveillance Scope:** Add Generation 1 nightsight device and increase to Adjacent for Sight Group. 12 Active Points; total cost 4 points.

THERMALVISION DEVICE

Effect: Infrared Perception (Sight Group)
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge
Breakability: 1 PD/1 ED

Description: Thermalvision devices allow a character to see heat patterns and traces, making it possible to see people (and many objects) in the dark based on their body heat. They have many mundane applications, such as detecting overheating components in electronic or mechanical equipment.

Game Information: Infrared Perception (Sight Group) (5 Active Points); OAF (-1), 1 Continuing Fuel Charge (battery, Easy to obtain; 2 Hours; -0). Total cost: 2 points.

Options:

1) **Powerful Thermalvision Device:** This form of thermalvision device is so powerful that it can "see people through walls" by perceiving their body heat and the like. Add Partially Penetrative for Sight Group (blocked by anything that's sufficiently thick, that generates its own heat, or the like). 10 Active Points; total cost 5 points; total cost of device 7 points.

Bugs And Bug Detectors

Bugs are electronic tracking and/or listening devices. There are two basic kinds: those that emit a simple radio signal which can be traced (such as a character might put in an enemy's car so he could find the car anywhere in the city); and those that are actually miniature microphones and/or cameras, allowing a listener to hear or view what occurs in the vicinity of the bug. Either type of bug needs to be properly placed so that it's hidden but works as well as possible. This often involves sneaking into someone's office or home to plant the bug, and requires the *Bugging* and *Concealment* Skills for best results. Of course, where there are bugs, there are devices to detect and neutralize them as well, even if they're hidden inside walls or phone systems.

See *HERO System Skills* for a more detailed discussion of bugs and bugging, including numerous bugs and related devices written up in *HERO System* terms.

STANDARD VISUAL BUG

Effect: Clairsentience (Sight Group)
Target: Special
Duration: Constant
Range: 1,600m
Charges: 1 Continuing Fuel Charge
Breakability: 7 PD/7 ED

Description: This is the typical sort of device used for visual electronic surveillance of a fixed location. It broadcasts what it "sees" over a range of one mile. Unless there's a direct wire connection between the bug and the reception equipment (which is unlikely), anything that interferes with radio transmissions can disrupt the bug's transmission temporarily or permanently. Because it's an Obvious Focus, a character has to use his Concealment Skill (with Bugging as a Complementary Skill) to hide it.

This bug has an internal battery able to power it for up to one week. The longer the bug's range, the larger its batteries have to be... but the easier it is to detect. Some visual bugs are extremely small (for example, pinhole lenses about 1/8 inch across), but most are at least a little larger than that.

Game Information: Clairsentience (Sight Group), 8x Range (1,600m, or 1 mile), 1 Continuing Fuel Charge (battery, Easy to obtain; 1 Week; +¾) (61 Active Points); OAF (-1), No Range (character must place bug at perception point before he can use the power; -½), Affected As Radio Group As Well As Sight Group (-¼). Total cost: 22 points.

Options:

1) **High-Powered Bug:** Increase to 16x Range (3,200m). 70 Active Points; total cost 25 points.
2) **Low-Powered Bug:** Decrease to 2x Range (400m). 44 Active Points; total cost 16 points.
3) **Standard Audio Bug:** This is the same sort of bug, but it picks up and transmits sound rather than visual images. Some of them are as small as pencil erasers. Change to Clairsentience (Hearing Group). 61 Active Points; total cost 22 points.
4) **Standard Visual And Audio Bug:** This bug picks up and transmits both visual images and sound. Change to Clairsentience (Sight and Hearing Groups). 79 Active Points; total cost 29 points.
5) **Landline Connection:** This bug has a direct, wired connection between itself and the unit that receives the image it transmits, making it much more difficult to disrupt the transmission. Remove Affected As Radio Group As Well As Sight Group (-¼). Total cost: 24 points.
6) **Disguised Bug:** This form of the Standard Bug is built into, or made to look like, an everyday object — a radio, a clock, a smoke detector, or just about anything else you can think of. Someone who examines the bug closely or takes it apart will soon realize what it is (or at least that it's not what it looks like). Change OAF (-1) to IAF (-½):
   Standard Visual: Total cost 27 points
   Standard Audio: Total cost 27 points
   Standard Visual And Audio: Total cost 35 points.
7) **Hard-To-Find Bug:** This bug's transmissions are particularly difficult to find with bug detectors for some reason. Usually bugs like these are a little larger than normal, and thus harder to hide and easier to find than a normal bug. Add Concealed (-6 to PER Rolls with Detect Bugs).

Standard Visual: 72 Active Points; total cost 26 points.

Standard Audio: 72 Active Points; total cost 26 points.

Standard Visual And Audio: 89 Active Points; total cost 32 points.

Disguised Standard Visual: 72 Active Points; total cost 32 points.

Disguised Standard Audio: 72 Active Points; total cost 32 points.

Disguised Standard Visual And Audio: 89 Active Points; total cost 39 points.

8) **Undercover Agent Audio Bug:** This "bug" is a listening device worn by an undercover police officer (or the like). Concealed under the clothes, it transmits voices and noises in the wearer's vicinity to a nearby receiver. To the Standard Audio Bug, add Mobile Perception Point. 70 Active Points; total cost 25 points (for an OAF version) or 31 points (for an IAF version disguised as a pen, a calculator, a watch, or the like).

BUG DETECTOR

Effect: Detect Bugs 16-
Target: Self
Duration: Constant
Range: 20m
Charges: 1 Continuing Charge
Breakability: 4 PD/4 ED

Description: This devices detects bugs by perceiving the radio waves they generate. This means it only detects "active" bugs — bugs which are transmitting while the Detector is in use. Bugs which are turned off or inactive cannot be detected (and some types of bugs are harder to detect than others), nor can bugs using infrared light or other media than radio waves. Its batteries provide enough power for a total of one hour of operation.

Game Information: Detect Active Bugs 16- (Radio Group), Increased Arc Of Perception (360 Degrees) (17 Active Points); OAF (-1), Affected As Sight Group As Well As Radio Group (-½), Limited Range (20m; -¼), 1 Continuing Fuel Charge (Easy to replace batteries, 1 Hour; -0). Total cost: 6 points.

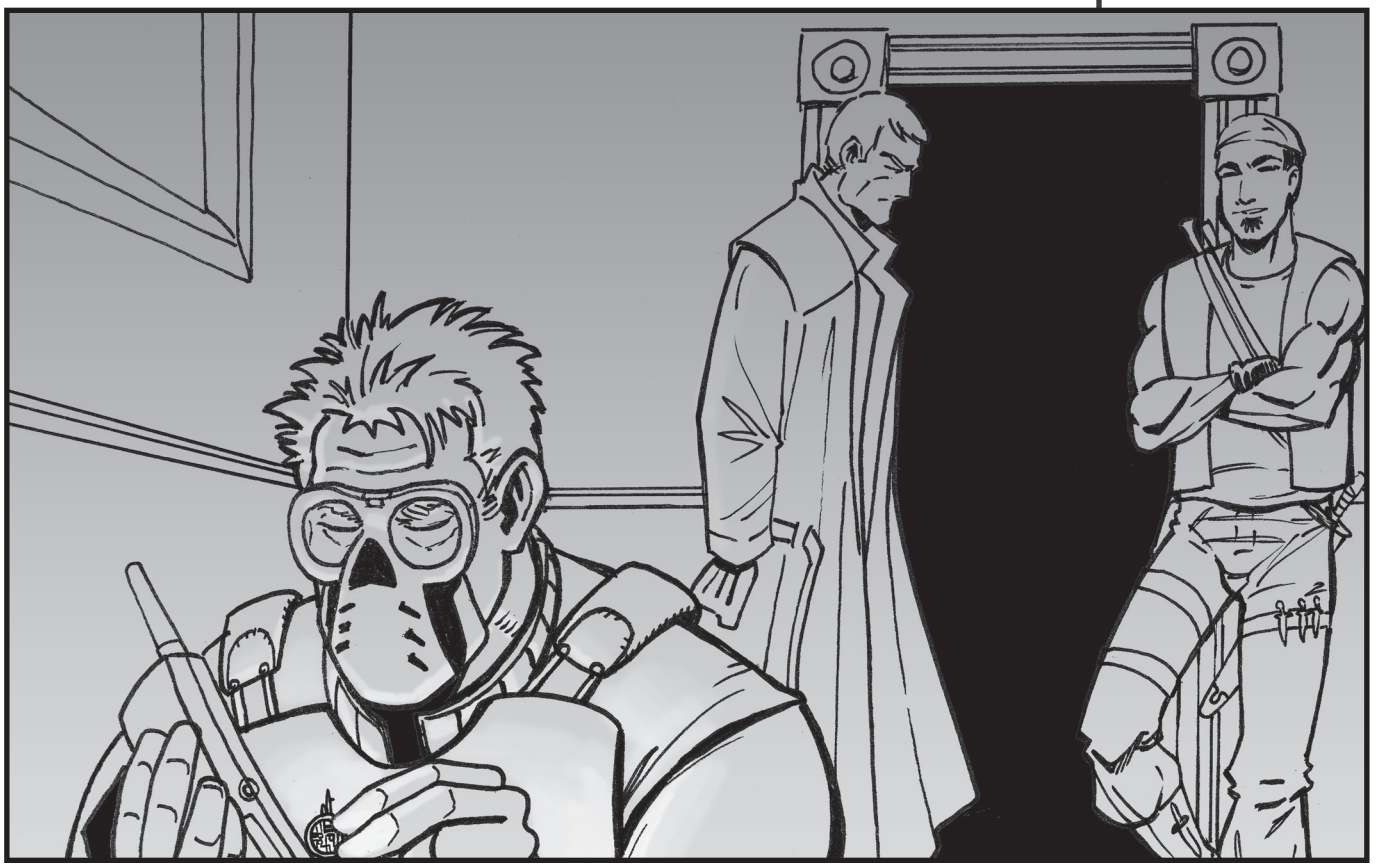
Options:

1) **Strong Bug Detector:** Increase to Detect Active Bugs 20-. 21 Active Points; total cost 8 points.
2) **Weak Bug Detector:** Decrease to Detect Active Bugs 13-. 14 Active Points; total cost 5 points.

TRACKING BUG

Effect: Images to Radio Group, +4 to PER Rolls
Target: 64m Radius
Duration: Constant
Range: No Range
Charges: 1 Continuing Recoverable Charge lasting 1 Week
Breakability: 15 PD/15 ED

Description: This is a device which characters can attach to cars and other moving objects to



follow them. It emits a distinctive radio signal which identifies the bug's location. Tracking the beacon requires any specialized radio-perceiving device (one such device is assumed to come with the Tracking Bug when the character buys it, but he could also use other radio equipment if necessary).

The Tracking Bug can reliably be "picked up" on tracking equipment primarily within a 64m radius. However, much like a character can see the beam from a flashlight from far away without being inside the beam, characters outside the 64m radius may still be able to track the Tracer, if the GM so permits: from 65-125m, the Image is at only +2 to PER Rolls; from 126-250m, it's at +0; from 251-500m it's at -2; beyond that it would require an Extraordinary Skill Roll to locate it.

Game Information: Images to Radio Group, +4 to PER Rolls, Area Of Effect (64m Radius; +1¼), Usable As Attack (allows character to "stick" the Image to a target; +1¼), 1 Continuing Recoverable Charge lasting 1 Week (stops functioning if it gets wet or experiences severe radio interference; +1) (76 Active Points); IAF (-½), Image Only Perceivable On Special Radio Frequencies (-0), No Range (character must place the bug on the target to be followed; -½), Set Effect (detectable signal; -1). Total cost: 25 points.

Options:

1) **Strong Bug:** Increase to +6 to PER Rolls. 103 Active Points; total cost 34 points.
2) **Weak Bug:** Decrease to +2 to PER Rolls. 49 Active Points; total cost 16 points.
3) **Broad-Signal Bug:** Increase to Area Of Effect (250m Radius; +1¾). 85 Active Points; total cost 28 points.
4) **Superheroic Tracking Bug:** This form of the Tracking Bug is a small object that a character can hurl onto a fleeing enemy's back or getaway vehicle so he can track that person later. Change No Range (-½) to Range Based On STR (-¼). Total cost: 28 points.

WIRETAP

Effect: Clairsentience (Hearing Group), Only For Defined Phones
Target: Defined phone(s)
Duration: Constant
Range: 1,600m (see text)
Charges: 1 Continuing Fuel Charge
Breakability: 7 PD/7 ED

Description: This bug is installed in a telephone (or, in some cases, on a telephone trunk line leading to an entire office, entire building, or the like). It picks up and transmits all conversation that takes place over that phone, but doesn't hear other sounds.

Game Information: Clairsentience (Hearing Group), 8x Range (1,600m, or 1 mile), 1 Continuing Fuel Charge (battery, Easy to obtain; 1 Week; +¾) (61 Active Points); OAF (-1), No Range (character must place bug at perception point before he can use the power; -½), Can Only Hear Sound From Specific Telephone(s) (-1), Affected As Radio Group As Well As Sight Group (-¼). Total cost: 16 points.

Options:

1) **Strong Wiretap:** Increase to 16x Range (3,200m). 70 Active Points; total cost 19 points.
2) **Weak Wiretap:** Decrease to 2x Range (400m). 44 Active Points; total cost 12 points.
3) **Fax Tap:** Similar devices exist to monitor and capture information coming through fax machine phone lines. Change to Clairsentience (Radio Group). Total cost: 16 points.

Miscellaneous Sensory Devices

BOMB DETECTOR

Effect: Detect Explosives 16-
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This device detects nearby explosive substances by identifying the chemical vapors they give off. It needs to be near the explosives for approximately two seconds to detect them.

Game Information: Detect Explosives 16- (Smell/Taste Group) (12 Active Points); OAF (-1), Extra Time (Extra Phase; -¾). Total cost: 4 points.

DRUG DETECTOR

Effect: Detect Illegal Drugs 14-
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: A Drug Detector senses the chemical vapors given off by illegal drugs. It can usually "sniff out" drugs even if they're hidden inside objects or their odor is "masked" by other substances. It does not indicate which drugs are present, and must be reasonably close to the drugs to detect them.

Game Information: Detect Illegal Drugs 14- (Smell/Taste Group) (10 Active Points); OAF (-1). Total cost: 5 points.

SATELLITE LINK

Effect: Various viewing abilities
Target: Self
Duration: Constant
Range: Self
END Cost: Varies
Breakability: 9 PD/9 ED

Description: This gadget uses the world-spanning satellite network to give the user a view of anything seen by satellite! The character uses the link to tap into the network and obtain a "feed" from it showing whatever can be seen in the target area at that time. There may not always be a satellite available that's watching what a character wants to see; in game terms, if the Activation Roll fails, the character's objective is in a "blind zone" (either because no satellite is "on target" or because weather blocks his view).

If there's a satellite in position, the character can see a lot — given the powerful IR and UV capabilities of many satellites, a link might be able to read the heat patterns of a building to determine its layout, how many people are in it (and where they are), and so forth.

A typical Satellite Link requires a large system of computer banks and monitors that must be kept in a Base.

At the GM's option, in a high-tech campaign it might be possible for characters to have a Satellite Link that only requires a laptop computer, or even a viewing device mounted on a bracer or large wristwatch-like device. For a laptop, change OAF Immobile (-2) to OAF (-1) (total cost: 20 points); for a bracer, change it to OIF (-½) (total cost: 26 points).

Game Information:

Cost	Power
12	**Satellite Link (Worldwide Viewing):** Clairsentience (Sight Group), MegaScale (1m = 1,000 km; +1¾); OAF Immobile (-2), Activation Roll 11- (can only see target area if satellites are available; -½), Requires A System Operations Roll (-½), Limited Vision (can only see what a satellite could see; -½)
1	**Satellite Link (IR Capability):** Infrared Perception (Sight Group); OAF Immobile (-2), Linked (-½)
1	**Satellite Link (UV Capability):** Ultraviolet Perception (Sight Group); OAF Immobile (-2), Linked (-½)
3	**Satellite Link (Penetrating IR Capability):** Partially Penetrative for Sight Group (blocked by anything that's sufficiently thick, that generates its own heat, or the like); OAF Immobile (-2)

Total cost: 17 points.

TEMPEST EQUIPMENT

Effect: Detect Computer Radio Emissions 14-
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge
Breakability: 3 PD/3 ED

Description: TEMPEST stands for "Transient Electromagnetic Pulse Emanation Standard." It refers to the amount of electromagnetic radiation given off by various types of computer equipment (monitors, cables, motherboards, and so forth). Using what's known as van Eck technology, TEMPEST gear monitors and records everything that passes across a computer's screen by perceiving and "reading" the electromagnetic radiation. This won't necessarily work over long distances (the normal rules for applying the Range Modifier to PER Rolls applies), and anything that provides the computer with Power Defense automatically blocks TEMPEST reading (as will placing a sheet of metal between the computer and the TEMPEST gear).

Game Information: Detect Computer Radio Emissions 14- (Radio Group) (10 Active Points); OAF (-1), Blocked By Power Defense (-½), 1 Continuing Fuel Charge (batteries, Easy to obtain; 10 Hours; -0). Total cost: 4 points.

WOLF'S EARS

Effect: +4 PER for Hearing Group plus Hearing Group Flash Defense (10 points)
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge
Breakability: 2 PD/2 ED

Description: This device serves two purposes. First, it enhances the user's hearing. Second, it screens out all sounds above a certain level, preventing the wearer from being deafened by explosions or gunshots.

Game Information:

Cost	Power
5	**Wolf's Ears (Hearing Enhancement):** +4 PER for Hearing Group; OIF (-½), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0)
7	**Wolf's Ears (Hearing Protection):** Hearing Group Flash Defense (10 points); OIF (-½), 1 Continuing Fuel Charge (battery, Easy to obtain; 6 Hours; -0)

Total cost: 12 points.

SUPERHERO SENSORS & COMMUNICATIONS

Some of the Modern sensory and communications gadgets described above are pretty impressive — but when Superheroic technology becomes available, even more amazing and reliable devices are possible! Many of these also work well for Science Fiction settings.

WEIRD SCIENCE SENSORY AND COMMUNICATIONS GADGETS

In the Pulp era, radio is still a new thing, and television and radar are only being invented... but that doesn't necessarily slow down a character who has access to Weird Science!

Communications Gadgets

RADIO, ADVANCED

Effect: Radio Perception/Transmission
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: Unlike most Pulp-era radios (which impose a -1 or greater penalty on PER Rolls to receive or transmit due to their relatively primitive technology), this one has crystal-clear reception and is easy to use.

Game Information: Radio Perception/Transmission (10 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼). Total cost: 4 points.

Options:

1) **Concealed Radio:** This form of the radio is easily hidden, or is built into some other gadget. Change OAF (-1) to IAF (-½). Total cost: 6 points.

RADIO, MINIATURE

Effect: Radio Perception
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This high-quality radio is so small the character can fit it in his ear like a hearing aid, or otherwise conceal it on his person. It only allows him to receive transmissions, but that's enough to learn what his friends are doing or get orders from his boss.

Game Information: Radio Perception (8 Active Points); IAF (-½), Affected As Hearing Group As Well As Radio Group (-¼). Total cost: 4 points.

Options:

1) **Receive And Transmit:** Some Miniature Radios let the character transmit as well. Change to Radio Perception/Transmission. 10 Active Points; total cost 6 points.

TELEVISION WRISTWATCH

Effect: HRRP (Radio Group)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This useful piece of Weird tech looks like an oversized sort of wristwatch. It's actually a wrist television that allows the character to both receive and transmit images and voices. It's the perfect way for a team of heroes to stay in touch!

Game Information: HRRP (Radio Group) (12 Active Points); OIF (-½), Affected As Sight And Hearing Group As Well As Radio Group (-½). Total cost: 6 points.

Sensory Gadgets

BLACKLIGHT GOGGLES

Effect: Ultraviolet Perception (Sight Group)
Target: One character
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: These goggles — which look something like an aviator's goggles, but are larger and have purplish lenses — allow the character to see clearly by starlight or moonlight. If he has a black light projector (built as a form of Images), he can see just fine in even the darkest rooms.

Game Information: Ultraviolet Perception (Sight Group) (5 Active Points); OIF (-½). Total cost: 3 points.

ELECTRONIC EAR

Effect: Telescopic (+8 versus Range Modifier) for Hearing Group
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This Weird gadget augments the user's hearing, allowing him to hear distant sounds that are too faint for ordinary perception.

Game Information: Telescopic (+8 versus Range Modifier) for Hearing Group (12 Active Points); OAF (-1), Nonpersistent (-¼). Total cost: 5 points.

Options:

1) **Strong Ear:** Increase to +10 versus Range Modifier. 15 Active Points; total cost 7 points.
2) **Weak Ear:** Decrease to +6 versus Range Modifier. 9 Active Points; total cost 4 points.
3) **Experimental Ear:** The scientific principles behind the Electronic Ear aren't clearly understood yet, so sometimes the device doesn't work. Add Activation Roll 14- (-¼). Total cost: 5 points.

PHONE RECORDER

Effect: Eidetic Memory, Only To Record Phone Calls
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: This amazing and wondrous device actually allows a hero to record phone calls when he's not home to get them!

Game Information: Eidetic Memory (5 Active Points); OAF (-1), Only To Record Phone Calls (-2). Total cost: 1 point.

STETHOSCOPIC DISC

Effect: Adjacent for Hearing Group, Only Works Through Walls/Doors
Target: Self
Duration: Constant
Range: No Range
END Cost: 0
Breakability: 1 PD/1 ED

Description: This device is a disc-shaped object. When the character places it on a wall or door, and then puts his ear against it, he can hear the speech and sounds on the other side of the barrier is if he were there.

Game Information: Adjacent for Hearing Group (5 Active Points); OAF (-1), Only Works Through Walls/Doors (-½). Total cost: 2 points.

Options:

1) **Weak Disc:** The character has to focus intensely on what he's doing to hear the sounds clearly. Add Concentration (½ DCV throughout; -½). Total cost: 2 points.

TRACKING SPRAY

Effect: Images To Ultraviolet Perception, Usable As Attack
Target: One character
Duration: Constant
Range: No Range
Charges: 1 Continuing Charge lasting 1 Week
Breakability: 12 PD/12 ED

Description: Characters who have Blacklight Goggles (see above) sometimes make use of this gadget. It's an aerosol can of spray (or some other form of spritzer or applicator) containing a long-lasting paint that only shows up when viewed with Ultraviolet Perception. This makes it easy for the character to track the target through crowds, and the like.

Game Information: Images to Ultraviolet Perception, +4 to PER Rolls, Usable As Attack (allows character to "stick" the Image to a target; +1¼), Continuing Charge lasting 1 Week (stops functioning if target washes himself and his clothes thoroughly; +½) (60 Active Points); OAF (-1), Set Effect (distinctive marking; -1), No Range (-½). Total cost: 17 points.

WIRELESS BUG

Effect: Clairsentience (Hearing Group)
Target: Self
Duration: Constant
Range: No Range
Charges: 1 Continuing Fuel Charge lasting 1 Week
Breakability: 12 PD/12 ED

Description: This amazing listening device works by wireless radio broadcast. Once placed, it transmits all nearby sounds to a listener who can be a mile away. The user can turn the bug on and off via a special radio transmission to conserve battery power.

Game Information: Clairsentience (Hearing Group), 8x Range (1,600m, or about 1 mile), 1 Continuing Fuel Charge (battery, Easy to obtain; 1 Week; +¾) (61 Active Points); OAF (-1), No Range (character must place bug at perception point before he can use the power; -½), Affected As Radio Group As Well As Sight Group (-¼). Total cost: 22 points.

Options:

1) **High-Powered Bug:** Increase to 16x Range (5,600m). 70 Active Points; total cost 25 points.
2) **Low-Powered Bug:** Decrease to 2x Range (700m). 44 Active Points; total cost 16 points.
3) **Experimental Bug:** The technology used in this bug doesn't always work right, with the reception and/or transmission often fading in and out briefly. Add Activation Roll 14- (-¼). Total cost: 20 points.

SUPERHERO SENSORY AND COMMUNICATIONS EQUIPMENT

Communications Gadgets

ENTOMOPATHIC HELMET

Effect: Telepathy 8d6 (Animal class of minds), Insects Only
Target: One character
Duration: Constant
Range: LOS
END Cost: 4
Breakability: 8 PD/8 ED

Description: This helmet contains advanced neuro-circuitry that allows the wearer to communicate with insects. He can't compel the insects to do what he wants, but he can get information from them, request their assistance, and so forth.

For characters interested in talking to other types of animals, change the *Insects Only* Limitation to something more appropriate (or, to communicate with all types of animals, remove that Limitation altogether).

Game Information: Telepathy 8d6 (Animal class of minds) (40 Active Points); OIF (-½), Insects Only (-1). Total cost: 16 points.

Options:

1) **Strong Entomopathy:** Increase to Telepathy 10d6. 50 Active Points; total cost 20 points.
2) **Weak Entomopathy:** Decrease to Telepathy 6d6. 30 Active Points; total cost 12 points.
3) **Realistic Helmet:** The Helmet has a built-in battery with a limited supply of power. Add 16 Charges (-0). Total cost: 16 points.
4) **Experimental Helmet:** Neuro-circuitry, particularly entomopathic neuro-circuitry, is so new that all the kinks haven't been worked out yet. Add Activation Roll 14- (-¼). Total cost: 14 points.
5) **Built-In Battery:** The Helmet comes with a built-in battery that has a virtually limitless charge. Add Reduced Endurance (0 END; +½). 60 Active Points; total cost 24 points.
6) **Bug Eyes:** The helmet's eye-lenses are faceted, granting the character the wide-angle view many insects have. Character also buys Increased Arc Of Perception (360 Degrees) for Sight Group (10 Active Points); OIF (-½). Total cost 7 points; total cost of gadget 23 points.
7) **Restricted Entomopathy:** This form of the Helmet can only communicate with one type of insect, not all insects. Change Insects Only (-1) to [Defined Type Of Insect] Only (-2). Total cost: 11 points.
8) **Advanced Entomopathic Helmet:** This form of the Helmet not only allows the wearer to talk to insects, it lets him command them and call them as well. Change to:

Cost	Power
53	**Entomopathic Helmet:** Multipower, 80-point reserve; all OIF (-½)
2f	**1) Insect Communication:** Telepathy 10d6 (Animal class of minds); OIF (-½), Insects Only (-1)
2f	**2) Insect Command:** Mind Control 10d6 (Animal class of minds); OIF (-½), Insects Only (-1)
2f	**3) Call Insect Swarm:** Summon one Stinging Insect Swarm built on 105 Total Points (see HSB 489), Slavishly Loyal (+1); OIF (-½), Summoned Being Must Inhabit Locale (-½), Arrives Under Own Power (-½)
3f	**4) Call Giant Insect:** Summon one Giant Insect built on up to 320 Total Points (see HSB 157-63), Expanded Class (giant insects; +¼); OIF (-½), Summoned Being Must Inhabit Locale (-½), Arrives Under Own Power (-½)

Total cost: 62 points.

RADIO COMMUNICATOR, BASIC

Effect: Radio Perception/Transmission
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: This is a radio reception and transmission device that's either loosely attached to a character's costume, easy to damage or disable in some way, or carried like a walkie-talkie or CommuniCard. It's voice-activated and set to one frequency, but the user can select other frequencies on the AM, FM, and police bands. Using it generally does not require any action from the user beyond turning it on at the start of the mission and turning it off at the end.

Game Information: Radio Perception/Transmission (10 Active Points); OAF (-1). Total cost: 5 points.

Options:

1) **Strong Radio:** Add +3 PER with Radio Perception/Transmission. 13 Active Points; total cost 6 points.
2) **Attached Radio:** This form of the Basic Radio Communicator is more firmly attached to the character, and thus difficult to take away or damage — he could wear it as part of his mask, beneath (or as part of) a helmet, and so forth. Change OAF (-1) to OIF (-½). Total cost: 7 points.
3) **Scrambled Radio Communicator:** Characters concerned with security sometimes add in a scrambler option to their radios. This is built as a Variable Power Pool of Languages (at Native accent level) in a Focus. (Although Skills are Special Powers, and therefore cannot be bought in Power Frameworks without GM permission, GMs should permit this construct, which is interesting, fun, and not especially abusive.) A successful Cryptography roll can decrypt a scrambler "language," but users can counter the actions of cryptographers by changing the computer-generated "language" at frequent intervals (this constitutes changing the Pool and requires 1 Minute; to change the Pool in just a Full Phase, the character must succeed with a Cryptography or Systems Operation roll). Character also buys: Variable Power Pool (Scrambler Pool), 4 Pool + 4 Control Cost; IAF (-½), Only For One Language At A Time (-1). Total cost: 5 points. Total cost of device: 10 points.
4) **Variant Radio Communicator:** This form of the device is a closed radio link that only works with up to eight people (the character has eight radio headsets he can distribute to the people he wants to talk with). Technically since it's built with a Mental Power it's perceivable with Mental Awareness and so on, but in the interest of common and dramatic sense the GM should, on the basis of its Limitations,

treat it as an ordinary radio device. Mind Link (specific group of up to any eight minds at once), No LOS Needed (once characters receive their headsets) (35 Active Points); OAF (radio headsets, character must give one to each person he wants to Link with; -1), Only With Others Who Have Mind Link (-1), Affected As Radio And Hearing Groups, Not Mental Group (-½). Total cost: 10 points.

RADIO COMMUNICATOR, ADVANCED

Effect: HRRP plus other functions
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 5 PD/5 ED

Description: An Advanced Radio Communicator has much more functionality than the Basic model. It can broadcast and receive on a much greater number of frequencies, including visual ones such as television. It can detect the source of radio transmissions and estimate range and transmission strength, allowing heroes to find homing beacons and other transmission sources.

Additionally, Advanced Radio Communicators have powerful built-in computer functions, including: basic atlas entries on a city, national, and world scale; a user-maintained contacts database, including all team members, with private signal codes (allowing the user to send out a signal to a specific team member, to all members in a specific sub-group, to the team as a whole, and so on); and a sophisticated data management program that allows the user to specify handling of incoming messages (*e.g.,* "Put MegaMan through to me immediately; take a message on all calls from Captain Norton").

Among many superheroes, the most popular form of the Advanced Radio Communicator is the *CommuniCard* — a device the shape and size of a credit card with a built-in miniaturized viewscreen; it may double as an identity card. Other possibilities include a cell phone- or walkie-talkie-like device, a "communications sphere" accompanying the character, and so forth.

Game Information:

Cost	Power
5	**Communications:** HRRP (Radio Group); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½)
12	**Broadcast Tracking:** Detect Source Of Radio Transmissions (PER Roll) (Radio Group), Discriminatory, Analyze, Increased Arc Of Perception (360 Degrees), Range; OAF (-1) 0
5	**Scrambled Transmission Function:** Variable Power Pool (Scrambler Pool), 4 Pool + 2 Control Cost; OAF (-1), Only For One Language At A Time (-1)
3	**Onboard Computer:** Computer (see below); OAF (-1)

Total cost: 25 points

Options:

1) **Attached Advanced Radio Communicator:** Some characters prefer to build their ARCs into a costume, helmet, or the like so they're not so easy to take away. The most popular form of this ARC is probably the Wrist Radio, a device similar in size and shape to a wristwatch. Change OAF (-1) to OIF (-½) throughout. Total cost: 32 points.

Onboard Computer

Val	Char	Cost	Roll	Notes
10	INT	0	11-	PER Roll 11-
10	DEX	0	11-	
3	OCV	0		
3	DCV	0		
3	OMCV	0		
3	DMCV	0		
2	SPD	0		*Phases:* 6, 12

Total Characteristic Cost: 0

Cost	Skills
2	AK: Earth 11-
2	AK: Home Nation 11-
2	CK: Campaign City 11-
2	KS: Contact Information 11-
4	PS: Personal Assistant 13-
3	Systems Operation 11-

	Programs
1	Activate Homing Signal Upon Approved Remote Query
1	Automatically Signal Specific Team Member(s) On Verbal Cue
1	Automatically Dial Recorded Number On Spoken Cue
1	Prioritize Incoming Calls According To User Preferences
1	Send Emergency Call to Team Members If Specified Protocols Are Not Met
1	Search Reference Material For Information On A Topic

	Talents
3	**Clock:** Absolute Time Sense
3	**Calculator:** Lightning Calculator
3	**Instant-On Feature:** Lightsleep

Total Computer Cost: 30/5 = 6

2) **Advanced Computer Access:** The Communicator's computer is linked to one or more restricted-access databases or systems. Add Computer Link (cost depends on how expensive the Link is).

SIGNAL FLARE GUN

Effect: Sight Group Images, +4 to PER Rolls
Target: 16m Radius
Duration: Constant
Range: 220m
Charges: 1 Continuing Charge
Breakability: 8 PD/8 ED

Description: This small, slim pistol, easily able to fit into a vest pocket, a pouch on a utility belt, or the like, fires a projectile that creates a bright flare. It's intended to serve as a warning or a request for assistance. The character defines the shape and color of the flare effect when he purchases the gadget; usually it creates a signal in the shape of a superteam's emblem or the like.

Game Information: Sight Group Images, +4 to PER Rolls, Area Of Effect (16m Radius; +¾) (38 Active Points); OAF (-1), Set Effect (signal flare of defined appearance; -1), 1 Continuing Charge lasting 1 Minute (-1). Total cost: 9 points.

Options:

1) **Strong Flare:** Increase to +6 to PER Rolls. 49 Active Points; total cost 12 points.
2) **Weak Flare:** Decrease to +2 to PER Rolls. 28 Active Points; total cost 7 points.
3) **Experimental Signal Flare Gun:** The flare effect doesn't always manifest properly. Add Activation Roll 14- (-¼). Total cost: 9 points.
4) **Screamer Flare:** This form of the flare also emits a specific noise. Add Hearing Group. 47 Active Points; total cost 12 points.
5) **Attached Signal Flare Gun:** The Flare Gun is built into the character's costume so it's difficult to take away from him. Change OAF (-1) to OIF (-½). Total cost: 11 points.
6) **Multi-Shot Signal Flare Gun:** Change to 4 Continuing Charges lasting 1 Minute each (-¼). Total cost: 12 points.

Sensory Gadgets

A famous crimefighter once observed, "You can't fight crime if you can't find the criminals." This section contains gadgets that enhance, augment, or add to the character's natural senses.

AUDIO-ENHANCING EARPHONES

Effect: Various Hearing Group-based Sensory Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: Varies

Description: This is a device like a set of earphones that enhances the wearer's auditory senses. A character may buy as many of the listed senses as he wants, in whatever order he wants; he's not required to buy some before buying others.

Game Information:

Cost	Power
4	**Hearing-Augmenting Earphones:** +4 PER with Hearing Group (8 Active Points); OAF (-1)
10	**Hearing-Augmenting Earphones:** Discriminatory, Analyze for Hearing Group (20 Active Points); OAF (-1)
6	**Parabolic Earphones:** +8 versus Range Modifier for Hearing Group (12 Active Points); OAF (-1)
3	**Radio Earphones I:** Radio Perception (8 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼)
5	**Radio Earphones II:** Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼)
5	**Radio Earphones III:** HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Hearing Group As Well As Radio Group (-¼), Does Not Receive Or Transmit On Visual Wavelengths (-¼)
7	**Sonar Earphones:** Active Sonar (Hearing Group) (15 Active Points); OAF (-1)
10	**Targeting Earphones:** Targeting for Hearing Group (20 Active Points); OAF (-1)
1	**Ultrasonic Earphones:** Ultrasonic Perception (Hearing Group) (3 Active Points); OAF (-1)

Options:

1) **Attached Earphones:** These earphones firmly attach to the character's costume — or they're not earphones at all but earpieces, built into a helmet, or the like. Change OAF (-1) to OIF (-½) throughout.

Cost	Power
5	Hearing-Augmenting Earphones
13	Hearing-Augmenting Earphones
8	Parabolic Earphones
4	Radio Earphones I
6	Radio Earphones II
5	Radio Earphones III
10	Sonar Earphones
13	Targeting Earphones
2	Ultrasonic Earphones

CHEMORECEPTION ENHANCER

Effect: Various Smell/Taste Group-based Sensory Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: Varies

Description: This device, usually built into a mask, helmet, or the like, augments the character's olfactory senses (which in turn heightens his sense of taste). A character may buy as many of the listed senses as he wants, in whatever order he wants; he's not required to buy some before buying others.

Game Information:

Cost	Power
3	**Chemoreception Augmentation:** +3 PER with Smell/Taste Group (6 Active Points); OAF (-1)
6	**Chemoreception Augmentation:** +8 versus Range Modifier for Smell/Taste Group (12 Active Points); OAF (-1)
10	**Chemoreception Augmentation:** Discriminatory, Analyze for Smell/Taste Group (20 Active Points); OAF (-1)
10	**Combat Chemoreception:** Targeting for Smell/Taste Group (20 Active Points); OAF (-1)
2	**Tracking Chemoreception:** Tracking for Normal Smell (5 Active Points); OAF (-1)

Options:

1) **Attached Enhancer:** This form of the Enhancer attaches firmly to the character's costume. Change OAF (-1) to OIF (-½) throughout.
   - 4 Chemoreception Augmentation
   - 8 Chemoreception Augmentation
   - 13 Chemoreception Augmentation
   - 13 Combat Chemoreception
   - 3 Tracking Chemoreception

CRIME SCENE ANALYZER

Effect: Criminology 18-
Target: Self
Duration: Constant
Range: No Range
END Cost: 0
Breakability: 4 PD/4 ED

Description: This device looks like an oversized handheld computer, but it's actually a highly-sophisticated analytical device. Using a variety of miniaturized, built-in sensors, it can thoroughly analyze any crime scene, detecting the trace evidence and impressions left by a criminal and reporting to the user on their possible causes and implications.

As with other Skill-based devices, the GM should monitor the use of this gadget and disallow it if necessary. Used properly, it can add a lot to the game (especially for a superteam without a detective-oriented PC); used improperly, it can unbalance some aspects of the campaign.

Game Information: Criminology 18- (21 Active Points); OAF (-1). Total cost: 10 points.

Options:

1) **Strong Analyzer:** Increase to Criminology 20-. 25 Active Points; total cost 12 points.
2) **Weak Analyzer:** Decrease to Criminology 16-. 17 Active Points; total cost 8 points.
3) **Realistic Analyzer:** The Analyzer has a built-in battery that requires periodic recharging. Add 1 Continuing Fuel Charge lasting 1 Hour (-0). Total cost: 10 points.
4) **Experimental Analyzer:** The Analyzer uses sophisticated, cutting-edge technology, and doesn't always function properly. Add Activation Roll 14- (-¼). Total cost: 9 points.
5) **Attached Analyzer:** The Analyzer is built into the character's costume. Change OAF (-1) to OIF (-½). Total cost: 14 points.

MINDSCANNER HEADBAND

Effect: Mind Scan 8d6
Target: One character
Duration: Instant
Range: LOS
END Cost: 4
Breakability: 8 PD/8 ED

Description: This device is a headband made of some copper-colored metal with a gem-like crystal (usually white or mauve) set into it in the center of the forehead. While wearing it, a character can mentally scan an area for another mind.

Game Information: Mind Scan 8d6 (40 Active Points); OAF (-1). Total cost: 20 points.

Options:

1) **Strong Headband:** Increase to Mind Scan 12d6. 60 Active Points; total cost 30 points.

2) **Weak Headband:** Decrease to Mind Scan 6d6. 30 Active Points; total cost 15 points.
3) **Realistic Headband:** The Headband has an internal battery that only has enough energy for a few seconds' worth of mind-scanning before it requires recharging. Add 8 Charges (-½). Total cost: 16 points.
4) **Experimental Headband:** Psionic technology is a new field, and devices created with it don't always perform as expected. Add Activation Roll 14- (-¼). Total cost: 18 points.
5) **Attached Headband:** This form of the Headband isn't so easily taken away from the character. It may be built into a helmet, a ring, or the like — or it may simply fit very firmly around his head. Change OAF (-1) to OIF (-½). Total cost: 27 points.

MUTANT SCANNER

Effect: Detect Mutant, Discriminatory
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 3 PD/3 ED

Description: This handheld device, said to have been invented by anti-mutant scientists, allows the user to detect mutants near him. Mutants detected by the device appear as blips on a small screen, with accompanying data readout; if the user can't see, the radar's useless to him.

Game Information: Detect Mutant (INT Roll), Discriminatory (Radio Group) (10 Active Points); OAF (-1), Affected As Sight Group As Well As Radio Group (-½), Nonpersistent (-¼). Total cost: 4 points.

Options:

1) **Strong Scanner:** Add Analyze. 15 Active Points; total cost 5 points.
2) **Realistic Scanner:** The Scanner has a built-in battery that requires periodic recharging. Add 1 Continuing Fuel Charge lasting 1 Hour (-0). Total cost: 4 points.
3) **Experimental Scanner:** The Scanner uses sophisticated, cutting-edge technology, and doesn't always function properly. Add Activation Roll 14- (-¼). Total cost: 3 points.
4) **Attached Scanner:** The Scanner is built into the character's costume. Change OAF (-1) to OIF (-½). Total cost: 4 points.

PORTABLE RADAR ARRAY

Effect: Radar
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 3 PD/3 ED

Description: This handheld device is a short-range directional radar unit. Objects detected by the radar appear as blips on a small screen (the larger the object, the better-defined the shape of the blip); if the user can't see, the radar's useless to him.

Game Information: Radar (Radio Group) (15 Active Points); OAF (-1), Affected As Sight Group As Well As Radio Group (-½). Total cost: 6 points.

Options:

1) **Strong Array:** Add +3 PER with Radar. 18 Active Points; total cost 7 points.
2) **Realistic Array:** The Array has a built-in battery that requires periodic recharging. Add 1 Continuing Fuel Charge lasting 1 Hour (-0). Total cost: 6 points.
3) **Experimental Array:** The Array uses sophisticated, cutting-edge technology, and doesn't always function properly. Add Activation Roll 14- (-¼). Total cost: 5 points.
4) **Attached Radar:** The Array is built into the character's costume. Change OAF (-1) to OIF (-½). Total cost: 7 points.
5) **Omnidirectional Radar:** The Array can perceive objects all around the character. Add Increased Arc Of Perception (360 Degrees). 20 Active Points; total cost 8 points.
6) **Stealth Radar:** This Radar Array emits modulated "blips" that are difficult for others to detect. Add Concealed (-5 to PER Rolls to perceive Radar emissions). 20 Active Points; total cost 8 points.

SENSE-ENHANCING MASK

Effect: Various Sensory Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: Varies

Description: Incorporated into the character's mask are one or more devices designed to enhance his senses, or provide senses he lacks — lenses over the eyes, auditory enhancers in the earpieces, and so forth. A character may buy any or all of these gadgets, as desired; he doesn't have to buy some as a prerequisite for buying others.

Game Information:

Cost	Power
10	**Active Sonar Array:** Active Sonar (Hearing Group) (15 Active Points); OIF (-½)
5	**Auditory Enhancers:** +4 PER with Hearing Group (8 Active Points); OIF (-½)
4	**Mask Radio I:** Radio Perception (8 Active Points); OIF (-½), Affected As Hearing Group As Well As Radio Group (-¼)
6	**Mask Radio II:** Radio Perception/Transmission (Radio Group) (10 Active Points); OIF (-½), Affected As Hearing Group As Well As Radio Group (-¼)
6	**Mask Radio III:** HRRP (Radio Group) (12 Active Points); OIF (-½), Affected As Sight And Hearing Group As Well As Radio Group (-½)
10	**Micro-Lenses:** Microscopic (x1,000) for Sight Group (15 Active Points); OIF (-½)
3	**Nightsight Lenses:** Nightvision (5 Active Points); OIF (-½)
8	**Parabolic Receiver:** +8 versus Range Modifier for Hearing Group (12 Active Points); OIF (-½)
10	**Radar Array:** Radar (Radio Group) (15 Active Points); OIF (-½)
8	**Telescopic Lenses:** +8 versus Range Modifier for Sight Group (12 Active Points); OIF (-½)
3	**Thermalsight Lenses:** Infrared Perception (Sight Group) (5 Active Points); OIF (-½)
3	**Ultrasight Lenses:** Ultraviolet Perception (Sight Group) (5 Active Points); OIF (-½)
2	**Ultrasonic Receiver:** Ultrasonic Perception (Hearing Group) (3 Active Points); OIF (-½)
7	**Wide-Angle Lenses:** Increased Arc Of Perception (360 Degrees) for Sight Group (10 Active Points); OIF (-½)
10	**X-Ray Lenses:** Fully Penetrative for Sight Group (stopped by lead, gold, or force-fields) (15 Active Points); OIF (-½)

SIGHT-ENHANCING GOGGLES

Effect: Various Sight Group-based Sensory Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: Varies

Description: This device is a set of goggles that enhances the wearer's visual senses. A character may buy as many of the listed senses as he wants, in whatever order he wants; he's not required to buy some before buying others.

Game Information:

Cost	Power
7	**Micro-Goggles:** Microscopic (x1,000) for Sight Group (15 Active Points); OAF (-1)
2	**Nightsight Goggles:** Nightvision (5 Active Points); OAF (-1)
3	**Sight-Augmenting Goggles:** +3 PER with Sight Group (6 Active Points); OAF (-1)
6	**Telescopic Goggles:** +8 versus Range Modifier for Sight Group (12 Active Points); OAF (-1)
2	**Thermalsight Goggles:** Infrared Perception (Sight Group) (5 Active Points); OAF (-1)
5	**Thermalsight Goggles, Hi-Res:** Infrared Perception (Sight Group), Discriminatory (10 Active Points); OAF (-1)
5	**Thermalsight Goggles, Wall-Penetrating:** Partially Penetrative for Sight Group (blocked by anything that's sufficiently thick, that generates its own heat, or the like) (10 Active Points); OAF (-1)
2	**Ultrasight Goggles:** Ultraviolet Perception (Sight Group) (5 Active Points); OAF (-1)
5	**Wide-Angle Goggles:** Increased Arc Of Perception (360 Degrees) for Sight Group (10 Active Points); OAF (-1)
7	**X-Ray Lenses:** Fully Penetrative for Sight Group (stopped by lead, gold, or force-fields) (15 Active Points); OAF (-1)

Options:

1) **Attached Goggles:** These goggles firmly attach to the character's costume — or they're not goggles at all but lenses, built into a helmet, or the like. Change OAF (-1) to OIF (-½) throughout.

Cost	Power
10	Micro-Goggles
3	Nightsight Goggles
4	Sight-Augmenting Goggles
8	Telescopic Goggles
3	Thermalsight Goggles
7	Thermalsight Goggles, Hi-Res
7	Thermalsight Goggles, Wall-Penetrating
3	Ultrasight Goggles
7	Wide-Angle Goggles
10	X-Ray Goggles

SPY SPHERE

Effect: Automaton Follower with Clairsentience (Sight and Hearing Groups) and Telekinesis (20 STR)
Target: N/A
Duration: N/A
Range: N/A
END Cost: N/A
Breakability: Special

Description: This device is a sphere, typically about the same size as a baseball or grapefruit, equipped with audio-visual devices that feed sensory data back to the character. Additionally, the sphere has a tractor beam that it can use to pick up and move objects at the character's command.

SPY-SPHERE

Val	Char	Cost	Roll	Notes
5	STR	-5	10-	Lift 50 kg; 1d6 HTH damage [0]
20	DEX	20	13-	
10	CON	0	11-	
20	INT	10	13-	PER Roll 13-
0	EGO	0	—	
10	PRE	0	11-	PRE Attack: N/A
5	OCV	10		
12	DCV	45		
0	OMCV	0		
0	DMCV	0		
5	SPD	30		*Phases:* 3, 5, 8, 10, 12
10	PD	27		*Total:* 10 PD (10 rPD)
10	ED	27		*Total:* 10 ED (10 rED)
3	REC	0		
0	END	-10		
5	BODY	-5		
—	STUN	—		**Total Characteristics Cost: 149**

Movement: Running: 0m
Leaping: 0m
Swimming: 0m
Flight: 20m

Cost	Powers	END
35	**Audiovisual Systems:** Mind Link (character's mind), No LOS Needed	0
	plus Clairsentience (Sight and Hearing Groups) Reduced Endurance (0 END; +½); Only To Allow Character To Use Sphere's Senses (-1), Linked (-¼)	
45	**Tractor Beam:** Telekinesis (20 STR) Reduced Endurance (0 END; +½)	0
15	**Robot Body:** Does Not Bleed	0
45	**Robot Body:** Takes No STUN	0
2	**Tireless:** Reduced Endurance (0 END; +½) on 5 STR	0
30	**Steel Body:** Resistant (+½) for 10 PD/10 ED	0
35	**Robot Body:** Life Support: Total	0
45	**Graviton Manipulation:** Flight 20m No Turn Mode (+¼), Sideways Maneuverability (+½), Reduced Endurance (0 END; +½)	0
-12	**No Legs:** Running -12m (0m total)	
-2	**No Legs:** Leaping -4m (0m total)	
-2	**No Legs:** Swimming -4m (0m total)	
5	**Sphere Senses:** Infrared Perception (Sight Group)	0
5	**Sphere Senses:** Ultraviolet Perception (Sight Group)	0
3	**Sphere Senses:** Ultrasonic Perception (Hearing Group)	0
	Skills	
7	Stealth 15-	

Total Powers & Skills Cost: 256

Total Cost: 405

400	**Matching Complications (75)**
10	**Physical Complication:** Affected By Cyberkinesis (has EGO 25 for purposes of cyberkinetic powers, and can be affected by cyberkinesis-based Presence Attacks) (Infrequently, Slightly Impairing)
5	**Physical Complication:** Cannot Make Presence Attacks (Infrequently, Barely Impairing)
25	**Psychological Complication:** Must Obey Wearer's Commands (Very Common, Total)

Total Complications Points: 40

Experience Points: 40

In game terms, the sphere is defined as an Automaton which the character buys as a Follower. That way it can operate apart from the character and is affected by attacks separately from the character — an RKA or Drain STR used on the sphere won't injure the character or reduce his STR. As a Follower, the spheres is *technically* free-willed, but for the sake of common and dramatic sense it's best to treat it like an ordinary device and let the character control it absolutely (the device's Psychological Complications reflect this).

For ease of game play, it often works best if the sphere has the same DEX, INT, and SPD as the character using it. If necessary, adjust the device's DEX, INT, and SPD. The GM may also want the character to "synch up" other aspects of the two characters, such as Combat Skill Levels.

Of course, a character could easily build other functions into a Spy-Sphere if he wanted: weapons; invisibility generators; hologram projectors; and so on. The only limits are the player's imagination, the GM's tolerance, and the points available to spend on additions.

Game Information: See Character Sheet.

Options:

1) **Variant Spy-Sphere:** Characters who don't want the complexities of buying the Spy-Sphere as a Follower can buy this simpler version. It defines the Sphere as a Mobile Perception Point for Clairsentience with the Targeting Sense Modifier and Indirect Telekinesis (thus allowing the character to control the use of the Tractor Beam via his Clairsentience when the Sphere isn't within his LOS). The Sphere can go as far as 9,600m (about six miles) away from the character.

Cost	Power
48	**Spy-Sphere Audiovisual Systems:** Clairsentience (Sight and Hearing Groups), 32x Range (9,600m), Mobile Perception Point (24m movement rate), Reduced Endurance (0 END; +½); OAF (-1), Cannot Move Through Solid Objects (-0)
3	**Spy-Sphere Audiovisual Systems:** Targeting for Clairsentience (10 Active Points); OAF (-1), Only Works With Spy-Sphere Tractor Beam (-1)

41 **Spy-Sphere Tractor Beam:** Telekinesis (20 STR), Indirect (+1), Improved Maximum Range (9,600m; +1¼), Reduced Endurance (0 END; +½); OAF (-1), Affects Whole Object (-¼), Can Only Affect One Target At Once (-¼), Linked (only works at perception point of Clairsentience; -¼)

Total cost: 92 points

TACTICAL COMPUTER

Effect: Armor Piercing (x3; +1¾) for attacks of up to 60 Active Points
Target: Self
Duration: Constant
Range: Self
END Cost: 10
Breakability: 20 PD/20 ED

Description: This highly-sophisticated device uses various built-in sensors plus a high-speed computer to detect, analyze, and determine the best way to exploit weaknesses in a target's defenses.

This gadget uses the rules for multiple Armor Piercing on APG 137. If the GM doesn't want to bring those rules into the campaign, consider converting it to +10 with All Combat that can only be used to increase the damage of an attack.

Game Information: Armor Piercing (x3; +1¾) for attacks of up to 60 Active Points (105 Active Points); OAF (-1), Activation Roll 11- (-½). Total cost: 42 points.

Options:

1) **Strong Computer:** Increase to for attacks of up to 80 Active Points. 140 Active Points; total cost 56 points.
2) **Weak Computer:** Decrease to for attacks of up to 40 Active Points. 70 Active Points; total cost 28 points.
3) **Realistic Computer:** This device requires a lot of power. Add Increased Endurance Cost (-½). Total cost: 35 points.
45) **Attached Computer:** This type of Tactical Computer is built into a helmet, suit of powered armor, or the like, making it difficult for another character to take it away from the user. Change OAF (-1) to OIF (-½). Total cost: 52 points.

X-RAY VIEWER

Effect: Fully Penetrative for Sight Group, No Range
Target: Self
Duration: Persistent
Range: Touch (see text)
Charges: 60 Charges
Breakability: 3 PD/3 ED

Description: This device is a viewer about a foot wide by eight inches high and one inch deep. When attached to a wall, door, or other object, it allows the character to see through that object to whatever's beyond. For example, a character could use it to watch the tumblers in a safe's door while he manipulated the lock (thus allowing him to open the safe without the combination), or to find out who's inside a room before entering. Since the character has to attach the Viewer to whatever he wants to see through, the power has the Limitation No Range, but the character can see to his normal range of sight once the device is attached.

Although 60 Charges is normally a +½ Advantage, in this case it's reduced to +0 because the benefit offered by lots of Charges — not using END — is one that doesn't apply to this Power (since it already costs no END).

Game Information: Fully Penetrative for Sight Group (stopped by lead, gold, or force-fields), 60 Charges (see text; +0) (15 Active Points); OAF (-1), No Range (see text; -½). Total cost: 6 points.

Options:

1) **Stronger Battery:** Increase to 120 Charges (see text; +0). Total cost: 6 points.
2) **Weaker Battery:** Decrease to 12 Charges (-¼). Total cost: 5 points.
3) **Realistic Viewer:** The basic write-up assumes only the character can see through the Viewer (perhaps it connects to or broadcasts to special goggles he wears, for example). This version allows anyone who can see the Viewer to view through it; this is limited to eight people, because that many persons crowding around the Viewer will block other peoples' views. Change to: Fully Penetrative for Sight Group (stopped by lead, gold, or force-fields), Usable By Nearby (+1), 60 Charges (see text; +0) (30 Active Points); OAF (-1), No Range (see text; -½). Total cost: 12 points.
4) **Experimental Viewer:** Packing x-ray technology into such a small, portable device isn't easy; as a result, sometimes the Viewer doesn't work properly. Add Activation Roll 14- (-½). Total cost: 5 points.

SCIENCE FICTION COMMUNICATIONS AND SENSORS

Communications and sensory technology really come into their own in the Science Fiction genre, when advances in micro-miniaturization, rubber sciences like "hyperwave transmissions," and other technological advances make it possible to condense what would once have required an entire battleship's worth of sensors or communications gear into a gadget that a character can hold in his hand.

In addition to the devices described below, any of the Modern sensory and communications equipment, and most (if not all) of the Superheroic, is appropriate for Science Fiction campaigns.

COMMUNICATIONS EQUIPMENT

COMM BUTTON

Effect: Radio Perception/Transmission, MegaScale (transmission range is 1,000 km per Active Point)
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: The descendant of modern cell phones and portable radios, this device is a tiny unit (no bigger than a nickel) with a sensitive microphone and voice-activated controls, capable of automatically linking up to the local wireless network to allow instant communication with anyone else on the planet (or in orbit). They need no maintenance because they're cheap enough to be disposable.

Game Information: Radio Perception/Transmission (Radio Group), MegaScale (transmission range is 1,000 km per Active Point; +1¾) (27 Active Points); IAF (-½), Affected By Hearing Group As Well As Radio Group (-¼), Nonpersistent (-¼). Total cost: 2 points.

Options:

1) **Improved Comm Button:** This form of Comm "Button" is a little larger and has a viewscreen so that it can send and receive video transmissions. It's worn on the wrist or lower arm for easy viewing. Change to: HRRP (Radio Group), MegaScale (transmission range is 1,000 km per Active Point; +1¾) (33 Active Points); OAF (-1), Affected By Sight And Hearing Group As Well As Radio Group (-½), Nonpersistent (-¼). Total cost: 12 points.

HOLOGRAPHIC COMMUNICATION SYSTEM

Effect: HRRP; Eidetic Memory; Sight Group Images
Target: Self/Self/1m Radius
Duration: Constant
Range: Self/Self/50m
Charges: 1 Continuing Fuel Charge lasting 1 Hour
Breakability: 6 PD/6 ED

Description: An HCS makes it possible for people to communicate "face to face" by projecting holographic images. Standard versions are installed in many offices, starships, and homes; this version is the portable personal model often carried by tourists and people out for a night on the town.

Game Information:

Cost	Power
15	**Receiver/Transmitter:** HRRP (Radio Group), Megascale (transmission range is 1,000 km per Active Point; +1¾) (33 Active Points); OAF (-1), Nonpersistent (-¼), 1 Continuing Fuel Charge lasting 1 Hour (easily recharged; -0)
2	**Memory:** Eidetic Memory (5 Active Points); OAF (-1), Only To Remember Things Received/Transmitted (-½), 1 Continuing Fuel Charge lasting 1 Hour (easily recharged; -0)
1	**Holo-Emitter:** Sight Group Images (5 Active Points); OAF (-1), Set Effect (only received/broadcast images; -1), 1 Continuing Fuel Charge lasting 1 Hour (easily recharged; -0)

Total cost: 18 points.

HOLOPROJECTOR

Effect: Sight and Hearing Group Images, Set Effect (recorded or broadcast images only)
Target: 1m Radius
Duration: Constant
Range: 150m
Charges: 1 Continuing Fuel Charge lasting 1 Hour
Breakability: 3 PD/3 ED

Description: A very common gadget used for entertainment, advertising, "telepresence," and various other purposes ranging from deadly serious to silly, a Holoprojector projects visual images, either realtime feeds from a camera or recorded.

Game Information: Sight and Hearing Group Images (15 Active Points); OAF (-1), Set Effect (recorded or broadcast images only; -½), 1 Continuing Fuel Charge lasting 1 Hour (easily recharged; -0). Total cost: 6 points.

TRANSLATOR

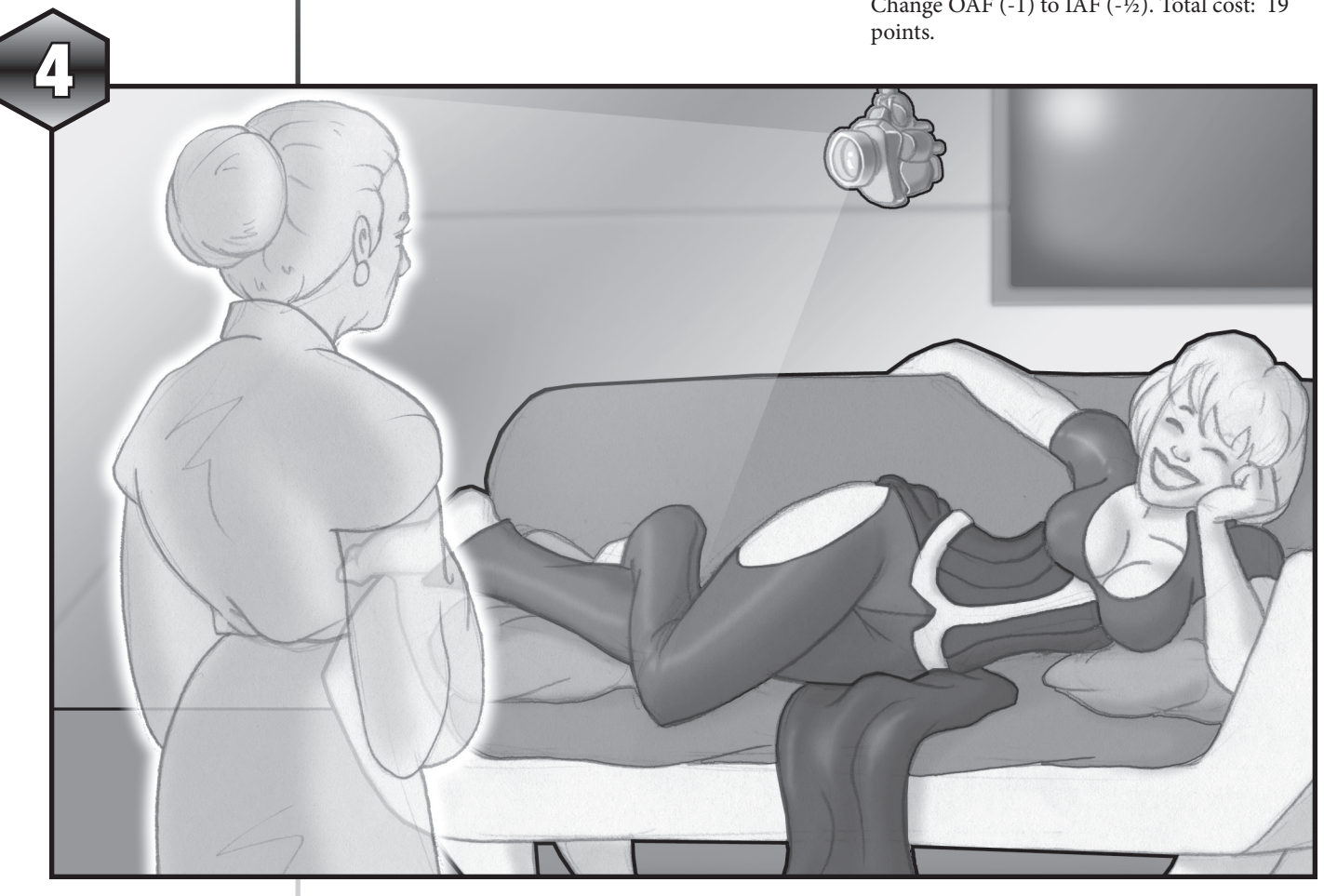
Effect: Universal Translator 18-
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 6 PD/6 ED

Description: In a Galaxy filled with dozens of sentient species, some of whom may not even communicate via speech, a handheld device that can translate back and forth is often essential! They're powered by microbatteries that last for days. Stationary versions of this device are installed in many starships and buildings, removing the need for characters to carry their own Translators.

Game Information: Universal Translator 18- (29 Active Points); OAF (-1). Total cost: 14 points.

Options:

1) **Concealed Translator:** Some species or beings consider holding a Translator while talking to be gauche. To get around this they conceal the Translator as part of their clothing or jewelry. Change OAF (-1) to IAF (-½). Total cost: 19 points.



SENSORY EQUIPMENT

ELECTRO-BINOCULARS

Effect: Various vision abilities
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 4 PD/4 ED

Description: These powerful vision aids, often used by soldiers, scientists, and explorers, provide light amplification, thermal sensing, magnification, and real-time image enhancement.

Game Information:

Cost	Power
2	**Basic Nightsight:** Nightvision (5 Active Points); OAF (-1)
2	**Thermal Sensing:** Infrared Perception (Sight Group) (5 Active Points); OAF (-1)
9	**Magnification:** +12 versus Range for Sight Group (18 Active Points); OAF (-1)
2	**Image Enhancement:** +2 PER with Sight Group (4 Active Points); OAF (-1)
1	**Rangefinder:** Absolute Range Sense (3 Active Points); OAF (-1)

Total cost: 16 points.

Options:

1) **Attached Electro-Binoculars:** This form of the device attaches to a helmet, thus freeing the user's hands.

Cost	Power
3	**Basic Nightsight:** Nightvision (5 Active Points); OIF (-½)
3	**Thermal Sensing:** Infrared Perception (Sight Group) (5 Active Points); OIF (-½)
12	**Magnification:** +12 versus Range for Sight Group (18 Active Points); OIF (-½)
3	**Image Enhancement:** +2 PER with Sight Group (4 Active Points); OIF (-½)
2	**Rangefinder:** Absolute Range Sense (3 Active Points); OIF (-½)

Total cost: 23 points.

NANOSPIES

Effect: Infrared Perception (Sight Group) plus Clairsentience (Sight Group)
Target: Self
Duration: Constant
Range: Self/3,200m
Charges: 4 Continuing Charges lasting 1 Hour each
Breakability: 16 PD/16 ED

Description: Nanobots aren't always destructive; some are used for reconnaissance instead. "Nanospies" carry small cameras and transmitters that send a visual image (including thermal images) back to the person who activated them.

Game Information: Infrared Perception (Sight Group), 4 Continuing Charges lasting 1 Hour each (+0) (5 Active Points); OAF (nanospy launcher; -1) (total cost: 3 points) plus Clairsentience (Sight Group), 16x Range (3,200m), Mobile Perception Point, Multiple Perception Points (up to four at once), 4 Continuing Charges lasting 1 Hour each (+½) (82 Active Points); OAF (nanospy launcher; -1) (total cost: 41 points). Total cost: 43 points.

NIGHTSIGHT GLASSES

Effect: Nightvision; Infrared Perception; Ultraviolet Perception; Sight Group Flash Defense (10 points)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: Futuristic descendants of modern nightvision devices (see page 303), these are as light and comfortable as a pair of sunglasses and adjust automatically to ambient light, providing both night vision and glare protection.

Game Information:

Cost	Power
2	**Basic Nightsight:** Nightvision (5 Active Points); OAF (-1)
2	**Thermal Sensing:** Infrared Perception (Sight Group) (5 Active Points); OAF (-1)
2	**Ultraviolet Sensing:** Ultraviolet Perception (Sight Group) (5 Active Points); OAF (-1)
5	**Glare Protection:** Sight Group Flash Defense (10 points) (10 Active Points); OAF (-1)

Total cost: 11 points.

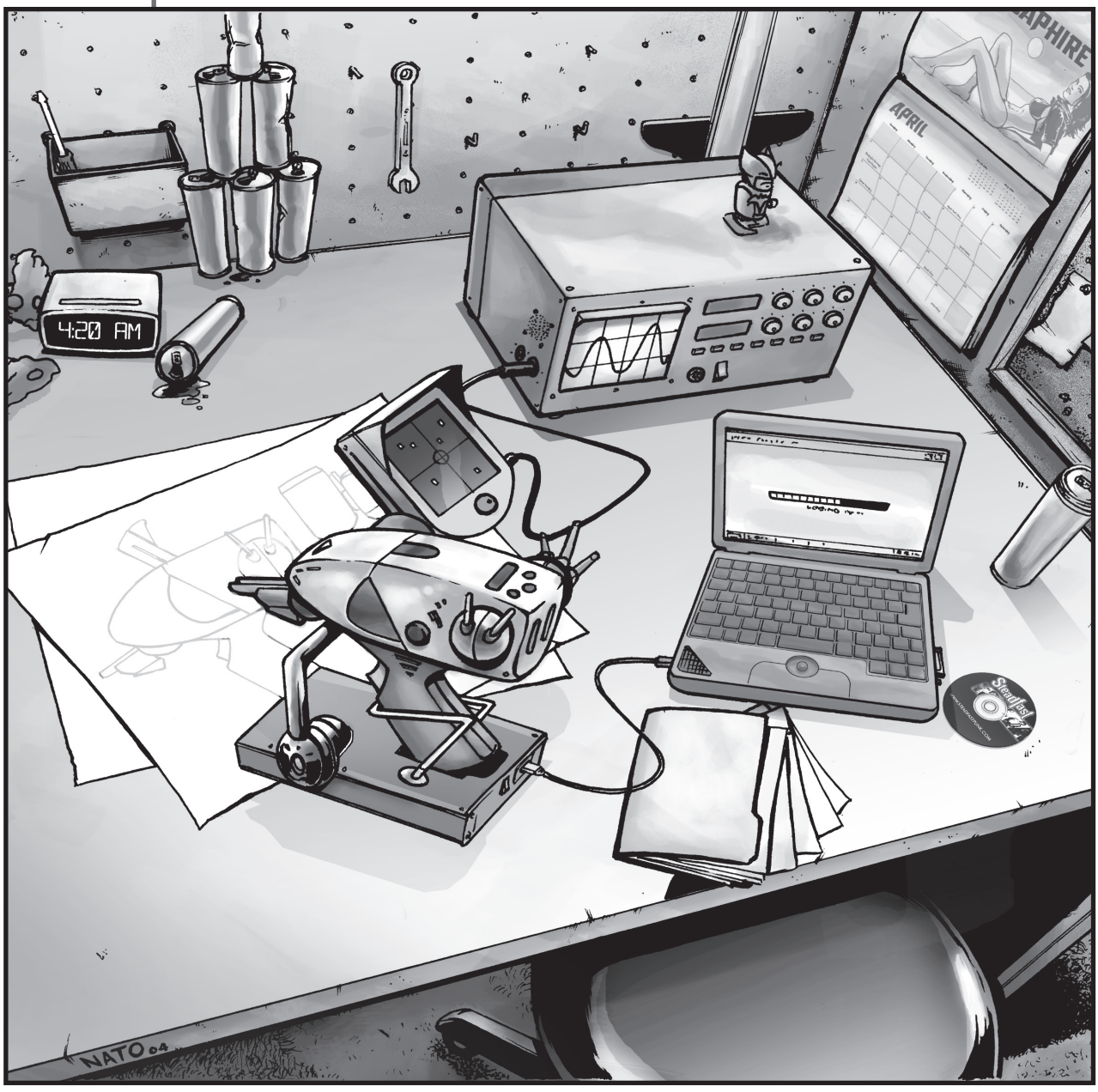
SENSOR JEWELRY

Effect: Various Sensory Powers
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: Varies

Description: In some Science Fiction settings, technology's advanced enough to allow characters to wear powerful sensors that look like ordinary, attractive jewelry. Audio and radio sensors tend to be earrings (or sometimes rings or bracelets if they have video capability). Visual sensors feature "stones" large enough to accomplish the task, and sometimes have to be held up to the eye to be used, thus giving the object's purpose away. (A few cultures build such devices into monocles or headbands in some way.) A character may buy any or all of these gadgets, as desired; he doesn't have to buy some as a prerequisite for buying others.

Game Information:

Cost	Power
10	**Active Sonar Array:** Active Sonar (Hearing Group) (15 Active Points); IAF (-½)
5	**Auditory Enhancers:** +4 PER with Hearing Group (8 Active Points); IAF (-½)
4	**Radio I:** Radio Perception (8 Active Points); IAF (-½), Affected As Hearing Group As Well As Radio Group (-¼)
6	**Radio II:** Radio Perception/Transmission (Radio Group) (10 Active Points); IAF (-½), Affected As Hearing Group As Well As Radio Group (-¼)
6	**Radio III:** HRRP (Radio Group) (12 Active Points); IAF (-½), Affected As Sight And Hearing Group As Well As Radio Group (-½)
10	**Micro-Lens:** Microscopic (x1,000) for Sight Group (15 Active Points); IAF (-½)
3	**Nightsight Lens:** Nightvision (5 Active Points); IAF (-½)



8 **Parabolic Receiver:** +8 versus Range Modifier for Hearing Group (12 Active Points); IAF (-½)

10 **Radar Array:** Radar (Radio Group) (15 Active Points); IAF (-½)

8 **Telescopic Lens:** +8 versus Range Modifier for Sight Group (12 Active Points); IAF (-½)

3 **Thermalsight Lens:** Infrared Perception (Sight Group) (5 Active Points); IAF (-½)

3 **Ultrasight Lens:** Ultraviolet Perception (Sight Group) (5 Active Points); IAF (-½)

2 **Ultrasonic Receiver:** Ultrasonic Perception (Hearing Group) (3 Active Points); IAF (-½)

7 **Wide-Angle Lens:** Increased Arc Of Perception (360 Degrees) for Sight Group (10 Active Points); IAF (-½)

10 **X-Ray Lens:** Fully Penetrative for Sight Group (stopped by lead, gold, or force-fields) (15 Active Points); IAF (-½)

PERSONAL SENSOR UNIT

Carried by explorers, scientists, detectives, and anyone who needs to gather information from a locale, personal sensor units include spectrographic scanners to analyze materials, a battery of electromagnetic radiation detectors, and a powerful built-in analytic computer. Scanning takes some time, but the results can be recorded and studied later. Specialized versions are available for specific jobs (see Options).

PERSONAL SENSOR UNIT

Effect: Detect Electromagnetic Radiation And Physical Objects 14-; HRRP
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 7 PD/7 ED

Description: Carried by explorers, scientists, detectives, and anyone who needs to gather information from a locale, personal sensor units include spectrographic scanners to analyze materials, a battery of electromagnetic radiation detectors, and a powerful built-in analytic computer. Scanning takes some time, but the results can be recorded and studied later. Specialized versions are available for specific jobs (see Options). A PSU is powered by microbatteries that work for hours, if not days.

Anyone can use a Personal Sensor Unit for basic tasks. However, fine-tuning it for specific tasks or readings may require a Systems Operation roll, and interpreting the data it collects may require a wide range of Skills.

Game Information: Detect Electromagnetic Radiation And Physical Objects 14- (Radio Group), Discriminatory, Analyze (30 Active Points); OAF (-1), Nonpersistent (-¼), Requires A Systems Operation Roll (see text; -0), Affected As Sight And Hearing Group As Well As Radio Group (-½) (total cost: 12 points) **plus** HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½), Nonpersistent (-¼) (total cost: 4 points) **plus** Eidetic Memory (5 Active Points); OAF (-1), Nonpersistent (-¼), Requires A Systems Operation Roll (see text; -0), Only To Remember Things Detected (-½) (total cost: 2 points). Total cost: 18 points.

BUILT-IN COMPUTER

Val	Char	Cost	Roll	Notes
10	**INT**	0	11-	PER Roll 11-
10	**DEX**	0	11-	
3	**OCV**	0		
3	**DCV**	0		
3	**OMCV**	0		
3	**DMCV**	0		
2	**SPD**	0		*Phases:* 6, 12

Total Characteristic Cost: 0

Cost	Skills
3	Computer Programming 11-
3	Cryptography 11-
42	AK: Milky Way Galaxy 50-
42	KS: Everything 50-
50	50 points' worth of Science Skills (based on the PSU's primary function[s])
3	Systems Operation 11-

Programs

1 Activate Homing Signal Upon Approved Remote Query
1 Analyze Gathered Data
1 Automatically Signal Designated Person(s) On Verbal Cue
1 Operate PSU's Sensors To Gather Data
1 Send Emergency Call To Designated Person(s) If Specified Protocols Are Not Met
1 Search Reference Material For Information On A Topic

Talents

3 **Clock:** Absolute Time Sense
3 **Calculator:** Lightning Calculator
3 **Instant-On Feature:** Lightsleep

Total Computer Cost: 158/5 = 32
Total cost of PSU: 50 points

Options:

1) **Translator PSU:** This form of PSU includes a built-in Translator. Add Universal Translator 18- (29 Active Points); OAF (-1). Total cost 14 points; total cost of PSU 32 points.
2) **Built-In Computer:** Some PSUs have powerful built-in computers that can interpret the gathered data and explain it to the user at whatever level of comprehension he's most comfortable with. Add the computer on page 323.
3) **Specialized PSUs:** Some characters use specialized PSUs, such as:

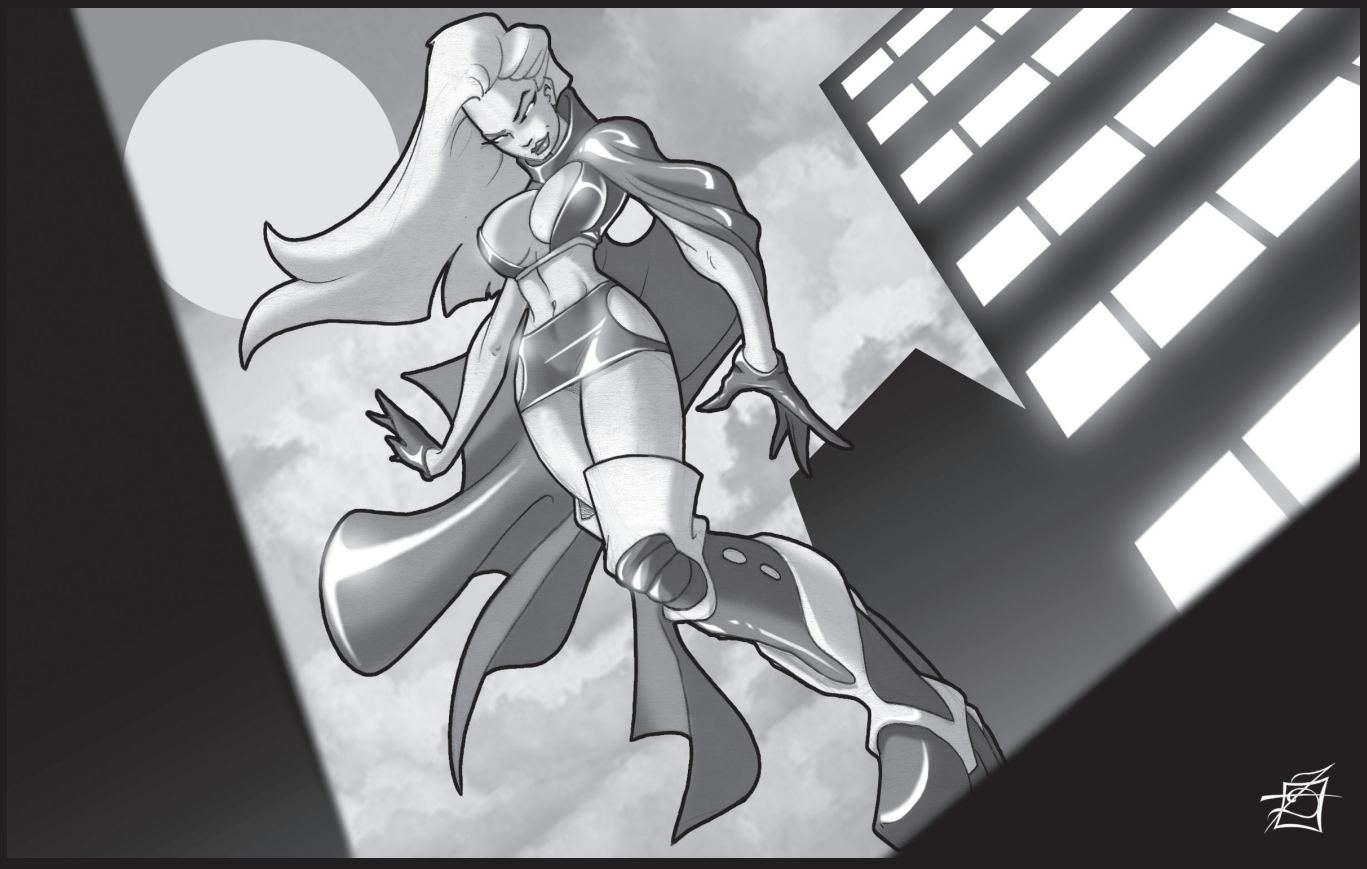
Atmospheric Analyzer: Utilized by planetary explorers, the atmospheric analyzer has the ability to precisely determine the molecular composition of a planet's atmosphere. It can also be used to determine if another vessel has breathable air. Change to: Detect Atmospheric Composition 14- (Radio Group), Discriminatory, Analyze, Increased Arc Of Perception (240 Degrees) (22 Active Points); OAF (-1), Nonpersistent (-¼), Requires A Systems Operation Roll (see text; -0), Affected As Sight and Hearing Group As Well As Radio Group (-½) (total cost: 8 points) plus HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½), Nonpersistent (-¼) (total cost: 4 points) plus Eidetic Memory (5 Active Points); OAF (-1), Requires A Systems Operation Roll (see text; -0), Only To Remember Things Detected (-½) (total cost: 2 points). Total cost: 14 points.

Bio-Scanner: Popular among explorers, soldiers, and spies, a bio-scanner can detect lifeforms and provide detailed information about them (size, weight, body structure, type of food consumed, and the like). In addition to its obvious scientific uses, a bio-scanner can detect enemy troop locations, or help the Imperial authorities track down fugitives. Change to: Detect Life 14- (Radio Group), Discriminatory, Analyze, Increased Arc Of Perception (360 Degrees), Tracking (35 Active Points); OAF (-1), Nonpersistent (-¼), Requires A Systems Operation Roll (see text; -0), Affected As Sight and Hearing Group As Well As Radio Group (-½) (total cost: 13 points) plus HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½), Nonpersistent (-¼) (total cost: 4 points) plus Eidetic Memory (5 Active Points); OAF (-1), Requires A Systems Operation Roll (see text; -0), Only To Remember Things Detected (-½) (total cost: 2 points). Total cost: 18 points.

Cybernetics Detector: This PSU detects the presence of cybernetic technology concealed within a person's body. It's often used by border inspectors and law enforcement officers. Change to: Detect Cybernetics 13- (Radio Group), Discriminatory, Increased Arc Of Perception (360 Degrees) (19 Active Points); OAF (-1), Nonpersistent (-¼), Affected As Sight And Hearing Group As Well As Radio Group (-½), Limited Range (40m; -¼) (total cost: 7 points) plus HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½), Nonpersistent (-¼) (total cost: 4 points) plus Eidetic Memory (5 Active Points); OAF (-1), Requires A Systems Operation Roll (see text; -0), Only To Remember Things Detected (-½) (total cost: 2 points). Total cost: 13 points.

Medical PSU: A "med-scan" (as they're called) can quickly and reliably diagnose a patient's medical condition. Field medics use them regularly, as do hospital doctors and many explorers (though knowing a medical condition, and knowing how to cure or repair it, are two different things). Change to: Detect Medical Condition 14- (Radio Group), Discriminatory, Analyze, Microscopic (x100) (26 Active Points); OAF (-1), Nonpersistent (-¼), Requires A Systems Operation Roll (see text; -0), Affected As Sight And Hearing Group As Well As Radio Group (-½) (total cost: 9 points) plus HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½), Nonpersistent (-¼) (total cost: 4 points) plus Eidetic Memory (5 Active Points); OAF (-1), Requires A Systems Operation Roll (see text; -0), Only To Remember Things Detected (-½) (total cost: 2 points). Total cost: 15 points.

Geo-Scanner PSU: Prospectors and explorers looking for suitable planets for mining and/or colonization use soil analyzers to obtain detailed reports of surrounding mineral deposits. The device can also detect and locate trace deposits of any known physical compound or metallic alloy. Change to: Detect Soil Composition 14- (Radio Group), Discriminatory, Analyze, Microscopic (x100) (26 Active Points); OAF (-1), Nonpersistent (-¼), Requires A Systems Operation Roll (see text; -0), Affected As Sight and Hearing Group As Well As Radio Group (-½) (total cost: 9 points) plus HRRP (Radio Group) (12 Active Points); OAF (-1), Affected As Sight And Hearing Group As Well As Radio Group (-½), Nonpersistent (-¼) (total cost: 4 points) plus Eidetic Memory (5 Active Points); OAF (-1), Requires A Systems Operation Roll (see text; -0), Only To Remember Things Detected (-½) (total cost: 2 points). Total cost: 15 points.



CHAPTER FIVE

MISCELLANEOUS EQUIPMENT

MEDICAL EQUIPMENT

Weapons being as powerful as they are, sometimes defensive gear alone isn't enough. Characters may need medical equipment to heal torn flesh and repair broken bones.

MODERN MEDICAL EQUIPMENT

Here's some examples of the sort of personal medical equipment available to Modern-day characters.

Drugs

Here are a few generically-described drugs that characters might be given when they're hurt... or give to an enemy to weaken him temporarily. They take the Limitation *Must Be Injected* (-½), meaning they have to be injected into the target's body with a syringe or the like; the options have other delivery methods.

KNOCKOUT DRUG

Effect: Blast 1d6, NND, Damage Over Time
Target: One character
Duration: Instant
Range: No Range
Charges: 12 Charges
Breakability: 1 PD/1 ED

Description: This is a fast-acting drug designed to render a person unconscious, typically because he's in tremendous pain or someone needs to perform a painful medical procedure on him.

Game Information: Blast 1d6, NND (defense is Life Support [appropriate Immunity]; +1), Damage Over Time (8 increments, one per 3 Segments for 24 seconds, target's defense only applies once; +4½) (32 Active Points); OAF Fragile (-1¼), Must Be Injected (-½), No Range (-½), 12 Charges (-¼). Total cost: 9 points.

Options:

1) **Strong Knockout Drug:** Increase to Blast 2d6. 65 Active Points; total cost 18 points.
2) **Weak Knockout Drug:** Decrease to Blast ½d6. 19 Active Points; total cost 5 points.
3) **Knockout Pill:** This form of the drug is a pill a character can take, rather than an injection. Remove Must Be Injected (-½). Total cost: 11 points.

PAINKILLER DRUG

Effect: Physical and Energy Damage Reduction, Resistant, 25%
Target: One character
Duration: Constant
Range: Self
Charges: 12 Continuing Charges lasting 20 Minutes each
Breakability: 1 PD/1 ED

Description: This drug deadens a character's ability to feel pain for 20 minutes.

Game Information: Physical and Energy Damage Reduction, Resistant, 25% (30 Active Points); OAF Fragile (-1¼), Must Be Injected (-½), STUN Damage Only (-½), 12 Continuing Charges lasting 20 Minutes each (-0). Total cost: 9 points.

Options:

1) **Painkiller Pill:** This form of the drug is a pill a character can take, rather than an injection. Remove Must Be Injected (-½). Total cost: 11 points.

STIMULANT DRUG

Effect: Life Support (Diminished Sleep: no need to sleep)
Target: One character
Duration: Constant
Range: Self
Charges: 12 Continuing Charges lasting 6 Hours each
Breakability: 1 PD/1 ED

Description: This drug shakes off the sleepies in a major way, eliminating a character's need to sleep for the next six hours no matter how tired he is. Characters can stay awake on Stimulant Drugs for a long time, but if they keep it up too long eventually they'll "crash" and have to sleep no matter how powerful the drugs are.

Game Information: Life Support (Diminished Sleep: no need to sleep) (3 Active Points); OAF Fragile (-1¼), Must Be Injected (-½), 12 Continuing Charges lasting 6 Hours each (-0). Total cost: 1 point.

Options:

1) **Stimulant Pill:** This form of the drug is a pill a character can take, rather than an injection. Remove Must Be Injected (-½). Total cost: 1 point.

Other Medical Equipment

FIRST AID KIT

Effect: +2 with Paramedics rolls
Target: Self
Duration: Constant
Range: Self
END Cost: 0 (see text)
Breakability: 1 PD/1 ED

Description: This item is a standard paramedic's first aid kit, well-stocked with expendable supplies (bandages, gauze, some types of drugs, and so on) plus reusable supplies (small scissors, scalpel, thermometer, and the like).

Although the Kit itself costs no END to use and doesn't have Charges, some of its supplies — drugs, gauze, and so on — are finite. Once they run out, characters have to obtain more, and the GM may reduce the Kit's bonus to +1 (or even +0 in some circumstances) due to the lack of supplies.

See *Skill Kits,* page 336, for many similar gadgets that improve a character's ability to use specific Skills.

Game Information: +2 with Paramedics rolls (4 Active Points); OAF (-1). Total cost: 2 points.

SCIENCE FICTION MEDICAL EQUIPMENT

Most of this equipment is primarily appropriate for Space Opera settings and other campaigns where high technology is advanced and commonplace. In other sorts of games — such as many Low Science Fiction or Post-Apocalyptic campaigns — Modern medical technology (perhaps slightly improved) may be the best thing available.

MEDICAL NANOBOTS

Effect: Regeneration (1 BODY per Minute)
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Charge lasting for 5 Minutes
Breakability: 1 PD/1 ED

Description: Medical nanobots are microscopic machines suspended in a saline solution. When injected into a person's body, they immediately go to work "repairing" injured tissue and helping to stabilize that person's condition. They have a "lifespan" of five minutes.

Game Information: Regeneration (1 BODY per Minute) (14 Active Points); OAF Fragile (-1¼), 1 Continuing Charge lasting for 5 Minutes (-¾). Total cost: 5 points.

Options:

1) **Strong Medical Nanobots:** Increase to 1 Continuing Charge lasting for 10 Minutes (-¾). Total cost: 5 points.
2) **Weak Medical Nanobots:** Decrease to 1 Continuing Charge lasting for 3 Minutes (-1). Total cost: 4 points.

MEDKIT

Effect: Simplified Healing 2d6
Target: One character
Duration: Instant
Range: Touch
Charges: 6 Charges
Breakability: 4 PD/4 ED

Description: The standard first aid kit in futuristic settings, a Medkit includes bandages which function like stitches, drugs to stop bleeding and prevent shock, stimulants, immunoboosters, and more. It can fix minor injuries in mere seconds.

Game Information: Simplified Healing 2d6 (20 Active Points); OAF (-1), Extra Time (1 Turn, -1¼), Requires A Paramedics Roll (-½), 6 Charges (-¾). Total cost: 4 points.

Options:

1) **Strong Medkit:** Increase to Simplified Healing 3d6. 30 Active Points; total cost 7 points.

2) **Weak Medkit:** Decrease to Simplified Healing 1d6. 10 Active Points; total cost 2 points.
3) **Larger Medkit:** Increase to 12 Charges (-¼). 20 Active Points; total cost 5 points.

MULTISYRINGE

Effect: Minor Transform 8d6 (sick persons into well persons)
Target: One character
Duration: Instant
Range: Touch
Charges: 12 Charges
Breakability: 8 PD/8 ED

Description: This handheld device contains an extensive supply of different medicines its user can inject into a sick person to cure him. The Activation Roll represents the fact that the multisyringe might not have quite the right medicine for a specific illness (or a specific species); if characters know in advance what illnesses they may encounter, they can load the multisyringe with the appropriate medications and ignore the roll.

Note that the multisyringe does *not* provide any sort of Healing — it simply stops the course of a disease or illness. Characters who have lost BODY, STUN, or other Characteristics to an illness must recover them normally (or with the help of other medical technology).

Game Information: Minor Transform 8d6 (standard Effect: 24 BODY) (sick persons into well persons, heals back through any normal means that would cause character to contract the same disease) (40 Active Points); OAF (-1), Activation Roll 11- (-½), No Range (-½), All Or Nothing (-½), Limited Target (sentient beings; -¼), 12 Charges (-¼). Total cost: 10 points.

Options:

1) **Larger Multisyringe:** Increase to 32 Charges (+¼). 50 Active Points; total cost 13 points.

PERSONAL HEALING AMPULE

Effect: Healing BODY 2d6
Target: One character
Duration: Instant
Range: Touch
Charges: 4 Charges
Breakability: 4 PD/4 ED

Description: Often given as standard issue to military personnel, a Personal Healing Ampule ("PHA") helps soldiers mend injuries they've received when medical assistance is not readily available. The ampule contains a biochemical gel. When ejected through the nozzle into a wound, it accelerates the body's natural healing processes. However, not only does this make the person receiving the treatment extremely hungry, it can have adverse mental effects if used too often. For each PHA dose after the first a character receives during a 24-hour period, the GM should roll 3d6. On an 11-, the character loses ½d6 INT for 6d6 hours. For each use beyond the second, increase the roll by 2 (13-, 15-, and so on).

Game Information: Healing BODY 2d6 (20 Active Points); OAF (-1), Extra Time (at least one Extra Phase, possibly longer; -¾), Side Effect (see text; -0), 4 Charges (-2). Total cost: 4 points.

Options:

1) **Strong PHA:** Increase to Healing BODY 3d6. 30 Active Points; total cost 6 points.
2) **Weak PHA:** Decrease to Healing BODY 1d6. 10 Active Points; total cost 2 points.

PORTABLE AUTODOCTOR

Effect: Simplified Healing 6d6
Target: One character
Duration: Instant
Range: No Range
Charges: 2 Charges
Breakability: 12 PD/12 ED

Description: A marvel of Space Opera technology, this device is a small chamber. Typically it's built onto a pedastal in a space station or starship, but the version described here is a man-portable tent-like affair that's carried in a special backpack and can be set up in less than a minute by a trained user. An injured person seals himself in, and the computers operating the Autodoctor go to work, using its built-in diagnostic systems and medical technology to repair injured bodies, cure illnesses, and otherwise restore the character to good health. This often takes a long time — a minimum of 1 Minute, but usually one hour to one day per BODY lost.

Game Information: Simplified Healing 6d6 (60 Active Points); OAF Bulky (-1½), Extra Time (see text; -1½), 2 Charges (-1½). Total cost: 11 points.

PSIONIC EQUIPMENT

In some Superhero and Science Fiction settings, it's possible to duplicate psionic powers with technology. It may be so rare that building it requires special Skills (such as SS: Psionic Engineering), or it may be so commonplace that any engineer can create a psi-gadget.

In theory the types of psionic equipment could be almost numberless; such devices might even have to be custom-built specifically for individual minds. Here are just a few examples of the possibilities.

PSIONIC BLASTER HEADBAND

Effect: Mental Blast 4d6, Only Works For Persons Who Are Already Psionic
Target: One character
Duration: Instant
Range: LOS
END Cost: 4
Breakability: 8 PD/8 ED

Description: This headband enhances the powers of persons who are already psionic by allowing them to project blasts of mental energy. Using it can be tiring, and requires a level of concentration that may expose the user to counterattack, but it's a powerful weapon in the right circumstances.

Game Information: Mental Blast 4d6 (40 Active Points); OAF (-1), Only Works For Persons Who Are Already Psionic (-0), Concentration (½ DCV; -¼), Limited Normal Range (40m; -¼). Total cost: 16 points.

Options:

1) **Strong Headband:** Increase to Mental Blast 6d6. 60 Active Points; total cost 24 points.
2) **Weak Headband:** Decrease to Mental Blast 3d6. 30 Active Points; total cost 12 points.
3) **Universal Headband:** Anyone, even a non-psionic, can put on this headband and gain the ability to project mental blasts. Remove Only Works For Persons Who Are Already Psionic (-0). Total cost: 16 points.

PSI-SCAN CAMOUFLAGER

Effect: Images To Detect Psionic Powers, -5 to PER Rolls
Target: Self
Duration: Constant
Range: No Range
Charges: 1 Continuing Fuel Charge lasting 20 Minutes
Breakability: 4 PD/4 ED

Description: This device, usually built into a hat, headband, necklace, or the like, interferes with devices designed to detect psionic abilities. It cannot conceal the use of psi-powers from another psi, but does prevent non-psionic authorities from uncovering the wearer's powers via psi-detector. To their scanners, his mind appears to be a normal, non-psionic mind.

Game Information: Images To Detect Psionic Powers, -5 to PER Rolls (20 Active Points); IAF (-½), Set Effect (only to make character's mind seem non-psionic; -1), No Range (-½), 1 Continuing Fuel Charge lasting 20 Minutes (easily replenished with a new power cell; -¼). Total cost: 6 points.

Options:

1) **Strong Camouflager:** Increase to -8 to PER Rolls. 29 Active Points; total cost 9 points.
2) **Weak Camouflager:** Decrease to -3 to PER Rolls. 14 Active Points; total cost 4 points.

PSI-SHIELD HEADBAND

Effect: Mental Defense (10 points)
Target: Self
Duration: Persistent
Range: Self
Charges: 1 Continuing Fuel Charge lasting 20 Minutes
Breakability: 2 PD/2 ED

Description: Although not as effective as the psi-shield helmet used by the military and police (see Options), this protective device is commercially available to civilians and can be designed to complement a variety of outfits and clothing styles.

Game Information: Mental Defense (10 points) (10 Active Points); OAF Fragile (-1¼), 1 Continuing Fuel Charge lasting 20 Minutes (easily replenished with a new power cell; -¼). Total cost: 4 points.

Options:

1) **Psi-Shield Helmet:** Police and military personnel who have to deal with mentalists are issued these helmets, which rpvide much stronger protection against psionic attack. Increase to Mental Defense (20 points). 20 Active Points; total cost 8 points.

SURVIVAL & ENVIRONMENTAL EQUIPMENT

This section describes equipment commonly used by characters to help them cope with their environment and the threats it presents. Some of this equipment also has defensive or sensory functions.

MODERN SURVIVAL AND ENVIRONMENTAL EQUIPMENT

GEIGER COUNTER

Effect: Detect Radiation (INT Roll +8) (no Sense Group)
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 4 PD/4 ED

Description: Highly useful in many Modern-day situations, and one of the most sought-after devices in Post-Apocalyptic settings where the holocaust that ended society involved nuclear war, a Geiger counter detects ionizing radiation. A particle of radiation causes the inert gas in the device to become conductive, creating an electrical signal that indicates the presence of radiation. Some Geiger counters use the electrical signal to move a needle, some to light an indicator, but most indicate the presence and intensity of radiation with a distinctive "clicking" sound that becomes faster and more intense the stronger and closer the source of radiation is.

Game Information: Detect Radiation (INT Roll +8) (no Sense Group), Range (18 Active Points); OAF (-1), Nonpersistent (-¼). Total cost: 8 points.

GAS MASK

Effect: Life Support: Self-Contained Breathing; Sight Group Flash Defense, Only Protects Against Tear Gas-Type Flashes
Target: Self
Duration: Constant/Persistent
Range: Self
Charges: 1 Continuing Fuel Charge/0 END
Breakability: 2 PD/2 ED

Description: A gas mask covers the entire head and either screens out harmful gases or gives the wearer his own self-contained air supply for a short time. This protection extends to tear gas.

Game Information: Life Support: Self-Contained Breathing (10 Active Points); OIF (-½), 1 Continuing Fuel Charge (easy to replenish, 1 Hour; -0) (total cost: costs 7 points) plus Sight Group Flash Defense (10 points) (10 Active Points); OIF (-½), Only Protects Against Tear Gas-Type Flashes (-1) (total cost: 4 points). Total cost: 11 points.

SURVIVAL KIT

Effect: +2 to Survival rolls
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: This incredibly useful package of items and materials make it a lot easier for someone to survive in the wild. It includes a tent made of material that reflects heat internally to keep most of the user's body heat inside, water purification tablets, a selection of fishhooks and line, a survival knife, handy waterproof reference materials, and the like.

See *Skill Kits,* page 336, for many similar gadgets that improve a character's ability to use specific Skills.

Game Information: +2 with Survival rolls (4 Active Points); OAF (-1). Total cost: 2 points.

SCIENCE FICTION SURVIVAL AND ENVIRONMENTAL EQUIPMENT

Many worlds both within and without settled space present grave environmental risks for visitors and explorers — everything from lack of oxygen, to the existence of alien diseases and contaminants, to bizarre lifeforms that view Humans (and other sentients) as food. Fortunately, explorers have developed equipment to lessen the risks posed by these hostile conditions.

ANTI-GLARE GOGGLES

Effect: Sight Group Flash Defense (10 points), Hardened
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: Protective eyewear is important in space (where one might gaze directly at a star or a functioning rocket exhaust port) and planetside (since blinding sunlight makes driving and hiking more onerous). These stylish goggles protect the wearer from bright lights. The tinted, solarized lenses are scratchproof, shatter-resistant, and come in any number of dark and colorful shades.

Game Information: Sight Group Flash Defense (10 points), Hardened (+¼) (12 Active Points); OAF (-1). Total cost: 6 points.

Options:

1) **Ultra-Dark Goggles:** Increase to Sight Group Flash Defense (20 points). 25 Active Points; total cost 12 points.

ANTI-RADIATION INJECTION

Effect: Life Support (Safe Environment: High Radiation)
Target: One character
Duration: Constant
Range: Self
Charges: 12 Continuing Charges lasting 6 Hours each
Breakability: 1 PD/1 ED

Description: This serum protects a character from that most insidious of environmental threats, radiation. Worth its weight in gold in many Post-Apocalyptic settings (among others), it makes a character immune to the effects of radiation for six hours.

Game Information: Life Support (Safe Environment: High Radiation) (2 Active Points); OAF Fragile (-1¼), Must Be Injected (-½), 12 Continuing Charges lasting 6 Hours each (-0). Total cost: 1 point.

Options:

1) **Anti-Radiation Pill:** This form of the drug is a pill a character can take, rather than an injection. Remove Must Be Injected (-½). Total cost: 1 point.
2) **Realistic Anti-Radiation Injection:** This form of the drug provides protection against radiation, but not the absolute immunity offered by the standard injection. It increases the character's CON for purposes of resisting the effects of rads (see 6E2 153-54). Change to: +30 CON (30 Active Points); OAF Fragile (-1¼), Must Be Injected (-½), Only To Resist Radiation Effects (see 6E2 153-54; -2), 12 Continuing Charges lasting 6 Hours each (-0). Total cost: 6 points.

DECONTAMINATION FOAM

Effect: Minor Transform 10d6 (radioactive person or object into non-radioactive one)
Target: One character or object
Duration: Instant
Range: No Range
Charges: 4 Charges
Breakability: 10 PD/10 ED

Description: This yellowish foam, which comes in sturdy cannisters about the size of a 12 ounce beverage can that contain four doses, can totally remove radiation from a single person or object. It can't correct the effects of exposure to radiation that someone's already suffered, but it can prevent him from getting any worse going forward, and it can make irradiated objects safe to handle.

This item also comes in pill/powder form so it can be mixed with radioactive food to render it safely edible.

Game Information: Minor Transform 10d6 (radioactive person or object into non-radioactive one, heals back through further exposure to radiation) (50 Active Points); OAF (-1), No Range (-½), 4 Charges (-1). Total cost: 14 points.

EVA SUIT

Effect: Life Support, Resistant Protection (4 PD/4 ED), and other abilities
Target: Self
Duration: Varies
Range: Self
END Cost: Varies
Breakability: 4 PD/4 ED

Description: Every species has its own version of the Extra-Vehicular Activity (EVA) suit, a successor to the lower-tech spacesuit (see below). EVA suits offer the same sort of protection as a spacesuit, but are slimmer, lighter, and easier to use. Furthermore, unlike a spacesuit they don't suffer from limited supplies of breathing gases — as long as the built-in power pack remains

functional, the suit continues to provide a safe breathing environment for the wearer (who can program into it the type of breathing gases he prefers).

The basic model described here is a Human EVA suit that comes equipped with magnetized boots and an adequate thruster system to allow for maximum maneuverability in an environment without gravity or air. Generally used by engineers and mechanics needing to make external repairs to vessels and stations, this ensemble is also standard issue to explorers landing on planets for the first time. Manufacturers have developed numerous helpful additions to the suit (see below).

Game Information:

Cost	Power
9	**Environmental Protection:** Life Support (Self-Contained Breathing; Safe Environments: High Pressure, High Radiation, Intense Cold, Intense Heat, Low Pressure/Vacuum); OIF (-½), Costs Endurance (-½)
8	**Protection:** Resistant Protection (4 PD/4 ED); OIF (-½)
7	**Magnetic Boots:** Clinging (normal STR +15); OIF (-½), Costs Endurance (-½), STR 20 Maximum (-0), Works Only on Metal Surfaces (-¼)
4	**Thrusters:** Flight 10m; OIF (-½), Only Works In A Vacuum (-1)
7	**Glare Shielding:** Sight Group Flash Defense (10 points); OIF (-½)
6	**Communications System:** HRRP (Radio Group); OIF (-½), Affected As Sight And Hearing Group As Well As Radio Group (-½)
6	**Power Pack:** Endurance Reserve (16 END, 12 REC); OAF (-1)

Total cost: 47 points

Options:

1) **Optional Equipment:** EVAs are to some extent modular; characters can buy many other systems as a part of them (or that attack to them), though care must be taken not to strain the suit's power pack. Examples include a wristlight (forearm-mounted flashlight), searchlights mounted on chest, shoulder, or helmet, and jumpboots.

Cost	Power
11	**Wristlight:** Sight Group Images, +4 to PER Rolls, Reduced Endurance (0 END; +½) (33 Active Points); OIF (-½), No Range (-½), Only To Create Light (-1)
16	**Searchlight:** Sight Group Images, +4 to PER Rolls, Area Of Effect (8m Radius; +½), Reduced Endurance (0 END; +½) (44 Active Points); OIF (-½), Limited Range (40m; -¼), Only To Create Light (-1)
3	**Jumpboots:** Leaping +20m (24m forward, 12m upward); OIF (-½), Increased Endurance Cost (x3 END; -1), Only Works In A Vacuum (-1)

GILL PACK

Effect: Life Support (Expanded Breathing: Breathe Underwater)
Target: Self
Duration: Persistent
Range: Self
Charges: 1 Continuing Fuel Charge lasting 1 Day
Breakability: 1 PD/1 ED

Description: This advanced underwater breathing system extracts oxygen from the surrounding water by electrolysis, giving the wearer effectively unlimited breathing until the power runs out (the battery pack lasts a day). The unit mixes the oxygen with argon to avoid some hazards of high pressure on deep dives.

Game Information: Life Support (Expanded Breathing: Breathe Underwater) (5 Active Points); OIF (-½), 1 Continuing Fuel Charge lasting 1 Day (easily refueled; -0). Total cost: 3 points.

MICROHEATER

Effect: Life Support (Safe Environment: Intense Cold), Usable By Nearby (creates heat in a 4m radius area)
Target: Self
Duration: Constant
Range: No Range
Charges: 1 Continuing Fuel Charge lasting 12 Hours
Breakability: 1 PD/1 ED

Description: Although small and light enough to fit comfortably in the palm of one hand, this device puts out enough heat to warm a 4m radius area for up to half a day.

Game Information: Life Support (Safe Environment: Intense Cold), Usable By Nearby (creates heat in a 4m radius area; +1) (4 Active Points); OAF (-1), 1 Continuing Fuel Charge lasting 12 Hours (-0). Total cost: 2 points.

OXYGENATION PILLS

Effect: Life Support (Self-Contained Breathing)
Target: Self
Duration: Persistent
Range: Self
Charges: 4 Continuing Charges lasting 1 Day each
Breakability: 2 PD/2 ED

Description: These large blue-white Weird Science pills contain enough concentrated oxygen to keep a person alive for up to 1 Day without the need to breathe. This allows a hero to adventure underwater, withstand some types of gas attacks, and the like.

Game Information: Life Support (Self-Contained Breathing), Usable Simultaneously (up to four persons at once, must be given separately to each person and uses 1 Charge per person; +½), 4 Continuing Charges lasting 1 Day each (+0) (15 Active Points); OAF (-1). Total cost: 7 points.

Options:

1) **Strong Pills:** Increase to 4 Continuing Charges lasting 1 Week each (+1¼). 15 Active Points; total cost 7 points.
2) **Weak Pills:** Decrease to 4 Continuing Charges lasting 1 Hour each (+0). 15 Active Points; total cost 7 points.

SPACESUIT

Effect: Life Support, Resistant Protection (2 PD/2 ED), and other abilities

Target: Self

Duration: Varies

Range: Self

END Cost: 0 (1 Continuing Fuel Charge lasting 6 Hours for Breathing Gases)

Breakability: 2 PD/2 ED

Description: Anyone venturing into Trace atmospheres or outer space needs a spacesuit. This version represents early twenty-first century Human models, with a rigid chest section for easy access to controls. It provides pressure and temperature support indefinitely, and oxygen for up to six hours.

Game Information:

Cost	Power
3	**Environment Protection:** Life Support (Safe Environments: Intense Cold, Low Pressure/Vacuum) (4 Active Points); OIF (-½)
7	**Breathing Gases:** Life Support (Self-Contained Breathing) (10 Active Points); OIF (-½), 1 Continuing Fuel Charge (easily obtained; 6 Hours; -0)
3	**Protection:** Resistant Protection (2 PD/2 ED) (6 Active Points); OIF (-½); Activation Roll 11- (-½)
5	**Communications System:** Radio Perception/Transmission (Radio Group); OIF (-½), Affected As Sight And Hearing Group As Well As Radio Group (-½)

Total cost: 18 points.

Options:

1) **Advanced Spacesuit (Skinsuit):** As space travel becomes more common, people want suits which are less bulky and allow more freedom of movement. Skinsuits are the solution — instead of wearing a pressurized balloon, the user wears a suit that hugs the skin, turning his own skin into a "spacesuit." The helmet is a clear bubble, and the backpack can provide oxygen for up to a day. (Use the first two powers for the standard Spacesuit, above, but the Breathing Gases last for 1 Day.) Total cost: 18 points.
2) **Armored Spacesuit:** For environments like the atmosphere of Jupiter, characters need a space suit that's also designed to keep pressure *out,* and to provide more protection in general. This particular suit resists up to 90 atmospheres of pressure (see *Star Hero*), enough to allow a character to walk on the surface of Venus. It also works fine as a deep-diving suit in the oceans of Earth or Europa. Change to:

Cost	Power
5	**Environment Protection:** Life Support (Safe Environments: High Pressure, Intense Cold, Intense Heat, Low Pressure/Vacuum) (7 Active Points); OIF (-½)
7	**Breathing Gases:** Life Support (Self-Contained Breathing) (10 Active Points); OIF (-½), 1 Continuing Fuel Charge (easily obtained; 6 Hours; -0)
50	**Protection:** Resistant Protection (30 PD/20 ED) (75 Active Points); OIF (-½)
5	**Communications System:** Radio Perception/Transmission (Radio Group); OIF (-½), Affected As Sight And Hearing Group As Well As Radio Group (-½)

Total cost: 67 points.

SURVIVAL OVERSKIN

Effect: Life Support (Safe Environments: Intense Cold, Intense Heat)

Target: Self

Duration: Persistent

Range: Self

Charges: 4 Continuing Charges lasting 1 Day each

Breakability: 2 PD/2 ED

Description: This Weird Science gadget is an aerosol can filled with a special chemical spray (it could also be a tube of ointment, or anything else that could safely be applied to the skin). A person it's sprayed on feels no harmful effects from extreme cold or heat for one day.

Game Information: Life Support (Safe Environments: Intense Cold, Intense Heat), Usable Simultaneously (up to four persons at once, must be applied separately to each person and uses 1 Charge per person; +½), 4 Continuing Charges lasting 1 Day each (+0) (6 Active Points); OAF (-1). Total cost: 3 points.

Options:

1) **Strong Overskin:** Increase to 4 Continuing Charges lasting 1 Week each (+1¼). 6 Active Points; total cost 3 points.
2) **Weak Overskin:** Decrease to 4 Continuing Charges lasting 1 Hour each (+0). 6 Active Points; total cost 3 points.

SURVIVAL TENT

Effect: Life Support plus Barrier 2 PD/2 ED, 2 BODY (25m long, 2m tall, and 1" thick)
Target: Area
Duration: Constant
Range: No Range
Charges: 1 Continuing Fuel Charge lasting 12 Hours
Breakability: 2 PD/2 ED

Description: This airtight structure provides protection from the weather as well as shielding from minor physical attacks. The tent can withstand arctic temperatures and storms, the blistering heat of a desert at noontime, and the thunderstorms of rain forests.

Game Information:

Cost	Power
12	**Sealed Environment:** Life Support (Self-Contained Breathing; Safe Environments: Intense Cold and Intense Heat), Area Of Effect (2m Radius; +¼) (24 Active Points); OIF (-½), Linked (to Barrier; -½), 1 Continuing Fuel Charge lasting 12 Hours (-0)
16	**Protective Structure:** Barrier 2 PD/2 ED, 2 BODY (25m long, 2m tall, and ½m thick) (36 Active Points); OIF (-½), No Range (-½), Restricted Shape (4m radius circle; -¼), 1 Continuing Fuel Charge lasting 12 Hours (-0)

Total cost: 28 points.

WATERSUIT

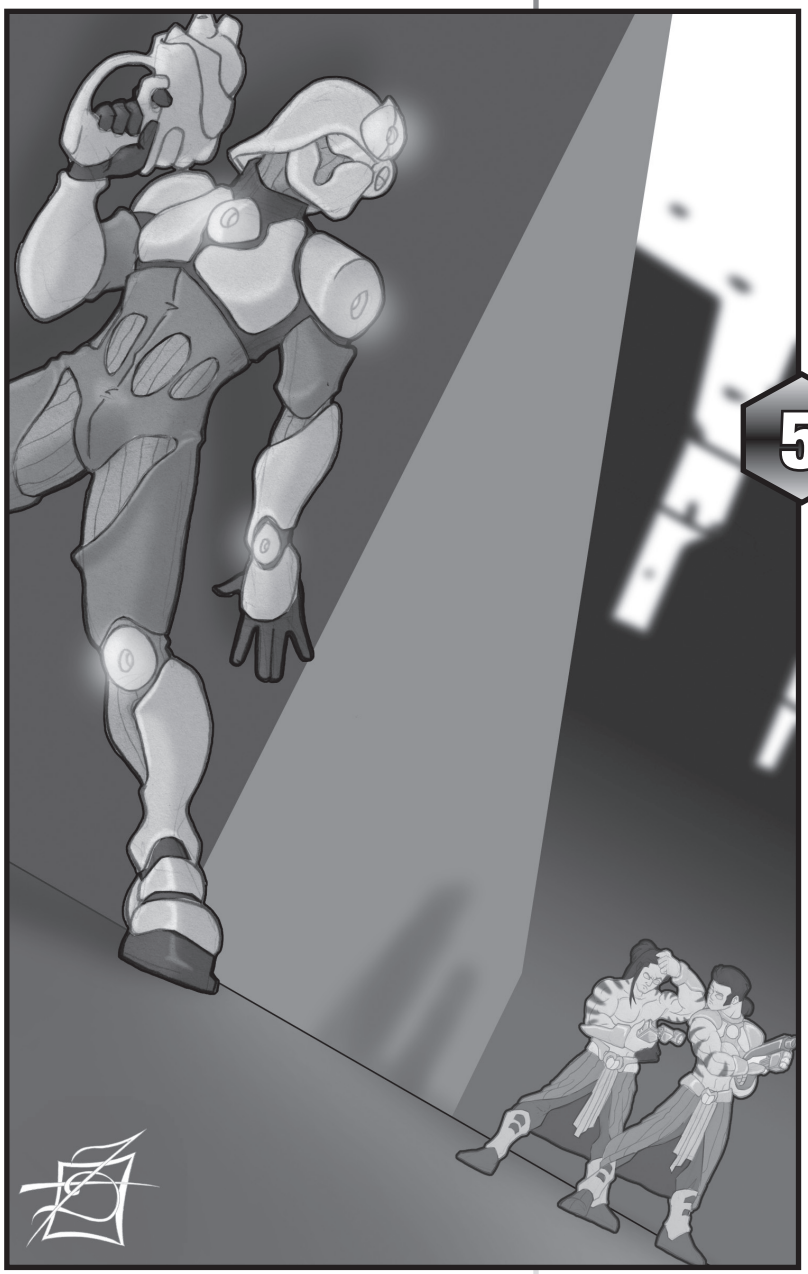
Effect: Life Support (Self-Contained Breathing, Safe Environments), plus other abilities to help aquatic aliens function out of water
Target: Self
Duration: Varies
Range: Self
END Cost: Varies
Breakability: 3 PD/3 ED

Description: Built for ichthyoid aliens and other water-dwelling species who wish to function outside of an aquatic environment, the watersuit provides freedom of movement as well as environmental protection. It resembles a standard Terran EVA suit in many respects, and contains enough water to keep an aquatic alien alive almost indefinitely with the help of a power pack that refreshes the water. Inside the container, the wearer has access to a miniature control system, allowing him to manipulate the mechanical arms and legs installed in the suit (assuming he's not humanoid; if he is his suit lacks the artificial limbs).

Game Information:

Cost	Power
9	**Safe Environment:** Life Support (Self-Contained Breathing; Safe Environments: High Pressure, High Radiation, Intense Cold, Intense Heat, Low Pressure/Vacuum; OIF (-½), Costs Endurance (-½)
2	**Artificial Hands:** Extra Limbs (2); OIF (-½), Costs Endurance (-½)
8	**Artificial Feet:** Running 12m; OIF (-½)
6	**Hardened Metal:** Resistant Protection (3 PD/3 ED); OIF (-½)
5	**Battery Pack:** Endurance Reserve (12 END, 12 REC); OAF (-1)

Total cost: 30 points.



TOOLS

Characters often have important tasks to perform, and sometimes the right tool is just what they need to get the job done quickly and well.

SKILL KITS

A *Skill Kit* is a collection of special, better-than-average quality tools and supplies that help a character use a particular Skill. Sometimes they're literally "kits," as with the First Aid Kit and Survival Kit described above, but they can simply be a collection of high-quality Skill-related gear, as shown by many of the examples below. A few of the examples are Skill-related equipment built in other ways than a Skill Roll bonus.

SKILL KIT

Effect: +1 with defined Skill
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: This writeup represents a generic Skill Kit. All you have to do is define which Skill it applies to when you buy it (such as Demolitions Kit, Interrogation Kit, Mechanics Kit, or Systems Operation Kit). It can apply to most Skills, but the GM has the final say. (For Skills that have specific rules for equipment bonuses, like Climbing, either adjust this writeup or use a Skill-specific writeup below if available.)

In some cases the materials that come with a Skill Kit may get used up. For example, the drugs and bandages in a Paramedics Kit run out after a while, requiring the character to replace them. This generally doesn't qualify for the *Charges* Limitation unless the GM rules that the character has so few supplies that he has to replace them practically every day.

The bonus bought for this basic Skill Kit equates to the lowest level of the "Good" equipment modifier listed on 6E1 58. The options describe how to buy even better equipment. Thus, by buying a Skill Kit, a character effectively guarantees that he always has at least "Good" or better equipment to work with. (In game terms, he gets the bonus he paid for; he doesn't get both the purchased bonus and the Skill Modifier bonus.)

Game Information: +1 to defined Skill (2 Active Points); OAF (-1). Total cost: 1 point.

Options:

1) **Better Skill Kit:** Increase to +2 with defined Skill. 4 Active Points; total cost 2 points.
2) **Really Good Skill Kit:** Increase to +3 with defined Skill. 6 Active Points; total cost 3 points.
3) **Very Good Skill Kit:** Increase to +4 with defined Skill. 8 Active Points; total cost 4 points.
4) **Extremely Good Skill Kit:** Increase to +5 with defined Skill. 10 Active Points; total cost 5 points.
5) **Multi-Skill Skill Kit I:** Instead of just applying to one Skill, the character's Skill Kit applies to three related Skills:
   - **Good Kit:** +1 with three related Skills. 3 Active Points; total cost 1 point.
   - **Better Kit:** +2 with three related Skills. 6 Active Points; total cost 3 points.
   - **Really Good Kit:** +3 with three related Skills. 9 Active Points; total cost 4 points.
   - **Very Good Kit:** +4 with three related Skills. 12 Active Points; total cost 6 points.
   - **Extremely Good Kit:** +5 with three related Skills. 15 Active Points; total cost 7 points.
6) **Multi-Skill Skill Kit II:** The character's Kit applies to all Skills of a given category (e.g., all Technological Skills), subject to the standard rules for this type of Skill Level.
   - **Good Kit:** +1 with all Skills of a defined category. 4 Active Points; total cost 2 points.
   - **Better Kit:** +2 with all Skills of a defined category. 8 Active Points; total cost 4 points.
   - **Really Good Kit:** +3 with all Skills of a defined category. 12 Active Points; total cost 6 points.
   - **Very Good Kit:** +4 with all Skills of a defined category. 16 Active Points; total cost 8 points.
   - **Extremely Good Kit:** +5 with all Skills of a defined category. 20 Active Points; total cost 10 points.
7) **Concealed Skill Kit:** This form of Skill Kit is meant to be hidden, or is constructed to look

like some mundane object. (See also Concealed Lockpicks, below, for another approach to creating concealed Skill gear.) Change OAF (-1) to OIF (-½). Total costs are:

Good Kit: 1 point
Better Kit: 3 points
Really Good Kit: 4 points
Very Good Kit: 5 points
Extremely Good Kit: 7 points

CLIMBING — CLIMBING GEAR

Effect: +3 to Climbing
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: This writeup represents "Basic" climbing equipment, such as a rope and grapnel. The options listed below describe more advanced climbing gear.

Game Information: +3 to Climbing (6 Active Points); OAF (-1). Total cost: 3 points.

Options:

1) **Advanced Climbing Gear:** Increase to +6 with Climbing. 12 Active Points; total cost 6 points.
2) **Very Advanced Climbing Gear:** Increase to +12 with Climbing. 24 Active Points; total cost 12 points.
3) **Climbing Shoes or Climbing Claws:** Character also buys: +1 with Climbing (2 Active Points); OIF (-½). Total cost: 1 point.

DISGUISE — ACID-SENSITIVE CLOTHING

Effect: Cosmetic Transform 2d6 (one set of clothes into another pre-prepared set)
Target: Self
Duration: Instant
Range: No Range
Charges: 1 Charges
Breakability: 2 PD/2 ED

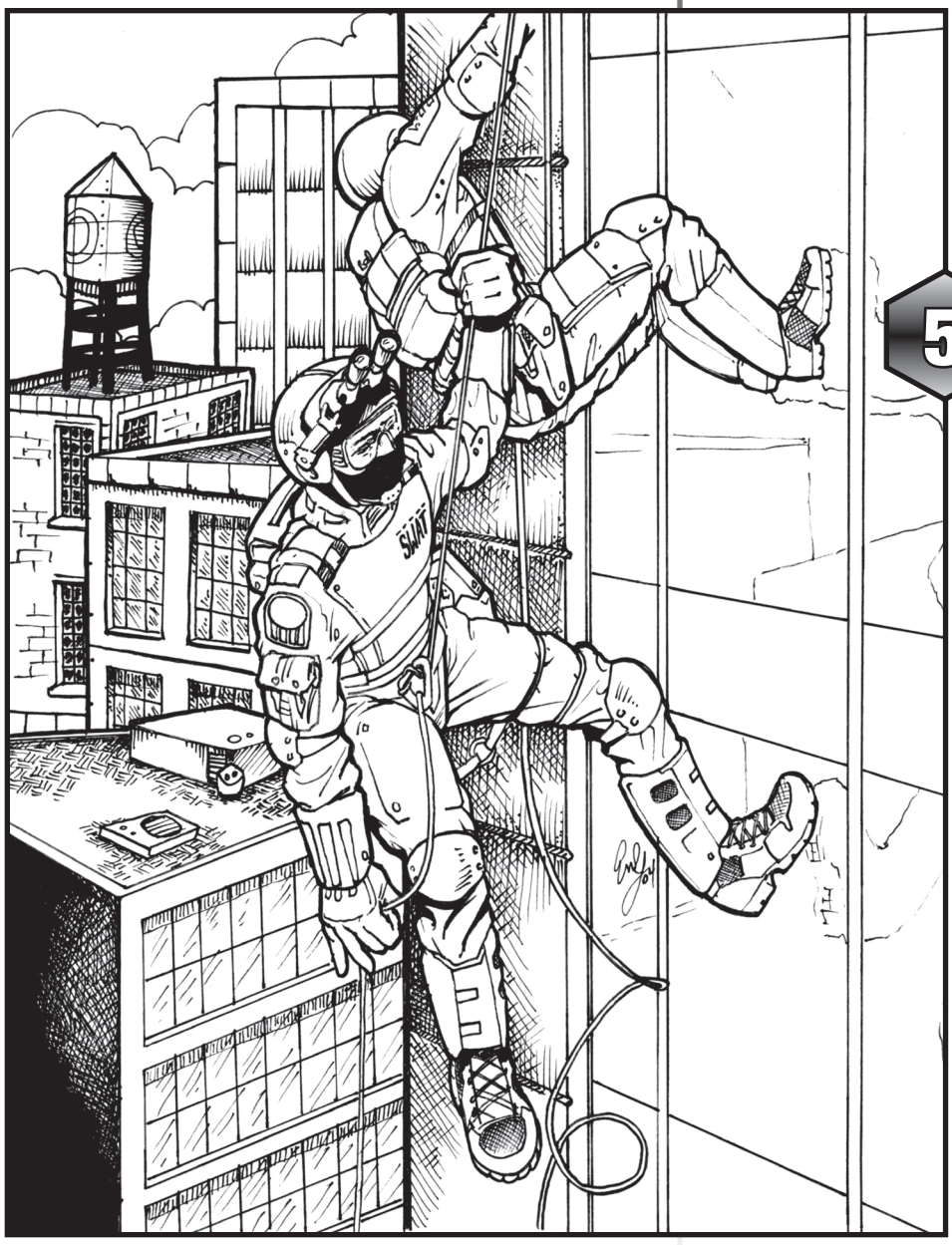
Description: To assist with his disguises and ability to maintain his secret identity, the character often wears special chemically-treated clothing. This clothing dissolves instantly and completely when exposed to a mild acid (of which the character typically carries a vial), or to any strong acid. The character wears a set of normal underneath.

Game Information: Cosmetic Transform 2d6 (one set of worn clothing into another set of clothing worn underneath; heals back by obtaining a new suit from the character's headquarters or supplier), Improved Results Group (+¼) (12 Active Points); IIF (-¼), Limited Target (clothes; -½), 1 Charge (-2). Total cost: 3 points.

DISGUISE — DISGUISE KIT

Effect: +2 to Disguise
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: The character carries a concealable, compact kit of various disguise supplies and aids to make it even easier for him to conceal his identity and impersonate others.



Game Information: +2 to Disguise (4 Active Points); IAF (-½). Total cost: 3 points.

Options:

1) **Better Kit:** Increase to +3 to Disguise. 6 Active Points; total cost 4 points.
2) **Worse Kit:** Decrease to +1 to Disguise. 2 Active Points; total cost 1 point.

DISGUISE — FALSE FINGERPRINTS

Effect: Shape Shift (Touch Group), Fingerprints Only
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Charge lasting 1 Day
Breakability: 4 PD/4 ED

Description: By preparing and applying specially-molded plastics to his fingertips, the character can cover up his own fingerprints and substitute different ones. He can't imitate another person's prints, but disguising his own is a big help when it comes to evading the authorities. The fake prints wear off his fingers after one day.

Game Information: Shape Shift (Touch Group, any sort of human fingerprint), 1 Continuing Charge lasting 1 Day (+¼) (19 Active Points); IIF (-¼), Extra Time (takes 5 Minutes to prepare and apply, but can be used normally thereafter; -1), Fingerprints Only (-1). Total cost: 6 points.

Options:

1) **Imitative Prints:** The character's equipment allows him to imitate the fingerprints of other people. He has to have a sample of the other person's prints to make a mold that duplicates them. Add Imitation and Requires Sample To Duplicate (-¼). 31 Active Points; total cost 9 ints.

GAMBLING - GAMBLING RIG

Effect: +3 with Gambling, Only To Cheat At Card Games
Target: Self
Duration: Persistent
Range: Self
Charges: 1 Recoverable Charge (see text)
Breakability: 1 PD/1 ED

Description: Gamblers in the Wild West sometimes wore elaborate rigs under their clothing. By moving their arms or legs just so, they could cause the rig to drop a card into their hands so they could win. The device comes with one card (which must be chosen in advance) in it. When the character uses the rig, he can make a Sleight Of Hand roll to take the card it gives him and replace it with another he already has in his hand, saving that card for later use. Of course, the device only works if the card put in the rig to begin with matches the cards used at the table in terms of appearance.

Game Information: +3 with Gambling (6 Active Points); IIF (-¼), Only To Cheat At Card Games (-½), Requires A PS: Use Gambling Rig Roll (-¼), 1 Recoverable Charge (see text; -1¼). Total cost: 2 points.

Options:

1) **Computerized Rig:** Modern card sharps sometimes use microcomputers built into their shoes and other items of apparel to count cards, giving them a real edge when playing blackjack. Change to: +3 with Gambling (6 Active Points); IIF (-½), Only To Cheat At Blackjack (-1), Requires A PS: Use Gambling Rig Roll (-¼). Total cost: 2 points.

GAMBLING — MARKED CARDS

Effect: +2 with Gambling, Only To Cheat At Card Games
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: The character has a set of subtly-marked cards. When he plays with them, he can "read" the markings on the backs of the cards to know what each opponent has in his hand, thus making it much easier for him to win.

Game Information: +2 with Gambling (4 Active Points); IAF (-½), Only To Cheat At Card Games (-½). Total cost: 2 points.

LOCKPICKING — LOCKS

Effect: Lockpicking 8- (or better)
Target: One door or locked object
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: If the GM wants to use the "Simplified Lockpicking" rules from HSS 229, here's what various categories of lock would cost. The costs are listed unmodified (since they're primarily for use with Vehicles, Bases, and the like); the GM can easily apply a Focus Limitation to them if desired.

Game Information: Lockpicking 8-. Total cost: 1 point.

Options:

1) **Higher-Quality Locks:** The lock listed above is a "Poor"-quality lock - the sort of lock that any Vehicle or Base might have as "Everyman equipment." Here's what better locks cost:

   Average Lock: Lockpicking 11-. Total cost: 7 points.

   Above Average Lock: Lockpicking 14-. Total cost: 13 points.

   High Quality Lock: Lockpicking 17-. Total cost: 19 points.

Very High Quality Lock: Lockpicking 20-. Total cost: 25 points.

Superb Lock: Lockpicking 23-. Total cost: 31 points.

LOCKPICKING — CONCEALED LOCKPICKS

Effect: Concealment 16-, Only To Hide Lockpick Set
Target: Self
Duration: Constant
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: A character may need to carry a set of lockpicks into a location without anyone detecting them. This set is specially concealed inside a pen or like object. Since characters don't normally pay Character Points for ordinary tools, it's bought as a highly-Limited form of Concealment; for tools characters pay points for (such as lockpicks good enough to provide a Skill Roll bonus), you can simply buy them as IAFs instead of OAFs.

Characters can use this writeup buy "concealed" versions of the equipment for other Skills - just change the name of the Skill in the Limitation.

Game Information: Concealment 16- (17 Active Points); IAF (-½), Only To Hide Lockpick Set (-2). Total cost: 5 points.

LOCKPICKING — SAFE CRACKER

Effect: RKA 4d6, Penetrating (x2), Only Works On Safe/Vault Doors
Target: One safe/vault door
Duration: Instant
Range: No Range
Charges: 8 Charges
Breakability: 24 PD/24 ED

Description: A thief who gets his hand on one of these Weird tech wonders will soon find himself on easy street if he plays his cards right. It uses Weird Science principles to destroy or peel open the doors of safes and vaults, allowing the user ready access to all the loot inside.

Game Information: RKA 4d6, Penetrating (x2; +1) (120 Active Points); OAF Bulky (-1½), Extra Time (1 Minute; -1½), No Range (-½), Only Works On Safe/Vault Doors (-2), 8 Charges (-½). Total cost: 17 points

Options:

1) **Strong Safe Cracker:** Increase to RKA 6d6. 180 Active Points; total cost 26 points.
2) **Weak Safe Cracker:** Decrease to RKA 3d6. 90 Active Points; total cost 13 points.
3) **Experimental Safe Cracker:** Weird Science isn't always reliable. Add Activation Roll 11- (-½). Total cost: 16 points.

LOCKPICKING — SKELETON KEY

Effect: Lockpicking 18-
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 4 PD/4 ED

Description: A favorite of detectives, masked crimefighters, and thieves everywhere, the Skeleton Key can open virtually any lock.

Game Information: Lockpicking 18- (21 Active Points); OAF (-1). Total cost: 10 points.

Options:

1) **Strong Skeleton Key:** Increase to Lockpicking 21-. 27 Active Points; total cost 13 points.
2) **Weak Skeleton Key:** Decrease to Lockpicking 15-. 15 Active Points; total cost 7 points.
3) **Disguised Skeleton Key:** The Skeleton Key actually looks like a necklace (or part of one) or some other bit of jewelry, or is hidden inside a cane, pocketknife, or other mundane object. Change OAF (-1) to IAF (-½). Total cost: 14 points.

NAVIGATION — ADVANCED GPS DEVICE

Effect: Navigation (Land) 16-
Target: Self
Duration: Persistent
Range: Self
Charges: 1 Continuing Fuel Charge (6 Hours)
Breakability: 3 PD/3 ED

Description: As discussed on HSS 241, a basic GPS device is bought as an Enhanced Sense (Detect Exact Position On Earth). But many GPS devices come with built-in computers with mapping software and other features that make it a snap for the user to find his way from one place to another even if he doesn't understand the latitude/longitude system. The battery has enough power for six hours of continuous operation; the user recharges it by plugging the device into any electrical outlet.

Game Information: Navigation (Land) 16- (17 Active Points); OAF (-1), Affected As Sight And Radio Sense Group (-½), Extra Time (Full Phase to use; -½), 1 Continuing Fuel Charge (6 Hours, easily recharged; -0). Total cost: 6 points.

SECURITY SYSTEMS — SECURITY DEVICES

Effect: Security Systems 8- (or better)
Target: One door, room, fence, or secured object
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: If the GM wants to use the "Simplified Security Systems" rules from HSS 268, here's what various categories of security device would cost. The costs are listed unmodified (since they're primarily for use with Vehicles, Bases, and the like); the GM can easily apply a Focus Limitation to them if desired.

Game Information: Security Systems 8-. Total cost: 1 point.

Options:

1) **Higher-Quality Devices:** The security device listed above is a "Poor"-quality one - the sort of alarm that any Vehicle or Base might have as "Everyman equipment." Here's what better security devices cost:

   Average Security Device: Lockpicking 11-. Total cost: 7 points.

   Above Average Security Device: Lockpicking 14-. Total cost: 13 points.

   High Quality Security Device: Lockpicking 17-. Total cost: 19 points.

   Very High Quality Security Device: Lockpicking 20-. Total cost: 25 points.

   Superb Security Device: Lockpicking 23-. Total cost: 31 points.

STEALTH — SNEAKY SHOES

Effect: +2 with Stealth rolls; Only To Move Silently
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: The character has a special pair of soft-soled, non-squeak shoes that make it easier to walk without creating any noise.

Game Information: +2 with Stealth rolls (4 Active Points); OIF (-½), Only To Move Silently (-½). Total cost: 2 points.

Options:

1) **Even Sneakier Shoes:** Increase to +3 with Stealth rolls. 6 Active Points; total cost 3 points.
2) **Less Sneaky Shoes:** Decrease to +1 with Stealth rolls. 2 Active Points; total cost 1 point.

TECHNOLOGY SKILLS — MINIATURE TOOLKIT

Effect: +2 to Technology Skills
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: The character carries a concealable, compact kit that contains a variety of useful miniaturized tools. These tools make it easier for him to perform any task that relates to repairing, altering, or modifying equipment or technological objects. They don't help him use equipment, just work on it. Thus, the Skill Levels would apply to most Lockpicking rolls, to Electronics rolls to rewire a radio, or the like, but not to a Systems Operation roll to tune or use a radio properly.

Game Information: +2 to Technology Skills (8 Active Points); IAF (-½). Total cost: 5 points.

Options:

1) **Better Kit:** Increase to +3 to Technology Skills. 12 Active Points; total cost 8 points.
2) **Worse Kit:** Decrease to +1 to Technology Skills. 4 Active Points; total cost 3 points.

SCIENCE FICTION TOOLS

ENGINEER'S TOOLBOX

Effect: +2 with Technology Skills
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 1 PD/1 ED

Description: Filled with all sorts of useful tools and related devices, this toolbox is *de rigeuer* for engineers and technicians throughout the Galaxy — particularly those who travel frequently or work all over a large ship. It contains a miniaturized analytical computer, a universal systems interface, an assortment of electro-spanners, and various other miniaturized tools and widely-used spare parts.

Game Information: +2 with Technology Skills (8 Active Points); OAF (-1). Total cost: 4 points.

Options:

1) **Better Toolkit:** Increase to +3 with Technology Skills. 12 Active Points; total cost 6 points.
2) **Even Better Toolkit:** Increase to +4 with Technology Skills. 16 Active Points; total cost 8 points.
3) **Smaller/Less Sophisticated Toolkit:** Decrease to +1 with Technology Skills. 4 Active Points; total cost 2 points.

FORCEBEAM TOOL

Effect: RKA 1d6; Telekinesis (10 STR), Fine Manipulation; +1 with Technology Skills
Target: One character/One character/Self
Duration: Instant/Constant/Persistent
Range: No Range/60m/Self
Charges: 1 Continuing Fuel Charge lasting 1 Hour
Breakability: 5 PD/5 ED

Description: An outgrowth of force-field technology, this versatile gadget is a cutter, a short-range forcebeam projector, and an all-purpose tool.

Game Information:

Cost	Power
12	**Forcebeam Tool:** Multipower, 25-point reserve, 1 Continuing Fuel Charge lasting 1 Hour (refuels by recharging; -0) for entire reserve; all OAF (-1)
1f	**1) Cutter:** RKA 1d6; OAF (-1), No Range (-½)
1f	**2) Tractor Beam:** Telekinesis (10 STR), Fine Manipulation; OAF (-1), Limited Range (60m; -¼), Reduced By Range (-¼)
1f	**3) Toolbox-In-One:** +1 with Technology Skills; OAF (-1)

Total cost: 15 points.

GRAVITY LIFTER

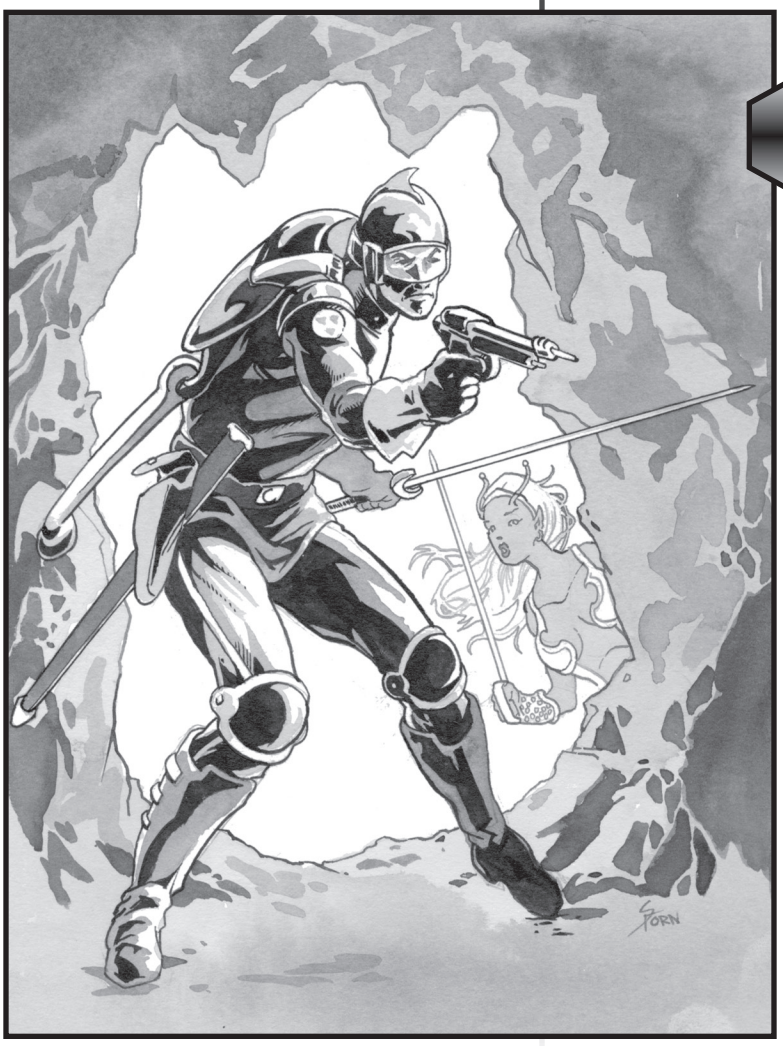
Effect: +20 STR
Target: Self
Duration: Constant
Range: Self
Charges: 1 Continuing Fuel Charge lasting 1 Hour
Breakability: 4 PD/4 ED

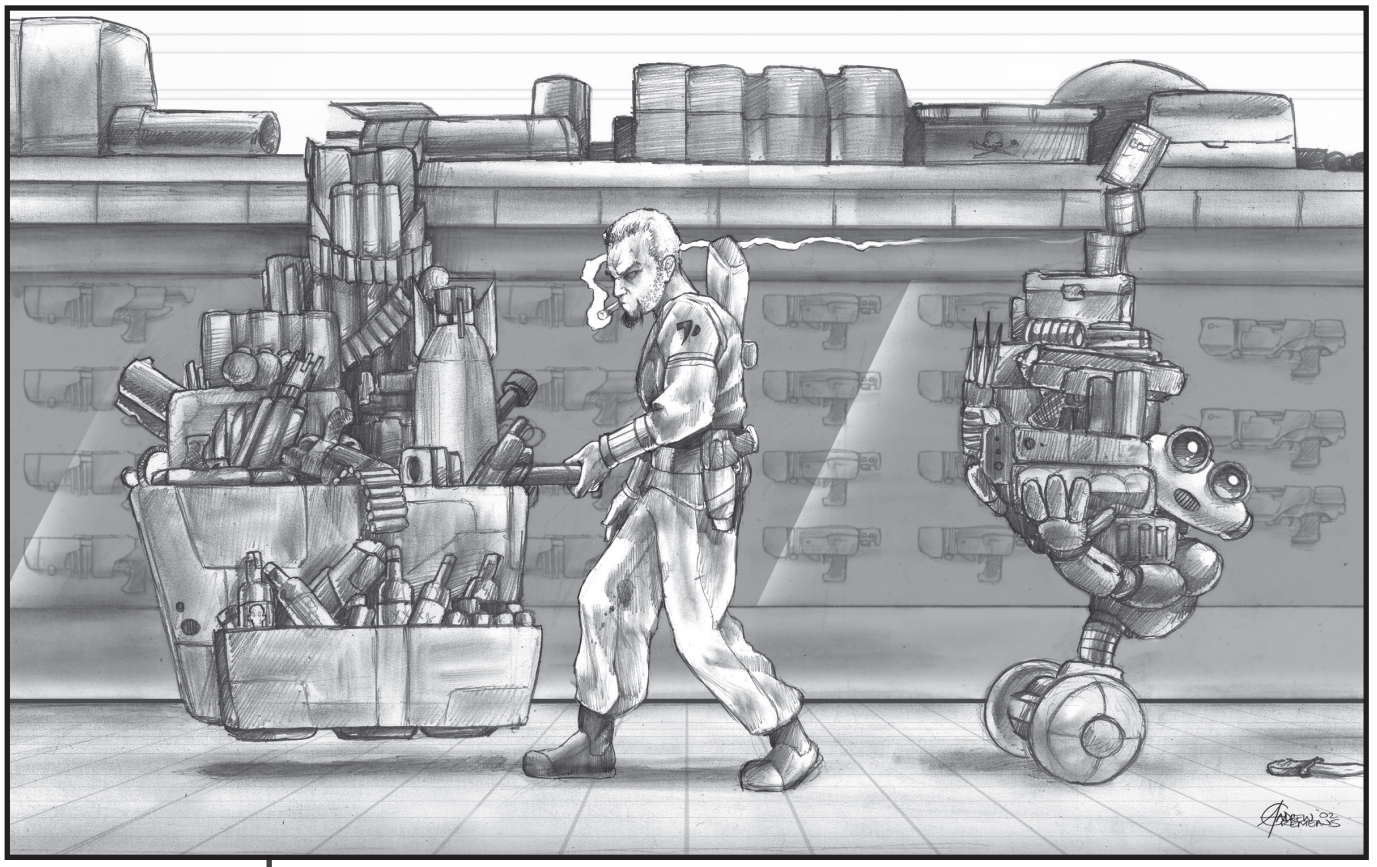
Description: The development of antigravity technology makes moving heavy objects easy. A gravity lifter is simply an antigravity module and a strong clamp. Attach it to a load, switch on the module, and suddenly a child can lift the heaviest cargo.

Game Information: +20 STR (20 Active Points); OAF (-1), 1 Continuing Fuel Charge lasting 1 Hour (refuels by recharging; -0), Only for Lifting (-1). Total cost: 7 points.

Options:

1) **Strong Lifter:** Increase to +30 STR. 30 Active Points; total cost 10 points.
2) **Weak Lifter:** Decrease to to +15 STR. 15 Active Points; total cost 5 points.





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MULTITOOL

Effect: +3 with all Technology Skills
Target: Self
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 2 PD/2 ED

Description: Instead of carrying a whole toolbox, why not use a Multitool? Made of "smart matter" and a mini-computer with a database of hundreds of different configurations, the Multitool can take just about any shape needed.

Game Information: +3 with all Technology Skills (12 Active Points); OAF (-1). Total cost: 6 points.

POWER-MOVER EXO-SKELETON

Effect: 30 STR; Resistant Protection (6 PD/6 ED); Endurance Reserve (20 END/12 REC)
Target: Self
Duration: Persistent
Range: Self
END Cost: 3/0/0
Breakability: 6 PD/6 ED

Description: Often used by cargo loaders on tender and supply starships, as well as workers in factories and starports, this "tool" is an enormous skeletal metal framework with motors and hydraulic systems attached. The systems give the user incredible lifting power; the metal framework provides limited protection. The machine responds to the user's actions fast enough that he incurs no SPD or DEX penalty for using it, though its size may sometimes prove inconvenient.

Game Information:

Cost	Power
15	**Clamps, Grips, And Servos:** 30 STR (30 Active Points); OIF Bulky (-1), Character Cannot Use Own STR (-0)
5	**Exoskeletal Protection:** Resistant Protection (6 PD/6 ED) (18 Active Points); OIF Bulky (-1), Activation Roll 9- (-1½)
6	**Battery:** Endurance Reserve (20 END/12 REC) (13 Active Points); OIF Bulky (-1).

Total cost: 26 points.

REPAIR ROD

Effect: Healing BODY 8d6, Only Works On Electronics And Similar Machinery
Target: One device/machine
Duration: Instant
Range: Touch
Charges: 16 Charges
Breakability: 16 PD/16 ED

Description: This expensive but versatile engineer's tool allows the user to repair just about any sort of damaged machinery or electronic device. The engineer must first study and diagnose the problem (i.e., make a Skill Roll with an appropriate technology-related Skill), then program the proper instructions into the nanobots contained

within the rod. He then unleashes them to begin repairs. A few minutes later, the device is as good as new... assuming the 'bots can find enough raw materials to work with and were properly programmed.

Game Information: Healing BODY 8d6 (damaged machine or machine component into working machine or machine component) (80 Active Points); OAF (-1), Only Works On Electronics And Similar Machinery (-1), Extra Time (takes a minimum of 5 Minutes per point of BODY damage the machine has suffered; -2), Character May Take No Other Actions While Using Repair Rod (-¼), Requires A Skill Roll (see text; -½), 16 Charges (-0). Total cost: 14 points.

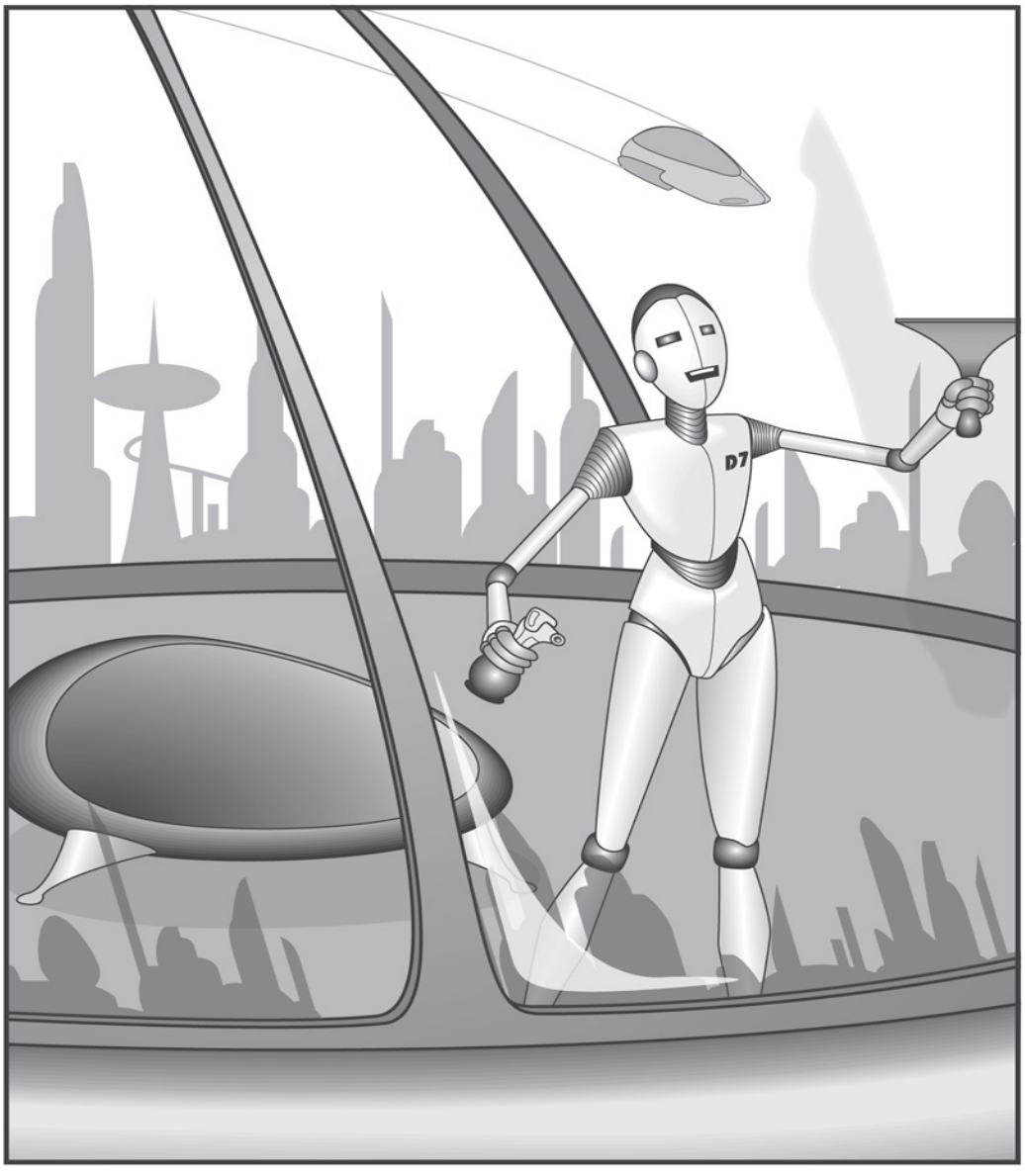
Power Devices

In Science Fiction settings, where technology is omnipresent, one highly useful tool is a portable power source. Here are a few examples.

COLD FUSION GENERATOR

Effect: Endurance Reserve (80 END/75 REC)
Target: One or more electricity-powered device(s)
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 14 PD/14 ED

Description: This is a second-generation cold fusion device. It's small enough for one person to carry in a large backpack, but strong enough to provide enough power for a campsite, household, or personal vehicle.



Game Information: Endurance Reserve (80 END/75 REC) (70 Active Points); OAF Bulky (-1½), Only Powers Electrical Devices (-¼). Total cost: 25 points.

PERSONAL FUSION UNIT

Effect: Endurance Reserve (120 END/120 REC)
Target: One or more electricity-powered device(s)
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 22 PD/22 ED

Description: Built with late starfaring-era technology, this is a portable fusion plant weighing 100 kilograms and occupying about as much space as a small filing cabinet. It can run for a decade on one supply of fuel.

Game Information: Endurance Reserve (120 END/120 REC) (110 Active Points); OAF Bulky (-1½), Only Powers Electrical Devices (-¼). Total cost: 40 points.

UNIVERSAL BATTERY

Effect: Endurance Reserve (100 END) plus Endurance Reserve (10 REC), Slow Recovery (1 Hour)
Target: One or more electricity-powered device(s)
Duration: Persistent
Range: Self
END Cost: 0
Breakability: 4 PD/4 ED

Description: This amazing item is a small, portable battery that can provide power to virtually any device that uses electricity. It's about six inches wide, six inches tall, and three inches deep. Using a broadcast power system it can provide power (in game terms, END) to electrical devices within roughly two feet of itself; it can power more than one device at once if set up to do so. Once its power reserves run out it slowly "regenerates" its power (at the GM's option it has small solar panels and if exposed to direct sunlight it Recovers on a once per 5 Minutes basis instead of its usual once per Hour).

Game Information: Endurance Reserve (100 END) (20 Active Points); OAF (-1), Only Powers Electrical Devices (-¼) (total cost: 9 points) plus Endurance Reserve (12 REC) (8 Active Points); OAF (-1), Slow Recovery (1 Hour; -4) (total cost: 2 points). Total cost: 11 points.

APPENDIX

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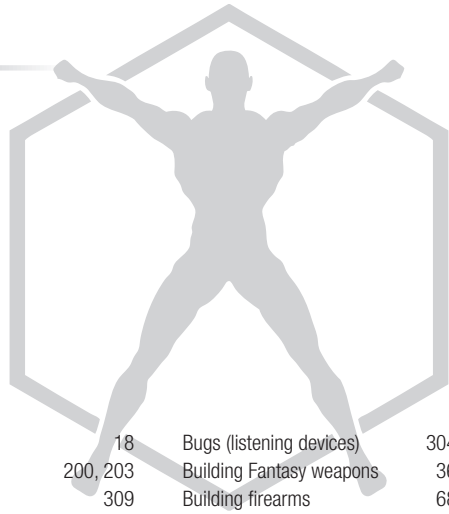

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