

THE
ULTIMATE

ENERGY

PROJECTOR

STEVEN S. LONG

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An Ultimate Book For *Hero System*

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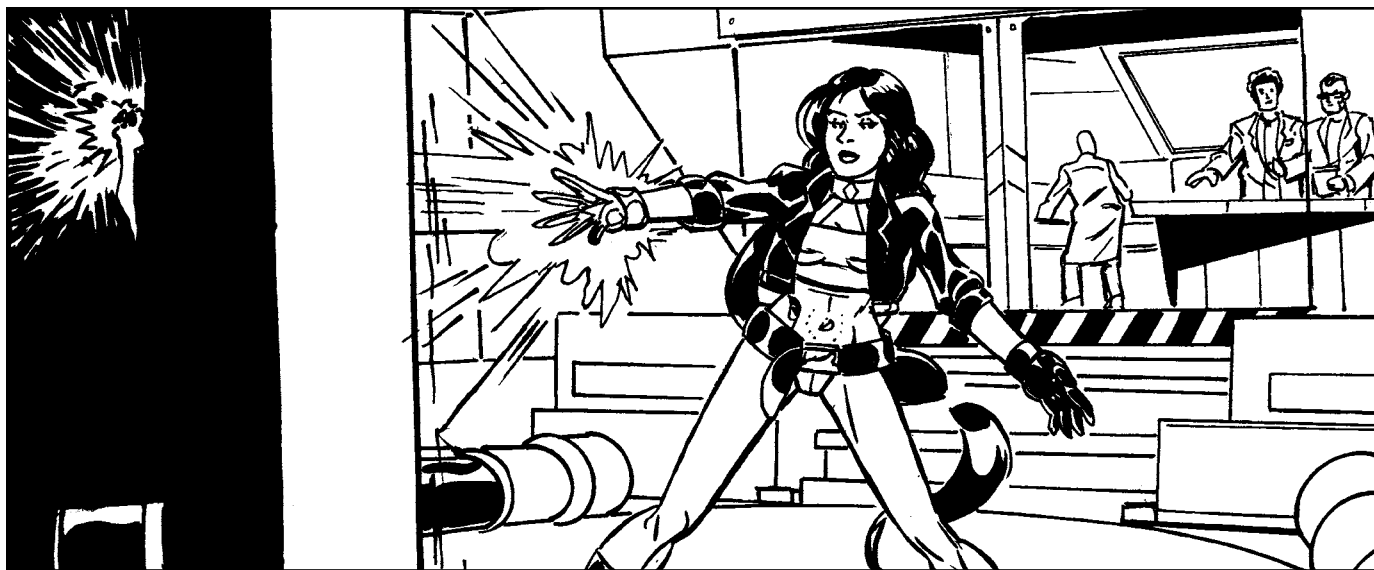
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INTRODUCTION



One of the most archetypical comic book characters is the *energy projector*, sometimes called a “blaster” — a character whose powers involve projecting and controlling some form of energy, be that fire, electricity, sonics, or some vaguely-defined form of generic energy. Flying through the sky, his body glowing with power, beams of energy lancing out from his hands or eyes to strike his foes and save the innocent, he embodies the collective concept of the “superhero” more than just about any other character type.

But while energy projectors are most common, and most commonly associated, with the comics, they exist in some form in many other genres as well. In Fantasy you’ve got the stereotypical wizard, whose powers often involve projecting blasts of fire, bolts of lightning, or pure arcane force for various effects. Some Fantasy settings even feature specific types of “Elemental Magic” that involve controlling and manipulating the four classical elements of Air, Earth, Fire, and Water. In other genres, such as Pulp and Science Fiction, energy projectors are more likely to rely on gadgetry than personal power — blaster pistols, flamethrowers, and other devices let a character project energy for various purposes. But the possibility also exists of energy creatures and similar beings whose powers resemble those of the superheroic blaster or Fantasy wizard.

The Ultimate Energy Projector is your guide to creating and playing energy projector characters (sometimes referred to as “EPs”) in the *HERO System*. It deals with all facets of energy projection powers in *HERO System* terms, from the “mechanical” aspects of creating them to using them in your campaign properly.

Chapter One, *Energy Projector Characters*, discusses the broad topic of creating characters with energy projection powers. After reviewing energy projector archetypes and related topics, it reviews various *HERO System* elements — Skills, Powers, Disadvantages, and so on — and how they apply to energy-manipulating characters.

Chapter Two, *The Energy Spectrum*, is the longest and most detailed in the book. It reviews over two dozen types of energy (and related “special effects,” in *HERO System* terms), discussing how they work “realistically” and how to simulate or represent them using the *HERO System* rules. It includes optional rules on how they interact, so that you know what happens if your fire-projecting character uses one of his attacks on a defense made of ice.

Chapter Three, *Energy Projectors Genre By Genre*, briefly reviews how energy projectors and their powers tend to function in various major

genres, such as superheroes, Fantasy, and Science Fiction. It includes one or more sample character for several major genres; you can use these as sample PCs, NPCs to pit against your heroes, or just colorful encounters for the heroes.

Chapter Four, *Combat And Adventuring With Energy Projectors*, provides advice and guidance for the GM who has one or more energy projectors in his campaign, and for the player who’s running such a character. It’s got plenty of information about Combat Maneuvers and other aspects of the combat rules that might affect, or be exploited by, energy projectors.

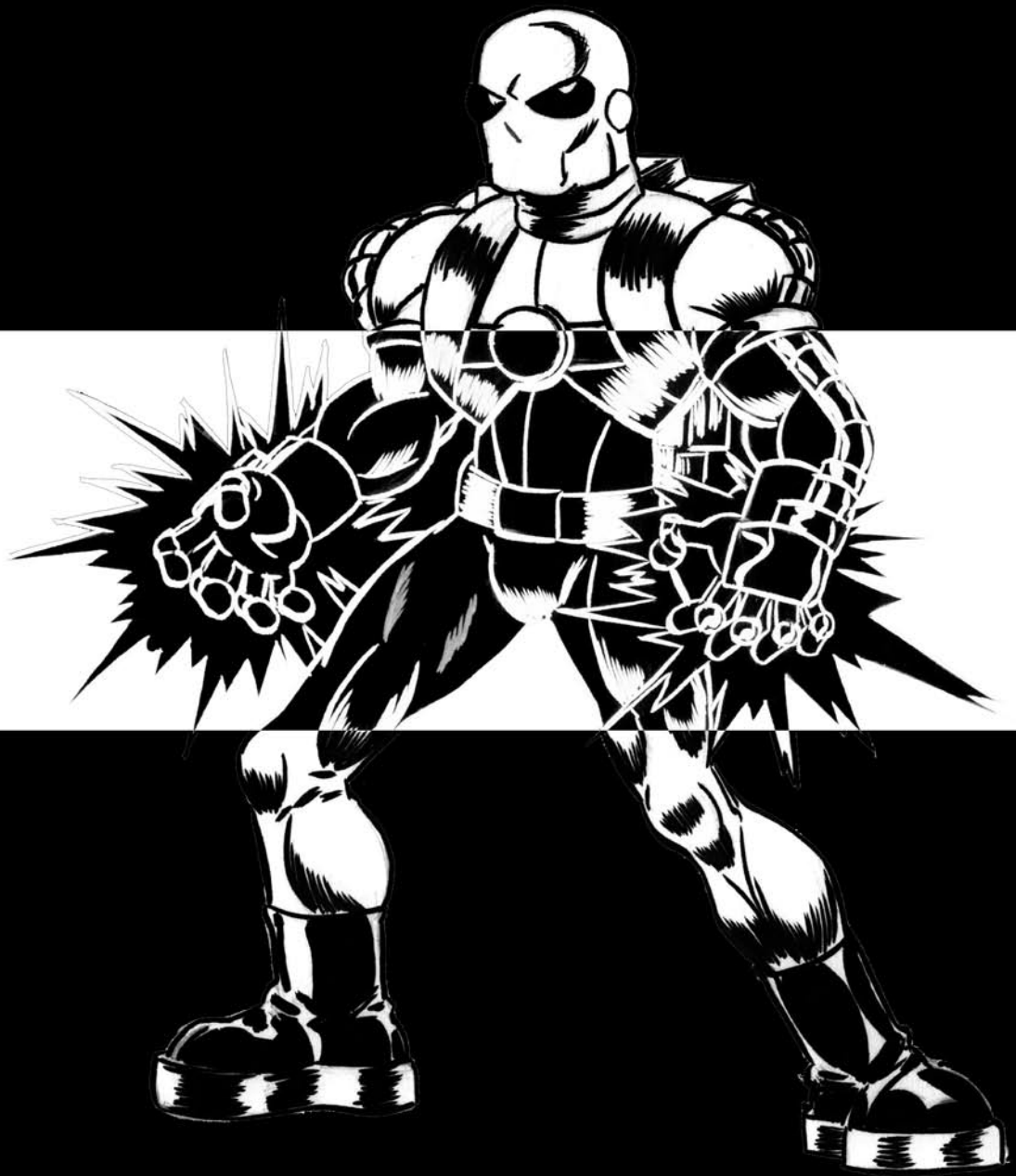
SCIENCE!

Parts of this book, primarily Chapter Two, present some (often simplified) real-world information about how various energy types work. Typically this is done with an eye toward (a) providing ideas for powers you could create with that energy type, and (b) to offer the GM guidance for how to rule on interactions and other effects. In some cases real-world benchmarks are provided (like the number of decibels of noise created by street traffic, or the number of volts in a bolt of lightning) to help the GM. However, in general this book does *not* provide specific links to quantifiable real-world amounts of energy (joules, volts, degrees, or the like) and *HERO System* rules for attacks and damage. There’s no rule in here that says X joules of energy equals 1 Damage Class of damage, or what have you. That sort of information is often difficult to derive (at best), provides little (if any) extra utility and enjoyment for the game, and leads to inconsistencies and arguments that are best avoided. After all, the *HERO System* is intended to simulate *dramatic reality*, not “real reality,” and even if Chapter Two of this book does verge a little more toward the “realistic,” the overall goal of the game is not “realism.”

EXAMPLE POWERS

Each section of Chapter Two includes some sample powers, but not nearly as many overall as are found in other *Ultimate* series books. The number of types of energy and “special effects” covered by this book is so large that including a full set of example powers for each one would mean reprinting most of *The UNTIL Superpowers Database* and *The UNTIL Superpowers Database II*, which would make this book far too large. Instead, you should just think of the “USPDs” as the perfect companions for this book which will help you create fun energy projector characters quickly and easily.

chapter one:



ENERGY PROJECTOR CHARACTERS

ENERGY PROJECTOR BASICS



For the purposes of this book, an “energy projector” (or “EP”) is a character

- whose abilities and powers primarily focus on the projection, manipulation, or control of energy (whether it’s a common form of energy, such as Fire or Electricity, or something more exotic like the “Cosmic Energy” that exists in many *Champions* settings); or
- for whom abilities involving energy are a significant part of his design.

The classic example of an energy projector is a comic book superhuman like the Marvel Comics characters the Human Torch, Cyclops, the Living Laser, Magneto, Electro, Banshee, the Mandarin, and Quasar, or DC Comics characters such as Green Lantern, Starfire, Cosmic Boy, Lightning Lad, Doctor Light, and Firestorm. But although energy projectors are most common in the Superheroes genre, they exist in various forms in many other genres. The firebolt-flinging wizards of many Fantasy settings, the blaster pistol-wielding, finned helmet-wearing space explorers of the Pulp, and the energy beings of Science Fiction tales all fit into this archetype to one degree or another.

ENERGY PROJECTOR BACKGROUNDS

The first way to add depth and breadth to your energy projector character is to determine his background (in *Champions* campaigns, his “origin”). In short, you have to answer the question, “Where did my character get his energy projection powers and abilities?” An energy projector’s background usually relates to the special effects or nature of his powers, and may relate to his personality or archetype. Here are some classic backgrounds for energy projectors:

ALTERATION

Some sort of process has permanently altered the character’s physiology. This might have been intentional (which means someone knows the secret of inducing energy powers and can create energy projectors at will), but more likely it was accidental. In a Superheroes setting, getting struck by lightning or exposed to bizarre forms of radiation often cause a character to develop energy projection powers. The effects of the alteration are permanent (or at least as permanent as anything can be in an adventure campaign).

MAGIC

The character has somehow discovered or gained access to a magical power source that gives him energy projection powers. In a Fantasy campaign, this usually means that a wizard has studied magic so that he can cast spells that manipulate or project energy, or a character has acquired and enchanted item (such as a wand) that involves energy projection somehow. In a Superheroes campaign, a divine or cosmic entity might grant a character energy powers for some reason; for example, a god of fire might give a character power over fire. Since it’s magic, no more explanation may be required, though in some games determining the precise origin or nature of the magic could be important. And don’t forget Clarke’s Law — any sufficiently-advanced technology can *seem* like magic....

MUTATION

The character is a step above mere humans in the evolutionary chain. Mutants are born with their powers, though their abilities may only start to manifest under stressful circumstances (such as puberty or being involved in a disaster). Mutation is an origin found almost entirely in comic books, and thus it’s a common feature of many *Champions* campaigns. Since mutation involves changing the body in some way, including augmenting its existing capabilities, it’s perfectly logical for a mutation to grant many types of energy projection powers. Some of the best-known mutants in the comics, such as Marvel Comics’s Cyclops and Iceman, are energy projectors.

The most important question for a Mutant origin is: when do the character’s energy projection powers manifest? Typically they emerge in adolescence or later, in which case the character may have an easier time adjusting to his powers (but the adjustment period may not have ended by the time the campaign begins). On the other hand, a child who develops energy projection powers at an early age may suffer all kinds of problems — he sets the house on fire, attracts unwanted attention, causes accidents, and so on — but by the time the campaign begins he’s probably had years to get used to his abilities.

Another important issue is whether the character has any other mutant abilities. In many cases mutant powers come with unusual side effects or restrictions, particularly early in the character’s career. For example, a mutant’s energy projection

powers may only work when he's exposed to sunlight. Energy projection powers may be one aspect of a broad suite of related powers.

In the Champions Universe and many other settings, a Mutant character has to take a Distinctive Feature, *Mutant*, to reflect the fact that others can perceive his mutant nature with special scanners and the like. This is worth 10 points (Not Concealable; Always Noticed; Detectable Only By Unusual Senses). In many campaigns, people view mutant characters (regardless of their powers or actions) with suspicion or hatred, which may entitle the character to take a Social Limitation.

TECHNOLOGY AND OTHER ENHANCEMENTS

The character's physiology isn't any different than normal (or not radically different), but he possesses technology (or some other external force) that gives him energy projection powers. This background differs from Alteration in that the effects (a) depend upon an external force or object that can usually be taken away from the character (and possibly used by other people), and (b) may be temporary or heavily restricted.

In the comics, the classic example of this background tends to be "a device of power from a benevolent alien civilization," such as Green Lantern's power ring or Quasar's wristbands, but it's also possible for a character to build his own gadgets. In Heroic genres like Pulp Hero, Dark Champions, and Star Hero, most energy projectors have this background. Those genres feature few (if any) innate superhuman abilities, so characters have to rely on weapons like flamethrowers and blaster pistols to accomplish what Fantasy wizards and *Champions* superheroes can do with innate power.

RACIAL

The character is non-Human, and his species possesses energy projection powers. Not everyone from this species might be the same — for example, each member might have a slightly different suite of powers, or his level of power (or skill at using his powers) might differ — but unlike Humans that species naturally has energy projection powers in some percentage of the population. This is most common among energy beings in Science Fiction settings, like the Az'arc'a from *Terran Empire*.

ENERGY PROJECTOR PERSONALITIES

While energy projectors are often a diverse lot, certain personality types tend to crop up frequently as the result of having or using energy projection powers. They include:

DETACHED

This energy projector's powers somehow cut him off from humanity, making it difficult for him to relate to other people. Typically this takes one of three forms. First, the character is a being of pure energy, which makes it difficult for him to have ordinary relationships with ordinary flesh-and-blood humans (particularly romantic relationships). Second, the character's energy powers are Always On, or otherwise frequently active, in a way that keeps him from having normal contact with other people. This is a common motif with Fire-based characters, who cannot touch other people because of the flames and heat their bodies create. Third, an energy projector may be so powerful that he loses perspective and can no longer relate to ordinary humans' troubles, triumphs, and viewpoints.

In any case, the energy projector's condition makes him detached from others. In the third case described above this may not cause any distress, but usually the inability to interact normally with other people wears at the hero, possibly making him short-tempered or causing other psychological problems. He has to live vicariously through others, through movies and music, or whatever other way he finds to cope.

THE ELEMENTAL ENERGY PERSONALITY

Characters with some types of energy projection powers, particularly those based on the classical four elements (Air, Earth, Fire, Water), often have personality traits that relate to the type of energy they use or embody. The typical example is the "hot"-headed or thrillseeking Fire-based character, whose powers make him temperamental or prone to anger. Other possibilities include Ice/Cold-manipulating characters (who may be "cool," in either sense of the word), stolid, consistent, and loyal Earth-based characters, fluid and flexible Water characters, and cruel-hearted or enigmatic Darkness characters.

THE GUARDIAN

Energy projectors whose powers come from a beneficent alien civilization, a mystic embodiment of some form or energy, or a similar source may have obligations to his benefactor. Typically this takes the form of guarding or preserving something — a specified sector of Space, all life on a particular planet (or throughout the Galaxy), a special organization and its ideals, or the like. Such characters often develop a strong devotion or attachment to their duty, making it the foremost thing in their lives... perhaps even to the point of unhealthy obsession.

THE LORD OF POWER

Especially powerful energy projectors, particularly ones who fall into the *Cosmic Hero* archetype describe below, sometimes have a tendency to be overconfident, lordly, and condescending (whether consciously or subconsciously). They possess such awesome powers that they have difficulty thinking of anyone who's not on the same level as any sort of threat... or possibly even worthy of any significant consideration at all. This attitude can become outright arrogance when possessed by energy projector villains.



ENERGY PROJECTOR ARCHETYPES

As with any other character type, energy projectors often fit into one (or more) of several “archetypes.” Players should use these archetypes as inspiration when thinking of what type of energy projector they want to play, and how they want to portray the character.

Energy projector archetypes generally derive either from the particular types of powers a energy projector possesses, or how he tends to use them. Players can pick and choose among these archetypes as they prefer; some characters are “pure” examples of a particular archetype, while others display aspects of several archetypes.

THE ABSORBER

This type of character doesn't necessarily possess energy projection powers that he can use all the time. Instead his powers involve absorbing energy from other sources — the attacks of enemy energy projectors, electrical current from live wires, the heat of burning candles and torches, or what have you. Depending on how his powers work, the character may have the power to project (or redirect) energy after he absorbs it, or the absorbed energy may affect him personally, making him stronger, faster, tougher, or the like. In game terms, an Absorber typically has Powers like Absorption (surprise, surprise), Adjustment Powers and/or Defense Powers Linked to Absorption, Missile Deflection, and possibly energy Telekinesis.

Similar to the Absorber is the *Energy Vampire*, a character who somehow “feeds” off the energy of others — be it the “life force energy” that all living beings possess, or other energy projectors' powers. Energy Vampires are usually villains, since using their powers requires them to weaken or kill other people.

THE BEING OF PURE ENERGY

This character's powers derive from the fact that he's *made* of energy. He may look like an ordinary flesh-and-blood being (though he might glow, have eyes made of energy, “drip” energy from his fingertips or eyes, or the like), or the true nature of his body may be obvious to everyone. Since he doesn't have a true physical form, he may have trouble interacting with other characters (see *Detached*, above), and in some cases he damages things around himself just by touching them (*i.e.*, he has a Damage Shield that's Always On). On the other hand, it's often difficult to hurt him (especially with physical attacks), and his energy state may grant him other innate powers like the ability to fly or become intangible.

THE COSMIC HERO

Particularly common in Galactic Champions games (see the book of the same name for more information), the *Cosmic Hero* is an energy projector whose powers are associated with outer space, aliens, or similar cosmic forces. Typically he possesses great

power of the “cosmic” variety (see page 67 for more information), though it may manifest in ways resembling other archetypes (Cosmic characters are often Bricks as much as they are Energy Projectors, for example). He usually spends a lot of time in space, or at least has the capability to exist there (*i.e.*, total Life Support, lots of Movement Powers).

THE ELEMENTAL

This energy projector’s powers focus on or manifest as a particular form of energy. As the name indicates, the forms of energy most frequently involved are the classical four elements — Air, Earth, Fire, and Water — with Fire being particularly common (especially in Heroic genres). Other possibilities include Ice/Cold, Darkness/Shadow, and Light. Compared to other types of energy projectors, the Elemental’s powers are more likely to have a mystic origin, and to be linked together in ways that both help and hinder the character (*i.e.*, to be bought through an Elemental Control).

THE MANIPULATOR

Rather than creating or projecting energy himself, the Manipulator can control, alter, and otherwise manipulate energy in his environment. This may severely restrict him at times, since the type of energy he can control won’t always exist nearby (or occur in useful amounts), but at other times he may become nearly unstoppable.

The most common type of Manipulator in most campaigns is the pyrokinetic, who controls flame (the Marvel Comics supervillain Pyro is a good example of this type of Manipulator). Not only is fire fairly common, but it’s possible for a character to create some himself via flint and tinder, a cigarette lighter, or a flamethrower. In modern-day campaigns, *electrokinetics* (who manipulate electricity) are also popular and powerful; some have powers that verge into cyberkinesis (control and manipulation of machines) in addition to affecting pure electricity. Other possibilities include *biokinetics* (who control the biological functions of themselves and/or other people) and *cryokinetics* (who manipulate cold, ice, and frost; they can lower temperatures, generate ice storms and ice structures, and so forth).

THE ONE-TRICK PONY

Most energy projectors have a whole range of powers involving energy — not just offensive bolts and blasts, but protective force-fields, flight, and the like. Not this archetype. He’s only got one power — typically an attack of some sort — but he uses it to the fullest extent possible. In a low-powered campaign he may just buy a single power outright and add a generous helping of Combat Skill Levels (and/or an appropriate *Power Skill*) so he can more easily perform “tricks” with it. In higher-powered campaigns he typically buys the power through a Power Framework (usually a Multipower) to represent the ways he’s learned to use his one power. For example, if his power is an Energy Blast (the most common choice for a One-Trick Pony), his Multipower might have slots for a standard attack (Energy

Blast 12d6), an especially powerful but tiring attack (Energy Blast 16d6, x2 END cost), a tightly-focused beam (Energy Blast 10d6, Armor Piercing), a wide beam (Energy Blast 8d8, Area Of Effect (Cone), No Range), and so on. But since he’s a One-Trick Pony, he doesn’t also have an energy-based Force Field, Flight, or the like — all he can do is project that one energy bolt in various configurations.

THE POWERED ARMOR ENERGY PROJECTOR

This character doesn’t possess innate energy projection powers — his powers derive from a suit of powered armor he’s built (or otherwise obtained). This provides him with an excellent mix of offense and defense, since he can build all sorts of blaster weapons into his armored suit. In most cases the Powered Armor Energy Projector either (a) has a large Multipower whose slots represent the various energy projection weapons he has, (b) has an easily-reconfigured Variable Power Pool that does the same thing, or (c) has Energy Blasts and other powers with the *Variable Advantage* and/or *Variable Special Effects* Advantages. Any of these options let him switch from, say, a Pulson Blaster built into his gauntlets, to a Laser Cannon mounted in his chestpiece, to his Freon Ray Projector, to a Force Beam Blaster on his helmet.

THE TELEKINETIC

Also known as the Psychokinetic, this character has powers based around Telekinesis and related effects: he can use his powers (which are often mental/psionic in nature; see *The Ultimate Mentalist* for more) to manipulate physical objects. (If he controls energy instead, he falls into the Manipulator archetype described above.) Telekinetics display a broad range of powers in addition to simple Telekinesis: they can, for example, create telekinetic force blasts and force screens (Energy Blast, Force Field); attack their enemies with telekinetic “spears” (Ranged Killing Attack); rip them apart from the inside or kill them by preventing their hearts or lungs from moving (Ranged Killing Attack, NND, Does BODY); shatter and break objects with telekinetic force (various forms of Killing Attack, Dispel, and so forth); dissipate gases and similar substances (Dispel gas-based attacks); and so on. The list is practically endless; see the USPDs and *The Ultimate Mentalist* for dozens of examples.

THE WEAPONER

Most common in the Heroic genres, but also found in Superheroic campaigns, the Weaponer is an energy projector whose powers depend on a particular weapon or other gadget. While most energy projectors have innate powers of some sort, the Weaponer built his (or had them built, or otherwise acquired them). The typical weapon is a blaster gun of some sort, whether it’s the finned “electric pistol” of Pulp-era space explorers, the comic book-tech pulson pistol used by a VIPER agent, or a Star Hero adventurer’s everyday laser rifle. Other possibilities include flamethrowers, a Star*Guard’s Star-Staff (which can project energy for all sorts of effects), a magic wand that can hurl lightning bolts, and the like.

SKILLS



For the most part, energy projectors use Skills the same way, and with about the same frequency, as other types of characters. Here are some additional rules and notes about how specific Skills interact with energy projectors and their powers. See *The Ultimate Skill* for detailed rules about all the Skills, many of which may work well with energy projector characters.

AUTOFIRE SKILLS

Although they're usually associated with Autofire weapons like submachine guns, Autofire Skills can also apply to innate powers and abilities. Thus, if an energy projector has an Autofire Energy Blast (or the like), he could buy one or more Autofire Skills to represent his skill at using it.

CONCEALMENT, STEALTH

Energy projectors who try to hide themselves may be betrayed by their own powers! It's not uncommon for energy projection powers to create perceivable effects — a glow, an energy bleed-off, or even the heat they give off (which can be “seen” with Infrared Perception). That in turn may make it much easier for other characters to perceive an energy projector; see *Perceiving Energy Projectors* in Chapter Four for more information and rules.

MARTIAL ARTS

While the optional Ranged Martial Arts rules from *The Ultimate Martial Artist* are most often used with weapons, nothing in the rules forbids characters to buy them for innate powers. An energy projector who wants to be particularly skilled with his powers could buy a Ranged Martial Art with them, such as Energy Projection Attacks (see accompanying text box).

When a character buys a Ranged Martial Art for an innate ability(ies), the GM has to determine

the default attack the Skill works with. Typically this is either one specific attack (such as the character's Energy Blast 12d6, but not his Energy Blast 10d6, Penetrating) or one specific power (for example, any of his Energy Blasts but none of his RKAs or Ranged Drains). To use his Ranged Martial Arts with other attacks, the character has to buy an appropriate Weapon Element (even if no “weapon” is actually involved).

POWER

The *Power* Skill is ideal for many energy projectors, since it gives them a way to push the boundaries of what they can do. Typically they buy it by special effect (Fire Powers, Ice Powers, Telekinetic Powers, and so on), but at the GM's option may be required to buy it by Power (Energy Blast Tricks, Drain Tricks, and so on) or in some other way.

See *The Ultimate Skill*, pages 251-53, or *The UNTIL Superpowers Database*, page 267, for more information and detailed rules about the *Power* Skill.

SCIENCE SKILL

For energy projectors whose powers involve some form of easily-studied and -analyzed energy (such as fire, anything from the electromagnetic spectrum, or sonics), a Science Skill pertaining to that type of energy (or physics in general) is definitely appropriate — even if the character doesn't have a general background in science, his experience with his own form of energy might have given him the equivalent of a true scientist's knowledge.

At the GM's option, a character could use a *Science* Skill that's closely related to a particular form of energy as Complementary to a *Power* Skill roll when using or manipulating that type of energy (for example, SS: Sonics for a sonic attack, or SS: Fire with a fire attack; SS: Physics or Chemistry aren't close enough). In some cases the SS might even function as a junior version of Power, allowing for at most a ten percent gain in power and effectiveness. But of course, what works for the hero can also work against him — enemies who are well-versed in science may use their knowledge of how his powers function to weaken or harm him.

See the individual energy type/special effect descriptions in Chapter Two for more information about the “real world” science involved with various forms of energy.

TWO-WEAPON FIGHTING

Characters cannot use Two-Weapon Fighting to, for example, project one Energy Blast (or other innate Ranged attack) from each hand unless the GM specifically permits them to — as the Skill's name indicates, it's generally intended for use with weapons.

ENERGY PROJECTION ATTACKS

Usable with Energy Blasts; Energy Blasts Weapon Element is Free

Rng Maneuvers	Phs	Cost	OCV	DCV	Rng	Damage/Effect
Accurate Blast	½	4	+2	-2	+2	Energy Blast Strike
Basic Blast	½	4	+0	+0	+2	Energy Blast +2 DC Strike
Disarming Blast	½	4	+0	+0	+0	Disarm, +15 STR to roll
Dodging Blast	½	3	-1	+2	+0	Energy Blast Strike
Leg Blast	½	3	+0	-1	+0	Energy Blast +2 DC Strike, Throw
Long-Range Blast I	½	5	+0	-2	+6	Energy Blast Strike, +1 Segment
Long-Range Blast II	½	5	+1	-1	+4	Energy Blast Strike
Power Blast	½	4	-1	-1	+0	Energy Blast +4 DC Strike
Rapid Blast	½	4	+1	+0	+0	Energy Blast +2 DC Strike

Elements

RKAs	+1Use Art with Ranged Killing Attacks
Ranged Drains	+1Use Art with Ranged Drains

TALENTS



Many Talents may be appropriate for various types of energy projectors, depending on the type of energy they control. For example, a Light-manipulating character might have Absolute Range Sense (he can use his powers to do what a laser rangefinder does), while many a Sonic-based character has Perfect Pitch. A character who's made of energy might have all sorts of Talents, such as Lightsleep, Lightning Reflexes, Resistance, and Simulate Death, to reflect his "inhuman" nature.

COMBAT SENSE; DANGER SENSE

Characters who can sense energy (of whatever type) or who can use their energy powers for sensory purposes (see *Enhanced Senses*, below) might also be able to buy either or both of these Talents. Combat Sense tends to be more common among energy projectors than Danger Sense, but both have their place.

ENVIRONMENTAL MOVEMENT

This Talent is often ideal for energy projectors whose powers relate to some aspect of the environment. The classic example is a water-manipulating character who has Aquatic Movement (either because he's made of water himself, or is so used to being in water). Other examples include Ice/Cold-based characters with Icewalking or an Earth-based character who buys Environmental Movement so he can move and fight without difficulty in mud. In some cases the GM might even consider letting a character have a partial Environmental Movement benefit if the character makes a *Power Skill* roll (for example, an Ice/Cold-manipulating character could make an *Ice Powers* roll to suffer only half the usual penalties for walking on ice).



POWERS



At the heart of most energy projector characters lie not Skills or Talents, but Powers. It is with their Energy Blasts, Flashes, RKAs, and Transfers that these characters fight (or perpetrate) crime, destroy evil monsters, and wage war.

POINT OF ORIGIN

As discussed on page 98 of *The HERO System 5th Edition, Revised*, a character can define his power as originating from any point on his body. For energy projection powers (particularly attacks), the most common point of origin is the hands, followed roughly in order by the eyes, chest, and forehead. Each has its benefits and drawbacks (and others are certainly possible).

The hands make the most sense as a point of origin for a typical energy bolt or similar power, whether the beam comes from the palm, the back of the hand, the clenched fist, the base of the wrist, or the fingertip. It's a natural extension of the idea of using the hands to wield a weapon, throw a rock, or fire a gun. Using the hands makes the attack easy to aim and fire in just about any direction — a character can point his hands in front of him, to the side, up or down, and to a limited extent even behind him to project a bolt of energy without having to move his body at all. As a point of origin, the hands receive no Power Modifier, though if the character has to use both his hands at once to fire a power, this may qualify for the *Gestures* Limitation (though not the “both hands” modifier).

The eyes are another common point of origin for energy attacks, with some benefits and some drawbacks. The main advantage is that the eyes make it easy to aim an attack — the character simply looks at his target and fires. In game terms, you can simulate this with the *Line Of Sight* Advantage, by buying 2-point Combat Skill Levels with the attack, or both. At the GM's option, a character with an eye-based Ranged attack can receive a +1 OCV bonus if he takes a Half Phase Action to “aim” and succeeds with an appropriate *Power* Skill roll (at the usual penalty of -1 per 10 Active Points in the power). (This is in addition to bonuses from Brace, Set, and other Combat/Martial Maneuvers.) On the other hand, it's not as easy to direct an attack with the eyes. The character has no way to fire behind himself without turning his body — a real dilemma if, for example, his hands are tied behind his back. As a point of origin, the eyes receive no Power Modifier.

Some characters project energy beams from their chest. This features all the drawbacks of using the eyes without any of the potential ben-

efits (though chest-based energy bolts do tend to be larger and more powerful than beams fired from the hands or eyes). At the GM's option, a character with a chest-based Ranged attack may take a -¼ Limitation on his power.

A few characters project energy blasts from their foreheads rather than their eyes. In general this works the same as an eye-based attack, though it may not be quite so easy to aim.

Changing The Point Of Origin

Typically a character chooses a point of origin for a power when he buys that power, and cannot change it thereafter. However, there are two possible ways to vary a power's point of origin.

First, the character can buy a form of Indirect (+¼) that lets him change a power's point of origin as an Action that takes no time. For example, his Energy Blast could come from his eyes one Phase, his hands another Phase, and his chest some other Phase. If the GM thinks that a +¼ Advantage is too costly for this effect, he can change it to a +5 or +10 Character Point Adder.

Second, at the GM's option a character can change the point of origin of a power if he succeeds with an appropriate *Power* Skill roll (at the usual penalty of -1 per 10 Active Points in the power). The GM might even allow this repeatedly, rather than restricting it to a rare or one-time thing as with most “power tricks.”

ADJUSTMENT POWERS

While energy projectors are best known for firing devastating bolts of destructive energy, many of them can manipulate energy in more subtle ways that are often best represented with Adjustment Powers. Here are some additional or expanded rules to help you use Adjustment Powers when creating characters.

Adjusting Compound Powers

Some characters have “compound” powers — abilities built with two or more Powers, such as a lightning bolt spell defined as an RKA + Linked Flash. Adjustment Powers affect a compound power as two powers. Using the lightning bolt spell as an example, a character with Drain Magic 3d6, any one Magic power at a time (+¼), has to choose whether to Drain the RKA or the Flash — he can't affect both at once. If his power could affect “any two Magic powers at once (+½)”, then he could Drain both powers at the same time. A GM who wants to deal with the additional complication could split the Drain effect between the two powers if desired.

Adjusting Multiple Versions Of The Same Power; Awareness Of Adjusted Powers

In some cases a character defines an Adjustment Power as working against a particular type of Power — Drain Energy Blast, Aid Force Field — rather than a special effect (Drain Fire Powers, Aid Energy Powers). In this case, it may happen that the target of such a power has two or more powers built with the Power in question. In that case, only one of the powers is Adjusted (unless the Adjustment Power has a *Variable Effect* Advantage so it can affect more than one such power at once), and the character with the Adjustment Power chooses which one. But this assumes he knows what powers the target has that use that Power — if he only knows about one, that's the one he has to affect (see page 105 of *The HERO System 5th Edition*, Revised for more information on this). Having the Adjustment Power does not automatically grant him knowledge of the target's powers built with that Power.

Similarly, a character may try to use an Adjustment Power on a target, but the target doesn't have the type of power(s) the Adjustment Power is built to affect. If the character doesn't know the target's powers, he can take a "shot in the dark" and hope that a particular power fits into the category of things he can Adjust. If he's wrong, the attack fails and is wasted, and the character's used up that particular Phase without accomplishing anything. It's up to the GM to inform him of what happens in whatever way the GM sees fit. The character might learn that his target doesn't have that type of powers, or the GM may simply say "Your attack had no effect" and leave the character to wonder whether his opponent has Power Defense, is secretly Desolidified with Invisible Power Effects, or the like.

If an Adjustment Power has a secondary effect (for example, it has the *Does Knockback* Advantage so that it causes Knockback), the secondary effect does not apply if the target doesn't have the Characteristic or power(s) the Adjustment Power is built to affect.

Defining The Target Of An Adjustment Power

When a character buys an Adjustment Power defined as affecting a specific Power (such as Drain Energy Blast or Aid Growth), the Adjustment Power only works on that Power, not on similar Powers or aspects of other Powers which are similar. For example, a character cannot buy Drain Killing Attack and use it against either HKA or RKA; he has to buy Drain HKA or Drain RKA. A character with Drain Density Increase can't use it to affect Knockback Resistance even though Density Increase has a similar effect. (Of course, a character could use the *Variable Effect* Advantage to create an Adjustment Power that could affect more than one specified Power at once.)

A character cannot Adjust a target's CV, or PER Roll, or other "secondary" aspects of a Characteristic, rather than the Characteristic itself. Combat Value and the like cannot be directly affected with Adjustment Powers; the character must affect the actual Characteristic, not the things

deriving from it. It would, however, be possible to buy, say, an Aid DEX with the Limitation *Only Increases DEX For Purposes Of Calculating OCV*, with the GM setting the value of the Limitation.

A positive Adjustment Power (such as Aid) cannot be used to enhance the "internal" qualities of a Power, such as making Nonresistant Damage Reduction into Resistant Damage Reduction.

Healing Via Adjustment

In genre fiction it's not uncommon for some energy projectors — particularly ones with "bodies of energy" or similar powers — to "heal" themselves by absorbing energy from outside sources. For example, an electricity elemental who's been injured by an attack (or perhaps by using his powers too much) could touch a wall socket and draw electricity from it into himself to "heal" himself or replenish his spent energy.

In game terms, powers such as this are typically built with Absorption or Transfer as the base Power, plus a Linked Healing of some sort. But that can be a little tricky to use at times and clutters up the character sheet. At the GM's option, a character can take the new +0 Advantage, *Healing Effect*, for those Powers. Absorption or Transfer with Healing Effect must be defined to affect only the Characteristic or Power the character wants to "heal" (typically BODY, STUN, or both at once), only works when that Characteristic or Power is below its ordinary starting total, and can only increase that Characteristic or Power up to its ordinary starting total... but the effect of the Power is permanent, just like Healing is. Unlike Healing, a character can use Absorption or Transfer with Healing Effect again and again on himself without restriction, though the GM may choose to impose restrictions on it similar to those on Healing if players use a Healing Effect power improperly.

Example: *Kasdrevan (a wizard with 10 BODY) has a spell, the Incantation of the Healing Blow, which causes attacks made against him to heal him! He defines this as Absorption 6d6 (physical, to BODY), Healing Effect (+0). Because he's applied the Healing Effect Advantage, he can't split the Absorption between, say, BODY and PD — it can only affect BODY, the Characteristic he wants to "heal." Furthermore, the Absorption only works when his BODY is below 10 due to injuries or other factors, and cannot increase his BODY beyond 10. However, any BODY gained from the Absorption remains with him permanently (until lost to another injury or the like); the points gained don't fade away as they would with an ordinary Absorption power.*

Multiple Adjustment Powers

Sometimes a character gets affected by two or more Adjustment Powers at once — for example, two different enemies might both use Drain STUN on him, or two different allies might Aid his DEX. For Absorption, Aid, and Transfer, the "maximum effect" rules on page 106 of *The HERO System 5th Edition*, Revised rulebook apply.

In the case of negative Adjustment Powers, each one affects a character separately for purposes

of determining when the character recovers lost points — they don't all lump together. Regardless of whether, for example, two Drains come from a single or multiple attackers, track each use of Drain separately. The character recovers 5 points per Turn from each Drain separately either in Post-Segment 12 (standard method) or 12 Segments after a given Drain affected him (optional method). You should also apply this rule to positive Adjustment Powers, though the GM may want to grant an exception in the case of Absorption, since a single Absorption roll might “boost” the character from multiple attacks. In that case it might make more sense to lump all the points gained from a single Adjustment roll into one unit, and have that unit lose points at the rate of 5 per Turn (or whatever).

Negatively Adjusting Elemental Controls

When a slot in an Elemental Control is negatively Adjusted (subjected to a Drain, for example), it recovers at the specified rate for the Adjustment Power (typically 5 Character Points per Turn). The base cost regains the lost points first, then the slot(s).

Example: *Firewing's Flight 30" (a slot in his Elemental Control) is Drained for 10 Character Points' worth of effect. That means the slot and the base points lose 10 Character Points of power, so his Flight loses a total of 20 points, reducing it to Flight 20". The Drain has the standard return rate of 5 Character Points per Turn. In the next Post-Segment 12, the base cost of the EC regains 5 Character Points of effect, so he gets back 2" of Flight that he lost. One Turn later, the base cost gets back 5 more points and is now at full; Firewing has 5" of his Flight back. It will take two more Turns for the slot to regain its 10 lost points and his Flight to be back to its normal 30".*

Negatively Adjusting Power Defense

If a character attempts to Drain (or otherwise negatively Adjust) a target's Power Defense, the Power Defense applies first, and anything that gets past the Power Defense is then halved when determining how much the negative Adjustment Power reduces the Power Defense.

Variable Effect

If an Adjustment Power has the +¼ *Variable Effect* Advantage (any Characteristic or Power of a given special effect, one at a time), there's no restriction on the number of Characteristics or Powers it can apply to — it's just that it can only affect them one at a time. For example, if a character has Drain Fire Powers 3d6 and his opponent has 37 Fire powers, the character can affect all 37 of them... one at a time. But the GM may impose a numerical limit if he chooses.

DEFENSE POWERS

The most common Defense Powers for energy projectors are Force Field and Force Wall (see below), though others are certainly possible. For example, a character might have a particularly strong “force shield” surrounding him that functions as Damage Reduction.

Only Works Against Limited Type Of Attack

The *Only Works Against Limited Type Of Attack* Limitation is particularly useful for energy projectors who want extra defenses that only apply to a specific type of energy (typically the type they control or use). However, the basic -½ and -1 cost structure may not be precise enough for some campaigns. The accompanying table expands the Limitation. The listed examples come from the Champions Universe and similar *Champions* campaigns; the GM should adjust the values for his own campaign if necessary.

ONLY WORKS AGAINST LIMITED TYPE OF ATTACK

Value	Frequency Of Attack	Example
-0	Very Common	Physical attacks (any)
-¼	Common	Energy attacks (any)
-½	Uncommon	Electricity, Fire, Magic, Sonics, Telekinetic, blaster pistols
-¾	Rare	Ice/Cold, Light
-1	Very Rare	Gravity, Magnetism, Time, Vibration

Unified Defense Against A Special Effect

Some special effects might do either Physical or Energy damage, depending on exactly how the special effect is defined. For example, an Ice/Cold beam of intense cold would be an Energy attack, but projecting a block or dart of ice at someone might be considered a Physical attack.

At the GM's option, characters can buy *Unified Defense* that applies to *all* attacks of a given special effect, regardless of whether they're defined as Physical or Energy. (Unified Defense has no effect on Mental attacks, Drains, Flashes, Transforms, or the like, regardless of their special effect.) It costs 1 Character Point per point, and *must* be defined as working against a particular special effect (it does not receive a Limitation for this). It is not Resistant, but characters can purchase Damage Resistance for it.

ABSORPTION

The optional rule on page 131 of the main rulebook about Absorbing from attacks that don't directly “damage” a character (such as Dispel, Entangle, Flash, or Transform) is one worth considering for energy projectors. If anyone can Absorb that sort of “energy,” it's likely to be an energy projector. The GM may even want to create a separate category other than Physical and Energy (call it “Alternate Attacks”) to cover those types of attacks regardless of whether they take physical or energy form.

Unless the GM permits otherwise, characters cannot use their own attacks on themselves so they can Absorb from the damage. Similarly, they generally cannot Absorb from their own attacks if a target Missile Reflects an attack back at them, they get caught in their own Area Of Effect, or the like.



Absorption And Force Wall

Typically, BODY prevented from affecting the character by a Force Wall cannot be Absorbed. However, if the Force Wall has the *Feedback* Limitation, or the GM rules otherwise based on special effects or other factors, it can.

CHANGE ENVIRONMENT

Energy projectors often use this Power to represent either (a) primary abilities that aren't usually overwhelmingly powerful but are useful when applied to everyone in an area, and/or (b) secondary effects of their main powers that may have tactical applications. Some examples include:

Gravity Field (Telekinetic STR, Only To Pull People Toward The Ground): A great way for gravity-manipulating characters to interfere with others' ability to move. Every 5 STR represents 1 G of force; see the *Gravity* section in Chapter Two for more information.

Ice Sheet (-4 to DEX Rolls to remain standing, Only Affects Characters Who Are Moving On The Ground): Many ice-manipulating characters can coat the ground with ice, making it difficult to move or remain standing.

Intense (Electro-)Magnetic Field: Many energy powers could create an electromagnetic field. This may have no combat effect (other than triggering an opponent's Limitations and/or Susceptibility), but could impose a -1 to PER Rolls with sensory and communications equipment (or a higher penalty, if paid for).

Weather Control: Weather-manipulating characters can achieve many different effects with Change Envi-

ronment. See pages 251-52 of *The UNTIL Superpowers Database* for a detailed example and rules.

Typically, the defense against the effects of a Change Environment is "stay out of the affected area" (or "get out of the affected area," if the character's already in it), though Change Environments that directly cause damage apply against the standard defenses for such attacks. However, the GM may in his discretion rule that certain defenses, or actions by the affected character, constitute protection against the Change Environment's effects. For example, having certain Enhanced Senses might act as a "defense" against gloom-based Change Environments that inhibit vision, and putting on snowshoes or spiked boots would protect a character against the DEX Roll penalty imposed by an ice sheet. As always, you should consider the special effects involved, common sense, and dramatic sense.

DARKNESS

This Power is the definitional power for characters who use Darkness/Shadow energy, but it doesn't necessarily have to represent black, impenetrable darkness. Any phenomena that could totally "blind" people perceiving into, out of, or through it can qualify as Darkness. For example, a Light-manipulating character could create a field of light so bright that it functions as Darkness to Sight Group, while an Air/Wind or Fire/Heat character could generate a cloud of smoke so dense that it accomplishes the same goal. And don't forget the possibility of Darkness to other Sense Groups; a Chemical-manipulating character might create a cloud of vapors that make using Smell/Taste impossible, for example.

DESOLIDIFICATION

This power is common among energy projectors who can transform their bodies to pure energy, or who are energy beings. Depending on the character's form of energy, the power may require certain Limitations. For example, a character who can transform into light may have the Limitation that he cannot move through opaque objects (-½), while one who can become air would have Cannot Pass Through Solid Objects (-½).

Additionally, an energy form may imply certain other powers. A Damage Shield with Affects Physical World (+2) is the most common; touching pure energy can cause serious injury. Flight and FTL Travel are just two of many other possibilities. See the various "Body Of" powers in the USPDs for examples.

Being Desolidified does not protect a character from being harmed by the Side Effects of his own powers, or by the effects of Disadvantages such as Dependence and Susceptibility.

ENDURANCE RESERVE

Having vast energy powers doesn't necessarily imply that one has great personal stamina (*i.e.*, END, in game terms). For many energy projectors, buying an Endurance Reserve for their energy powers makes more sense conceptually than buying a lot of CON and/or END. An Endurance Reserve works particularly well when there's some restriction on the character's ability to take Recoveries (in other words, when there's a Limitation on the REC of the Reserve). For example, the character Sunspot (*Villains, Vandals, And Vermin*, page 123) can only Recover spent END in direct sunlight. Some other possible Limitations for energy projectors' REC include:

Can Only Use REC In Direct Sunlight (-1)

Can Only Use REC In Moonlight (-¾)

Can Only Use REC In Sunlight (-½)

Can Only Use REC In Sunlight, Starlight, Or Moonlight (-¼)

Can Only Use REC When Can Touch A Source Of Electricity (-½)

Can Only Use REC In The Presence Of Sound (-¼)

Can Only Use REC In The Presence Of External Sound (sound not created by the character; -½)

Can Only Use REC When In Contact With Earth/Stone (-¼, possibly more)

In some cases the GM may even rule that the character's REC is proportional to the intensity of the phenomenon or amount of substance required for taking Recoveries. For example, if a character Can Only Use REC In Sunlight (-½), on a cloudy day or when he's in the shade he might only get to use 50-75% of his REC, exposure to direct sunlight is 100% of REC, and being able to stop and sunbathe in direct sunlight is 120% of REC.

A character can Push powers that draw END from an Endurance Reserve, but the GM may forbid him to do so if allowing this would be inappropriate or seems abusive.

ENERGY BLAST

This Power more than any other tends to define the energy projector as an archetype — after all, it's the main Power with which characters project energy as an attack. It's not uncommon for an energy projector to have a Power Framework whose slots are all variations on a standard Energy Blast (one basic EB, one with Armor Piercing, one with Double Knockback, one that does STUN Only, and so on).

Increased Damage Differentiation

The GM can, if he wishes, allow for greater differentiation of dice of damage than just whole and half dice. This provides more incentive for characters to buy odd values of Energy Blast, and also allows for greater variation among characters in Heroic genres.

Using this system, values for Energy Blast ending in 0 or 5 remain whole dice, and values ending in 3 or 8 remain the half-die breakpoint. Additionally, values ending in 2 or 7 add +1 point of damage, and values ending in 4 or 9 use the next highest die and subtract 1 point of damage. For example, here's what 10-20 points of Energy Blast look like using this system:

ENERGY BLAST DIFFERENTIATION

Points In EB	Damage
10	2d6
11	2d6
12	2d6+1
13	2½d6
14	3d6-1
15	3d6
16	3d6
17	3d6+1
18	3½d6
19	4d6-1
20	4d6

STUN Damage

Page 160 of the main rulebook notes that "STUN Only" is a -0 Limitation for Energy Blast, because in the average campaign the drawbacks of STUN-only damage (no BODY damage, no Knockback) more or less evenly balance with the benefits (no risk of harming unintended targets or causing property damage). But not every campaign is "average." In some cases the GM may prefer to alter the Modifier's value to better reflect his setting and the nature of the adventures the PCs have. For example, in a campaign that mostly takes place in wilderness areas, the odds of unintended property damage or injury being an issue are less than for campaigns set in urban environments, so STUN Only might be more restrictive and thus deserve a -¼ value. In a game where the PCs often have to destroy inanimate objects and smash through walls, not being able to do BODY damage is a real hindrance, possibly meriting an increase to -¼ or -½ for the Limitation.

In some cases characters may want to have Energy Blasts that do greater STUN damage than normal (just like an RKA with the *Increased STUN Multiplier* can). At the GM's option, characters can buy a new Advantage, *Increased STUN Damage*, for Energy Blast. For a +¼ Advantage, the character increases the STUN damage rolled for his Energy Blast by an amount equal to the dice (not DCs) in the attack, thus improving his chances of doing STUN damage to the target, Stunning the target, and so forth. For example, an Energy Blast 6d6, Increased STUN Damage would add +6 STUN to every roll. Characters may buy this Advantage multiple times for a single attack, adding the dice in the attack as STUN for each purchase (thus doing 2x dice in extra STUN for a +½ Advantage, 3x dice in extra STUN for +¾, and so forth). The GM may establish a limit on how many times a character can purchase this Advantage for a single attack, if desired.

ENHANCED SENSES

Many energy projectors have Enhanced Senses, typically of one or more of two types. First, they may have the ability to sense the type of energy they can control/manipulate/project, such as a Fire-based character with Infrared Perception (Sight Group) because he can see heat patterns or a Magnetism-based character with Detect Magnetic Fields (no Sense Group). Characters whose powers involve the electromagnetic spectrum in any way might buy various Radio Group Senses. Second, they may be able to use their control over energy to give themselves enhanced sensory capacity. The most common example here is emitting some sort of "energy pulse" that functions like Radar or Active Sonar, but a character with sufficient power and control could probably justify buying Spatial Awareness with various Sense Modifiers. Similarly, a Light-based character might control the movement of light to effectively give himself N-Ray Perception (Sight Group).

Enhanced Senses also affect energy projectors by allowing other characters to perceive them more easily (such as using Infrared Perception to perceive the heat given off by an energy projector's force-field). See *Perceiving Energy Projectors* in Chapter Four for more information.

ENTANGLE

Entangle is a common power for energy projectors whose energy can have any sort of physical force or effect, such as those with Earth/Stone and Telekinetic powers. Characters who manipulate pure energy can create "cages" with somewhat similar effects (see *Fiery Prison*, page 104, for an example), though their purpose is less to absolutely restrain someone than to keep them from physically leaving a certain area.

Entangle Barriers

Besides its offensive value, Entangle has defensive potential in that a character can use it to create walls. (See the sidebar for a discussion of the relative merits of Entangle walls versus Force Walls.) Typically, an Entangle wall is 1" (three hex sides)

long for every 1 BODY in the Entangle, and 1" tall. At the GM's option, a character may construct a longer or larger wall by paying for an Adder, *Larger Wall*. Each +2 Character Points adds +1" to the length or height of the wall. Whether the GM allows this Adder or not, a character does not have to create a wall of his maximum length and height if he does not want to; he can voluntarily choose to make it smaller, though it still has the full BODY rolled on the dice. (The lack of ability to reduce the size of an Entangle barrier is a -0 Limitation.)

An Entangle barrier must touch the ground, but need not touch any other surface unless the GM rules otherwise. Depending on the setting, circumstances, power, special effects, and the like, "the ground" may not necessarily be the literal ground; it might be, say, a building rooftop, a really large tree branch, or on top of some other horizontal surface, but it must be horizontal and the Entangle has to be on top of it — it can't be attached just to a vertical surface or a ceiling. The requirement that an Entangle "touch" more than a single surface is a -0 Limitation.

Similarly, an Entangle barrier must be "attached" to the ground, in that no one can freely move it without overcoming its BODY and DEF in a "push" or "shove" intended to break it free and move it (rather than simply breaking it altogether). Once it's detached, the ability to move it depends on its weight (as determined by the GM), the pushing character's STR, the surfaces involved, and similar factors.

FLASH

Flash is another common offensive power for energy projectors, particularly those who can control/manipulate/project Light. Many forms of energy can be tuned to be bright enough to blind someone, either as the only effect of an attack or as a Linked attack to one that causes damage.

Long-Term Flashes

In the "real world," some disabling or harassing weapons, such as tear gas and pepper spray, are bought a Sight Group Flashes, but their effects can last several minutes or more, not the few seconds common to Flashes in the game. Some energy projectors might likewise be able to blind targets for long periods of time. At the GM's option, characters can build long-term Flash attacks by applying the Advantage *Delayed Recovery* (+2) to Flash. For a Flash with this Advantage, each "Normal Damage BODY" rolled on the Flash dice represents 1 Turn of sensory deprivation, rather than 1 Segment. The GM may adjust the recovery rate based upon curative measures the characters take, for the sake of drama, or for any other appropriate reason — after all, it's not always conducive to enjoyable game play to have PCs and NPCs incapacitated for long periods of time.

Alternate Flash Rules

For some campaigns or characters, the absolute nature of Flash — that it totally "blinds" the target — may not seem appropriate. In that situation, consider using the following optional rule:

CREATING WALLS

In the *HERO System*, there are generally two ways for a character to create a wall quickly: Entangle and Force Wall. Each method has its benefits and drawbacks.

The main benefit to an Entangle is that it's an Instant Power — "fire and forget," so to speak. The character doesn't have to spend any END or effort maintaining it once it's up, and in theory it could remain in existence for years if no one destroys it. But on the downside, an Entangle wall can't be reshaped or moved like a Force Wall can, and cannot have its top or bottom closed over to form a "bubble" around a target. Thus, it's always possible to climb over or go around an Entangle wall, given time and the proper abilities or resources.

A Force Wall doesn't have those restrictions — a character can reshape or move a Force Wall after creating it, use it to totally encapsulate a target, and so forth. But the price of this flexibility is that Force Wall is a Constant Power requiring Phase-by-Phase END expenditure to maintain. That makes it a poor choice for creating walls that should exist for a long time, or for characters who have to closely monitor their END usage.



each Normal Damage BODY rolled on the Flash dice counts as a -1 PER Roll penalty with the affected Sense. As each Segment of the Flash effect wears off, the Flash penalty diminishes by 1, so that when the duration ends, so does the penalty. While affected by the Flash, the victim may make PER Rolls at the current penalty to use the Sense. If he succeeds, he suffers no effect that Phase; if he fails, he suffers the usual penalties for lack of a Sense.

Example: *Photon's in a campaign that uses the alternate Flash rules. On her Phase in Segment 6 she uses her Sight Group Flash 12d6 on Brawler and rolls 14 BODY. For the next 14 Segments, Brawler's Sight is affected. In the first Segment — Segment 6, the one he was Flashed in — he suffers a -14 to Sight Group PER Rolls. In Segment 7, it becomes a -13; in Segment 8, a -12, and so forth. Thus, if he tries to make a Sight PER Roll in Segment 12, he suffers a -9 penalty. If he succeeds, he can see normally that Segment; if he fails he's subject to the usual penalties for lack of Sight.*

FORCE FIELD

Force Field is a stereotypical energy projector Power, and in the average campaign it's likely to be the most common form of defense among the archetype. Here are some additional rules for it.

Impermeability

Force Field isn't necessarily impermeable to liquids, gases, or the like. Force Field is a Defense Power, and thus provides protection against things that damage or injure the character. If a liquid is defined as

a form of attack, or a dangerous substance that could inflict injury, then the Force Field's defense applies to reduce or eliminate the damage it causes. Whether it literally prevents the liquid from contacting the character depends on the special effects of the Force Field and the circumstances. For instance, if a character's Force Field is defined as "a screen of energy surrounding the character's body," the Force Field might only prevent contact if it counteracts all damage the liquid would do — otherwise some "gets through" and hurts the character somehow. On the other hand, if the Force Field is defined as "the character has super-tough skin," then it's definitely not going to prevent the liquid from contacting the character — but it may prevent the liquid from hurting him when it contacts him. The same rationale applies to picking up dangerous objects, like a red-hot piece of metal. As for non-damaging substances, such as ordinary rainfall, whether a Force Field can prevent them from touching the character depends on special effects, the circumstances, and the GM's judgment. Since that has no real game effect at all, most GMs probably won't care if a player wants to define his character's Force Field as keeping him dry in the rain.

The Flash Defense, Mental Defense, and Power Defense provided by a Force Field are automatically considered Resistant.

Protects Carried Items

The *Protects Carried Items* Adder doesn't make it impossible, or more difficult, for an attacker to Grab the character's Focus, or some other object he's holding. Nothing about that Adder negates the effects of the *Focus Limitation*, except insofar as it allows an Accessible Focus to be protected by the

Force Field where it otherwise would not be. This applies even if the Accessible Focus is what's generating the Force Field.

Adjustable Force Field

Standard Force Fields are bought with a defined amount of Physical and Energy defense, and the defined amounts can't be changed after the power's bought. A character with Force Field (20 PD/20 ED) always has Force Field (20 PD/20 ED); he can't alter it to Force Field (10 PD/30 ED) or any other combination.

At the GM's option, characters *can* alter their Force Fields that way if they buy a new Advantage, *Adjustable* (+1). An Adjustable Force Field can have its points of defense re-allocated in any way, without changing its maximum or adding new categories of defense. Thus, a Force Field (20 PD/20 ED) could become (40 PD/0 ED), (15 PD/25 ED), or any other combination that adds up to 40 (though it can't put any points into Mental Defense, Power Defense, or any other defense not originally bought for it). A Force Field (15 PD/15 ED/10 Mental Defense/10 Power Defense) could become (5 PD/5 ED/10 Mental Defense/30 Power Defense) or any other combination that adds up to 50 among the four types of defense. Re-allocating the points of defense in a Force Field requires a Half Phase Action and can only be done once per Phase.

The GM can also allow Adjustable for Force Walls if desired, though this may cause more problems with game balance. Standard rules about the "transparency" of Force Walls apply, even if a Force Wall's allocation puts 0 points in a particular type of defense.

FORCE WALL

Force Wall is another common Defense Power for energy projectors. In addition to its defensive capabilities, it has some offensive potential (it can be used to englobe an opponent, block off avenues of escape, and so forth). Here are some additional rules for it.

Altering Shape And Size

As noted on page 179 of *The HERO System 5th Edition, Revised* rulebook, a character can alter the size of his Force Wall as a Half Phase Action (+/-1" of height for +/-1" of length). Similarly, he can alter the shape of the wall as a Half Phase Action — for example, he could cause a straight Force Wall to curve around and englobe someone standing next to it. The GM can restrict how much of a change in shape a character can make at once; a radical change might require a Full Phase Action, or even longer, or require a successful roll with an appropriate *Power Skill*. Standard rules about moving things with Force Walls apply, if a person or object is in the way of the shape-change.

Attacking Through A Force Wall

Erecting a Force Wall between an attacker and the victim of his Constant attack does not stop the Constant attack from ceasing to affect the victim — the attack continues to affect the victim as normal, unless the GM rules otherwise based on special effects, game balance, common/dramatic sense, or other considerations. However, if the

Force Wall is Opaque and blocks Line Of Sight, it will cause the Constant Power to stop working as specified in the rules.

If a character makes an attack using an Area Of Effect/Explosion attack against a hex that's inside (or on the other side of) a Force Wall, the "intervening" Force Wall does not automatically convert the hex where the attack "contacts" the Force Wall into the "target hex." The target hex is the target hex chosen by the attacker — the Force Wall doesn't change that. The GM might explain the special effect of the character's Force Wall protecting him as "it kept the grenade from exploding right next to you," but in rules terms having a Force Wall up doesn't alter the target hex of an attack. As always, the GM is free to rule otherwise based on special effects, game balance, common and dramatic sense, and other factors. In some cases, such as when the attack involves a Focus such as a grenade, having the Force Wall change which hex constitutes the "target hex" may make sense.

Despite the fact that it has Range, first and foremost a Force Wall provides defense for the character who created it (and for the other persons "behind" it). If a character wants to use a Move By/Through against a target who's protected by a Force Wall, consider the Force Wall + character as a single target. The character performs his Move By/Through as normal. If his Attack Roll fails, he stops dead at the edge of the Force Wall but takes no damage from "hitting" it. If the Attack Roll succeeds, roll the damage as usual. If the damage is enough to break through the Force Wall, the character "continues" moving, ends his movement where planned, and applies the attack's damage to the target (who, of course, subtracts the Force Wall's defense from it along with his other defenses). If the damage fails to break through the Force Wall, the attacker stops dead at the edge of the Force Wall and takes the damage he normally would as if he failed to do any Knockback to the target.

Regarding velocity, the velocity a character can use in this situation depends on the velocity he can build up, per the standard rules, before hitting the Force Wall. The velocity he might have built up beyond that, in the area between the Wall and the target, does not matter.

If a character attacks a character who's englobed in a Force Wall and misses, as a default rule the attack misses completely; it doesn't have a chance to hit just the Force Wall. The GM can make an exception if he feels that would be appropriate.

Coordinated Attacks

The BODY from Coordinated attacks *does not* add together for purposes of destroying a Force Wall, or any other purpose. If one Coordinated attack knocks down a Force Wall, then all attacks can "get through," but the Force Wall's defenses still subtract from both as normal before the STUN's added together for Stunning purposes. If neither attack penetrates the Force Wall, then neither attack affects the target at all.

Englobing Energy Beings

A Force Wall with PD but no ED can englobe a character who's made of energy. Just because the character's special effect is that he's made of energy

doesn't mean he has no physical presence for game purposes (unless he's bought *Desolidification*, in which case he can just walk right through the Force Wall unless it has the *Affects Desolidified* Advantage).

Exotic Attacks And NNDs

An attack with the *No Normal Defense* Advantage does not necessarily qualify as an "exotic" attack for purposes of determining whether it can pass through a Force Wall. In general, "exotic attacks" include any attack that targets Mental Defense, Flash Defense, or Power Defense... but the GM must take common sense, dramatic sense, special effects, and considerations of game balance into account. For example, an attack defined as a "knockout dart" and built as a Drain STUN won't penetrate a Force Wall that provides PD protection, regardless of what defense works against it. If an NND is subject to a defense that's not one of the "standards" (such as Armor, Force Field/Wall, Mental Defense, Power Defense, Flash Defense, and so on), then the GM should resolve the situation based on special effects, common sense, dramatic sense, and considerations of game balance.

Exotic Defenses Are Resistant

The Flash Defense, Mental Defense, and Power Defense provided by a Force Wall are automatically considered Resistant.

Hit Locations

If the Hit Location rules are in use, and an attacker fires at a target who's protected by a Force Wall (or an ordinary wall or some other barrier), here's how you resolve the damage if the attack penetrates the barrier and affects the target:

For Killing Attacks, do this:

1. First, find out if the KA does enough BODY to penetrate the FW. If not, the issue of the STUN is moot.
2. If the KA gets through the FW, subtract the FW's defenses from the BODY done.
3. Apply the remaining BODY to the target normally using the Hit Location rules, and calculate STUN from it.

For a Normal Damage attack, subtract the Force Wall's defenses (and the character's other defenses) from the STUN rolled, then apply the NSTUN multiplier to the STUN damage the character actually takes after defenses.

Knockback

Force Walls, even ones shaped like globes or similar shapes, do not take Knockback or get moved by attacks.

If an attack doesn't do enough BODY damage to get through a Force Wall, it does not do Knockback to the character who created the Force Wall. If the character wants to take Knockback from any attack that could do Knockback regardless of whether it penetrates the Force Wall or not, he can take that as a $-\frac{1}{2}$ form of the *Feedback* Limitation.

Moving A Force Wall Globe

Unless the GM has some objection, any character can pick up and move a Force Wall "bubble,"

either with ordinary STR or Telekinesis. A Force Wall globe is an object that's not attached to anything (as opposed to ordinary Force Walls, which are "anchored" and can't be moved unless they move with their creator as described in the rules). A character trying to move another character's Force Wall bubble has to make an Attack Roll (either against DCV 3 or the DCV of the character generating it, at the GM's discretion), but the character generating the Force Wall can "hit" it automatically (though he must still use an Attack Action to do so). Despite this, Force Wall bubbles do not take Knockback from attacks.

For game purposes, anything in the bubble moves along with it and does not take damage from being moved, unless the GM rules otherwise. At the GM's discretion, a character inside a Force Wall bubble can move the bubble, sort of like a hamster in a ball, assuming special effects, common sense, and dramatic sense don't indicate otherwise. Typically the character gets his full inches of Running when doing this. However, the GM must take into account all the weight inside the ball and use the Encumbrance rules to see if the character is slowed down. Even if that doesn't happen, the GM may want to restrict the number of inches of movement the character can apply.

Opacity And Transparency

A Force Wall can be Opaque to a given Sense or Sense Group, but also Transparent to Flash attacks. Transparent is just a game mechanic that describes how Force Walls react to different types of attacks; it has nothing to do with whether a Force Wall can be seen through. Similarly, a Flash is a form of attack that temporarily "blinds" Senses; despite the name it doesn't necessarily have anything to do with visible light. If a wall is Opaque, it's going to block visible light, whether that light is a special effect of a Sight Group Flash, ordinary sunlight, a flashlight bought as Images, or something else. Opaque is opaque. But being Opaque does not make a Force Wall immune to the standard rules about an exotic attack penetrating and "destroying" a Force Wall that offers no protection against it — that's what the Transparent does. A Force Wall can be Opaque and still get destroyed by a Flash if the Force Wall offers exotic defenses but no Flash Defense — the mere fact that it blocks visible light (which means it stops some types of Flashes automatically) does not mean it "takes no damage" from Flashes.

Personal Force Walls

Some characters have "personal Force Walls" — ones with the *Self Only* and *No Range* Limitations so the Wall only protects the character himself. This is a good way for an energy being to represent his general resilience to attacks, or with an appropriate *Only Works Against Limited Type Of Attack* Limitation for an energy projector to protect himself from the type of energy he controls. But even a personal Force Wall is still a Force Wall, and that means a character can't make attacks through it without an appropriately-defined Indirect attack,

by smashing through it, or because he's applied the appropriate form of the *Transparent Advantage*. In fact, he'd need Indirect on his STR just to punch people or touch things through the Force Wall! However, at the GM's option, the character can ignore these restrictions if he buys a +1 Advantage, *Personal Force Wall*, for his Force Wall; this allows all his attacks to ignore it as if it were a Force Field. (Characters cannot purchase this Advantage for other Force Walls, just "personal Force Walls.")

Personal Immunity

Applying the *Personal Immunity* Advantage to a Force Wall does not allow a character to attack through the Force Wall without having to break through it. All it does is prevent him from being englobed with it when he tries to englobe someone else and the attack is Missile Reflected (or the like)... but since Force Wall is a Constant Power, the character could just turn off the globe.

Transparency

A character cannot make a Force Wall Transparent to both types of damage, only to one ("regular" or "exotic" attacks).

KILLING ATTACK, RANGED

Many energy projectors have at least one RKA to represent more powerful, intense, or focused uses of their basic energy bolt. (Additionally, some energy types, such as Fire, are more "realistically" simulated with RKA than Energy Blast.)

As with Energy Blast, the GM can adjust the cost structure of RKA (and HKA) to allow for greater differentiation of dice of damage than just whole and half dice. Basically this method assigns

KILLING ATTACK DIFFERENTIATION

Points in RKA	Damage
5	1 point
10	½d6
12	1d6-1
15	1d6
20	1d6+1
25	1½d6
27	2d6-1
30	2d6
35	2d6+1
40	2½d6
42	3d6-1
45	3d6
... and so on	

a defined, slightly lower or higher, cost for the "-1" and "+1" increments of Killing Damage, as shown in the following table:

LIFE SUPPORT

Life Support is a common power for energy projectors who are beings of energy or have energy bodies — after all, someone made of energy probably doesn't need to breathe, eat, or sleep like normal people, and can withstand the effects of many a hostile environment. (And if he does eat, it might

not be the usual sort of food; perhaps he "eats" sunlight or electricity, for example.) Beyond that, this Power has some implications and options that can apply to energy projectors and their powers.

Life Support As A Defense

Many energy NNDs and AVLDS have one or more forms of Life Support, typically a Safe Environment, as the defense against them — indeed, the defense is pretty much mandatory, given the special effects in question. For example, a Radiation Pulse NND would have Safe Environment (High Radiation) as the defense, and a Bitter Cold NND would have Safe Environment (Intense Cold). To not choose those forms of Life Support as a defense removes some of the utility Life Support provides, so GMs should be very cautious about allowing it.

Gamers interested in greater variation among characters can extend the concept of Life Support as a defense in two ways. First, they can reduce the effectiveness of all of the Safe Environments that cost 2 Character Points. With this option, characters can buy 1-point versions of those four Safe Environments. The 1-point version is half as effective as the regular 2-point version:

- when used as a defense against an NND, AVLDS, or similar attack, a 1-point Safe Environment doesn't provide an absolute defense; it reduces the damage done by half.
- the Safe Environment is otherwise roughly half as effective (with the GM determining exactly what this entails). For example, a character with 1-point Safe Environment (Intense Cold) can stay in extreme cold longer than other characters before he feels uncomfortable or develops frostbite, but eventually he will suffer problems. One with Safe Environment (High Radiation) can take a lot more rads than other characters, but after enough exposure he'll begin suffering radiation poisoning.

Second, the GM can allow Safe Environments to have some effect against attacks of the appropriate special effect that aren't NNDs/AVLDS. This may either be a part of how those types of energy work in the campaign (*i.e.*, characters get no Limitation for it), or it might constitute a -¼ (at most) Limitation on the attacks. Here's how this works:

Safe Environment (High Pressure): reduces the damage caused by Gravity attacks (and similar attacks) that squeeze or crush the character by 10%

Safe Environment (High Radiation): reduces the damage caused by Radiation attacks by 25%

Safe Environment (Intense Cold): reduces the damage caused by Ice/Cold attacks by 25%, provided the attack does Energy damage (it has no effect against, for example, crushing blocks of Ice that do Physical damage)

Safe Environment (Intense Heat): reduces the damage caused by Fire/Heat attacks by 25% (alternately, it might reduce pure Fire attacks by 25%, and pure Heat attacks by 50%)

The GM can also apply this to other forms of Life Support if he wishes, such as using Life Support (Longevity) to reduce the effects of Time-

based attacks. In all cases, the reduction of damage applies *after* the character uses his defenses to reduce the attack's damage, just like the *Damage Reduction Power*.

If the GM prefers, he can even scale this effect based on the value of a Limitation, *Expanded Defensive Effect*, taken on the attack. For a -0 Limitation, the appropriate Safe Environment reduces damage by 10% (or this may be the campaign default, worth no Limitation at all). For a -¼ Limitation, it reduces the damage by 25%. For a -½ Limitation, it reduces the damage by 50%. For a -1 Limitation, it reduces the damage by 75%. In some cases, the GM may require that characters always take a Limitation of a minimum value for attacks of a particular special effect; for example, Ice/Cold attacks might always have to take the Limitation at the -¼ value.

MISSILE DEFLECTION AND REFLECTION

Missile Deflection is an appropriate Power for many energy projectors (especially if Limited so it only applies to the types of energy they control/use). It often works best if bought to function at Range or with Reflection — otherwise, Combat Skill Levels with DCV may be a better purchase.

Here are some additional rules, suggestions, and options for Missile Deflection and Reflection:

Active Points Instead Of Special Effects

Currently, Missile Deflection and Reflection is defined as working against certain special effects — at its lowest level it affects thrown objects, and it scales upward through “non-gunpowder projectiles” and “any physical projectile” to all Ranged attacks. This is unusual for the *HERO System*, where special effects don't usually determine how two Powers interact (Chapter Two of this book notwithstanding). After all, depending on how characters define their attacks, it's possible to have a thrown object or a non-gunpowder projectile that's as powerful, or more powerful, as a bullet or energy beam.

Addressing this concern requires some fundamental changes to the way Missile Deflection works. For this “revised” Missile Deflection, a character pays 10 Character Points and can Deflect any Ranged attack — *but* he suffers an OCV penalty equal to -1 per 10 Active Points in the attack. To counteract this, typically a character buys lots of 2-point Combat Skill Levels to improve his OCV. (At the GM's option characters can buy 1-point Penalty Skill Levels that only improve the character's OCV for purposes of counteracting the Active Point penalty.) If a character only wants to Deflect attacks of a given special effect, he can represent that with a *Restricted Deflection* Limitation: only thrown attacks is a -2; non-gunpowder projectiles is a -1, and any physical projectile is a -½.

The Attacker's OCV

When a character uses his Missile Deflection, it functions against the OCV the attacker uses to make his Attack Roll. If the attacker's OCV is modified by the Range Modifier, the application of Combat Skill Levels, or anything else, that all fac-

tors in, and thus may make the Deflecting character's roll easier or harder.

Enhanced Missile Deflection

At the GM's option, Missile Deflection automatically works at Range at the current +½ level — characters can use it to Deflect Ranged attacks directed at themselves or any adjacent hex. By applying the *Ranged* (+½) Advantage, a character can make his Missile Deflection work at any Range up to 5" x Active Points. This makes the Power a more attractive purchase for many characters, since it gives Missile Deflection functionality that sets it apart from DCV Levels.

Expanded Deflection

Standard Missile Deflection doesn't work against Entangles or any area-affecting attack. At the GM's option, a character can purchase a new Advantage, *Expanded Deflection*, to allow the power to do that. For a +¼ Advantage, a character can Deflect Entangles (unless they're bought with Area Of Effect/Explosion). For an additional +¼ Advantage (total of +½), the character can also Deflect Selective/Nonselective Area Of Effect attacks. For an additional +½ Advantage (total of +1), the character can also Deflect any Area Of Effect, Explosion, or area-affecting attack. Unless the GM permits otherwise, characters cannot Reflect any of these attacks.

Indirect Attacks

Indirect attacks are not inherently non-Deflectable. It's a question of common sense and dramatic effect. For example, if a character's set up and ready for an attack from the front, the GM might not allow him to Deflect an attack that strikes him from behind due to Indirect. And as noted in the rules, a character must be able to perceive an attack to Deflect it; in some cases, he may not be able to perceive an Indirect attack.

Missed Attacks

As noted in the rules, Missile Deflection works against “incoming” attacks or attacks “made against” a target. What this means is that an attack doesn't necessarily have to hit a character for that character to be able to Deflect or Reflect it. However, the GM could rule that an attack that misses by a considerable margin (say, 5 or more) doesn't even come close to the character and therefore is not Deflectable/Reflectable. In any event, the standard rules on the timing of Deflection/Reflection (it's an Attack Action, it must be declared before the attacker rolls his Attack Roll, and so forth) apply.

Ranged Deflection

Unless the GM rules otherwise, a character with full Range (+1) for his Missile Deflection can Deflect multiple attacks, using the standard rules for doing so, anywhere within his potential range of effect, regardless of where the “targets” are. For example, in one Phase he could Deflect an attack from a target 10" away (-0), then one for a target 2" away (-2), then one for someone standing next to him (-4), then one for someone 57.5" away (-6), and so on — but once he misses a Deflection, he can't make any more that Phase.



Reflection And Force Walls

A Reflected attack always “comes from” or “originates with” the character using Reflection, for purposes of determining the effect of Force Walls, Concealment, and other such defenses and modifiers. The character can apply the *Indirect* Advantage to make the attacks come from some other angle.

Telekinesis

A character who has both Telekinesis and Missile Deflection cannot automatically use his Missile Deflection at Range — if he wants that ability, he has to buy the *Range* Advantage for his Missile Deflection.

Telekinesis can be Missile Deflected, since it’s a Ranged attack. It’s usually going to require the 20-point form of Missile Deflection, but ultimately that depends on the special effect of the Telekinesis.

POWER DEFENSE

Power Defense is more common for energy projectors than just about any archetype (except perhaps mystics). Since they often define their abilities using Drain and other Adjustment Powers, it stands to reason that they’d have some resistance to similar attacks.

A character can choose to use his Power Defense to resist Aid/Succor or Healing, if for some reason he doesn’t want another character to use those powers on him.

SUPPRESS

Energy projectors often create powers using Suppress. Here are a few additional rules for that Power.

Continuous Suppresses

With most powers, applying Continuous converts a Power into a Constant Power that the character can maintain Phase after Phase by continuing to pay END. Since Suppress is already Constant, the effect of applying Continuous to it is to let the attacker use it to affect the target again and again, without having to make an Attack Roll or use an Attack Action. That means each subsequent “use” of Suppress is a new attack — just one the character gets to make without the need for roll or Action. He still has to pay END separately to make/maintain each Phase’s Suppress effect. While the overall END cost can be decreased using Reduced Endurance, there’s no way to stop the “accumulation” from occurring.

Example: *Technique has a Suppress Machine Powers 2d6, all Machine Powers simultaneously (+2), Continuous (+1) (40 Active Points; costs 4 END per use) power that she uses to shut down devices. The first Phase she uses it, it costs her 4 END. The next Phase it costs her 4 END (to maintain the first Phase’s effect) + 4 END (for the second Phase’s “new” attack). The third Phase it increases to 12 END (4+4+4), and so on.*

Suppress With Charges

If a character buys Suppress with Charges, the Suppress effect lasts for the one Phase the Charge is active, then it ends and the Suppressed points immediately return to the victim. If the Charges

are Continuing Charges, the effect lasts until the duration of the Charge expires, then the points immediately return. If the Charges are Continuing Fuel Charges, the character has to keep expending 1 second's worth of fuel per Phase to maintain the Suppress; as soon as he stops doing this, the points immediately return.

If a character buys a Suppress that's Continuous, and has Continuing Charges, the power consumes one Continuing Charge per Phase (regardless of the Charge's duration), or 1 second's worth of a Fuel Charge, unless the GM rules otherwise. In particular, the GM may sometimes wish to charge a character more than 1 second's worth of a Fuel Charge to maintain game balance.

Characters cannot apply the *Costs Endurance Only To Activate* (+¼) Advantage to Suppress.

Suppressing BODY

If a character's suffering from the effects of a Suppress BODY, he can Heal or Regenerate the lost BODY. Healing (either the normal or Regeneration form) restores BODY lost to a Suppress BODY while the Suppress remains in effect — though of course the character maintaining the Suppress could hit the victim with another use of the Suppress BODY, forcing the victim to start Healing/Regenerating the additional lost BODY (if desired). However, if a character suffers a Suppress BODY that reduces him to negative his BODY (or lower), Healing Resurrection will not restore him to "life," because (a) the condition that "killed" the character remains in full effect, and (b) he's not truly dead, so Resurrection isn't applicable.

If a character Suppresses the BODY of an inanimate or unliving object, such as a Vehicle, a Base, a mailbox, or a rock, to 0, it crumbles to its component pieces or dust, just like with a Drain — but when the Suppress effect ceases to function, the object instantly re-assembles into its intact, working self. If someone takes part of the object away while the BODY is Suppressed, the GM has to determine the effects based on what's taken, how far away it's taken, and so forth.

TELEKINESIS

Telekinesis is the power to move physical objects at a distance without physically touching them. Although it's often defined as a psionic power (see *The Ultimate Mentalist*), it's nearly as common among energy projectors (in fact, "Telekinetic energy" is one of the special effects sometimes chosen by energy projectors; see Chapter Two). Some energy projectors can even telekinetically "grasp" and "move" energy; for example, a pyrokinetic can control flame this way. (See *Liquids, Gases, And Energy*, below, for how to do this.) Here's some additional information about the Power as it pertains to energy projectors.

Characters As Weapons

Telekinetic characters sometimes like to pick up an enemy and use him hit another enemy. This works the same for them as for characters using ordinary STR; see page 99 of *The Ultimate Brick* for more information and rules.

Combat Skill Levels

The type of Combat Skill Levels a character should buy for Telekinesis depends on what he wants to do with them. If he just wants to improve OCV, 2-point Levels suffice. If he wants to improve OCV or DCV, he needs 3-point Levels. If he wants to improve OCV or DCV with all his Ranged attacks (including Telekinesis), he needs 5-point CSLs. In short, he should buy CSLs for Telekinesis normally; the Power's versatility doesn't change how CSLs apply.

Cumulative

Characters cannot apply Cumulative to Telekinesis.

Fine Manipulation

Ordinary Telekinesis is relatively crude. A character can use it to pick things up, hit things, and throw things, but not for delicate tasks or tasks requiring precise movement. To use Telekinesis like that, a character must pay for the +10 Character Points *Fine Manipulation* Adder.

A good basic test for whether Fine Manipulation is required to do something is this: if a character can pick up the object or perform the task with a large, infinitely thin paddle, then he doesn't need Fine Manipulation. For example, he could slide the imaginary paddle underneath just about any object (no matter how small or delicate) to pick that object up; therefore, Fine Manipulation isn't ordinarily required just to pick up objects. He could also use the edge of the paddle to flip a lightswitch, so Fine Manipulation isn't required for that, either. On the other hand he can't type with the paddle; that requires Fine Manipulation. For fine work that doesn't necessarily require a Skill, like hitting a single key on a keyboard, the GM may allow a character to make a DEX Roll (or EGO Roll, for Psychokinesis) to perform the task successfully. Fine Manipulation is not required for most everyday tasks (for example, opening a jar, making a sandwich, or turning a key).

In noncombat situations, the GM may, if he chooses, ignore the Fine Manipulation rules and allow any telekinetic to type or perform other delicate tasks. If there are no distractions or pressing need for speed, the telekinetic can concentrate on the task at hand and perform it without Fine Manipulation (much in the same way a normal person who cannot type can "hunt and peck" a document, given enough time). If it would be particularly heroic or dramatic, the GM might even allow the telekinetic to do this in a combat situation if he reduces his DCV to 0 to simulate how hard he's concentrating.

The text of the *Fine Manipulation* Adder notes it does not allow a character to manipulate objects on the microscopic level. With the GM's permission, a character can do that by buying the *Microscopic Sense* Modifier for his Sight, with the Limitation that it only works with Telekinesis, to allow him to "perceive" things at the microscopic level so he can telekinetically manipulate them. The GM determines the effects of microscopic Telekinesis, but of course should not allow it to unbalance the game.

Neither Fine Manipulation nor Microscopic Sight counteract the penalty for Target Size when a character tries to pick up small objects with his Telekinesis. He could, however, buy Penalty Skill Levels for his Telekinesis to partly or fully cancel them out.

Grab And Move

If a character uses Telekinesis to Grab and Move a character, he can perform the Move as a “free” action immediately after the Grab, instead of Squeeze or Throw. If he wants to try to hit another character with whatever (or whoever) he’s moving, he has to wait until his next Phase, same as with Grabbing and Throwing someone — a character’s not allowed to convert the “free” action he gets with a Grab into a second attack against a third party.

Line Of Sight

A character cannot Grab or Punch something with Telekinesis beyond his Line Of Sight. However, once he Grabs an object he can continue to manipulate it even if it passes out of his LOS. If he moves an object behind something he cannot see through, or if he moves it beyond the range of his eyesight, his hold on the object continues (though he may have difficulty knowing where to move it or what he can do with it, of course). Characters who want to have “sensory feedback” with their Telekinesis, so that they know what’s happening near objects that they are telekinetically manipulating beyond their LOS, should Link the appropriate form of Clair-sentience to their Telekinesis.

Liquids, Gases, And Energy

Characters have to apply the *Affects Porous* Adder to pick up liquids with Telekinesis. *Affects Porous* Telekinesis can affect gases, smokes, and mists, but only if it also has the *Advantage Area Of Effect*. This may grant Telekinesis some *Dispel*-like effects, since characters usually build gases and smokes with Powers (such as *Change Environment*, *Darkness*, and *NND Energy Blast*). If the GM considers this abusive, he should disallow this use of Telekinesis, instead requiring characters to buy *Dispel* (and similar Powers).

Some telekinetics can actually use their power to affect forms of energy. Usually this is limited to a particular form of energy, such as a pyrokinetic’s ability to move and shape masses of fire. Since energy is weightless, the STR of the Telekinesis reflects how much energy the character can pick up in other terms: 1 Damage Class worth of energy (usually Killing Damage) for every 5 points of telekinetic STR. This also provides a convenient method for determining the damage done to characters touched with the energy. Energy picked up with Telekinesis in this fashion is self-sustaining (it does not “burn out” or dissipate) until used to damage someone (which “extinguishes” it). When let go, the energy dissipates at once, unless it’s placed on something it can “attach” itself to (*i.e.*, fire placed on something flammable, where it keeps burning until it exhausts the fuel; electricity placed into an electrical outlet or cable, and so forth).

Characters cannot use ordinary Telekinesis to pick up energy; doing so requires a specialized form of Telekinesis indicated by an appropriate Limitation, such as *Only Works On Fire* or *Only Works On Electricity*. Typically these are -1 Limitations, but the GM may adjust the value if necessary. A character with “energy Telekinesis” can also use it to crudely shape the energy he can hold (to, for example, create a fiery phoenix out of flame). On the other hand he loses most of the ordinary uses of Telekinesis, such as grabbing, throwing, or punching, since he can’t affect physical objects.

Puppeteering

A character can use Telekinesis to “take control” of a target’s body and make him do things he doesn’t want to do — sort of an *Entangle* that forces the target to move. Each Phase in which the telekinetic retains control of the target, he may make that target take one physical action — walk, run, pick things up, pull a trigger, and so on. He cannot force the target to take actions that are mental or which are not based on physical movement (he could not, for example, force the target to fire an innate *Energy Blast* or use a *Mental Power*). If he makes the puppet attack another character (either HTH or at Range), the puppet’s OCV is $\frac{1}{2}$ of the energy projector’s OCV (or OECV if using *Psychokinesis*); the damage in HTH Combat depends on the energy projector’s telekinetic STR, not by the puppet’s STR.

A puppet cannot perform fine actions unless the Telekinesis is bought with *Fine Manipulation*. If two telekinetics try to use the same person as a puppet at the same time, a STR Versus STR Contest determines who wins control.

Rapid Fire

Assuming the GM allows the use of the *Rapid Fire* maneuver in the campaign, a character can *Rapid Fire* with his Telekinesis to Grab multiple targets, “punch” multiple targets, or the like. He must affect all targets the same way; he can’t Grab some and “punch” others. Having Grabbed multiple targets, he has the following choices:

- he can affect them all the same way (for example, Squeeze all of them, Throw all of them, continue to hold on to all of them, or turn them all upside down). If he does this, he must pay the END cost for his Telekinesis every Phase he maintains it. If Attack Rolls or the like are required, the character must make one roll per victim he wants to affect, or use *Rapid Fire* again, but making these multiple Attack Rolls counts as a single Attack Action.
- choose to affect one of the Grabbed victims in whatever way the Grab rules or other rules allow and let all the other victims go. If he does this, he must pay the END cost for his Telekinesis every Phase he maintains it. At the GM’s option, the character can affect two or more persons in some appropriate manner (such as smashing them into each other) by again *Rapid Firing* his Telekinesis against those persons while letting the others go (normal rules for *Rapid Fire* and END expenditure apply).



■ choose to affect two or more Grabbed victims, up to all of them, in different ways — holding on to some while Throwing others, Squeezing some and Throwing others, turning some upside down and lifting others 4" into the air, or what have you. But to do this, he must pay the END cost for his Telekinesis *once per person or object affected* every Phase he maintains it. If Attack Rolls or the like are required, the character must make one roll per victim he wants to affect (but making these multiple Attack Rolls count as a single Attack Action); he cannot Rapid Fire because he's doing different things to different victims. (Nor is he allowed to, say, Rapid Fire Squeeze three victims while Rapid Fire Throwing four others.)

Example: *Corporal Exeter of the Psi-Patrol has Telekinesis (40 STR — 60 Active Points) and uses it to Rapid Fire Grab six people. That costs him 6 END. In his next Phase, he decides he wants to keep holding on to them. Again, he pays 6 END to do this — he only pays for his Telekinesis once, since he's doing the same thing to every victim.*

In his next Phase, Exeter decides to Squeeze four victims and Throw two of them. He can do so, but must meet two requirements: first, he has to succeed with an Attack Roll against each one (not hard, since they're at reduced DCV due to being Grabbed); second, he has to pay 36 END — one payment of END for each victim affected.

Telekinesis Tricks

In theory a character with Telekinesis could do all sorts of things. For example, a telekinetic can blind a character by throwing dust in his eyes or holding his eyelids shut, mute him by holding his mouth shut, choke him by squeezing his throat, or kill him by squeezing and tearing important internal organs. However, Telekinesis by itself usually won't let him do these things — he has to buy separate abilities defined as "Telekinesis tricks." Chapter Two has plenty of examples. When deciding what to let a telekinetic do "for free" and what he has to pay points for, the GM should compare Telekinesis to ordinary STR. Would he let a character use his ordinary STR to, for example, scoop up an armful of sand and dust and throw it in an enemy's eyes to blind him? If so, a character using Telekinesis should be able to do the same thing without having to pay Character Points for the ability. Would he let a character use STR to squeeze someone's throat until he passed out? In that case, the GM might require the character to buy some form of NND defined as a "choke hold," so a telekinetic would have to purchase the same sort of power usable at Range.

Telekinetic "Armspan"

Telekinetic characters sometimes want to pick up an entire layer of soil from a field, or all of the water out of a pool, or something similar. Even if they have the STR to lift the object in question, ordinarily the GM shouldn't allow this. The "armspan" of a character's Telekinesis should be the same as his regular STR, *i.e.*, about the span of his arms. A telekinetic thus can pick up with his Telekinesis as much soil (or whatever) as he could encompass with his arms. If the character wants to use his Telekinesis over a broader area, he should buy the *Area Of Effect* Advantage for it.

However, the limited “span” of Telekinesis does not necessarily limit its uses to those that could be performed with the arms. Consider an automobile engine. A character with a normal armspan can spread his arms and reach across most of the engine. However, he cannot stop the pistons from pumping or the belts from moving. A telekinetic, on the other hand, usually *can* stop the parts of the engine from moving (at least, the visible parts). This is one of the many advantages Telekinesis has over ordinary STR.

Alternately, the GM can allow telekinetics to Spread their Telekinesis. For every 5 points of STR the character sacrifices, he may “spread” the reach of his Telekinesis by +1”. The reach of Telekinesis is assumed to be 1” at its base level, about the same as a person’s armspan. However, characters should not be allowed to Spread their Telekinesis when they use it to “punch” targets.

The “telekinetic armspan” rules do not allow a character to pick up multiple people or differing objects by making a single Attack Roll — they don’t grant any sort of Area Of Effect for free. They apply to attempts to pick up large masses of a specific type of object. As always, the GM has the final say on what a character can do with his Telekinesis based on special effects, game balance, common sense, dramatic sense, the circumstances, and other appropriate considerations.

A character can pick up multiple objects with Telekinesis to roughly the same extent that he could with his ordinary STR. Consider, for example, a pile of bricks (assuming all the bricks together don’t weigh more than the character’s telekinetic lifting capacity). If the bricks are neatly stacked on a pallet, the character can easily lift them all by lifting the pallet. If they’re in a big, jumbled pile, he can pick up as many as he can “fit” in his telekinetic “armspan.” The GM should make a final decision as to how a character can telekinetically lift a particular object, group of objects, or the like; obviously the specifics of a situation have a lot of impact on this issue.

Wielding Weapons

If a character uses Telekinesis to wield a weapon to which he can add damage with STR, his Telekinesis STR adds at the same rate and in the same way as his personal STR. There’s no change for the fact that Telekinesis costs more than STR. See page 230 of *The HERO System 5th Edition, Revised* for other rules about wielding weapons telekinetically.

TRANSFER

This Power is ideal for energy projectors who need to leech energy from other characters to live or enhance their own powers. As defined by the standard rules, it only allows a character to Transfer points from the target to himself. At the GM’s option, characters can buy a new Advantage, *Transfer To Other* (+½), that lets the character Transfer the Character Points removed from the victim not to himself, but to another person whom he touches (or who’s within range, if the power has the *Ranged* Advantage). This

form of Transfer *only* works to Transfer to other people; it cannot Transfer to the character himself, and if there’s no one to whom the character can Transfer the removed points, the power has no effect. However, the GM can allow a character to buy the Advantage with a +1 value instead; at that level it can Transfer either to the character or to another person, as the character chooses (but not to both at once).

Transfer And Defenses

If a Transfer removes points from a non-defense Characteristic/ability and provides them to a defense Characteristic/ability, it removes the full value rolled on the dice but provides only half that value to the recipient. For example, if a character rolls 10 for a Transfer STR to PD, he removes 10 points of STR and adds 5 points of PD.

If a Transfer removes points from a defense Characteristic/ability and provides them to a non-defense Characteristic/ability, it removes half the value rolled on the dice and provides that amount to the recipient. For example, if a character rolls 10 for a Transfer PD to STR, he removes 5 points of PD and adds 5 points of STR.

If a Transfer removes points from a defense Characteristic/ability and provides them to a defense Characteristic/ability, it removes half the value rolled on the dice and provides that amount to the recipient. For example, if a character rolls 10 for a Transfer PD to ED, he removes 5 points of PD and adds 5 points of ED. In other words, he’s not subjected to the halving effect twice.

Negative Characteristics

The rule allowing characters to Drain a Characteristic into the negatives also applies to Transfer.

TRANSFORM

Transform is a common power for energy projectors whose abilities involve some type of control over molecules or matter (though such characters often blur the lines between energy projector, mentalist, and cosmic hero indistinguishably). Here are some additional rules and guidelines for Transform.

Healing Back

In many cases, the condition for reversing a Transform is that it “heals back normally” (*i.e.*, that the character heals the “Transform damage” the same way he would ordinary BODY damage). If the target of the Transform is an object (which has no inherent REC), the GM decides how quickly it un-Transforms. There’s no set standard. He could base his decision on the object’s general cohesiveness, resilience, and so on, or he might rule that all objects have “REC 4” for these purposes (just like typical people)

If a Transform is defined as “character must heal the BODY back normally,” then generally Healing (in either standard or Regeneration form) counteracts the effects quickly by allowing the character to heal BODY “damage” at a much faster rate than normal. However, a character can define the reversal condition of a Transform as “character must heal the BODY back at the standard REC/month rate,” in which case Healing has no effect.

Multiple Transforms

It's possible that, while Transformed, a character will get Transformed a second time, into something else. For example, while Transformed into a wolf, a character might then get Transformed into a mouse. In this situation, both the "healing times" continue to run normally. If the wolf form runs out while the character is still in mouse form, when the mouse form ends he reverts to man-shape. If the mouse form runs out first, he reverts to a wolf — but the wolf form has been "on the clock" while he was a mouse. The second Transform doesn't put the first one "on hold."

Repeated Use Of Transform

A character (most likely a villain) can use a Transform on someone repeatedly to in effect prevent them from un-Transforming over time. For example, suppose Witchcraft Transforms Holocaust into a frog on May 1. Based on Holocaust's REC he'll heal back and un-Transform in a month. If she wants to Witchcraft can Transform him again each day. That way Holocaust heals back from the first Transform on June 1... but the one she applied on May 2 remains in effect, so he stays in frog form. Or she could just wait until May 31 and re-Transform him the day before he heals back so that he remains a frog for another month.

Transforming Energy

It's possible that some characters have the ability "transform" energy (since, according to modern physics, most forms of energy can be changed into other forms without any loss of energy [heat being one significant exception]). For example, a character might have the power to transform Sonic energy into Light energy, or Electricity into Magnetism, or Ice/Cold into Fire/Heat.

Despite referring to this as "transformation," this sort of ability doesn't involve the *Transform* power. Typically it's just a Limitation on the character's powers. For example, the superhero Mirrorball has various Light powers... but he has to have sound (Sonic energy) to "fuel" his abilities. He takes the Limitation *Requires Sufficient Sound* (-¼) on nearly all of his Light powers (including an Endurance Reserve for them) and works out the details with the GM (e.g., every 5 decibels of sound that Mirrorball can hear provides 1 REC for his Endurance Reserve). He might also buy one or more Transfer abilities (any Sonic power to any of his Light powers). Thus he "transforms" Sonic into Light as part of the "special effect" of his Light powers; he doesn't literally have a Minor Transform (Sonic into Light).

However, at the GM's option characters can buy Transform to work specifically on energy. This would allow, for example, a character to intercept an enemy's Electricity-based Energy Blast and convert it to, say, Pulson Energy (thus preventing the target, who has a Vulnerability to Electricity, from suffering the added effect). This sort of "interception" uses the same rules as for Dispelling an incoming attack, but could work on attacks made against other people, not just the character using the Dispel. Typically a Transform Energy power is a Minor Transform, but the GM may require characters to buy it as a Major Transform if necessary. The target of this type of Transform is "any energy" (which qualifies for a -¼ *Limited Target* Limitation), but the character can specify a more restricted class of target energy for a larger Limitation value. The result is a single, specified form of energy (such as "any energy into Sonic energy" or "any energy into Fire/Heat"). For a +¼ *Improved Results Group* Advantage, the character can Transform the target energy into up to four pre-defined types of energy; for a +1 Advantage, he can Transform it into any type of energy.

Every BODY rolled on a Transform Energy attack converts 10 Active Points of energy into the specified different form of energy. If the Transform only partly affects an energy attack, it hits the target with *both* energy types but the target suffers the worst sort of result he can from either type of energy for the *entire* attack. For example, suppose that the target of an Electricity attack has a Vulnerability to Electricity and also has a Force Field with the Limitation *Does Not Protect Against Fire/Heat* (-½). Someone tries to shoot him with a Lightning Bolt power (Energy Blast 12d6), and someone else uses a Transform Energy that converts 25 Active Points' worth of the Electricity into a Fire/Heat attack. The target not only still suffers from his Vulnerability (since the attack remains partly Electricity), he doesn't get to apply any of his Force Field (because the attack is partly Fire/Heat).

With the GM's permission, characters can "Coordinate" not to improve their chances to Stun the target but to ensure that a Transform Energy takes place. If both succeed with their Teamwork rolls, the character using the Transform Energy gets to do so before the attack hits the target; if either of them fail, the Transform Energy has no effect.

The GM can adjust these rules as necessary in light of special effects, common and dramatic sense, and the need to preserve game balance.

POWER ADVANTAGES



This section discusses Power Advantages that have a special impact on or relationship to energy projectors.

AREA OF EFFECT; EXPLOSION

Area Of Effect (and to a lesser extent, Explosion) is a common way for energy projectors to affect more than one target at a time. The Radius, Cone, and Line forms of the Advantage are all popular (the latter two usually with the *No Range* Limitation, so that they “originate” with the character).

New Areas Of Effect

Here are some additional Areas characters can use with the GM's permission:

Area Of Effect (Cage): A character can make an Area Of Effect (typically a Radius) into a “cage” — in other words, with an area in the center that's not affected by the power — by applying the Limitation *Targets Only Take Damage If They Touch Cage Or Move Into/Out Of The Affected Area* (-½). In other words, the boundaries of the Area form a “wall” that affects anyone who touches it (from either inside or outside), but being in the interior of the Cage doesn't cause anyone harm. The Cage's “walls” can include a “ceiling” and a “floor” if the creator of the Cage so chooses.

Typically a Cage uses Area Of Effect (One Hex) so that the “walls” of the Cage conform to the edges of the hex, leaving most of the interior of the hex open — allowing enough space for three or four people, at most, to remain comfortable. For larger Cages, typically the “walls” of the Cage are narrow ones along the outer edge of the Area, leaving a large interior unaffected. However, with the GM's permission a character can define his Cage as having thicker walls and a smaller interior area; he must make this choice when he buys the power, and can't alter the configuration of his Cage thereafter. (At the GM's option, for an additional +¼ Advantage the character can change the configuration of his Cage's walls, making them thicker or thinner from use to use as desired.)

A character trapped within a Cage isn't inhibited in any way. He can move freely, and even leave the Cage if he wants to — it's just that moving through the “walls” causes him damage. (By Linking the Cage with a Force Wall, a character could give it a physical component that the victim has to break through to get free.) He can perceive through the “walls” of the Cage normally, and even fire Ranged attacks through them without difficulty. (However, the GM may rule that any physical missiles passing through the “walls” suffer the Cage's damage.) If the GM permits, characters can buy

Adders and Advantages like *Cannot Be Escaped With Teleportation* or *Opaque* for a Cage to further incapacitate those trapped within.

Because a Cage is made of “energy” (or whatever the special effects of the power indicate), the Cage itself can't be attacked (any more than a standard Continuous Area Of Effect could be). For a ¼ reduction in the Advantage's value, a Cage has BODY equal to its Active Points divided by 10 (but no DEF) and can be attacked; it has DCV 3, and is destroyed when it reaches 0 BODY. For a -0 reduction in the Advantage's value, a Cage has BODY and DEF equal to its Active Points divided by 10; it has DCV 3, and is destroyed when it reaches 0 BODY.

Area Of Effect (Fixed Shape): Sometimes a character wants an Area Of Effect that covers an area with a specific shape, such as a crescent moon or an X. To create that, buy Area Of Effect (Any Area) with enough hexes to create the desired shape, then reduce the Advantage's value by ¼ to represent the fact that the character can't alter the shape.

Area Of Effect (Sight Range): Characters sometimes use a combination of Area Of Effect and Line Of Sight to represent a power that only works if the target of the power can see the character. This assumes relatively normal sight conditions. As a default, assume sight has a range of 50” if no visual obstacles are present. If anything interferes with a target's ability to see — shadows, darkness, fog, foliage, or the like — the GM should reduce the effective range of the power, remove some of its Active Points of effect, or rule that it cannot affect the target at all. If something blocks a target's sight completely (utter darkness, a wall that's in the way, or the like), then the power cannot affect him.

When you combine Area Of Effect (Radius) at the +1 level with Line Of Sight (+½) and the *No Range* Limitation (which may also require Personal Immunity), a “sight range” power allows a character to affect anyone who can see him. This simulates abilities like a gorgon's power to petrify anyone who looks at her, or a light-manipulating supervillain's power to hypnotize anyone who sees the mesmerizing light patterns surrounding him.

Area Of Effect (Small Explosion): For a +½ Advantage, a character can create an Area Of Effect that's a sort of cross between a One Hex and an Explosion. The attack does its full damage to the target hex, and half damage to all the hexes surrounding the target hex, and no damage beyond that area.

Area Of Effect (Voice Range): Characters sometimes use a combination of Area Of Effect and Incantations to represent a power that only works if the

target of the power can hear the character speaking, singing, or the like. This assumes a relatively normal volume of speech — the character may increase his voice slightly to “project” better, but cannot shout or scream. As a default, assume hearing has a range of 20” if no other noise is present. If anything interferes with a target’s ability to hear — such as other loud noises in the vicinity, wearing headphones or heavy headgear, or plugging one’s ears — the GM should reduce the effective range of the power, remove some of its Active Points of effect, or rule that it cannot affect the target at all.

When you combine Area Of Effect (Radius) at the +1 level with Incantations and the *No Range Limitation* (which may also require *Personal Immunity*), a “voice range” power allows a character to affect anyone who can hear him. This simulates abilities like a siren’s seductive song, a faerie’s power to make anyone who hears his music dance uncontrollably, or a sonic-powered superhero’s *Mind Control*.

Area Of Effect And Autofire

Sometimes an energy projector combines Area Of Effect and Autofire for a particularly potent (if expensive!) attack. Standard Autofire and Area Of Effect rules apply. If a character wants to make an attack against multiple targets, he does so against DCV 3, with a -1 penalty for each “hex” in the line (on which the center hex of the Area would be placed). The character is not restricted to using Autofire just within some defined “Area Of Effect target area.” The OCV penalty will quickly make it difficult for him to hit target hexes unless he has a really high OCV.

For multiple shots against a single target, the Attack Roll determines how many shots hit the target. The rest are considered misses and have no effect on the target. You can randomly determine the “scatter” for the missed shots, adapting the rules on pages 375-76 of *The HERO System 5th Edition, Revised*, if desired, but the target should not suffer any additional damage. If attack misses entirely, make one calculation for where the shots would scatter to based on the normal rules, then apply the damage from that one attack to the affected area. The rest, again, are considered misses and have no effect on the area hit (which may or may not overlap to hit the target anyway). In either case, lots of other things may get destroyed in the area from the other “missed shots,” but they shouldn’t have any effect in game terms — it’s just a special effect — unless the GM wants to take the time and trouble to come up with a more “realistic” result.

For single shots against multiple targets, determine whether each hits, and for any misses determine the scatter normally.

Filling The Area

Generally Area of Effect/Explosion attacks completely fill the affected area. There are no “shadows” created by obstacles that a target could take shelter behind. If a GM wants to be more “realistic” and come up with rules for taking cover from Areas Of Effect/Explosions that way, he can.

No Range Areas Of Effect

If a character has a No Range Area Of Effect attack, he still must make an Attack Roll (against DCV 3) to hit the target hex, unless the GM rules otherwise. If he misses, the attack has no effect on anyone whatsoever — since the power has No Range, the normal rules for determining the “location” of a missed Area-affecting attack don’t apply. The GM can interpret this in whatever way he sees fit. For example, it could be that the power failed to work somehow, that something protected the potential targets, or the like.

DAMAGE SHIELD

Damage Shield is a highly appropriate Advantage for energy projectors, who can often surround themselves with a “mantle” of the energy they control that can hurt anyone who touches them. As noted in the rules, at the +½ level a Damage Shield affects anyone who deliberately touches the character. That might mean Grabbing him, punching him, or just making casual contact, but the other person has to deliberately intend to touch the character somehow. Casual or unintended contact — being Knocked Back into him, accidentally brushing up against him, the character hitting or touching someone, or the like — doesn’t trigger the Damage Shield (unless the GM rules otherwise). At the +¾ level, *any* contact, intentional or unintentional, and whether initiated by the character with the Damage Shield or someone else, triggers the Damage Shield.

Area Of Effect Damage Shields

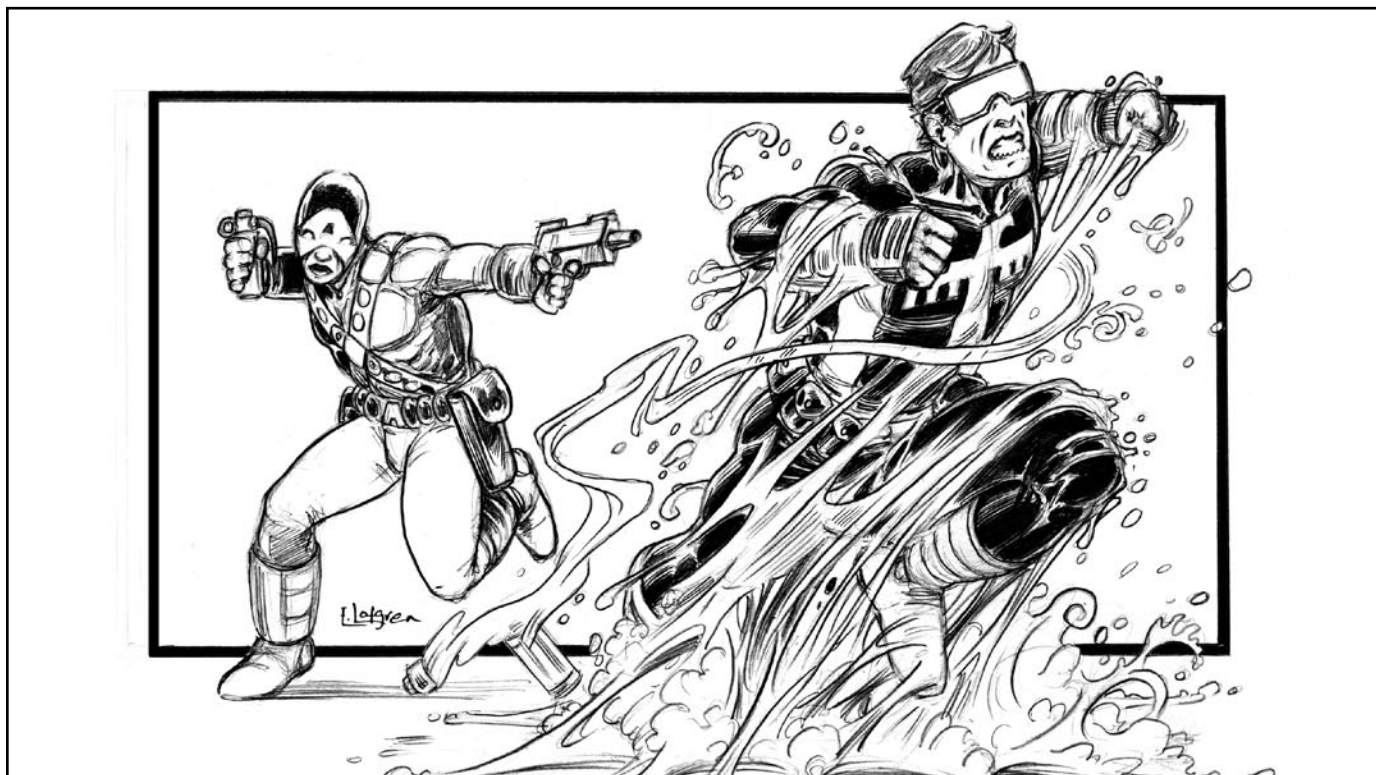
Characters can make Area Of Effect attacks into Damage Shields (this usually requires the *Mobile Advantage* as well, but the GM may waive that). Typically this means that anyone who enters the Area, or who is brought into the Area by the character moving, takes the Shield’s damage automatically. The character himself doesn’t suffer any damage; he doesn’t have to buy *Personal Immunity* for his Damage Shield. The rules don’t require Area Of Effect Damage Shields to be purchased with the additional +¼ Advantage for “offensive use,” but a GM can certainly impose that requirement if he so chooses.

Autofire Damage Shields

If a character applies Autofire to a Damage Shield, he must pay for the additional +1 Advantage, since Damage Shield doesn’t involve a normal Attack Roll. To determine how many “shots” hit, either the GM establishes a standard, or he rolls randomly (1d6-1, minimum of 1).

Damage Shield And Entangle

Although the rules note that Damage Shield doesn’t act as a defense (in other words, it doesn’t reduce the damage caused by any attack made against the character), that doesn’t mean it can’t have defensive consequences or uses. For example, if a character using a Damage Shield is captured in an Entangle, the Damage Shield affects the Entangle every Phase (unless some Advantage on the Entangle, or Limitation on the Damage Shield, indicates otherwise). Similarly, a Damage Shield affects a person Grabbing the character.



Damage Shield With Persistent Powers

If a character wants to have a Persistent Damage Shield, he still has to make it Continuous if the power's not inherently Constant. However, the GM may waive this rule if he thinks doing so won't cause game balance problems.

DOES KNOCKBACK

Sometimes energy projectors may want to buy this Advantage for a power that doesn't roll damage (such as Darkness). The GM can use whatever method he feels is appropriate to determine the "Normal Damage BODY" for purposes of calculating Knockback. Possibilities include: rolling 1d6 per 5 or 10 Active Points and counting the "Normal Damage BODY"; using a flat 1 BODY per 5 or 10 Active Points; or using a defined number of dice or BODY per increment of the power (such as, say, 2 BODY per 1" of Darkness).

DOUBLE KNOCKBACK

At the GM's option, characters can buy this Advantage multiple times, with each $+\frac{3}{4}$ purchase doubling the BODY for purposes of determining Knockback. For example, for a $+2\frac{1}{4}$ Advantage a character would multiply the BODY by 8 to calculate Knockback. This should be considered a "Stop Sign" option.

HARDENED

Some energy projectors want to make their defenses Hardened, but only against a particular type of energy (typically the one they use themselves). To do this, buy the Hardened as a naked Advantage and apply the *Only Works Against Limited Type Of Attack* Limitation.

INDIRECT

The *Indirect* Advantage is an excellent way to simulate how various types of energy work, or to represent an energy projector's control over the energy he creates/manipulates. Here are some additional rules and options for this Advantage.

Indirect Versus Barriers

With the GM's permission, characters can take a $+\frac{1}{2}$ form of Indirect to create attacks that bypass intervening barriers. The attack always originates with the character, and always fires straight from him, but passes right through barriers such as walls that are between him and the target. Of course, unless the character has some way to perceive his target through those barriers, this may not do him much good.

Indirect And Area-Affecting Attacks

An area-affecting attack with either of the standard forms of Indirect does not inherently pass through barriers. For example, an Indirect Area Of Effect/Explosion attack that has its target hex on one side of a wall (or Force Wall) does not ignore that barrier and pass through to affect targets on the other side. (It might be powerful enough to break through the wall and hurt someone on the other side, but that's a different matter.) The purpose of Indirect is to get the target hex of the attack on the other side of the barrier; once the character with the Attack Power chooses that target hex, the barrier functions normally to protect people on the other side.

However, at the GM's option, a character using the optional $+\frac{1}{2}$ form of Indirect described above could create an area-affecting attack that would ignore barriers, thus applying with equal force to targets on either side of a wall.

MULTIPLE SPECIAL EFFECTS

This new Advantage represents a power that manifests with two special effects simultaneously. Unless the GM rules otherwise, it's not required for powers that have different "origin" and "manifestation" special effects (see page 43), such as a Fire blast that's a Magic spell (it originates as Magic, but manifests as Fire). This Advantage is for a power that has two manifestation special effects at once — for example, a "Solar Flare Blast" that manifests as both Fire and Radiation simultaneously.

Refer to the Vulnerability Frequencies table (page 37) to determine the frequency with which the power's two special effects appear in the campaign (and check with the GM to make sure he hasn't altered the table for his campaign setting). The most common of the two (if they differ) is the base special effect, and the character pays for the other based on its frequency: $+\frac{1}{4}$ for an Uncommon special effect; $+\frac{1}{2}$ for a Common special effect; and $+\frac{3}{4}$ for a Very Common special effect. The GM may rule that some special effects are incompatible and cannot be "combined" into one attack with this Advantage (for example, Fire/Heat and Ice/Cold, Holy and Unholy, Darkness and Light).

If a power with Multiple Special Effects has one special effect that works against Energy Defense, and one that works against Physical Defense, the attack applies against the *lower* (or worse) of the target's two categories of defense. However, at the GM's option a character can take Multiple Special Effects at the $+\frac{1}{4}$ level for a single special effect to represent the fact that it can work against *either* Physical or Energy defenses (for example, an Ice/Cold attack that could be a dart made of ice (Physical) or a beam of pure Cold [Energy]). In that case the character chooses, from Phase to Phase, which defense applies against his attack.

If the GM uses the optional and expanded rules for various special effects described in Chapter Two, a power with Multiple Special Effects gets all the possible benefits or penalties for all of its special effects, unless those "modifiers" are incompatible; in that case the GM decides how things work. For example, a Sonic-and-Dimensional Manipulation attack would work better than normal underwater and function more effectively against most Physical defenses. With a Sonic-and-Fire attack, if it's used underwater the GM has to decide if the benefits for using Sonic apply, the penalties for using Fire underwater apply, the two cancel each other out and the attack works normally, or something else happens.

If a target has a Limited form of defense that only applies to one of the special effects in a Multiple Special Effects attack (such as Damage Reduction that *Only Works Against Fire* when hit by an Electricity-and-Fire/Heat attack), then that defense applies to the Multiple Special Effects attack in its entirety, as if the attack were just the one special effect. This remains true even if a target has two Limited defenses, one of which only works against Special Effect A and one only against Special Effect B — the target gets to apply them all against the Multiple Special Effects attack.

A power with Multiple Special Effects can trigger Vulnerabilities, Susceptibilities, or Limitations as if it were either of its manifestation special effects. In the event that a target is somehow unusually affected by *both* special effects, he suffers the worst of the two. For example, if a character with 2 x BODY from Fire/Heat attacks and $1\frac{1}{2}$ x BODY from Radiation attacks is hit with a Fire-and-Radiation attack, he takes 2 x BODY damage.

At the GM's option, a character can take this Advantage more than once, thus giving a power three, four, or more manifestation special effects simultaneously. The cost remains the same; for example, if a character has a Very Common special effect that also manifests as a Common, an Uncommon, and another Uncommon special effect, he pays a total of a $(+\frac{1}{2} + +\frac{1}{4} + +\frac{1}{4} =) +1$ Advantage. The GM can also decide to "cap" the value of Multiple Special Effects at some level (such as +2), at which point it functions as all special effects (or some large subset of all special effects, such as "All Magic," "All Energy," or "All Technology") simultaneously.

Multiple Special Effects And Powers

An attack with Multiple Special Effects is still only one attack, not two. Thus, it can only be Absorbed from once (even if the target has multiple Absorption powers), works normally with Find Weakness, can be used as one part of a multiple-power attack, and so forth. In situations where the two special effects in a Multiple Special Effect attack would interact with a Power or game element differently, the GM should interpret the situation in the best way for the target and the worst way for the character using the Multiple Special Effect attack. For example, suppose a character has a Physical-and-Pulson Energy attack defined as a thrown metal disk imbued with pulson energy. A target using Missile Deflection can Deflect that as a thrown attack (thus requiring only the 5 Character Point level of Missile Deflection); he doesn't need the 20-point form of Missile Deflection normally required to Deflect energy beams.

Multiple Special Effects And NND/AVLD

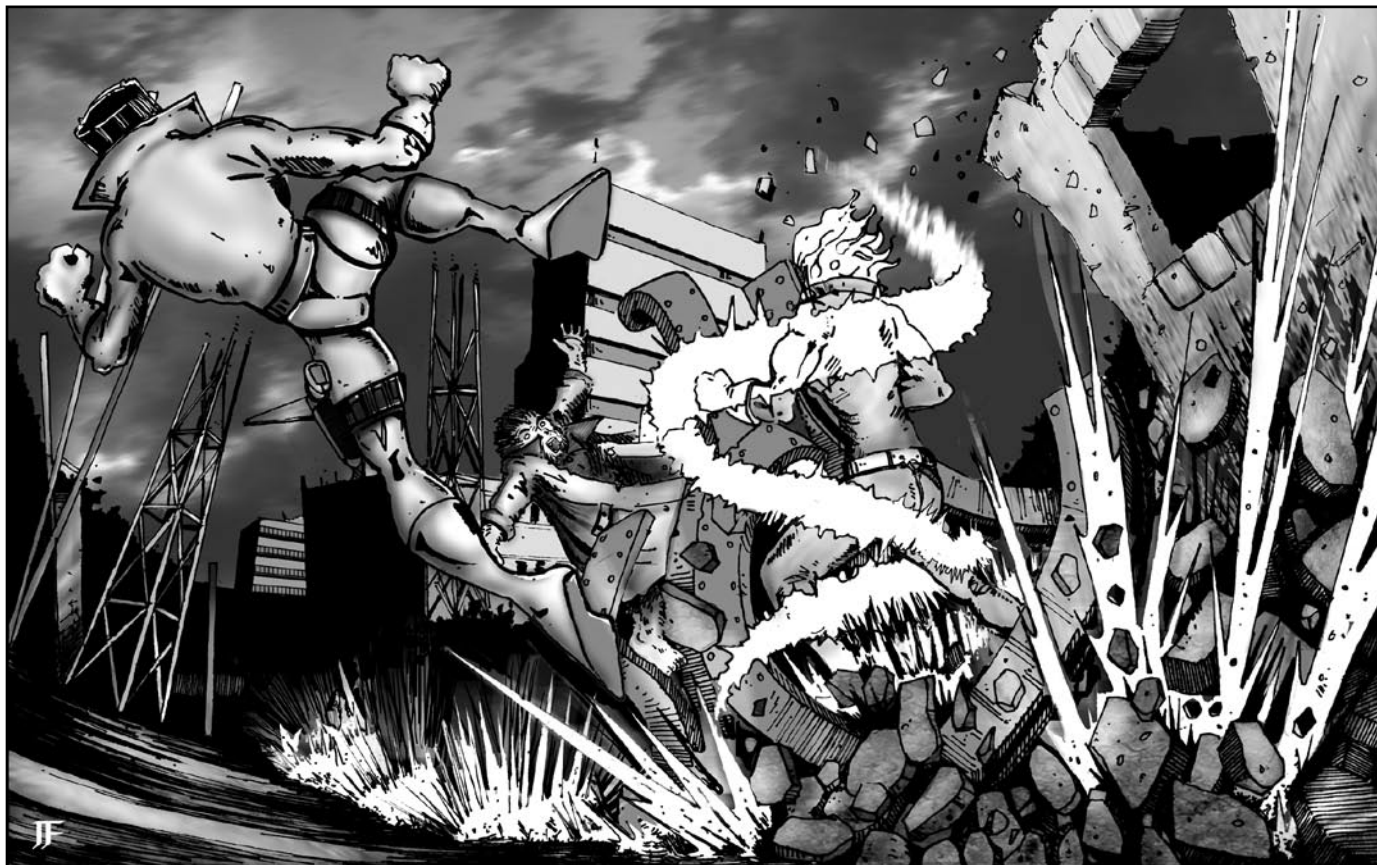
If a character has a Multiple Special Effects attack that's also an NND or AVLD, he must specify a different defense for each of the special effects involved. If a target has *any* of the specified defenses, he takes no damage from the attack.

Multiple Special Effects And Variable Advantage

Characters cannot take Multiple Special Effects for a power via the *Variable Advantage* Advantage unless the GM specifically permits them to.

Multiple Special Effects And Variable Special Effects

If a power with Multiple Special Effects has the *Variable Special Effects* Advantage at the $+\frac{1}{2}$ level, the character can switch the two (or more) special effects of the power using the standard rules for Variable Special Effects.



NO NORMAL DEFENSE; ATTACK AGAINST LIMITED DEFENSE

These two Advantages are popular with energy projectors who are concerned about hurting their opponents (or just want to Knock them Out quickly for some reason).

NND/AVLD attacks cannot ignore barriers (such as walls or Force Walls) that don't have the defense against them. Typically they get stopped by such barriers altogether, since they can't do BODY damage to break through them.

VARIABLE ADVANTAGE

This Advantage is a popular one for energy projectors, who use it to "tailor" their energy bolts (and other attacks) for maximum effectiveness. Here are a few additional rules for it.

If a character has Variable Advantage (+½ Advantages; +1) and has separately bought Reduced Endurance (0 END; +½) for his power, and he uses Variable Advantage for Autofire (5 shots; +½), the END cost for the power is half the normal END cost per shot. A +½ *Reduced Endurance* Advantage for an Autofire power is the equivalent of the +¼ *Reduced Endurance* Advantage for a normal power.

A character can allot part or all of his Variable Advantage to the *Variable Special Effects* Advantage. However, he must always choose the +½ level of Variable Special Effects unless the GM permits otherwise. If a character wants to maintain the change of special effect, he has to keep part of his Variable Advantage assigned to Variable Special Effects — otherwise, the power reverts to its normal special effect, whatever that may be, when the Variable Advantage changes.

If a character has Variable Advantage with the "Limited Group of Advantages" option, one (or more) of his four possible "settings" can be a combination of Advantages (such as Autofire [3 shots; +¼] and +1 Increased STUN Multiplier [+¼] to fill a +½ Variable Advantage), unless the GM rules otherwise.

A character cannot choose an Advantage via Variable Advantage that counteracts, contradicts, or compensates for a Limitation on the power. For example, if a character has a Ranged attack with the Limitation *No Range*, he cannot choose the *Ranged* Advantage for his attack.

A character using Variable Advantage cannot put an Advantage with a value of +0 on a power unless the GM specifically permits him to. The Advantages chosen for Variable Advantages should have a +¼ or greater value.

If a character has Variable Advantage and uses that to apply Area Of Effect to a power, calculate the size of the Area using the Active Points of the power not including the Variable Advantage.

VARIABLE SPECIAL EFFECTS

Variable Special Effects is another common Advantage for energy projectors' powers, especially in conjunction with Variable Advantage.

If a character has a Variable Special Effect attack, and he makes two attacks with it using Rapid Fire, he cannot vary the special effect of the two attacks — all attacks made with Variable Special Effects via Rapid Fire in a Phase must have the same special effect.

POWER LIMITATIONS



Here are a few notes about Limitations that have special applications for energy projectors and their powers. Compared to many archetypes, energy projectors use relatively few Limitations; their powers tend to be innate or inherent and thus subject to fewer restrictions than average.

ALWAYS ON

This Limitation works perfectly for simulating a character who doesn't have full control over his powers, in that he can't shut them off. The classic examples are superheroes like Cyclops of the X-Men (who can't turn off his powerful eye-beams) or Blazer of the Justice Machine (whose fire powers could overload and cause tremendous damage to everyone and everything around her). However, typically in genre fiction characters with such powers find some way to control them *artificially*, which the *Always On* Limitation doesn't allow except through massive END expenditure. At the GM's option, characters can take a $-\frac{1}{4}$ version of the Limitation, *Always On Controllable*. This works just like the regular *Always On*, except that the character has a defined method of keeping the power turned off. This method must be chosen when he buys the power, and can't be changed thereafter. Furthermore, any power bought as *Always On Controllable* must have a reasonably common and obvious method or set of circumstances that remove or negate the character's control over the power.

Typically the control method for an *Always On Controllable* power is some sort of Focus-like device that keeps the character's power in check (like Cyclops's ruby quartz visor or Blazer's containment suit). The fact that other people can take the object away from him (use the Focus rules for this) constitutes the removal method. The GM may allow other control methods if desired.

ENDURANCE LIMITATIONS

Since energy projectors usually use END to fuel their powers, Increased Endurance Cost is a classic Limitation for them. It's particularly appropriate for "charged up" attacks that do tremendous damage but require equally tremendous amounts of energy (see page 199), or for last-ditch defenses that the character can use to protect himself and others for the few seconds necessary to escape from peril.

With the GM's permission, a character can take *Costs Half Endurance* as a $-\frac{1}{4}$ Limitation, instead of the full $-\frac{1}{2}$ version of *Costs Endurance*.

The Endurance Limitations are primarily intended for abilities that characters use in combat, which is when END costs matter. It's not against the rules to apply them to non-combat abilities, but the GM may wish to consider reducing their value for such powers (even to -0) because spending END isn't very restrictive when there's plenty of time to recover it.

LIMITED POWER

At the GM's option, in campaigns using the energy types/special effects interaction rules in Chapter Two of this book, characters can take a form of Limited Power for energy powers defined as *Functions As Multiple Special Effects*. This means the power works as the *worst* of two or more special effects when it comes to judging interactions, determining if Limited defenses apply, determining if it triggers Susceptibilities and Vulnerabilities, and so forth.

To calculate the value of Functions As Multiple Special Effects, refer to the Vulnerability Frequencies table (page 37) to determine the frequency with which the power's special effect, and the other special effect it can function as, appear in the campaign (and check with the GM to make sure he hasn't altered the table for his campaign setting). The most frequent of them becomes the "base" frequency for the power, and the Limitation's value depends on the frequency of the other energy type/special effect: $-\frac{1}{4}$ for Uncommon; $-\frac{1}{2}$ for Common; $-\frac{3}{4}$ for Very Common.

Example: *Alchemica has a pheromone-based power that functions as both Biological and Chemical. Since both special effects are Uncommon, the Limitation is worth $-\frac{1}{4}$. When she uses the attack, it functions as the worse of the two special effects. For example, if she attacks someone who has Vulnerability (2 x Effect from Chemical Powers) with it, it functions as a Biological power and does not trigger the Vulnerability. When it interacts with other energy types/special effects, the GM reviews both Chemical and Biological and chooses whichever interaction is worst for Alchemica.*

LINKED

Energy projectors commonly use Linked to create energy attacks and powers with multiple effects. The classic examples are an energy bolt so bright it blinds the target as well as burning him (Energy Blast + Linked Flash) and a wall of energy that hurts anyone who touches it (Force Wall +

Linked Damage Shield), but there are many other possibilities. Here are some additional rules and guidelines for Linked:

Jointly Linked Powers

In some cases a character may want to have a lesser power that he *must* use whenever he uses the greater power. In other words the powers are *jointly Linked*, because neither can be used without the other (as compared to the usual arrangement, where the character can use the greater power without activating the lesser power). Typically this doesn't affect the value of Linked; it's a -0 addition to the Limitation's value. But if the lesser power costs a lot of END or otherwise inconveniences the character significantly, the GM might grant an additional ¼ more Limitation. Alternately, the GM may give the lesser power the standard -½ Linked value, and let the greater power take a -¼ Linked.

Multiple Linked Powers

A character can Link multiple powers together so that the lesser power in the first greater + lesser combination serves as the greater power for a second combination. For example, a character could have an Energy Blast 10d6 plus a Linked Drain 3d6. He could then Link a Flash 4d6 to the Drain. He can use the Energy Blast + Drain without using the Flash, but he has to use the Drain to use the Flash, and he can't use either of them without using the Energy Blast.

Linked Autofire Attacks

If a character Links two attacks that both have the *Autofire* Advantage, when he uses them together both must fire the same number of shots at the same targets.

NO KNOCKBACK

No Knockback is a highly appropriate Limitation for many forms of energy that have little or no physical impact, such as Light, Fire, and Radiation. In some campaigns the GM may even impose No Knockback on them as part of the ground rules defining each energy type; see the individual sections of Chapter Two for details.

PHYSICAL MANIFESTATION

Generally speaking, Physical Limitation is restricted to Constant Powers whose loss would inconvenience the character in some way. For example, having Ice Slides (Running) destroyed stops the character from moving temporarily (and may cause him to tumble and fall); having a Hand of Stone (Telekinesis) destroyed makes a character free or drop whatever he's holding. He can "re-create" the Physical Manifestation when he re-activates the power, but in the meantime he can't use it.

With that in mind, the GM may allow characters to take Physical Manifestation for Instant Powers that have a "lingering" or long-term effect of some sort. Examples include Mind Control (which can continue to affect the target long after the Attack Roll was made) and Telepathy (which characters can use to conduct long conversations). It might even apply to a Power like Hand-To-Hand Killing Attack if it's defined as creating claws or a weapon — the claws "remain in existence" between Phases even if the character can't use them. As long as the temporary loss of the power might restrict or hinder the character in some way (for example, if re-activating it takes a lot of time and effort), Physical Manifestation is probably a valid Limitation. If the character can instantly re-activate the power and not having it for a few seconds doesn't hinder him at all, the GM shouldn't allow the Limitation (or should give it a maximum value of -0).

VARIABLE LIMITATION

A character using Variable Limitations cannot put a Limitation with a value of -0 on a power unless the GM specifically permits him to. The Limitations chosen for Variable Limitations should have a -¼ or greater value.

POWER FRAMEWORKS



Power Frameworks are a key element of most energy projectors' character design. Typically the character uses one of three approaches, each with its own benefits and drawbacks:

1. A Multipower for various attacks, plus an Elemental Control for defenses, movement abilities, and miscellaneous related powers.
2. A Multipower with a reserve at least 50% larger than any slot, with a large number of Flexible slots featuring all sorts of abilities (primarily attacks, but also defenses, movement powers, and the like). (More rarely, a character with relatively few powers might buy them as an Elemental Control instead.)
3. A large Variable Power Pool, preferably with the *Cosmic* (+2) Advantage.

MULTIPOWER + ELEMENTAL CONTROL

The first choice, Multipower + Elemental Control, is the most popular for several reasons. First, it's easy to conceive and use. It compartmentalizes attacks neatly, separating them from other abilities and making it a simple matter to look down the list and decide which one to use in any given Phase. Nor does the character have to worry about proportioning his power between attacks, defenses, and movement. Second, it lets the character buy a large number of attacks (even if many of them are the same Energy Blast or RKA with different Advantages), which many characters like because it increases tactical flexibility. Third, while often more expensive than the "Large Multipower" option, it's not significantly more costly, and is usually cheaper than the VPP route.

But it has some drawbacks as well. First, buying two Power Frameworks isn't cheap, especially if the character should also have high Characteristics. Even the Large Multipower, with its many Flexible slots, sometimes ends up costing fewer points. Second, conceptually it may cause difficulty for some GMs. Specifically, why are the character's defenses, movement, and utility powers so intertwined that they're subject to the Elemental Control rules (such as heightened effect from Drains), but the character's attacks are distinct? There are explanations that would justify the dichotomy (such as "the character's defenses and movement come from a field of energy that surrounds his body, but his attacks don't use that field"), but the GM should monitor the situation to make sure the character isn't taking advantage of the rules.

Alternately, the GM might allow a character to use a Limitation to "link" a power or Power Framework to an Elemental Control so that the other ability is affected just as if it were in the EC. The Limitation *Affected By Negative Adjustment Powers Used On [Name] Elemental Control* (-¼) means the power is subject to all the EC drawbacks pertaining to Adjustment Powers, including the "doubling" effect and the "Adjust one, Adjust them all" effect.

LARGE MULTIPOWER

The "Large Multipower" approach offers characters the benefit of power and flexibility. Typically the Flexible slots in the Multipower (particularly the attacks) have at least slightly more Active Points than the comparative slots in the Multipower + EC method. Since all the slots are Flexible, the character can switch things around as needed, emphasizing offense, defense, or movement depending on the needs of the situation. In effect it's like a Cosmic VPP with a restricted number of slots.

On the downside, this method can get very expensive, since the Multipower reserve and slots are (a) often large (in a typical *Champions* campaign, the reserve tends to be around 90-120 points and the slots 60-80), and (b) subject to few (if any) Limitations. The higher cost of Flexible versus Fixed slots also factors in. Thus, a Large Multipower with a 90-point reserve and ten 60-point slots will cost 210 Character Points, over half of a starting Standard Superhero's total points. Second, taking advantage of the tactical flexibility requires attention and thought during combats. The character has to be careful to allow enough points for defenses and movement while still keeping his attacks powerful enough to be effective. Some characters find this challenging and fun, but it's not for everyone.

VARIABLE POWER POOL

For the ultimate in flexibility, an energy projector can buy a Variable Power Pool with Advantages that make it easy to change slots. This is most appropriate for a character whose powers are so cosmic or vast that there are few restrictions on what he can do. But all that power comes at a price — this approach is the most expensive of the three, even assuming the GM allows it at all. Even if the character has a significant Limitation on the VPP, such as a Focus, the VPP still ends up being costly.

DISADVANTAGES



For the most part, energy projectors take the same sorts of Disadvantages as other characters in the campaign. Here are a few notes on Disadvantages that have special applications for them.

SUSCEPTIBILITY

This Disadvantage is a common and popular one for energy projectors, particularly in the Superheroes genre — aliens living on Earth suffer injury and weakness when exposed to chunks of their home planet, energy beings who can't stand exposure to an "opposite" form of energy, and so on. In some campaigns, GMs may want to take one factor into account that the standard rules do not: whether the substance triggering the Susceptibility is merely in the vicinity of, in direct contact with, or internalized within the character.

With this optional rule, the default for Susceptibility is "character suffers effect when exposed to the substance." This means the Susceptibility affects the character if he's within 4" of the substance and the substance isn't contained within an object that suppresses or insulates its unusual properties. (In your discretion, at ranges beyond 4", the substance still affects the character, but at one-half its listed effect per 2x the distance. Thus, a substance that normally does 2d6 damage instead does 1d6 at 5"-8", ½d6 at 9"-16", 1 point at 17"-32", and no damage at 33" and beyond.) If the substance must be brought into direct contact with the character's skin, reduce the value of the Susceptibility by 5 points. If the character must ingest the substance, reduce the value by 10 points.

SUSCEPTIBILITY: PROXIMITY OF SUBSTANCE

Value	Proximity Is
-0	Substance Affects Character Within 4"
-5	Substance Must Touch Character's Skin
-10	Substance Must Be Ingested/Injected

Alternate Susceptibility Effects

With the GM's permission, you can adapt the rules for the *Dependence* Disadvantage to Susceptibility so that a character can suffer some effect other than damage from being Susceptible. For example, instead of taking damage when in the presence of the dangerous substance, a character could suffer incompetence, weakness, or loss of powers.

VULNERABILITY FREQUENCY TABLE

Special Effect(s)	Frequency
Acid Attacks	Uncommon
Air/Wind Attacks	Uncommon
Attacks (All), Physical/Normal or Energy	Very Common
Biological Attacks	Uncommon
Blasters (same as Particle Beam Attacks)	Very Common
Bullets	Very Common
Celestial/Solar Attacks	Uncommon
Chaos/Entropy Attacks	Uncommon
Chemical Attacks (same as Gas/Poison)	Common
Chemical Attacks, Air-Based	Uncommon
Cold/Ice Attacks	Uncommon
Cyberkinesis Attacks	Uncommon
Darkness Attacks	Uncommon
Dimensional Manipulation Attacks	Uncommon
Earth + Fire + Water Attacks	Very Common
Earth/Stone Attacks	Uncommon
Electrical + Magnetic Attacks	Very Common
Electrical Attacks	Very Common
Electromagnetic Pulses	Uncommon
Electromagnetic Radiation Attacks	Uncommon
Energy Attacks (All)	Very Common
Explosives	Very Common
Fiery Explosions	Uncommon
Fire Attacks	Common
Fire Attacks + Heat Attacks	Common
Force Attacks	Uncommon
Gas + Poison Attacks (same as Chemical)	Common
Gas Attacks	Common
Gravity Attacks	Uncommon
Gravity Attacks + Magnetic Attacks	Uncommon
Heat Attacks	Uncommon
Heat Attacks + Fire Attacks	Common
High-Tech Attacks	Very Common
Holy Attacks	Uncommon
Ice/Cold Attacks	Uncommon
Ice/Cold Attacks + Water Attacks	Common
Iron Attacks + Steel Attacks	Very Common
Kinetic Energy Attacks	Uncommon
Life Force Attacks	Uncommon
Light-Based Attacks	Uncommon
Magic, all types	Common
Magic, specific type	Uncommon
Magnetic Attacks	Uncommon
Magnetic Attacks + Gravity Attacks	Uncommon
Matter Manipulation Attacks	Uncommon
Melee Attacks, Physical/Normal	Very Common
Mental Powers, generally	Common
Particle Beam Attacks (same as Blasters)	Very Common

VULNERABILITY FREQUENCY TABLE (CONT'D)

Special Effect(s)	Frequency
Physical Attacks (All)	Very Common
Plasma Beams	Uncommon
Pleasurable Attacks	Uncommon
Poisons	Uncommon
Radiation Attacks	Uncommon
Shadow Attacks	Uncommon
Silver-Based Attacks	Uncommon
Solar/Celestial Attacks	Uncommon
Sonic Attacks	Uncommon
Spirit Attacks	Uncommon
Stone/Earth Attacks	Uncommon
Technology Attacks	Very Common
Telekinetic Attacks	Uncommon
Time Attacks	Uncommon
Undead or Unholy Attacks	Uncommon
Vibration Attacks	Uncommon
Water Attacks	Uncommon
Water Attacks + Cold Attacks	Common
Wind/Air Attacks	Uncommon
Wood-Based + Silver-Based Attacks	Uncommon
Wood-Based Attacks	Uncommon
Special Situations	
Ambushes + Treacherous Attacks	Very Common
Attacks When Obviously Outclassed	Common
Electrically Grounded —	
If a Flyer	Very Common
If a Non-Flyer	Common
Falling/Knockback Damage —	
If a Normal Character	Very Common
If a Predominantly High-Altitude Character	Common
Struck in HTH Combat	Very Common
Specific Powers/Game Mechanics	
Armor-Piercing Attacks	Common
Affects Desolidified Attacks	Uncommon
Dispel	Uncommon
Drains	Common
Ego Attack	Common
Energy Blast	Very Common
Entangles, standard	Common
Entangles, EGO-Based (Mental Paralysis)	Uncommon
Find Weakness-Aided Attacks	Uncommon
Flash Attacks, Sight Group	Common
Flash Attacks, all Sense Groups	Very Common
Images, Sight Group	Uncommon
Images, all Sense Groups	Uncommon
Killing Attacks, Energy	Very Common
Killing Attacks, Physical	Very Common
Knockback	Very Common
Mental Illusions	Uncommon
Mind Control	Common
Mind Scan	Uncommon
Presence Attacks, generally	Very Common
Presence Attacks From Desirable Opponents	Common
Transform	Uncommon

Related Effects

A character can apply Limitations to Powers and Characteristics to represent additional effects of his Susceptibility. For example, a character could buy his STR so that it doesn't work in the presence of the substance to which he's Susceptible. The Limitation value depends primarily on how common the substance is (-¼ for Uncommon, -½ for Common, -1 for Very Common), but you may want to take proximity and other factors into account and adjust the value accordingly.

It's also appropriate for a character to have other Disadvantages associated with his Susceptibilities. If the substance is supposed to do more than simply damage him, he can take other Disadvantages associated with it. For instance, Psychological Limitations such as *Freezes When Seeing Substance* (Total Intensity; frequency varies with substance) and Physical Limitations like *Blind In The Presence of Substance* (Impairs Greatly; frequency varies with substance) add new and interesting dimensions to the character's weakness.

VULNERABILITY

Energy projectors often take Vulnerabilities. The classic example is a Vulnerability to a substance or energy type that's the "opposite" of the one the character uses/controls (such as a Fire-based character being Vulnerable to Ice/Cold or Water powers). Similarly, beings with energy bodies often take Vulnerabilities to attacks that pierce or disrupt their "energy matrix" (or the like), since that causes them greater harm than an ordinary wound (for example, the *Champions* villain Pulsar is Vulnerable to Physical Killing Attacks).

Vulnerability is particularly appropriate for Superheroes campaigns, since superpowered characters are exposed to so many more powers than characters in other genres. The accompanying text box lists suggested Frequencies for various special effects, energy types, Powers, and the like for the "typical" *Champions* campaign (including Hero Games's *Champions Universe* setting). The GM should review this list, then modify it to reflect his perspective and predictions on how common these elements are in his campaign, add to it and continue to change it as the campaign develops, and regularly make it available to your players.

Note that the frequency of a Vulnerability may also depend on common campaign knowledge. Silver-Based Attacks are typically Uncommon, but if they're widely known to be especially effective against werewolves, a werewolf character could justify labelling them as "Common" for Vulnerability purposes, since most of his enemies know to use them against him.

Other Vulnerability Rules

A character may have two or more Vulnerabilities that are affected by a single attack — for example, a character who's Vulnerable to Ice/Cold and Vulnerable to Magic could get hit by a Frost Bolt Spell. In that situation, multiply the larger multiplier by the smaller multiplier to get an overall multiplier. Thus, two x1.5 multipliers become a x2.25 multiplier, a x1.5 and x2 become a x3 multiplier, and two x2 multipliers become a x4 multiplier.

If a character has a Vulnerability to both the

STUN and BODY of a particular special effect or type of attack, and is hit by a Killing Attack that exploits the Vulnerability, first determine the BODY and STUN of the Killing Attack normally. After that's done, apply the Vulnerability multiplier. For example, suppose a character who's Vulnerable to Fire (2 x STUN and 2 x BODY) is hit by a fire RKA 3d6 (a fireball). The attacker rolls his damage, getting 10 BODY and a x4 STUN Multiplier for 40 STUN. The Vulnerability now applies, doubling that to 20 BODY and 80 STUN.

In campaigns that use the Hit Location rules, apply both the Vulnerability modifier and the Hit Location modifier before taking the target's defenses into account. For example, a character hit in the Head with a Killing Attack to which he had a 2 x STUN Vulnerability would apply the x5 STUN Multiplier for the Head location, and then the x2 Vulnerability modifier.

Vulnerability damage multipliers do not apply to damage from Susceptibilities, Dependences, or other Disadvantages involving the same power/special effect.

Expanded Vulnerability

For some campaigns, the three categories of frequency — Uncommon, Common, and Very Common — may not offer enough options. The accompanying Optional Vulnerability Table and Optional Vulnerability Frequency Table present an expanded, five-category system for Vulnerability. Under this system, characters tend to get more points for Vulnerability than they do with the standard rules.

OPTIONAL VULNERABILITY TABLE

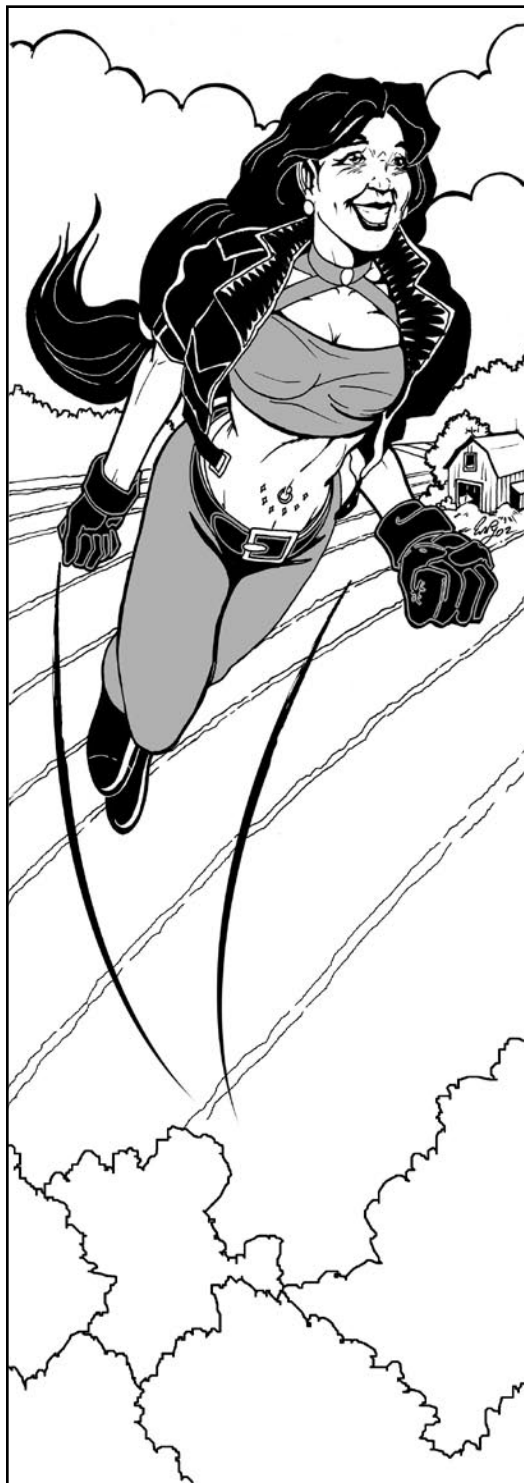
Value	The Attack is
5	Rare
10	Uncommon
15	Common (a group of Uncommon attacks, or a single Common attack)
20	Very Common (a group of Common attacks)
25	Extremely Common (a group of Very Common and Common attacks)
Value	Vulnerability Multiplier
+0	x 1½ (Target takes 1½x damage)
x2	x2 (Target takes 2x damage)

Expanded Multiples

At the GM's option, a character can take a Vulnerability that's even more dangerous than normal — one that does x3, x4, or more damage. For each additional point of multiple above x2 (x3, x4, x5, x6, and so forth), multiply the base value of the Vulnerability by that number (thus, a Common Vulnerability with a x3 multiplier is worth 30 points, one with x5 is worth 50 points, and so on).

OPTIONAL VULNERABILITY FREQUENCY TABLE

Special Effect(s)	Frequency
Acid Attacks	Rare
Air/Wind Attacks	Uncommon
Attacks (All), Physical/Normal	Extremely Common
Biological Attacks	Rare
Blasters (same as Particle Beam Attacks)	Extremely Common
Bullets	Extremely Common
Celestial/Solar Attacks	Rare
Chaos/Entropy Attacks	Rare
Chemical Attacks (same as Gas/Poison)	Common
Chemical Attacks, Air-Based	Uncommon
Cold/Ice Attacks	Common
Cyberkinesis Attacks	Uncommon
Darkness Attacks	Uncommon
Dimensional Manipulation Attacks	Rare
Earth + Fire + Water Attacks	Very Common
Earth/Stone Attacks	Common
Electrical + Magnetic Attacks	Very Common
Electrical Attacks	Very Common
Electromagnetic Pulses	Uncommon
Electromagnetic Radiation Attacks	Uncommon
Energy Attacks (All)	Extremely Common
Explosives	Very Common
Fiery Explosions	Uncommon
Fire Attacks	Common
Fire Attacks + Heat Attacks	Common
Force Attacks	Uncommon
Gas + Poison Attacks (same as Chemical)	Common
Gas Attacks	Common
Gravity Attacks	Uncommon
Gravity Attacks + Magnetic Attacks	Uncommon
Heat Attacks	Uncommon
Heat Attacks + Fire Attacks	Common
High-Tech Attacks	Extremely Common
Holy Attacks	Uncommon
Ice/Cold Attacks	Common
Ice/Cold Attacks + Water Attacks	Common
Iron Attacks + Steel Attacks	Very Common
Kinetic Energy Attacks	Rare
Life Force Attacks	Rare
Light-Based Attacks	Uncommon
Magic, all types	Very Common
Magic, specific type	Uncommon
Magnetic Attacks	Uncommon
Magnetic Attacks + Gravity Attacks	Uncommon
Matter Manipulation Attacks	Rare
Melee Attacks, Physical/Normal	Extremely Common
Mental Powers, generally	Common
Particle Beam Attacks (same as Blasters)	Extremely Common
Physical Attacks (All)	Extremely Common
Plasma Beams	Uncommon
Pleasurable Attacks	Uncommon
Poisons	Common
Radiation Attacks	Uncommon
Shadow Attacks	Uncommon
Silver-Based Attacks	Uncommon
Solar/Celestial Attacks	Rare
Sonic Attacks	Uncommon
Spirit Attacks	Rare



OPTIONAL VULNERABILITY FREQUENCY TABLE (CONT'D)

Special Effect(s)	Frequency
Stone/Earth Attacks	Common
Technology Attacks	Very Common
Telekinetic Attacks	Common
Time Attacks	Rare
Undead or Unholy Attacks	Uncommon
Vibration Attacks	Uncommon
Water Attacks	Uncommon
Water Attacks + Cold Attacks	Common
Wind/Air Attacks	Uncommon
Wood-Based + Silver-Based Attacks	Uncommon
Wood-Based Attacks	Uncommon
Special Situations	
Ambushes + Treacherous Attacks	Very Common
Attacks When Obviously Outclassed	Common
Electrically Grounded —	
If a Flyer	Extremely Common
If a Non-Flyer	Very Common
Falling/Knockback Damage —	
If a Normal Character	Extremely Common
If a Predominantly High-Altitude Character	Common
Struck in HTH Combat	Extremely Common
Specific Powers/Game Mechanics	
Armor-Piercing Attacks	Common
Affects Desolidified Attacks	Rare
Dispel	Uncommon
Drains	Common
Ego Attack	Common
Energy Blast	Extremely Common
Entangles, standard	Very Common
Entangles, EGO-Based (Mental Paralysis)	Uncommon
Find Weakness-Aided Attacks	Rare
Flash Attacks, Sight Group	Very Common
Flash Attacks, all Sense Groups	Extremely Common
Images, Sight Group	Common
Images, all Sense Groups	Common
Killing Attacks, Energy	Extremely Common
Killing Attacks, Physical	Extremely Common
Knockback	Extremely Common
Mental Illusions	Uncommon
Mind Control	Common
Mind Scan	Uncommon
Presence Attacks, generally	Extremely Common
Presence Attacks From Desirable Opponents	Common
Transform	Uncommon

chapter two:



THE ENERGY SPECTRUM

THE ENERGY SPECTRUM



ENERGY BASICS

For each energy type/special effect in this chapter, there's a sidebar as a quick reference source listing:

Defense: the type of defense (PD or ED) that typically applies against that energy type's/special effect's attacks.

Knockback: Whether attacks involving that energy type/special effect typically do Knockback in campaigns using the KB rules. A "No" answer indicates either that characters should typically take the *No Knockback* Limitation for attacks that would ordinarily do KB, or that the GM rules that attacks involving that energy type/special effect automatically don't do KB by default, as a campaign ground rule.

Of course, it's possible for the GM to redefine either of these things, or for a character to build an attack that works differently.

At the heart of any energy projector character design is the issue of what type of energy he uses, controls, and/or manipulates. In *HERO System* terms, this means what *special effect* he chooses for his powers, spells, or abilities.

In the standard *HERO System* rules, one special effect is pretty much just like another, except where characters spend or save Character Points to simulate a special effect by taking Advantages or Limitations for a power. An Energy Blast defined as "electricity" works just the same, in game terms, as one defined as "fire" or "sonics" or "water" — it does a defined amount of Normal Damage, regardless of the type of target or other circumstances. This is a deliberate design decision to maintain character balance and ensure faster, smoother game play. It's also a part of the *HERO System*'s philosophy of character creation and design freedom. Characters aren't restricted to some predefined set of special effects with specific game effects; they can create what they want, how they want.

Nevertheless, some gamers want more detail. They want to know if Sonics have a greater effect against rigid physical defenses made of Stone, or whether Magic is universally more effective against "mundane" objects and energies. In short, they want to consider some of the potential "realistic" aspects of energies and special effects and how they interact.

This chapter addresses those concerns by providing more detailed rules for nearly three dozen energy types/special effects, ranging from the common (Air, Earth, Fire, Water...) to the more obscure or abstract (Matter Manipulation, Mental/Psionic). As always, trying to address "realism" in a gaming context is an exercise fraught with peril (particularly when one considers obviously fictional forms of energy, such as Cosmic, Magic, or Mental/Psionic, which can function differently from campaign setting to campaign setting). It can lead to discussions, arguments, and excessive character designing that detract from your game far more than they add to it. So you should consider the information and rules in this chapter as *guidelines*, not as rigid rules to be applied in every game. In many campaigns the standard rules that don't differentiate between special effects work perfectly well, and others may require less (or more) information than you'll find here. If you think you know more about how Electromagnetic Energy, Holy energy, or Sonics should work in your game than this book does, by all means alter the rules to suit your own ideas and preferences.

To put it another way, *The Ultimate Energy Projector* is not a science textbook. It contains some real-world scientific information to help you evaluate how different energies/special effects work in your campaign, but at a layman's level that should help most people enhance their games without bogging them down in extensive scientific data. But if you *want* a lot of scientific data and *want* to spend a lot of time discussing and debating how different energies/special effects interact, go for it! After all, in the end the only unalterable rule of the *HERO System* (and roleplaying games in general) is "play them to have fun" — however you define "fun."

THE SPECIAL EFFECT TEMPLATE

Each energy/special effect covered in this chapter (some of which are not actually "energies" at all, but physical phenomena) is addressed in roughly the same fashion. First there's an introductory section that discusses the energy/special effect in real world terms, complete with any necessary rules or related information. For example, the Air/Wind section has rules about suffocation.

The next section is a type-by-type review of how that energy/special effect interacts with the others described in this book, primarily from the viewpoint of how an attack of Energy X affects a defense of Energy Y, and vice-versa. All energy types/special effects are assumed to be "neutral" as to themselves (for example, a Fire/Heat attack gains no benefits and suffers no penalties when opposed to a Fire/Heat defense), but see the rules for the *Interference Combat Maneuver* in Chapter Four. This section concludes with a suggested *Special Effect Power Modifier* (see below).

The third and final section of each energy type/special effect is a selection of sample powers. Some of these are the same as powers from the USPDs, but rewritten as necessary to include the *Special Effect Power Modifier* and other appropriate changes; some are entirely new.

THE SPECIAL EFFECT POWER MODIFIER

After determining whether a given energy type/special effect tends to be more or less effective than average, each section in this chapter includes a suggested *Special Effect Power Modifier* for it. This may be an Advantage, Adder, or Limitation, depending on the circumstances. The Modifier values suggested are defaults; the GM can alter them based on the specifics of his campaign and setting.

The GM also determines which powers can appropriately take the Modifier. Since the Modi-

fier's value is mostly based on the interaction of direct (damaging) attacks and defenses, those are the sort of powers for which it works best. Indirect attacks — Mind Control, Flash, Entangle, Transform, and the like — may not really be affected by the interaction rules, and thus not deserving of the Modifier. Similarly, No Normal Defense attacks don't generally qualify for the Modifier given their "all or nothing" nature.

Customizing The Modifier

Some GMs and players who want to change the values for some or all of the energy types/special effects, or even to customize a particular power regardless of what the rules in this chapter say. ("Your Fire Blast may work like normal... but *my* Fire Blast is extra-effective against Unholy defenses!") To help you do that, here's a simplified version of the rules used to determine the *Special Effect Power Modifier* values.

Determining the value of a *Special Effect Power Modifier* involves three steps:

1. Go through the list of interactions for that energy type/special effect and assign points from the Interactions Value table for positive and negative interactions: when the energy type/special effect is better than average against another energy type/special effect, it receives positive points; when it's worse than average against energy type/special effect, it receives negative points. The more common the other energy type/special effect is (using the Uncommon, Common, and Very Common categories from the Vulnerability Frequency Table on page 37), the more points its interactions can provide. (If the type of benefit/penalty involved isn't specifically listed on the Interactions Value table, the GM should use the entries in the table as guidelines to determine an appropriate value.)

In the end you have a positive number (indicating that the energy type/special effect is, overall, better than average), a total of 0 (indicating that the energy type/special effect is average, or "neutral"); or a negative number (indicating that the energy type/special effect is, overall, worse than average).

2. Compare the final number you derived to the Modifier Value table. That tells you whether the energy type/special effect you're working with deserves an Adder, an Advantage, or a Limitation based on the interactions you chose for it.

3. If necessary, consult with the GM and adjust the value from the Modifier Value table to account for other factors, such as how the energy type/special effect functions underwater.

ORIGIN SPECIAL EFFECT AND MANIFESTATION SPECIAL EFFECT

In evaluating how powers of different special effects interact, you should keep in mind the difference between the *origin* special effect of a power and the *manifestation* special effect of the power. The former refers to the source of the power — how it's created, where it comes from, and so on. The latter refers to how it manifests or exists when the character uses it.

INTERACTIONS VALUE

Attack Benefits	Defense Is...		
	V Common	Common	Uncommon
Significant	4	3	2
+3 or more DCs damage			
AP or Penetrating effect			
-4 or more points of defense			
Major	3	2	1
+1-2 DCs damage			
-2 to -3 points of defense			
Average	2	1	0
-1 point of defense			
Minor	1	0	0
+1 point of damage			
Defense Benefits	Attack Is...		
	V Common	Common	Uncommon
Significant	4	3	2
-3 or more DCs damage			
+4 or more points of defense			
Major	3	2	1
-1 to -2 DCs damage			
+2 to +3 points of defense			
Average	2	1	0
+1 point of defense			
Minor	1	0	0
-1 point of damage			

To use this table, determine first whether of the two energy types/special effects involved, it's the attack or the defense that benefits. (Sometimes the interactions differ, based on which power is the attack and which the defense; see Example 2 below.) Then go to the appropriate part of the table and use the indicated values for both energy types/special effects. The energy type/special effect that benefits gets positive points, while the one that suffers gets negative points... and due to differences in commonality they may get different amounts of points as well.

Example 1: Brad wants to create a new category of attacks for his campaign — Alkahests, defined as certain hyper-effective acid-like magical chemicals and poisons. According to his conception, Alkahest attacks (Uncommon) work well against Physical defenses (Very Common) — they gain +3 DCs of damage before the defense is applied. That means Alkahest benefits (gain positive points) and Physical suffers (gains negative points). +3 DCs is a "Significant" effect. Consulting the "Attack Benefits" section of the table, Brad sees that since the defense (Physical) is Very Common, Alkahest receives 4 points (+4 points, since it benefits). On the other hand, since Alkahest is Uncommon, Physical gets 2 points (-2 points, since it suffers) for the interaction.

Assuming Alkahest has no other noteworthy interactions, it ends with a total value of +4. According to the Modifier Value table, that means Alkahest requires a +10 Character Point Adder. Similarly, if -2 is Physical's overall total, it receives a -¼ Limitation.

Example 2: Air/Wind (Uncommon) defenses tend to blow away or disperse the brunt of Acid (Uncommon) attacks, reducing their effectiveness — they suffer a -2 DC reduction in damage before the defense is applied. That means the Air/Wind defense gets a Major benefit, entitling it to +1 point and Acid to -1 point. Similarly, an Acid defense poses less of an obstacle to an Air/Wind attack; reduce the Acid's ED by 1 point before applying the damage. That means the Air/Wind attack gets an Average benefit, entitling to +0 points and Acid to -0 points. Thus, the total value for Air/Wind-Acid interaction for Air/Wind is (+1 + +0 =) +1, and for Acid it's (-1 + -0 =) -1.

Usually a power's origin special effect and manifestation special effect are one and the same. For example, a Fire-controlling character has a Fire blast that originates as Fire and manifests as Fire. But in some cases they differ. For example, a wizard's Fire Bolt spell originates as the Magic special effect, but manifests as the Fire special effect. A demon's Hellfire Bolt originates as both the Magic

MODIFIER VALUE

Total	Modifier
+13 or more	+25 (or greater) point Adder (or +½ Advantage)
+8 to +12	+20 point Adder (or +¼ Advantage)
+4 to +7	+15 point Adder
+2 to +3	+10 point Adder
+1	+5 point Adder
0	+0 Advantage
-1	-0 Limitation
-2 to -3	-¼ Limitation
-4 to -6	-½ Limitation
-7 to -9	-¾ Limitation
-10 or more	-1 Limitation

and Unholy special effects, and manifests as Fire. A cosmic hero's energy bolt originates as Cosmic Energy, but can manifest as Fire, Light, Sound, or just about anything else he can conceive of.

The difference between origin and manifestation special effect can have game consequences. First, there's this chapter's rules for how different special effects interact. Those rules typically depend on the manifestation special effect entirely, or at least to a much greater degree than the origin special effect. Second, a power that has two (or more) different special effects for its origin and manifestation is subject to Adjustment Powers that affect *any* of its special effects. For example, both a Drain Magic and Drain Fire power work against the wizard's Fire Bolt described above. Usually this is just a -0 Limitation not worth noting on the character sheet, since the power is as likely to benefit from access to multiple positive Adjustment Powers as it is to suffer from the effect of multiple negative Adjustment Powers. However, in some circumstances the GM may wish to grant a -¼ Limitation to represent the power's greater "vulnerability" to being negatively Adjusted.

CREATING OBJECTS

Many energy types/special effects, such as Earth/Stone, Ice/Cold, and Matter Manipulation, allow characters to create physical objects out of various substances — everything from simple blocks and walls to sculptures and complex structures. There are several ways to approach this using the *HERO System* rules.

To create walls, you can use Entangle (either Limited to do just that, or not) or Force Wall (see sidebar, page 37). Typically Entangle works better for walls intended to last a long time without any need for the character to "maintain" them.

If the object in question can easily be defined using *HERO System* Powers and Power Modifiers — such as a sword (an HKA) or a bridge (a horizontal Force Wall) — just build it using those rules.

For complex objects not easily defined using Powers and Power Modifiers, a Major Transform — air into X object made of Y substance — works fine.

For simple objects that aren't worth the trouble to define in rules terms — utensils and tools, tables and other furniture, ornamental sculptures, and the like — the GM can simply allow characters to create them, provided they have no effect in combat or similar situations. This may require a successful roll with a *Power Skill* or other relevant Skill (such as PS: Sculptor), or the GM can simply allow it automatically.



Acid Powers represent a character's use of or control over acid or some acidic substance; in some respects they're a subset of Chemical powers (see later in this chapter) that deserve their own section due to commonality and rules issues. If appropriate you can also use Acid powers to represent any fast-acting attack with few defenses against it, such as napalm, an alkaline or a strong base (both of which are caustic, rather than corrosive like acid), superheated plasma, or biochemical attacks.

ACID IN GAME TERMS

The basic Acid power is RKA 1d6, Penetrating, Continuous, and Uncontrolled, and works against Energy Defense.

The Continuous and Uncontrolled effect of acid means the substance keeps damaging an affected target for a specific period of time. This lasts until one of either two things happens: the END allocated to the power runs out (or 1d6 Phases, if it costs 0 END); or the power reaches a defined damage threshold. The latter condition means the acid keeps damaging the target until the BODY damage rolled on the dice equals twice the BODY damage possible on a single attack. So, a basic Acid RKA 1d6 keeps attacking until the END allocated for it runs out, or until it inflicts a total of ($2 \times 6 =$) 12 BODY. (This means the damage rolled on the dice, regardless of how the target's defenses apply.) Against a target with no Hardened rED, the maximum BODY typically occurs first.

At the GM's option, if a character exposed to acid is wearing heavy clothing, physical armor, or the like, the acid may have to "eat" its way through those materials, damaging them until they're destroyed, before it affects the character himself. This may give the character a Phase or two of "breathing room" to shed the acid-affected garments before the acid affects his flesh. But of course, that may leave him without any defenses against other attacks....

An Acid attack that misses its target may still hit something and affect it, or remain nearby on the ground as a "puddle" that a character could step in until it gets used up eating at the ground. Similarly, some defenses (such as Air/Wind) may cause drops of Acid to scatter or spray around the target, doing some minor collateral damage to the environment.

NEUTRALIZING ACID

A victim can stop an Uncontrolled acid attack by applying the appropriate base (see below), or by immersing himself in water. Immersion in water puts out the acid on the victim's next Phase — the

immersion actually gets rid of the acid immediately, but the reaction also inflicts an additional immediate attack on the victim.

Example: *The Lord of Acid (SPD 4) hits Witchcraft (10 rED, not Hardened) with an Acid Cloud (RKA 1d6, Penetrating, Continuous, Uncontrolled). On Segments 3, 6, 9, and 12 (her attacker's Phases), Witchcraft takes 1d6 Killing damage. On Segment 3, when she first gets hit, The Lord of Acid rolls 4 BODY and 12 STUN. Since the attack is Penetrating, she takes 1 BODY and 1 STUN from the attack. On Segment 6, the attack continues, and this time rolls 6 BODY and 24 STUN. Witchcraft takes 2 BODY from that one (since the 6 that was rolled had two "BODY pips," and got them through her defenses as a minimum). If Witchcraft were to do nothing, the attack would keep whittling her down until 12 BODY was rolled on the acid's damage dice (or until the attacker's Uncontrolled END pool ran dry, but she doesn't know how much longer that might be). On Segment 8, however, she casts a Create Water spell directly over herself. That removes the acid, but the explosive reaction caused by dousing the acid also triggers one final attack on the Lord of Acid's next Phase. He rolls another 2 BODY and 10 STUN, which does 1 BODY and 1 STUN after she applies her defenses.*

Acids And Bases

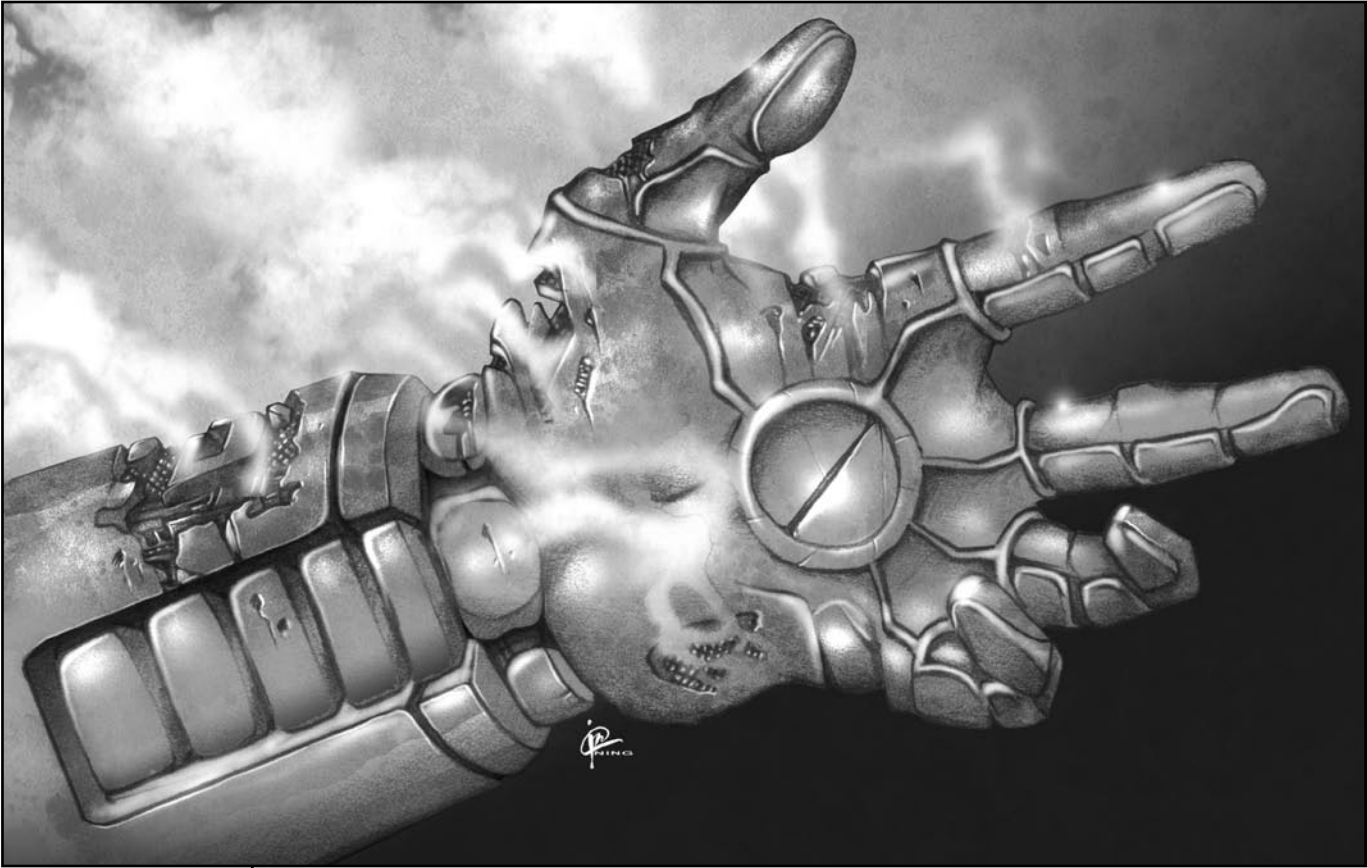
An acid can be neutralized by a *base* (a substance that accepts protons, whereas an acid donates them). A base raises the pH of a substance toward 14 (an acid being roughly defined as a substance with a pH less than 7.0). Typically a weak base, for example egg whites or baking soda, is used to counteract an acid, since strong bases (like alkali or many hydroxides) are caustic (and thus as likely to damage flesh or objects as acid) and can react exothermically (*i.e.*, generate heat and thus fire) when mixed with a strong acid.

In game terms, applying a base to an acid acts as a Suppress against the attack (though unlike an ordinary Suppress, the points "lost" to the Suppress don't return, they're permanently removed from the acid's effect). A weak base in equal amounts to the acid involved acts as a Suppress 8d6; lesser amounts have proportionately fewer dice of effect, greater amounts have no greater effect. A strong base in equal amounts to the acid involved acts as a Suppress 12d6; lesser amounts have proportionately fewer dice of effect, greater amounts have no greater effect. However, strong bases may themselves affect a character just like an acid does, and using them to stop acid has an 11- chance to cause an exothermic reaction that generates extreme heat.

ACID BASICS

Defense: ED

Knockback: No



This heat does ½d6+1 Damage Classes of Killing Damage to whatever was affected by the acid, and may set flammable materials on fire.

Blood is slightly basic, so creatures that lack it (like most undead) may suffer a slightly increased effect from Acid attacks.

SIMPLIFIED ACID GUIDELINES

Gamemasters who don't want to worry about the more complex rules above concerning Acid can use these simplified rules.

Characters might find caustic and corrosive chemicals — Acids, in game terms — in factories, the laboratories of alchemists and scientists, the blood of aliens or demons, and many other places. The number of dangerous chemicals of this type is nearly infinite, but their basic combat effects — which depend on whether the chemicals are weak or strong, diluted or undiluted — are simple.

The damage listed in the Acids Table assumes the character has been splashed with or exposed to about one quart of the substance. For much larger quantities, add 1-2d6; if the character is immersed in the chemicals, add 2 or more dice.

The damage indicated on the table is Normal Damage, NND, Does BODY. The defenses are to

be covered by a substance the chemicals cannot affect (like a chemical-proof sealed suit) or to have a Force Field (or other Power that keeps the chemicals from touching the character). At the GM's discretion, chemical damage may be Penetrating. Some Acids also cause or emit fumes; these do 2d6 NND damage (STUN only); the defense is appropriate Life Support.

A character takes damage from Acids for every Segment of exposure until the chemicals are washed off of him or otherwise removed. Sometimes a chemical can only be removed with special chemicals designed to neutralize it; in such cases, exposing the chemical to water may actually worsen the problem (an explosion of 2-12d6 Normal Damage can sometimes result). Appropriate safety measures are usually located near where dangerous chemicals are stored.

Damage from chemicals may result in scars and disfigurement (permanent reduction of COM). Consider this a Transform whose results can only be reversed via plastic surgery, some types of healing magic, or similar methods.

SECONDARY EFFECTS

Acid can have several secondary effects beyond simply damaging an object or injuring a character.

First, depending on the type of object(s) an Acid effects, the interaction may create noxious or dangerous fumes. Outdoors or in a large area this probably doesn't matter unless a character suffers an intense exposure, but in an enclosed space it may be a different matter. The GM decides what type of fumes, if any, an Acid attack creates,

ACIDS TABLE

Type Of Chemicals	Damage
Diluted, Weak	½d6 per Segment
Diluted, Strong	2d6 per Segment
Concentrated, Weak	1d6 per Segment
Concentrated, Strong	4d6 per Segment

what effect they have in game terms (you can use the Acids Table as a guideline, then decide if the damage is Normal Damage, NND damage [STUN only], or an NND Killing Attack), and how large the cloud of fumes is (typically no more than 2" radius at most, but possibly much larger depending on the amount of Acid and the strength of the interaction).

Second, Acid damage is more prone to causing horrific scarring than most types of attacks. In game terms this may constitute a Major Transform that reduces the victim's COM until he "heals" it with plastic surgery or the like. As a rough guideline, the base chance of scarring from an Acid attack that does actual BODY damage after the character's defenses are applied is 3-. Add +1 to the roll for every Damage Class in the attack. If the roll succeeds, the character suffers a Major Transform (lose 1d6 points of COM, with a maximum loss equal to the points of BODY damage done by the attack after defenses were applied). The Transform has Active Points equal to the Active Points in the Acid attack *plus* 5 Active Points for each 1 point of BODY damage caused by the attack after the first point of BODY. (The GM can establish a minimum effect for the Transform if desired, such as 3d6.)

Containing Acid

Even the strongest acids can be contained by *something*; they don't just keep on eating through everything around them. The GM may decide that some substances or aspects of some special effects (such as Earth/Stone) may thus be dramatically more effective at protecting against Acid attacks... or even immunize a character from them completely.

Denaturing Acid

Exposure to intense energy (such as Light or Radiation) can "denature" Acid, potentially causing an explosion or the release of noxious fumes. When such energies interact with Acid, the GM may, if he wishes, use the Fire/Heat-Chemical Interaction table on page 64 to determine what happens.

Acid Underwater

Most manifestations of Acid-based powers are liquid in form and dissipate easily in water. Indeed, many Acid attacks are neutralized entirely by contact with water, or may even have a single reaction immediately upon contact. This might be a dangerous surprise to the user, if the effect goes off directly in front of him, or involves acid on his skin!

As a general rule, it's easiest for the GM to assume that water neutralizes and dissipates dangerous acids. When characters use Acid attacks underwater, reduce the attacks to half effect. Similarly, acid-based defenses usually provide only half as much protection as normal when used underwater. This is accounted for by the *Special Effect: Acid Limitation*.

ACID AND OTHER SPECIAL EFFECTS

Here's how Acid interacts with other energies/special effects. In general, Acid attacks tend to be more effective against physical defenses than energy defenses; in fact, the GM may rule that an energy defense that's considered largely impermeable to liquid can prevent Acid from touching a character at all, and thus not damage him in any way (though it may run off the energy defense and affect whatever the character's standing on). Similarly, Acid defenses tend to be more effective against physical attacks than energy, and should be bought accordingly (with more PD than ED). As always, these rules are optional; the GM may change or ignore them as he sees fit.

AIR/WIND

Air/Wind defenses tend to blow away or disperse the brunt of Acid attacks, reducing their effectiveness — they suffer a -2 DC reduction in damage before the defense is applied. Similarly, an Acid defense poses less of an obstacle to an Air/Wind attack; reduce the Acid's ED by 1 point before applying the damage.

BIOLOGICAL

Biological defenses don't resist Acid well; Acid attacks do +2 DCs of damage against them before the defense is applied. (Alternately, the GM could treat Acid attacks as reducing Biological defenses by 1 point of effect against all attacks for each Acid attack they suffer in a given combat, but that may quickly make Acid far too effective against some targets.) Acid defenses also tend to work well against Biological attacks, since Acid interferes with many biological processes and functions; give them +2 defense before applying them to reduce the damage caused by a Biological attack.

CHAOS/ENTROPY

Acid has no special interaction with Chaos/Entropy; it neither gains nor loses against this special effect.

CHEMICAL

Acid is effectively a specialized type of Chemical power, as discussed above. It has no special interaction with Chemical powers; in general it neither gains nor loses against this special effect. However, if a Chemical power involves a base, contact between the Acid and the base may result in the Acid being neutralized, possibly with a resulting exothermic reaction.

COSMIC ENERGY

Acid has no special interaction with pure Cosmic Energy; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general). However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Acid has no special interaction with Darkness; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

DIMENSIONAL MANIPULATION

Acid attacks tend to have trouble getting through Dimensional Manipulation defenses, which by their very nature interfere with physical reality on some level. Subtract 1 DC from the Acid attack before applying it to defenses. Similarly, Dimensional Manipulation attacks gain +1 DC versus Acid defenses.

EARTH/STONE

Acid tends to have a hard time eating through durable Earth and Stone defenses; its attacks lose -2 DCs before the defense is applied. Earth/Stone attacks are similarly more effective than average against Acid defenses; the Acid defense is at -2 points of PD.

ELECTRICITY

Acid attacks affect Electricity defenses normally. Acid conducts electricity as well as water does. Reduce an Acid defense by 33% (one-third) of its Active Points before applying it to reduce the damage from an Electricity attack.

Alternately, Electricity might break down an Acid through electrolysis, so that an Electricity attack causes an Acid defense to lose -1 defense (or more) until the Acid-using character can “repair” it by re-activating the power. Or an Electricity defense might reduce the END allocated to keep an Acid attack functioning.

Some types of batteries generate electrical power from the chemical interaction between an acid and another chemical substance (such as lead). Depending on how an Acid-using character’s powers work, their interaction with other substances might generate electrical energy that an Electricity-based character could use somehow.

ELECTROMAGNETIC ENERGY

Acid has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

ENERGY MANIPULATION

Acid has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

FIRE/HEAT

The intense heat of Fire defenses tends to burn away some of the power of Acid attacks (which may cause unintended chemical reactions or create gases with unpleasant or unhealthy effects); reduce the attacks by -1 DC before the defense is applied. Fire/Heat attacks interact with Acid defenses normally (though again, the possibility of a dangerous chemical reaction exists). If appropriate, you can use the rules under *Chemical*, below, for Fire-Acid interactions as well.

To some extent, the dangers posed by Acid mixing with Fire may also occur whenever Acid encounters any form of energy that might “burn” it rapidly (such as Electricity or Pulson Energy).

FORCE MANIPULATION

Acid has no special interaction with Force Manipulation; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

GRAVITY

Gravity defenses work better than average against Acid attacks for two reasons. First, as noted above, Acid tends to be more effective against physical defenses than ones made of energy. Second, the gravitic energy inherent in a Gravity defense tends to pull projected or thrown Acid to the ground, or otherwise skew its accuracy. As a result, Gravity defenses are at +1 ED against Acid attacks before being applied to reduce the damage. Gravity attacks interact with Acid defenses normally.

HOLY/UNHOLY

Acid has no special interaction with Holy/Unholy power; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

ICE/COLD

Ice/Cold defenses tend to take physical form (ice shields, walls, armor, and the like) which are made of water, which neutralizes Acid. As the Acid melts through the defense, the resulting water counteracts it. In game terms, this reduces the Acid attack’s damage by -2 DC, but it weakens the Ice/Cold defense by -2 points of PD and ED until the character with that defense uses a Zero Phase Action to “renew” and strengthen the defense. Ice/Cold attacks interact with Acid defenses normally.

In some cases Acid may become totally inert when exposed to Ice/Cold... but when thawed go on to have their usual effect. The GM can handle this as he sees fit.

KINETIC ENERGY

Acid has no special interaction with Kinetic Energy defenses; it neither gains nor loses against this special effect. Kinetic Energy attacks interact with Acid defenses normally (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Acid has no special interaction with Life Force Energy; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

LIGHT

Acid has no special interaction with Light; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general, and denaturing).

MAGIC

Acid has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Acid has no special interaction with Magnetism; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

MATTER MANIPULATION

Since Acid is a physical substance, Matter Manipulation may be unusually effective against it; see the *Matter Manipulation* section, below, for information.

MENTAL/PSIONIC

Acid has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Acid attacks tend to be slightly more effective against Physical defenses; add +1 BODY before applying defenses (or rolling a STUN Multiplier). Physical attacks interact with Acid defenses normally.

PULSON ENERGY

Acid has no special interaction with Pulson Energy; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

RADIATION

Acid has no special interaction with Radiation; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general, and denaturing).

SONIC

Acid conducts sound as well as water does, making Sonic powers more effective. An Acid defense is at -3 ED before being applied to reduce a Sonic attack. Acid attacks and Sonic defenses interact normally.

TELEKINETIC

Acid has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect (except perhaps as noted above regarding its interaction with energy in general).

TIME

Acid has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Acid has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

As discussed above, water neutralizes Acid; immersion in water quickly stops an Acid attack from harming its victim. In terms of comparing an Acid attack to a Water defense, reduce the Acid attack's damage by 25% before applying defenses. Similarly, Water attacks are at +1 DC against Acid defenses.

The typical laboratory safety rule when mixing water and acid is to add acid to water, never the other way around. At the GM's option, an Acid attack against a Water defense may generate a lot of heat (which has potential effects described in the *Fire/Heat* section of this chapter); a Water attack against an Acid defense may cause a lot of splattering and boiling.

CONCLUSION: THE SPECIAL EFFECT: ACID POWER MODIFIER

Overall, Acid has more drawbacks than it has benefits. Therefore, *Special Effect: Acid* constitutes a -½ Limitation.

EXAMPLE ACID POWERS

Here are some example Acid powers:

Offensive Powers**ACID CLOUD**

Effect: RKA 1d6, Penetrating
Target: One Hex
Duration: Uncontrolled
Range: 260"
END Cost: 5

Description: The character can create a cloud of acidic vapors. He might breathe them from his mouth, shoot them from his hands, or exude them from his body. The cloud's damage functions as normal acid damage.

Game Information: RKA 1d6, Area Of Effect (One Hex; +½), Continuous (+1), Penetrating (+½), Uncontrolled (see text; +½) (52 Active Points); *Special Effect: Acid* (-½). Total cost: 35 points.

ACID PROJECTION

Effect: RKA 1d6, Penetrating
Target: One character
Duration: Uncontrolled
Range: 8"
END Cost: 4

Description: The character has the ability to project acid from his body, typically by spitting or squirting it. In most cases, this means the acid has a limited range, though some large creatures and other characters may not suffer from this restriction.

Game Information: RKA 1d6, Continuous (+1), Penetrating (+½), Uncontrolled (see text; +½) (45 Active Points); Limited Range (8"; -¼), *Special Effect: Acid* (-½). Total cost: 26 points.

ACID SHEEN

Effect: RKA ½d6, Penetrating, Damage Shield, Trigger
Target: Self
Duration: Constant, Uncontrolled
Range: Touch
END Cost: 5

Description: The character’s body can exude a thin film of acid, making it dangerous to touch him — and causing him to damage objects he touches or wears, unless they’re resistant to acid.

This power has two effects. The first is the Damage Shield; that allows the character to cause damage when he touches or is touched by another person. The second is a typical acid attack; this reflects how the acid keeps damaging someone after they break contact with the character’s acidid sheen.

Game Information: RKA ½d6, Continuous (+1), Damage Shield (+½), Penetrating (+½) (30 Active Points); Special Effect: Acid (-½) (total cost: 20 points) **plus** RKA ½d6, Continuous (+1), Penetrating (+½), Uncontrolled (see text; +½), Trigger (when Damage Shield activates, Trigger immediately automatically resets; +¾) (37 Active Points); No Range (-½), Linked (victim must first take damage from Damage Shield; -¼), Special Effect: Acid (-½) (total cost: 16 points). Total cost: 36 points.

Defensive Powers

ACID SHIELD

Effect: Force Field (15 PD/5 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 2

Description: The character can place a small “wall” of acid in front of himself to destroy some incoming attacks before they even hit.

Game Information: Force Field (15 PD/5 ED) (20 Active Points); Limited Arc Of Protection (60 degrees in front; -1), Special Effect: Acid (-½). Total cost: 8 points.

Movement Powers

ACID TUNNELING

Effect: Tunneling 6” through 11 DEF material
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character applies his acid to the ground — be it earth, stone, ore, or some other substance — to create a tunnel he can move through. The tunnel remains open behind him, so his friends (or enemies) can follow.

Game Information: Tunneling 6” through 11 DEF material. Total cost: 45 points.

AIR/WIND



As one of the four classical elements Air (or Wind) is a popular choice as a special effect for energy projectors, and like the other “elemental” energies it offers a great deal of flexibility and power. Most Air/Wind abilities involve either

- controlling and projecting masses of air and wind in different configurations (straightforward blasts, tornado-like cones, and so on) to attack one’s enemies, propel the character through the air, and so on; or

- removing the air from an area for various purposes (see *Suffocation As An Attack*, below, for example; see also pages 281–83 of *Star Hero* for expanded information about and rules for vacuum)

IMPLICATIONS AND SECONDARY EFFECTS

Since wind results from changes in air pressure in the atmosphere, a character may manipulate pressure as a direct or indirect result of his Air/Wind powers, which could lead to ideas for other powers more closely related to “pressure manipulation.” On the other hand, anything that changes the local pressure significantly (the way, say, other Air/Wind powers, a sudden, radical change in temperature, or Gravity powers, might) could enhance or interfere with a character’s Air/Wind powers; the GM should determine the exact results.

Air/Wind powers often also include related phenomena like weather and temperature control, though these may be categories of their own in some settings (and some weather phenomena, such as lightning, fall under different special effects categories; “Weather” tends to be a broad origination special effect).

Some Air/Wind characters can create or generate their own air to work with, but most are conceived of as manipulating the existing air all around them. In that case, their powers may be entitled to a $-\frac{1}{4}$ *Does Not Work In The Absence Of Air* Limitation, which prevents them from functioning in space or underwater. (If the character frequently enters such environments, increase the Limitation to at least $-\frac{1}{2}$).

In areas with a lot of particulate matter, Air/Wind powers may “kick up a cloud of dust” when used, making it harder to see (in game terms, think of this as a Change Environment that imposes a -1 on Sight PER Rolls). The GM determines the size of the cloud based on the type of particulate matter involved and the strength of the power(s) in question; typically a 1” radius around the character for every full 20 Active Points in the power(s) being used works well.

Air/Wind Underwater

Depending on the exact special effect of an Air/Wind power, it may be completely useless underwater. Air/Wind powers that involve manipulating existing air have little or nothing to work with, and so usually have no effect at all. Air/Wind powers that involve creating air lose most of their effectiveness because they create bubbles that harmlessly dissipate and float to the surface — at most, they have half effect. The bubbles may blind people in the water, similar to the dust clouds described above.

SUFFOCATION AS AN ATTACK

Air/Wind-controlling characters can often take air away from someone as a form of attack, either to make the victim pass out or to kill him. (Similarly, Water-using characters can drown their foes, Force-manipulating characters can choke off their breathing, and so on; these rules apply to those abilities as well.)

In game terms, here’s how suffocation and drowning work according to the rules on page 424 of *The HERO System 5th Edition, Revised* rulebook:

1. A character who can’t breathe spends a minimum of 1 END per Phase. When the END runs out, he expends STUN as END. When the STUN runs out, he expends BODY, eventually dying.
2. A character can voluntarily lower his SPD to 2 to reduce the END/STUN/BODY loss. However, the minimum SPD for drowning/suffocation purposes is 2; even a SPD 1 character drowns at SPD 2 (2 END/STUN/BODY per Turn, in other words).
3. A character who can’t breathe cannot make Recoveries, including the Post-Segment 12 Recovery.

Simple Suffocation

If you’re not worried too much about “realism” and precisely modeling the drowning/suffocation rules, you can easily create a drowning/suffocation attack as a Continuous NND Energy Blast or RKA (the defense in either case being Life Support (Self-Contained Breathing)). See the *Example Air/Wind Powers* section, below, or the USPD for examples.

Complex Suffocation

For an attack that works like the drowning/suffocation rules do, you have to use Drain with a few special modifiers. First, the Drain has to affect one of three different Characteristics, one at a time (a common $+\frac{1}{4}$ Advantage). Second, the Drain has to switch between those Characteristics when specific things happen, without the need for any control from the character who started the attack. That sounds like it should require an Advantage similar to Trigger, but not a significant one — a $+\frac{1}{4}$.

AIR/WIND BASICS

Defense: Typically ED, but some Air/Wind attacks may be regarded as having Physical impact or effects instead.

Knockback: Yes

Third, the Drain has to remain in effect for long periods of time, and has to affect the victim on *the victim's* Phases, not the attacker's as usual. Since the victim is just as likely to be slower as his attacker than faster, and can voluntarily lower his SPD to reduce the attack's effectiveness, that's a +0 Advantage. (The GM can adjust the value if he sees fit.)

Fourth, the damage accrues at a specific rate — no slower, no faster. That's less effective than most attacks; it sounds vaguely like the *Gradual Effect* Limitation. So the power has a tailored form of that as a Limitation, and another Limitation so the effect remains the same (-1 point of each Characteristic) despite the fact that they all have different per-point costs.

Here's the basic attack:

Drain END, STUN, or BODY 8d6 (standard Effect: up to 24 points of effect), one Characteristic at a time (+¼), Continuous (+1), Affects Victim On Victim's Phases Not Attacker's (with a minimum SPD of 2 for these purposes; +0), Ranged (+½), Reduced Endurance (0 END; +½) (260 Active Points); Gradual Effect (victim loses 1 point of designated Characteristic per each of his Phases; -¼), Set Effect (victim only loses 1 point from each Characteristic, in the order specified in the text, regardless of per-point cost; -½). Total cost: 149 points.

In addition to that, the power has to cancel out the target's ability to take Recoveries. There's no precise mechanism in the game for stopping Recoveries in general, or Post-Segment 12 Recoveries specifically. But you can accomplish that goal by reducing the target's REC to zero:

Drain REC 8d6, Continuous (+1), Ranged (+½), Reduced Endurance (0 END; +½) (240 Active Points); Linked (-½). Total cost: 160 points.

This attack might not suffice to reduce all characters' REC to 0, at least not in one attack, but by GM's fiat the Absolute Effect Rule can apply (see *Fantasy Hero*, pages 250-51) to always reduce the a target to 0 REC.

The final result is a 309-point power, which is pretty expensive for nearly all campaigns. The GM can reduce the cost if he thinks that's appropriate.

AIR/WIND AND OTHER SPECIAL EFFECTS

Here's how Air/Wind interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Air/Wind defenses tend to blow away or disperse the brunt of Acid attacks, reducing their effectiveness — they suffer a -2 DC reduction in damage before the defense is applied. Similarly, an Acid defense poses less of an obstacle to an Air/Wind attack; reduce the Acid's ED by 1 point before applying the damage.

BIOLOGICAL

Air/Wind has no special interaction with Biological powers; it neither gains nor loses against this special effect generally. However, in the case of Biological powers that involve projecting spores, viruses, or the like through the air, an Air/Wind defense may gain significant bonuses (+3 defense or more) or, in the GM's discretion, constitute an absolute defense against the attack.

CHAOS/ENTROPY

Air/Wind has no special interaction with Chaos/Entropy powers; it neither gains nor loses against this special effect.

CHEMICAL

Air/Wind attacks interact with Chemical defenses normally. On the other hand, Air/Wind defenses are often particularly effective against Chemical attacks. They have ordinary effect against Chemical attacks introduced by touch (such as a venomous sting or a poisoned knife-blade), but against airborne Chemical attacks (like many gases, mists, and pheromone powers) they usually gain significant bonuses (+3 defense or more). In the GM's discretion, an Air/Wind defense may provide absolute protection against airborne Chemical attacks.

COSMIC ENERGY

Air/Wind has no special interaction with Cosmic Energy powers; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Air/Wind has no special interaction with most Darkness powers; in general it neither gains nor loses against this special effect. However, if a Darkness defense is defined as a form of smoke or mist, an Air/Wind attack tends to be more effective than normal against it (+2 Damage Classes or more).

DIMENSIONAL MANIPULATION

Air/Wind has no special interaction with Dimensional Manipulation powers; it neither gains nor loses against this special effect.

EARTH/STONE

Even the most powerful and violent Air/Wind attacks seem somewhat ephemeral against the durability and solidity of Earth and Stone. Subtract -2 Damage Classes from them before the defense is applied. Earth/Stone attacks usually penetrate Air/Wind defenses a little more effectively, since even the toughest force-field of Air has difficulty resisting the ponderousness of stone; reduce the Air/Wind defense by -1 point of PD before applying the defense to the damage. However, in the case of Earth/Stone attacks involving sand, dust, tiny chips of stone, or other small, relatively lightweight objects, Air/Wind defenses are actually *more* effective than normal; add +2 PD before applying them to the damage.

ELECTRICITY

Air/Wind has no special interaction with Electricity powers; it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Air/Wind defenses are a little better against Electromagnetic Energy than most forms of protection again; increase them by +2 before applying them to reduce Electromagnetic Energy damage. Air/Wind attacks and Radiation defenses interact normally.

ENERGY MANIPULATION

Air/Wind has no special interaction with Energy Manipulation powers; it neither gains nor loses against this special effect.

FIRE/HEAT

Air/Wind has an unusual relationship with Fire/Heat. On the one hand, a fast-blowing wind can easily put out a flame, as anyone who's ever blown out a candle knows. However, depending on the relative strength of the wind and the fire, as well as other environmental factors, Air/Wind can actually spread or stoke a fire, making it burn hotter or over a larger area (hence the use of a bellows in a smithy). The GM should keep this in mind when adjudicating how the two special effects interact on a broad scale. (See *Villainy Amok* for rules about how fires spread and burn.)

In terms of energy projectors' powers, which tend to involve intense uses of energy over a tightly-confined area, an Air/Wind attack tends to be effective against a Fire/Heat defense; add +1 DC before applying the defense. Fire/Heat attacks interact normally with Air/Wind defenses.

FORCE MANIPULATION

Air/Wind has no special interaction with Force powers; it neither gains nor loses against this special effect.

GRAVITY

Air/Wind has no special interaction with Gravity powers; it neither gains nor loses against this special effect. (But see page 51 regarding how Gravity-induced changes of pressure might affect Air/Wind powers.)

HOLY/UNHOLY

Air/Wind has no special interaction with Holy and Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Generally speaking, Air/Wind has no special interaction with Ice/Cold powers; it neither gains nor loses against this special effect. However, some Ice attacks involve large chunks of ice projected or hurled at the target in some fashion; you can adjudicate these using the rules for Air/Wind-Physical interaction (or in the case of large amounts of tiny ice crystals or shards, refer to Earth/Stone, above, for information).

KINETIC ENERGY

Air/Wind has no special interaction with Kinetic Energy powers; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Air/Wind has no special interaction with Life Force Energy powers; it neither gains nor loses against this special effect.

LIGHT

Air/Wind has no special interaction with Light powers; it neither gains nor loses against this special effect.

MAGIC

Air/Wind has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Air/Wind has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Air/Wind has no special interaction with Matter Manipulation powers; it neither gains nor loses against this special effect.

MENTAL/PSIONIC

Air/Wind has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Air/Wind attacks typically interact with Physical defenses normally. The interaction of Air/Wind defenses and Physical attacks depends on the nature of the Physical attack — specifically, how fast it moves, how heavy it is, and how aerodynamic it is. The modifiers for these two factors are cumulative; thus, an Average object that takes 13 points of "STR" less than what the defense has gives the defense +3 PD.

Speed Of The Physical Object

Against Slow-moving Physical attacks (which includes most thrown or hurled objects, dropped

objects, and the like), an Air/Wind defense gets +3 PD of effect before it applies to the damage. In effect the defense blows the missile off-course, reducing the likelihood it inflicts a serious hit on the target.

Against an Average speed Physical attack (which includes most physically-launched objects, such as arrows, crossbow bolts, and sling-stones), an Air/Wind defense gets +1 PD of effect before it applies to the damage.

Against Fast Physical attacks (which includes most bullets, rockets, and the like), an Air/Wind defense gets no bonus; the two interact normally.

(At the GM's option, any of these PD bonuses can instead become a negative modifier to the attacker's OCV, representing how easily the defense blows the attack off-course. Thus, an attack with a Slow missile against an Air/Wind defense would be at -3 OCV, rather than giving the defense +3 PD.)

Weight Of The Physical Object

To determine the effect of a Physical attack's weight, convert the Active Points of the Air/Wind defense into STR and compare it to the amount of STR needed to lift the object. For every full 5 points of STR above what's needed to lift the object, the Air/Wind defense gets +1 PD before it applies to reduce damage; for every 5 full points of STR below what's needed to lift the object, the defense suffers a -1 PD before it applies to damage.

(Again, you can convert these modifiers into OCV modifiers if preferred.)

Aerodynamicity

An aerodynamic Physical object (such as most missile weapons) may have an easier time penetrating an Air/Wind defense, giving it +1 (or more) points of damage before the Air/Wind defense is applied.

PULSON ENERGY

Air/Wind has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Air/Wind has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Air/Wind has no special interaction with Sonic powers; it neither gains nor loses against this special effect.

TELEKINETIC

Air/Wind has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Air/Wind has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Air/Wind has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Air/Wind has no special interaction with Water; it neither gains nor loses against this special effect.

**CONCLUSION: THE SPECIAL EFFECT:
AIR/WIND POWER MODIFIER**

Overall, Air/Wind has more benefits than drawbacks. Therefore, *Special Effect: Air/Wind* constitutes a +15 point Adder. In games involving a lot of underwater adventuring, the GM may wish to reduce this to +10 (or less) due to the problems Air/Wind suffers in that environment.

**EXAMPLE AIR/
WIND POWERS**

Here are some example Air/Wind powers. Most of these assume the character can generate his own air and so don't include the *Does Not Work In The Absence Of Air* (-¼) Limitation.

Offensive Powers

AIR BLAST

Effect: Energy Blast 7d6, Double Knockback
Target: One character
Duration: Instant
Range: 395"
END Cost: 8

Description: The character can project air from his body, typically by blowing it, shooting it from his hands, or by pushing the surrounding air. If the character has no access to any air, he cannot use this power.

Game Information: *Energy Blast 7d6, Special Effect: Air/Wind, Double Knockback (+¼) (87 Active Points); Does Not Work In The Absence Of Air (-¼). Total cost: 70 points.*

SUFFOCATION

Effect: Energy Blast 4d6, NND
Target: One character
Duration: Constant
Range: 300"
END Cost: 6

Description: Most characters need air to breathe. Some air-controlling characters can "cut off" a target's supply of oxygen, removing the air from the target's lungs and preventing him from obtaining any more. This quickly causes the victim to pass out.

Game Information: *Energy Blast 4d6, No Normal Defense (defense is Life Support [Self-Contained Breathing]; +1), Continuous (+1). Total cost: 60 points.*

WIND CONTROL

Effect: Telekinesis (30 STR)
Target: One character
Duration: Constant
Range: 225"



END Cost: 4

Description: The character exerts control over winds and air, using them to pick up and move objects, or even squeeze or “punch” them, without having to touch them.

Game Information: *Telekinesis (30 STR). Total cost: 45 points.*

Description: Characters with Air powers are some of the fastest, most maneuverable flyers known. No need for wings, jetpacks, or other props — this is flight in its purest form.

Game Information: *Flight 20”. Total cost: 40 points.*

Defensive Powers

AIR SHIELD

Effect: Force Field (20 PD/20 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 5

Description: The character protects himself with swirling, compacted currents of air that block and deflect incoming attacks.

Game Information: *Force Field (20 PD/20 ED), Special Effect: Air/Wind. Total cost: 55 points.*

Movement Powers

TRUE FLIGHT

Effect: Flight 20”
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Miscellaneous Powers

AIR BUBBLE

Effect: Life Support (Self-Contained Breathing)
Target: 3” radius around self
Duration: Constant
Range: Self (see text)
END Cost: 2

Description: This power lets the character create a self-replenishing bubble of breathable air so he and his comrades can enter areas without oxygen (underwater, caverns filled with poisonous gas, outer space, or the like). Anyone who wants to take advantage of the bubble must remain within 3” of the character.

Ordinarily, characters shouldn’t apply Area Of Effect to a power like Life Support; instead, they should apply Usable By Others if they want to affect multiple people. In this case, however, Area Of Effect is the best way to create the desired effect and shouldn’t pose significant game balance problems.

Game Information: *Life Support (Self-Contained Breathing), Area Of Effect (3” Radius; +1½) (25 Active Points); Costs Endurance (-½). Total cost: 17 points.*

BIOLOGICAL POWERS



BIOLOGICAL BASICS

Defense: PD

Knockback: No

Biological powers are abilities that somehow involve or manipulate the character's body or other biological phenomena (such as disease). This can include "biokinetic" powers that boost the character's physical capabilities or performance (or, more rarely, those of other people), various forms of defense involving toughened skin, "fleshwarping" powers that let a character literally mold flesh and bone, disease infliction and control, and the like. For purposes of the special effects interaction discussion in this chapter, it also tends to include abilities involving control over the density, size, or shape of one's body, though those powers have their own distinct categories in the USPDs. Generally it does not include natural weaponry (such as claws, fangs, and tentacles), which fall into the Physical category.

See pages 127-29 of *The HERO System Equipment Guide* for information on biological weapons in game terms.

BIOLOGICAL UNDERWATER

Biological powers that involve projecting spores, viruses, or the like through the air work poorly, if at all, underwater — at most they have 25% effectiveness. This is accounted for by the *Special Effect: Biological Limitation*.

BIOLOGICAL POWERS AND OTHER SPECIAL EFFECTS

Here's how Biological powers interact with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

In the case of Biological powers that involve projecting spores, viruses, or the like through the air, an energy-based defense may be unusually effective because it "burns" or quickly destroys the tiny physical objects. (In the GM's judgment this might qualify the Biological power for some form of the *Physical Manifestation Limitation*.) Depending on how intense the energy defense is, it may get +1 to +3 defense against such attacks. Similarly, a power that can affect physical objects may be more effective than normal against that type of Biological attack.

An airtight defense — in game terms, one built with Life Support (Self-Contained Breathing) — may totally prevent airborne Biological attacks from affecting the character. (Typically the way the power's built will make this plain, either because it's an NND with that defense or takes an appropriate Limitation, but even if that's not the case the GM can rule that this occurs.)

ACID

Biological defenses don't resist Acid well; Acid attacks do +2 DCs of damage against them before the defense is applied. (Alternately, the GM could treat Acid attacks as reducing Biological defenses by 1 point of effect against all attacks for each Acid attack they suffer in a given combat, but that may quickly make Acid far too effective against some targets.) Acid defenses also tend to work well against Biological attacks, since Acid interferes with many biological processes and functions; give them +2 defense before applying them to reduce the damage caused by a Biological attack.

AIR/WIND

Air/Wind has no special interaction with Biological powers; it neither gains nor loses against this special effect generally. However, in the case of Biological powers that involve projecting spores, viruses, or the like through the air, an Air/Wind defense may gain significant bonuses (+3 defense or more) or, in the GM's discretion, constitute an absolute defense against the attack.

CHAOS/ENTROPY

The bonds of the flesh do not well withstand the forces of primal Chaos. Biological defenses suffer a -2 point reduction before being applied to Chaos/Entropy attacks. Similarly, Biological attacks have difficulty penetrating Chaos defenses; they're at -1 DC before being applied to defenses.

Alternately, Chaos/Entropy may have a mutative effect on a Biological power when the two come into contact. The GM can use the Chaos-Dimensional Manipulation Interaction table on page 59 to determine the results (just substitute "Biological" for "Dimensional Manipulation"), or determine the results some other way.

CHEMICAL

Generally, Biological has no special interaction with Chemical powers; it neither gains nor loses against this special effect. However, Biological powers such as certain disease-causing powers are similar to many Chemical powers, and depending on the exact nature of the Biological and Chemical powers involved, the two may cancel each other out, enhance one another, or cause unintended "side effects." For example, a Chemical gas cloud with medicinal properties might kill off a cloud of Biological-produced viri.

COSMIC ENERGY

Biological has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect (except as discussed above for

energy powers generally). However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Biological has no special interaction with Darkness; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

DIMENSIONAL MANIPULATION

Biological attacks tend to have trouble getting through Dimensional Manipulation defenses, which by their very nature interfere with physical reality on some level. Subtract 1 DC from the Biological attack before applying it to defenses. Similarly, Dimensional Manipulation attacks gain +1 DC versus Biological defenses.

EARTH/STONE

Biological has no special interaction with Earth/Stone; it neither gains nor loses against this special effect.

ELECTRICITY

Biological has no special interaction with Electricity; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

ELECTROMAGNETIC ENERGY

Biological attacks have no special interaction with Electromagnetic Energy powers except as discussed above for energy powers generally. As discussed under *Electromagnetic Energy*, below, various forms of EM radiation tend to penetrate physical barriers well, so Biological defenses may suffer a reduction of -3 (or more) points before applying to Electromagnetic Energy attacks.

ENERGY MANIPULATION

Biological has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

FIRE/HEAT

Due to their intense heat, Fire defenses are particularly effective against Biological powers that involve projecting spores, viruses, or the like through the air — they gain at least +3 defense, and possibly more. Other types of Biological attacks have no special interaction with Fire/Heat powers. Fire attacks are slightly more effective against Biological defenses than normal; reduce the Biological defenses by -1 point.

FORCE MANIPULATION

Biological has no special interaction with Force Manipulation; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

GRAVITY

Biological has no special interaction with Gravity; it neither gains nor loses against this special effect, except as discussed above for energy powers generally. However, in the case of a Gravity defense, the defense doesn't burn or destroy the physical manifestation of the power so much as it uses gravitic energy to drag it to the ground or hold it at bay. (See *Gravity*, below, for more details.)

HOLY/UNHOLY

Biological has no special interaction with Holy or Unholy energies; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

ICE/COLD

Biological has no special interaction with Ice/Cold powers; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

KINETIC ENERGY

Biological has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally, and for powers that may directly control physical objects).

LIFE FORCE ENERGY

Because Biological attacks typically affect the target's life force on some level, Life Force Energy defenses tend to be good at keeping them out (+1 or more points of defense). Biological defenses have no special interaction with Life Force attacks.

LIGHT

Biological has no special interaction with Light; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

MAGIC

Biological has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Biological has no special interaction with Magnetism; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

MATTER MANIPULATION

In general, Biological has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. But in the case of Biological abilities with a physical manifestation of some sort, Matter Manipulation may be unusually effective; see the *Matter Manipulation* section, below, for information.

MENTAL/PSIONIC

Biological has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

PHYSICAL

Biological has no special interaction with Physical; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). However, an airtight Physical defense (such as a hazmat suit) may keep out Biological powers that involve projecting spores, viruses, or the like through the air; typically the attack itself reflects this with an Advantage like *No Normal Defense*, but the GM may reduce the effectiveness of such attacks (or negate them entirely) even if that's not the case.

PULSON ENERGY

Biological has no special interaction with Pulson Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

RADIATION

Biological has no special interaction with Radiation; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

SONIC

Biological has no special interaction with Sonics; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

TELEKINETIC

Biological has no special interaction with Telekinetic; it neither gains nor loses against this special effect (except as discussed above for energy powers generally, and for powers that may directly control physical objects).

TIME

Biological has no special interaction with Time powers; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

VIBRATION

Biological has no special interaction with Vibration; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

WATER

Biological has no special interaction with Water; it neither gains nor loses against this special effect.

CONCLUSION: THE SPECIAL EFFECT: BIOLOGICAL POWER MODIFIER

Overall, Biological has more drawbacks than it has benefits. Therefore, *Special Effect: Biological* constitutes a -¾ Limitation. The GM may increase this to -1 for certain attacks in settings involving a lot of underwater adventuring.

EXAMPLE BIOLOGICAL POWERS

Here are some example Biological powers:

Offensive Powers

CONTAGION

Effect: Drain CON 2d6, NND plus RKA 1d6, NND
Target: One character
Duration: Instant (5 minutes onset time)
Range: Touch
END Cost: 10

Description: The character can, by touching another person, inflict a debilitating and possibly fatal disease upon him.

Game Information: Drain CON 2d6, Delayed Return Rate (points return at the rate of 5 per Hour; +1), NND (defense is appropriate LS [Immunity]; +1) (60 Active Points); Extra Time (onset time begins 5 Minutes after victim is touched; -2), Special Effect: Biological (-¾) (total cost: 16 points) plus RKA 1d6, NND (defense is appropriate LS [Immunity]; +1), Does BODY (+1) (45 Active Points); No Range (-½), Extra Time (onset time begins 5 Minutes after victim is touched; -2), Linked (-½), Special Effect: Biological (-¾) (total cost: 9 points). Total cost: 25 points.

FLESHWARPING

Effect: Drain STR, DEX, CON, and COM 3d6
Target: One character
Duration: Instant
Range: Touch
END Cost: 6

Description: With his merest touch, the character can warp and shape the flesh of another living creature, causing it to melt, meld, and reshape. The victim becomes not only hideous to look at, but weaker and less able to control and use his mis-shapen body.

Game Information: Drain STR, DEX, CON, and COM 3d6, any four Characteristics simultaneously (+1) (60 Active Points); Special Effect: Biological (-¾). Total cost: 34 points.

Defensive Powers

HARDENED FLESH

Effect: Damage Resistance (8 PD/8 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 0

Description: The character can toughen his skin and flesh so that he can resist attacks involving blades, bullets, and the like

Game Information: Damage Resistance (8 PD/8 ED) (8 Active Points); Costs Endurance (-½), Special Effect: Biological (-¾). Total cost: 3 points.

CHAOS/ENTROPY



Chaos/Entropy powers provide a character with control over the essential forces of decay, disintegration, and disorder. In many cases they have Magic as an origination special effect, but they can result from mutant powers, “radiation accidents,” and other sources appropriate to the genre and setting.

Chaos/Entropy can have the unusual characteristic of being somewhat unpredictable. Since it embodies chaos, change, and similar phenomena in addition to death and decay, in some campaign settings it’s not an entirely reliable special effect. The unpredictability makes it dangerous; Chaos/Entropy powers often involve Required Skill Rolls (even Luck rolls), Side Effects, and similar Limitations.

Typically Chaos/Entropy abilities involve changing, warping, or “unmaking” (reducing to its component parts) things to achieve a specific effect. They tend to be more effective than normal against physical powers, since they can cause them to unravel or erode — after all, it’s a fundamental physical law that everything decays. In many cases you can represent this with Advantages like NND Does BODY, but you can also (or instead) use the rules in this section. Against energy powers they’re of ordinary effectiveness. On the other hand, Chaos/Entropy powers may also be dangerous and unpredictable, as discussed above.

CHAOS/ENTROPY AND OTHER SPECIAL EFFECTS

Here’s how Chaos/Entropy interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid has no special interaction with Chaos/Entropy; it neither gains nor loses against this special effect.

AIR/WIND

Air/Wind has no special interaction with Chaos/Entropy powers; it neither gains nor loses against this special effect.

BIOLOGICAL

The bonds of the flesh do not well withstand the forces of primal Chaos. Biological defenses suffer a -2 point reduction before being applied to Chaos/Entropy attacks. Similarly, Biological attacks have difficulty penetrating Chaos defenses; they’re at -1 DC before being applied to defenses.

Alternately, Chaos/Entropy may have a mutative effect on a Biological power when the two come into contact. The GM can use the Chaos-Dimensional Manipulation Interaction table on page 59 to determine the results (just substitute “Biological” for “Dimensional Manipulation”), or determine the results some other way.

CHEMICAL

Chemical powers fare only a little better against Chaos/Entropy than Biological powers do. Chemical attacks are a -1 DC before you apply them to Chaos/Entropy defenses, and Chemical defenses are reduced by 1 point before applying them to Chaos/Entropy damage.

COSMIC ENERGY

Chaos/Entropy has no special interaction with Cosmic Energy powers; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Chaos/Entropy has no special interaction with Darkness; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Chaos/Entropy and Dimensional Manipulation interact in strange and dangerous ways. The mix of primal Chaos energy with the dimension-warping and altering powers of Dimensional Manipulation creates the height of unpredictability. When the two powers come together (either because a Chaos attack hits a Dimensional defense, or a Dimensional Manipulation attack strikes a Chaos/Entropy defense), the GM should roll on the accompanying table. The GM can add in other effects or results as desired.

CHAOS/ENTROPY BASICS

Defense: ED

Knockback: Yes

CHAOS-DIMENSIONAL MANIPULATION INTERACTION

Roll (2d6) Effect

2	Chaos attack loses -1d6-1 DCs; Chaos defense loses -1d6-1 points
3-5	Chaos attack loses -½d6-1 DCs; Chaos defense loses -½d6-1 points
6-8	No effect; both powers function as normal
9-11	Dimensional attack loses -½d6-1 DCs; Dimensional defense loses -½d6-1 points
12	Dimensional attack loses -1d6-1 DCs; Dimensional defense loses -1d6-1 points

For any roll, the minimum effect is 0.



EARTH/STONE

Earth/Stone tends to be one of the most stable and durable special effects (particularly when Magic is involved and powers can have symbolic as well as literal meaning). As such it resists the unpredictability and change of Chaos/Entropy better than most powers. A Chaos/Entropy attack suffers -1 DC before being applied to an Earth/Stone defense; a Chaos/Entropy defense is at -1 point before being applied to an Earth/Stone attack.

ELECTRICITY

Chaos/Entropy has no special interaction with Electricity; it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Chaos/Entropy has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Chaos/Entropy has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Chaos/Entropy has no special interaction with Fire/Heat; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Chaos/Entropy has no special interaction with Force; it neither gains nor loses against this special effect.

GRAVITY

Chaos/Entropy has no special interaction with Gravity; it neither gains nor loses against this special effect.

HOLY/UNHOLY

In most settings, Chaos/Entropy has no special interaction with Holy or Unholy powers; it neither gains nor loses against this special effect. However, in Fantasy settings and other games where Magic is an important force, Chaos/Entropy may be regarded as a part of, aspect of, or “ally” of, Unholy powers (and thus an “enemy” of Holy), which may lead to one special effect or the other gaining or losing effectiveness in some respects.

ICE/COLD

If an Ice/Cold defense involves some physical object (ice armor, an ice shield/wall, or the like), that defense is at -1 point before being applied to a Chaos/Entropy attack. Non-physical Ice/Cold defenses interact with Chaos/Entropy normally; Ice/Cold attacks interact with Chaos/Entropy defenses normally.

KINETIC ENERGY

Chaos/Entropy has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

The powers of Life Force aren't as effective against the death, decay, and corruption of Chaos/Entropy. A Life Force defense is at -1 point before being applied to a Chaos/Entropy attack, whereas Chaos/Entropy defenses gain +1 point versus Life Force attacks.

LIGHT

Chaos/Entropy has no special interaction with Light; it neither gains nor loses against this special effect.

MAGIC

The unpredictability of Chaos and the reality-altering power of Magic are a potentially even more dangerous mixture than those of Chaos and Dimensional Manipulation. Roll on the same table used for Dimensional Manipulation, but don't subtract -1 from any of the dice rolls.

MAGNETISM

Chaos/Entropy has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

In some respects you might consider Chaos/Entropy powers as a subset of Matter Manipulation powers, which can affect matter in many ways other than destroying it. But in certain ways Chaos/Entropy is more powerful than its "larger cousin." Matter Manipulation defenses involve altering or enhancing the physical properties of objects (such as flesh or the skin), or even creating physical barriers... and such things do not withstand Chaos well. Add +1 DC to a Chaos/Entropy attack before applying a Matter Manipulation defense to it. Matter Manipulation attacks that involve transmutation or alteration of matter generally interact with Chaos/Entropy defenses normally, while attacks that involve actual physical objects (such as a "matter lance" or animated piece of furniture) are less effective — the Chaos/Entropy defense gains +1 point before being applied to reduce the damage.

MENTAL/PSIONIC

Chaos/Entropy has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect. However, in some settings, psionically "touching" Chaos/Entropy energy may pose risks for the mentalist, such as temporarily becoming insane.

PHYSICAL

Physical objects and abilities fare poorly when they contact Chaos/Entropy. Chaos/Entropy attacks gain +1 DC against Physical defenses; Physical attacks are at -1 DC before being applied to Chaos/Entropy defenses.

PULSON ENERGY

Chaos/Entropy has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Chaos/Entropy has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Chaos/Entropy has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Chaos/Entropy has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

It's said that in the long term, Chaos/Entropy wins out over everything; all things decay and dissolve. But Time defenses tend to involve *very* long periods of time, or manipulation of time in ways that thwart Chaos. Chaos/Entropy attacks are at -1 DC before being applied to Time defenses. Time attacks affect Chaos/Entropy defenses normally.

VIBRATION

Chaos/Entropy has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Chaos/Entropy has no special interaction with Water. While it's true that Water is physical, and thus would normally suffer in comparison to Chaos/Entropy, Water's constantly flowing, shifting, and changing nature counteracts that effect.

**CONCLUSION: THE SPECIAL EFFECT:
CHAOS/ENTROPY POWER MODIFIER**

Overall, Chaos/Entropy has more benefits than it has drawbacks. Therefore, Special Effect: Chaos/Entropy constitutes a +15 Character Point Adder.

EXAMPLE CHAOS/
ENTROPY POWERS

Here are some example Chaos/Entropy powers:

Offensive Powers

CHAOTIC BLAST

Effect: Energy Blast 9d6
Target: One character
Duration: Instant
Range: 300"
END Cost: 6

Description: The character summons the force of chaos to damage a target.

Game Information: Energy Blast 9d6, Special Effect: Chaos/Entropy (60 Active Points); No Knockback (-¼). Total cost: 48 points.

CHAOTIC DESTRUCTION

Effect: RKA 3d6
Target: One character
Duration: Instant
Range: 300"
END Cost: 6

Description: The character imbues the target with the essence of Chaos, causing it to disincorporate, rip apart, tear asunder, or the like.

Game Information: RKA 3d6, Special Effect: Chaos/Entropy (60 Active Points); No Knockback (-¼). Total cost: 48 points.

OBJECT RUINATION

Effect: Dispel Device/Object Powers 16d6
Target: One device/object
Duration: Instant
Range: 360"
END Cost: 7

Description: The character can warp and mold physical objects to break them, ruin their properties and powers, and so forth.

Game Information: Dispel Device/Object Powers 16d6, Special Effect: Chaos/Entropy, any one Device/Object power one at a time (+¼). Total cost: 79 points.

Defensive Powers

SHIELD OF ENTROPY

Effect: Force Field (12 PD/12 ED/12 Mental Defense/8 Sight Group Flash Defense/8 Power Defense)
Target: Self
Duration: Constant
Range: Self
END Cost: 6

Description: The character surrounds himself with an entropy-generating field, causing any incoming attacks to quickly deteriorate and have reduced effect.

Game Information: Force Field (12 PD/12 ED/12 Mental Defense/8 Sight Group Flash Defense/8 Power Defense), Special Effect: Chaos/Entropy. Total cost: 67 points.

Movement Powers

POINTS OF ENTROPY

Effect: Find Weakness 11-
Target: One character
Duration: Persistent
Range: Self
END Cost: 0

Description: The character's sense of entropy reveals points of weakness in a target's defenses.

Game Information: Find Weakness 11- with all Chaos/Entropy attacks. Total cost: 20 points.

Miscellaneous Powers

FORTUNE OF CHAOS

Effect: Luck 8d6
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The principles of chance and chaos seem to always work in the character's favor.

Game Information: Luck 8d6. Total cost: 40 points.

CHEMICAL POWERS



For purposes of *The Ultimate Energy Projector*, Chemical powers are abilities involving the use or manipulation of some Chemical substance that don't fit into some other category. In most campaigns this typically means drugs, poisons, gases and the like. Corrosive and caustic chemicals are covered under Acid; powers involving combustion reactions are generally listed under Fire/Heat or the like, and so on. Matter Manipulation powers that allow a character to transmute chemicals or alter their properties could also be considered a part of this category, and Biological and Chemical may also share some abilities.

But even allowing for those restrictions, the field of Chemical powers is vast. The proper types of drugs, poisons, and other chemicals (or combinations thereof) can kill, alter someone's mental state, weaken the physical form in various ways, inhibit biological reactions, induce mutations, and so on. Attacks involving pheromones can also be considered Chemical (and/or Biological). Chemical interactions and transmutations could involve all sorts of effects — they can generate Electricity or Fire/Heat, for example. The subject is so broad that the details are beyond the scope of this book. Players interested in learning more can draw on many textbooks and related resources for ideas and inspiration.

In the typical campaign, the most common Chemical powers are poisons and drugs. In *HERO System* terms, lethal poisons are typically built as RKAs, NND Does BODY (the defense being the appropriate Life Support [Immunity]), OAF Fragile, No Range, and Charges. Nonlethal poisons, such as knockout drugs, are usually bought as Drains (often with NND as well); many lethal poisons also have a Linked Drain CON effect (since even if someone survives the poison, it makes him weak and ill). Gradual Effect is a common Limitation for either type, but not necessarily required; so is Extra Time (representing an onset time before the Gradual Effect starts to occur).

See pages 128-30 of *The HERO System Equipment Guide* for information on chemical weapons in game terms, and pages 136-44 of that book or 173-76 of *Fantasy Hero* for *HERO System* rules and write-ups regarding poisons. (You can also use those rules for drugs, which work similarly but have different types of effects.)

Chemical Underwater

As with Acid, it's easiest for the GM to assume that Chemical powers used underwater tend to get neutralized and/or dissipated (unless

they're introduced by touch (such as a venomous sting or a poisoned knife-blade). On the other hand, some chemicals, like sodium and potassium, tend to react strongly to water, which may have unintended side effects. Airborne Chemical attacks (like many gases, mists, and pheromone powers) may not work at all; at best they have 33% effectiveness. This is accounted for by the *Special Effect: Chemical Limitation*.

CHEMICAL POWERS AND OTHER SPECIAL EFFECTS

Here's how Chemical powers interact with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

In the case of Chemical powers that involve projecting liquids, gases, or the like through the air, an energy-based defense may be unusually effective because it "burns" or quickly destroys the tiny physical objects. (In the GM's judgment this might qualify the Chemical power for some form of the *Physical Manifestation* Limitation.) Depending on how intense the energy defense is, it may get +1 to +3 defense against such attacks. Similarly, a power that can affect physical objects may be more effective than normal against that type of Chemical attack.

An airtight defense — in game terms, one built with Life Support (Self-Contained Breathing) — may totally prevent airborne Chemical attacks from affecting the character. (Typically the way the power's built will make this plain, either because it's an NND with that defense or takes an appropriate Limitation, but even if that's not the case the GM can rule that this occurs.)

ACID

Acid is effectively a specialized type of Chemical power, as discussed above. It has no special interaction with Chemical powers; in general it neither gains nor loses against this special effect. However, if a Chemical power involves a base, contact between the Acid and the base may result in the Acid being neutralized, possibly with a resulting exothermic reaction.

AIR/WIND

Air/Wind attacks interact with Chemical defenses normally. On the other hand, Air/Wind defenses are often particularly effective against Chemical attacks. They have ordinary effect against

CHEMICAL BASICS

Defense: ED

Knockback: No

CHEMICAL-ELECTRICITY INTERACTION

Roll (2d6)	Effect
2	Roll 1d6. On a 1-3, Chemical power gains that many DCs of effect (or an equivalent “boost”); on a 4-6, it loses 1-3 DCs of effect.
3-4	Convert Chemical Normal Damage into equivalent DCs of Killing Damage, or Killing Damage to Normal Damage; Drains become Aids, Aids become Drains; and so on.
5-9	No effect
10-11	Unintended side effect — interaction causes a Normal Damage Explosion with DCs based on half the Active Points in the Chemical power; power turns victim's skin blue; or the like.
12	Change Power used for Chemical ability into different Power (usually one that's in the same Power category)

Chemical attacks introduced by touch (such as a venomous sting or a poisoned knife-blade), but against airborne Chemical attacks (like many gases, mists, and pheromone powers) they usually gain significant bonuses (+3 defense or more). In the GM's discretion, an Air/Wind defense may provide absolute protection against airborne Chemical attacks.

BIOLOGICAL

Generally, Biological has no special interaction with Chemical powers; it neither gains nor loses against this special effect. However, Biological powers such as certain disease-causing powers are similar to many Chemical powers, and depending on the exact nature of the Biological and Chemical powers involved, the two may cancel each other out, enhance one another, or cause unintended “side effects.” For example, a Chemical gas cloud with medicinal properties might kill off a cloud of Biological-produced viri.

CHAOS/ENTROPY

Chemical powers fare poorly against Chaos/Entropy powers. Chemical attacks are a -1 DC before you apply them to Chaos/Entropy defenses, and Chemical defenses are reduced by 1 point before applying them to Chaos/Entropy damage.

CHEMICAL

Chemicals often interact strangely with one another, possibly causing dangerous reactions, making an otherwise innocuous (or even beneficial) substance harmful, or causing an overdose. If appropriate, the GM can adapt the Fire/Heat-Chemical Interaction table to determine what happens when two Chemical powers mix.

FIRE/HEAT-CHEMICAL INTERACTION

Roll (2d6)	Effect
2	Fire/Heat enhances Chemical attack, adding +1d6 DCs of damage; Chemical defense gains 1d6 points of effect against Fire/Heat attack
3-5	Normal Damage Explosion results, with DCs equal to half the Active Points in the attack; both attack and defense are then at half effect.
6-8	No effect; both powers function as normal
9-11	Poisonous fumes (RKA NND, Does BODY; defense is Life Support [Self-Contained Breathing or appropriate Immunity]) result, with DCs equal to half the Active Points in the attack, fills an area of 1d6” radius around the hex where the two powers interacted; both attack and defense are then at half effect.
12	Fire/Heat defense totally neutralizes Chemical attack; Chemical defense has no effect against Fire/Heat attack

COSMIC ENERGY

Chemical has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Chemical has no special interaction with Darkness; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

DIMENSIONAL MANIPULATION

Chemical attacks tend to have trouble getting through Dimensional Manipulation defenses, which by their very nature interfere with physical reality on some level. Subtract 1 DC from the Chemical attack before applying it to defenses. Similarly, Dimensional Manipulation attacks gain +1 DC versus Chemical defenses.

EARTH/STONE

Earth/Stone tends to be resistant to Chemical attacks (assuming, of course, that they're not built as NNDs or the like so that they bypass conventional protections) — they get +1 defense before being applied to reduce the Chemical effect. Chemical defenses affect Earth/Stone attacks normally.

ELECTRICITY

Chemical has no special interaction with Electricity; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). However, exposure to strong electrical current may alter chemicals, cause them to combine, or work other changes in them. Since a chemical-by-chemical review of the potential reactions is beyond the scope of this book, the GM can either determine what happens when Chemical meets Electricity based on his own judgment, or roll on the accompanying Chemical-Electricity Interaction table.

ELECTROMAGNETIC ENERGY

Chemical has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). At the GM's option, exposing Chemical powers to intense Electromagnetic Energy may have the same results as for Electricity; use the same table to roll the effects randomly if desired.

ENERGY MANIPULATION

Chemical has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

FIRE/HEAT

Fire (and to a lesser extent any other form of energy that might generate intense heat) can react with Chemical powers in many different ways. It

might simply burn them up, rendering them much less effective than normal... or it could cause an explosion, a raging conflagration, the emission of poisonous fumes, or other potentially disastrous side effects. The GM can either decide what happens on his own, or roll on the accompanying Fire/Heat-Chemical Interaction table to determine the results randomly.

FORCE MANIPULATION

Chemical has no special interaction with Force Manipulation; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

GRAVITY

Chemical has no special interaction with Gravity; it neither gains nor loses against this special effect, except as discussed above for energy powers generally. However, in the case of a Gravity defense, the defense doesn't burn or destroy the physical manifestation of the power so much as it uses gravitic energy to drag it to the ground or hold it at bay. (See *Gravity*, below, for more details.)

HOLY/UNHOLY

Chemical has no special interaction with Holy/Unholy energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

ICE/COLD

In general, Chemical has no special interaction with Ice/Cold powers; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). However, exposure to extreme cold may cause chemical reactions that inhibit (or, less likely, enhance) the power of a Chemical ability. At the GM's option, when the two interact, roll 2d6. On a 2 the Chemical power gains +1 DC (or +1 point of defense); on a 12 it loses -1 DC (or -1 point of defense). For all other results the two interact normally.

KINETIC ENERGY

Chemical has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally, and for powers that may directly control physical objects).

LIFE FORCE ENERGY

Chemical has no special interaction with Life Force Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). Depending on how the GM conceives of Life Force Energy, it might be particularly effective against poisons.

LIGHT

Chemical has no special interaction with Light; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

MAGIC

Chemical has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Chemical has no special interaction with Magnetism; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

MATTER MANIPULATION

Since Chemical powers involve physical substances, Matter Manipulation may be unusually effective against them; see the *Matter Manipulation* section, below, for information.

MENTAL/PSIONIC

Chemical has no special interaction with Mental/Psionic power; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

PHYSICAL

Chemical has no special interaction with Physical; it neither gains nor loses against this special effect. However, an airtight Physical defense (such as a hazmat suit) may keep out Chemical powers that involve projecting gases or the like through the air; typically the attack itself reflects this with an Advantage like *No Normal Defense*, but the GM may reduce the effectiveness of such attacks (or negate them entirely) even if that's not the case.

PULSON ENERGY

Chemical has no special interaction with Pulson Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

RADIATION

Chemical has no special interaction with Radiation; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

SONIC

Chemical has no special interaction with Sonics; it neither gains nor loses against this special effect (except as discussed above for energy powers generally).

TELEKINETIC

Chemical has no special interaction with Telekinetic power; it neither gains nor loses against this special effect (except as discussed above for energy powers generally, and for powers that may directly control physical objects).

TIME

Chemical has no special interaction with Time power; it neither gains nor loses against this special effect.

VIBRATION

Chemical has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Chemical powers tend to be weak when compared to Water powers, since the Water easily washes the Chemicals away (but see above regarding chemicals that react in water). Chemical attacks are at -1 DC against Water defenses, while Water attacks are at +1 DC against Chemical defenses.

CONCLUSION: THE SPECIAL EFFECT: CHEMICAL POWER MODIFIER

Overall, Chemical has more drawbacks than it has benefits. Therefore, *Special Effect: Chemical* constitutes a -¾ Limitation. The GM may increase this to -1 in campaigns involving a lot of underwater adventuring.

EXAMPLE CHEMICAL POWERS

Here are some example Chemical powers:

Offensive Powers

PHEROMONIC CONTROL

Effect: Seduction PRE +5, Mind Control Based On CON
Target: One character
Duration: Constant
Range: No Range
END Cost: 0/4

Description: The character's body emits enhanced and augmented pheromones at his command. He can use these pheromones to make himself more desirable to other people, or in a more brute-force fashion to take control of their minds.

Game Information:

Cost Power
7 *Pheromonic Control:* Seduction (PRE Roll +5) (13 Active Points); Special Effect: Chemical (-¾)
12 *Pheromonic Control:* Mind Control 8d6 (40 Active Points); Based on CON (-1), No Range (-½), Special Effect: Chemical (-¾)
Total cost: 19 points.

STINKING VAPORS

Effect: Change Environment (-4 to CON Rolls plus other effects if the CON Roll fails; see text)
Target: 2" radius around character
Duration: Constant
Range: No Range
END Cost: 5

Description: The character can emit foul-smelling chemical vapors to weaken his foes. Anyone who comes within 2" of him while the power's active must make a CON Roll at -4. If he fails, he suffers

a -2 penalty to CV and all Skill Rolls because of gagging and retching. He may make another roll each Phase; the -2 penalty remains in effect until he succeeds. The GM may lower the CON Roll penalty over time (-3 the second roll, -2 on the fourth roll, -1 on the eighth roll, and so on) to reflect how the character becomes used to the odor. Additionally, the smell makes it difficult to perceive other smells (on the other hand, it also reduces the character's ability to use Stealth).

Game Information: *Change Environment* 2" radius (stench), -4 to CON Rolls (see text), -6 to Smell/Taste Group PER Rolls, Multiple Combat Effects, Personal Immunity (+¼) (52 Active Points); No Range (-½), Special Effect: Chemical (-¾) (total cost: 23 points) **plus add** to *Change Environment* -2 CV, -2 to DEX-based Rolls, -2 to INT-based Rolls, and -2 to PRE-based Rolls, *Reduced Endurance* (0 END; +½) (51 Active Points); No Range (-½) Only Applies If Victim Fails CON Roll (see text; -½), Special Effect: Chemical (-¾) (total cost: 18 points). Total cost: 41 points.

VENOM TOUCH

Effect: Drain CON 3d6, NND plus RKA 2d6, NND
Target: One character
Duration: Instant
Range: Touch
END Cost: 4 Charges

Description: The character's body produces a poison that he can affect people with by scratching or biting them.

This writeup uses a typical lethal poison such as the ones described on pages 28-30 of the *HERO System Bestiary*. You can use the other write-ups there to increase or decrease the damage. The writeup assumes the character has an HKA (claws, fangs, or a sting) with which to deliver the venom into a target's body.

Game Information: *Drain CON* 3d6, *Delayed Return Rate* (points return at the rate of 5 per Hour; +1), NND (defense is appropriate LS [Immunity]; +1) (90 Active Points); 4 Charges (-1), HKA Must Do BODY (-½), Extra Time (onset time begins 5 Minutes after victim is bitten; -2), Gradual Effect (15 Minutes; 1d6/5 Minutes; -¾), Special Effect: Chemical (-¾) (total cost: 15 points) **plus** RKA 2d6, NND (defense is appropriate LS [Immunity]; +1), Does BODY (+1) (90 Active Points); No Range (-½), 4 Charges (-1), HKA Must Do BODY (-½), Extra Time (onset time begins 5 Minutes after victim is bitten; -2), Gradual Effect (10 Minutes; 1d6/5 minutes; -¾), Linked (-½), Special Effect: Chemical (-¾) (total cost: 14 points). Total cost: 29 points.

COSMIC ENERGY



Cosmic Energy” (or “Cosmic Power”) refers to a mysterious type of energy that permeates the Galaxy (and perhaps all Reality) in many *Champions* campaigns and similar games. It’s most common among characters whose origins have something to do with outer space or ultra-powerful beings (*i.e.*, Galactic Champions characters, characters who belong to the *Cosmic* archetype, and so on), but that’s not always the case.

COSMIC ENERGY IN GAME TERMS

Cosmic Energy can manifest in virtually any form or way (*i.e.*, as nearly any special effect, with Cosmic Energy being the origination special effect) and allows a character who wields it to do nearly anything — fire powerful beams of any type of energy, travel at speeds many times faster than light, shield entire planets from dangerous effects, and on and on. The only limit tends to be the character’s imagination.

In game terms, you can represent Cosmic Energy in several ways. First, the GM can allow a character to define “Cosmic power” as the special effect of all of his abilities. In this case, Cosmic Energy can appear as, or create, almost any thing or phenomena — Fire, metal, gamma radiation, a swarm of stinging insects. Depending on GM preference, either Cosmic Energy can be the origination special effect, or you can treat the manifestation special effect as the power’s only special effect. That way, Fire created by Cosmic Energy won’t trigger a Vulnerability or Susceptibility to Fire, nor would it be affected by a Drain Fire Powers ability, but a Drain Cosmic Power could affect it, and so on.

Second, the GM can require a character who has “Cosmic Power” abilities to define his powers so they can do nearly anything. His Attack Powers all have to have the *Variable Advantage* and *Variable Special Effects* Advantages (and possibly *Multiple Special Effects* as well), or he has to have a large Variable Power Pool, or the like. This way the character can create fire that would trigger a Vulnerability or Susceptibility to Fire, but he’s paying for the privilege of being so flexible. (On the other hand, this leaves the character vulnerable to Adjustment Powers that affect either the special effect he’s creating [Fire, in this example] or Cosmic Energy.)

Third, it’s not uncommon for characters with Cosmic Energy powers to have a Variable Power Pool with the appropriately-named *Cosmic* (+2) Advantage described on page 325 of *The HERO System 5th Edition, Revised* rulebook. That allows a character to do or create nearly anything, of any special effect; the USPDs have thousands of examples of potential powers for a Cosmic Energy VPP.

COSMIC ENERGY AND OTHER SPECIAL EFFECTS

As a sort of “universal” energy, Cosmic Energy in its raw form reacts neutrally with all other special effects; it neither gains nor benefits from interacting with them. What sets it apart is that (a) its flexibility lets it manifest in so many different forms, and (b) even in raw form it’s generally used in “amounts” greater than those of other special effects. If Cosmic Energy manifests as some other special effect, see the appropriate section of this chapter to determine how that type of energy/special effect interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

CONCLUSION: THE SPECIAL EFFECT: COSMIC ENERGY POWER MODIFIER

Since Cosmic Energy in its raw form is neutral as to all other special effects, and its flexibility is accounted for in how characters buy Cosmic Energy powers (see above), *Special Effect: Cosmic Energy* is a +0 Advantage.

COSMIC ENERGY BASICS

Defense: ED for pure Cosmic Energy; otherwise depends on the special effect/energy type the power manifests as.

Knockback: Yes for pure Cosmic Energy; otherwise depends on the special effect/energy type the power manifests as.

EXAMPLE COSMIC ENERGY POWERS

Here are some example Cosmic Energy powers:

Offensive Powers

COSMIC BLAST

Effect: Energy Blast 16d6
Target: One character
Duration: Instant
Range: 400”
END Cost: 8

Description: The character can project a blast of cosmic energy powerful enough to harm even tough superhumans.

Game Information: *Energy Blast* 16d6, *Special Effect: Cosmic Energy* (+0). Total cost: 80 points.

COSMIC MANIPULATION

Effect: Telekinesis (60 STR), Affects Porous
Target: One character
Duration: Constant
Range: 500"
END Cost: 10

Description: The character's cosmic powers allow him to pick up and manipulate objects at range, without touching them. He can even affects liquids.

Game Information: *Telekinesis (60 STR), Affects Porous, Special Effect: Cosmic Energy (+0). Total cost: 100 points.*

COSMIC TRANSMUTATION

Effect: Major Transform 8d6 (anything into anything)
Target: Anything
Duration: Instant
Range: 1,200"
END Cost: 24

Description: The character has god-like powers of transmutation. He can change anything into anything else — thin air into food, swords into plowshares, people into frogs, rocks into diamonds, dust into water, you name it. He can also use this power to grant superpowers to other people (the standard rules for doing so apply), take away the superpowers they currently have, or inflict Disadvantages upon them.

Game Information: *Major Transform 8d6 (anything into anything, heal back normally), Improved Results Group (anything: +1), Special Effect: Cosmic Energy (+0) (240 Active Points); All Or Nothing (-½). Total cost: 160 points.*

Defensive Powers

COSMIC FORM

Effect: Total Life Support
Target: Self
Duration: Inherent
Range: Self
END Cost: 0

Description: Cosmic energy suffuses the character's form, not only granting him immortality but making it possible for him to survive anywhere.

Game Information: *Life Support: Total (including Longevity: Immortality), Inherent (+¼), Special Effect: Cosmic Energy (+0). Total cost: 62 points.*

COSMIC SHIELD

Effect: Force Field (40 PD/40 ED), Hardened plus Power Defense (20 points)
Target: Self
Duration: Constant
Range: Self
END Cost: 0

Description: A field of cosmic energy surrounds the character's body, protecting him from most forms of harm.

Game Information: *Force Field (40 PD/40 ED/20 Power Defense), Hardened (+¼), Reduced Endurance (0 END; +½), Special Effect: Cosmic Energy (+0). Total cost: 175 points.*

Movement Powers

COSMIC FLIGHT

Effect: Flight 40"
Target: Self
Duration: Constant
Range: Self
END Cost: 10

Description: The character can fly at extremely fast speeds by propelling himself with cosmic energy.

Game Information: *Flight 40", x32 Noncombat, Special Effect: Cosmic Energy (+0). Total cost: 100 points.*

COSMIC SPACEFLIGHT

Effect: FTL Travel (1 LY per minute)
Target: Self
Duration: Constant
Range: Self
END Cost: 0

Description: When in outer space, the character can use cosmic energy to travel at up to five hundred thousand times the speed of light.

Game Information: *FTL Travel (500,000 LY/year, or about 1 LY/minute), Special Effect: Cosmic Energy (+0). Total cost: 48 points.*

Sensory Powers

COSMIC AWARENESS

Effect: Detect Physical Objects and Energy
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: Cosmic energy grants the character universal awareness of his surroundings.

Game Information: *Detect Physical Objects and Energy (INT Roll) (no Sense Group), Discriminatory, Analyze, Increased Arc Of Perception (360 Degrees), Range, Sense, Targeting, Telescopic (+12 versus Range Modifier), Tracking, Special Effect: Cosmic Energy (+0). Total cost: 53 points.*

DARKNESS



Often associated with evil, corruption, fear, and decay, Darkness (or Shadow) powers can come from many sources: mystic powers granted by demons; the ability to access a dimension filled with a malleable dark substance; mutant “anti-light” powers; or the like. Although more common among villains than heroes, they’re not necessarily evil or violent *per se*.

Technically speaking, in the real world Darkness isn’t a thing, but the absence of something — light. Therefore it’s not much of a thematic stretch to associate Darkness powers on some level with absence, negation, dissolution/annihilation, diminishment, and similar concepts. (On the other hand, in some senses Darkness is protective, because it hides one from one’s enemies.) In some campaign settings Darkness might have difficulty “producing” things (*i.e.*, generating significant forces that can have direct effects by themselves) but be useful for “counteracting” things (in game terms, this usually means building them as Drains and other negative Adjustment Powers).

Since Darkness doesn’t exist as a “force” in real life, the GM can make it function however he likes for his campaign, though any choice can have ramifications that affect how Darkness interacts with other special effects. For example, if Darkness control is always a Magic power, then Darkness abilities will have both an origination and a manifestation special effect. If Darkness is a semi-solid substance characters can use as if it were physical or energy, then Darkness powers may resemble Energy Manipulation powers.

In game terms, the Power most commonly associated with the Darkness special effect is, naturally, Darkness. Darkness to Sight Group creates a field of darkness that’s absolutely impenetrable to light; no light can get into or pass through it, no light generated inside it can be seen within or without it. (See *Light*, below, for further discussion.) For powers and phenomena requiring less absolute darkness, use Change Environment to impose penalties on Sight Group PER Rolls. A -4 to PER Rolls simulates the penalty for “dark night” listed in the rulebook.

SECONDARY EFFECTS

Darkness by definition interferes with Sight. In game terms this means Darkness powers are good candidates for Linked Sight Group Darkness (the Power) and Flash attacks. In some cases the GM might even let characters adapt the *Stops A Given Sense* or *Opaque Adders* (from Entangle and Force Wall, respectively) to other appropriate Powers.

If Darkness is associated with cold in the campaign (because by blocking light, specifically sunlight, it also blocks heat), it might cause minor Side Effects such as making ice form on nearby surfaces. Sometimes these effects might rise to combat-effective (and thus purchased) Linked powers.

DARKNESS AND OTHER SPECIAL EFFECTS

Here’s how Darkness interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Darkness has no special interaction with Acid; it neither gains nor loses against this special effect (except perhaps as noted under *Acid* regarding its interaction with energy in general).

AIR/WIND

Darkness has no special interaction with most Air/Wind powers; in general it neither gains nor loses against this special effect. However, if a Darkness defense is defined as a form of smoke or mist, an Air/Wind attack tends to be more effective than normal against it (+2 Damage Classes or more).

BIOLOGICAL

Darkness has no special interaction with Biological; it neither gains nor loses against this special effect (except as discussed under *Biological* for energy powers generally).

CHAOS/ENTROPY

Darkness has no special interaction with Chaos/Entropy; it neither gains nor loses against this special effect.

CHEMICAL

Darkness has no special interaction with Chemical; it neither gains nor loses against this special effect (except as discussed under *Chemical* for energy powers generally).

COSMIC ENERGY

Darkness has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS BASICS

Defense: ED

Knockback: Yes



DIMENSIONAL MANIPULATION

In general, Darkness has no special interaction with Dimensional Manipulation; it neither gains nor loses against this special effect. However, if Darkness powers result from “pulling” or “summoning” shadow or “dark energy” into the campaign setting from another dimension (a fairly common explanation for how Darkness powers work), then Dimensional Manipulation powers are more effective than normal against them, since they interfere with the character’s “access” to the dimension of Darkness: Dimensional Manipulation defenses gain +1 point of ED against Darkness attacks, while Darkness defenses suffer a -1 ED reduction before being applied against a Dimensional Manipulation attack.

EARTH/STONE

Darkness has no special interaction with Earth/Stone; it neither gains nor loses against this special effect.

ELECTRICITY

Darkness has no special interaction with Electricity; it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Darkness has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect.

ENERGY MANIPULATION

In general, Darkness has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect. But if Darkness is regarded as a semi-solid, energy-like “substance” that a character creates and manipulates to achieve various effects, then the Darkness powers may be unusually susceptible to Energy Manipulation powers that affect them directly (typically via Adjustment Powers). In that case, increase the effectiveness of the Energy Manipulation power by +1 DC. For example, a Darkness defense works normally against an Energy Manipulation “energy bolt,” since that’s not designed to affect it directly. But when someone uses an Energy Manipulation “leech energy” effect (a Drain Energy, any one Energy power at a time), the leech energy power receives +1 DC because it’s affecting the manipulable Darkness directly.

FIRE/HEAT

Although Fire and Darkness aren’t as directly opposed as Darkness and Light (see below), in some thematic sense the opacity and “chill” of Darkness is antagonistic to the brightness and warmth of Fire/Heat. (This is particularly true when both are manifestations of Magic.) To represent this, make each of them slightly less resistant to the other’s attacks: Fire/Heat defenses are at -1 ED versus Darkness attacks; and Darkness defenses are at -1 ED against Fire/Heat attacks.

FORCE MANIPULATION

Darkness has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Darkness has no special interaction with Gravity; it neither gains nor loses against this special effect.

HOLY/UNHOLY

In general, Darkness has no special interaction with Holy or Unholy energy; it neither gains nor loses against this special effect. However, in some Fantasy settings or other settings where Magic is prevalent, Darkness may be designated as an “evil” type of energy, and thus interact with Holy energy on that basis; see the *Holy/Unholy Energy* section, below, for more information.

ICE/COLD

In general, Darkness has no special interaction with Ice/Cold; it neither gains nor loses against this special effect. However, if Darkness is associated with coldness, exposure to it may actually augment some Ice/Cold abilities. For example, perhaps every Darkness attack on an Ice/Cold defense that does not succeed at getting some BODY damage through the defense to the target improves the Ice/Cold defense by +1 ED that lasts for 1 Turn.

KINETIC ENERGY

Darkness has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

In general, Darkness has no special interaction with Life Force Energy; it neither gains nor loses against this special effect. However, if Darkness is associated with absence, negation, and similar concepts, it may have an “anti-Life” aspect that makes it more effective against Life Force defenses (subtract -1 ED from them before applying them to Darkness attacks).

LIGHT

Light and Darkness are opposites; they directly counteract one another. For example, as specifically noted on page 146 of *The HERO System 5th Edition, Revised*, a Darkness to Sight Group field totally blocks out Sight Group Flashes, and totally prevents Images defined as “creating light” from working within its boundaries. In that sense, in the “battle” between Light and Darkness, Darkness wins. (Though of course a character could build one of those powers as Linked to a Dispel Darkness so they would “remove” the Darkness and affect the target.) In the broader special effects sense, Light attacks receive +2 DCs before being applied to Darkness defenses, and Darkness attacks receive +2 DCs before being applied to Light defenses.

MAGIC

Darkness has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Darkness has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Darkness has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect.

MENTAL/PSIONIC

Darkness has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Darkness has no special interaction with Physical powers; it neither gains nor loses against this special effect.

PULSON ENERGY

Darkness has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Darkness has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Darkness has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Darkness has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Darkness has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Darkness has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Darkness has no special interaction with Water; it neither gains nor loses against this special effect.

CONCLUSION: THE SPECIAL EFFECT: DARKNESS POWER MODIFIER

Overall, Darkness has more drawbacks than it has benefits. Therefore, *Special Effect: Darkness* constitutes a -¼ Limitation.

EXAMPLE DARKNESS POWERS

Here are some example Darkness powers:

Offensive Powers

DARKNESS FIELD

Effect: Darkness to Sight Group, Personal Immunity
Target: 4" radius
Duration: Constant
Range: 250"
END Cost: 5
Description: The character can create an area of absolute darkness through or into which only he can see.
Game Information: *Darkness to Sight Group 4" radius, Personal Immunity (+¼). Total cost: 50 points.*

DARKBLAST

Effect: Energy Blast 9d6
Target: One character
Duration: Instant
Range: 225"
END Cost: 4
Description: The character projects a blast of inky black energy that strikes with devastating force.
Game Information: *Energy Blast 9d6 (45 Active Points); Special Effect: Darkness (-¼). Total cost: 36 points.*

Defensive Powers

DARKSHIELD

Effect: Force Field (15 PD/15 ED/Sight Group Flash Defense 5/Power Defense 5)
Target: Self
Duration: Constant
Range: Self
END Cost: 4
Description: The character can surround himself with a field of dark energy that protects him from attacks.
Game Information: *Force Field (15 PD/15 ED/Sight Group Flash Defense 5/Power Defense 5) (40 Active Points); Special Effect: Darkness (-¼). Total cost: 32 points.*

Movement Powers

STEPPING THROUGH SHADOWS

Effect: Teleportation 20", Only Through Darkness/Shadows
Target: Self
Duration: Instant
Range: Self
END Cost: 4
Description: The character can travel instantly from one place to another — provided that both places are cloaked in darkness. If he has no shadow or darkness available, he cannot Teleport; and even when he does have a shadow to use at his departure point, he can only designate as arrival points other places where shadows exist. Both areas of shadow/darkness must be at least 1" in size (big enough to cover an adult human).
Game Information: *Teleportation 20" (40 Active Points), Only Through Darkness/Shadows (-¼). Total cost: 32 points.*

Miscellaneous Powers

BODY OF SHADOW

Effect: Desolidification
Target: Self
Duration: Constant
Range: Self
END Cost: 4
Description: The character can transform his body into pure shadow, rendering it so insubstantial he can walk through walls and avoid the effects of most attacks. Only other darkness powers, or powers of light, can harm him.
Game Information: *Desolidification (affected by darkness or light powers). Total cost: 40 points.*

DIMENSIONAL MANIPULATION



Dimensional Manipulation powers are abilities that work by accessing other dimensions, transporting things to and/or from other dimensions, or altering dimensional “reality” in some way. Travel to and from other dimensions is just the tip of the iceberg; the possibilities are nearly as infinite as the number of dimensions in the Multiverse!

Dimensional Manipulation powers are most common among mystics, but that’s not the only background that can explain them. Characters whose minds have somehow been “opened” so they can commune with other planes of existence, whose bodies simultaneously occupy multiple dimensions, or who’ve been granted awareness of the existence of “higher-order dimensions” are among the types who might have powers based on accessing or making use of alternate dimensions.

The nature and use of Dimensional Manipulation powers may depend, in part, on the Multiverse the GM has established (the one described on page 96 of *Champions Universe* is just one possible example). For instance, if the GM decides that his campaign setting doesn’t include alternate dimensions, characters probably can’t buy Dimensional Manipulation powers at all. If he’s established a particular structure or pattern for the alternate dimensions in his campaign, he may restrict or limit characters’ abilities to have and use the powers listed here. For example, in a Science Fiction setting, the only alternate dimension characters may have any access to is Hyperspace, which means any Dimensional Manipulation devices or powers somehow involve Hyperspace and its (relatively) well-known properties.

SECONDARY EFFECTS

The reality-warping powers of Dimensional Manipulation can easily create all sorts of “side effects.” If an attack re-arranges the matter in an area, it might, for example, alter the wiring in a way that shuts off electric current, causing flooding by breaking water pipes, or the like. Typically these have no combat effect and don’t need to be bought with Character Points (or can be represented as an environmental Side Effect), but in some cases characters may want greater control over this effect and can buy it as Change Environment or the like.

Similarly, an attack might “re-arrange” parts of a living target’s body somehow. This could have all kinds of secondary effects, which the character would have to pay for due to their usefulness in combat. Some possibilities include Drains of Running or other physical abilities, Transforms to eliminate or hinder Senses, Drain COM, or Drain REC to simulate how difficult it is to heal from the attack.

On a larger, more environmental, scale, frequent use of Dimensional Manipulation powers in the same area might weaken the “barriers” between different dimensions. This could cause bits of them to “leak” into each other, make it easier to use certain Summon-based powers, interfere with the laws of physics (or probability) in those areas, or let beings pass through from one dimension to the other effortlessly (or even by accident!). This may depend on how the GM conceives of the “Multiverse” in his campaign setting. For example, in some settings, the barriers between realities may already be fairly weak, making it easy to “rupture” them accidentally; in others they may be very robust, so this sort of secondary effect is unlikely.

DIMENSIONAL MANIPULATION AND OTHER SPECIAL EFFECTS

Here’s how Dimensional Manipulation interacts with other energies/special effects. Generally speaking, Dimensional Manipulation powers are more effective than normal against powers that have some sort of physical manifestation because of the way they bridge and breach physical realities; against energy powers they function normally.

In the case of Dimensional Manipulation powers that involve physical objects (for example, *Danger Portal* on USPD 61, which opens a portal to a dimension of some dangerous substance and projects it at the target), treat the attack not as “Dimensional Manipulation” but as the appropriate special effect. For example, dropping a boulder on someone would be Earth/Stone; pouring lava on a target is Fire/Heat.

These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid attacks tend to have trouble getting through Dimensional Manipulation defenses, which by their very nature interfere with physical reality on some level. Subtract 1 DC from the Acid attack before applying it to defenses. Similarly, Dimensional Manipulation attacks gain +1 DC versus Acid defenses.

AIR/WIND

Air/Wind has no special interaction with Dimensional Manipulation powers; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION BASICS

Defense: ED

Knockback: Yes

DIMENSIONAL MANIPULATION-GRAVITY INTERACTION

Roll (2d6)	Effect
2	Roll 1d6. On a 1-3, Gravity power gains that many DCs of effect (or an equivalent “boost”); on a 4-6, it loses 1-3 DCs of effect.
3-4	Gravity power is redirected. The GM rolls 1d6. On a 1 it hits the intended target, but from an unusual angle (as if it were Indirect). On a 2-4 it hits some other target, but not the Gravity or Dimensional Manipulation character. On a 5, the power “feeds back” into the Gravity-using character; apply its damage or effect to him. On a 6, it hits the Dimensional Manipulation power-using character (this assumes he was not the intended target; if he was, count this as a 2-4 result).
5-9	No effect
10-11	The two powers interact strangely. Roll 1d6. On a 1-2, the Gravity power gains +½d6 DCs or +½d6 points of defense (alternately, the Dimensional Manipulation power loses that much). On a 3-4, a random side effect affects the local environment (for example, maybe gravity reverses for a Segment or two, or the local flora switches places with its equivalent in another dimension). On a 5-6, the Dimensional Manipulation power gains +½d6 DCs or +½d6 points of defense (alternately, the Gravity power loses that much).
12	The two powers negate one another for 1d6 Segments. The characters’ other powers remain unaffected... unless the GM prefers otherwise.

BIOLOGICAL

Biological attacks tend to have trouble getting through Dimensional Manipulation defenses, which by their very nature interfere with physical reality on some level. Subtract 1 DC from the Biological attack before applying it to defenses. Similarly, Dimensional Manipulation attacks gain +1 DC versus Biological defenses.

CHAOS/ENTROPY

Chaos/Entropy and Dimensional Manipulation interact in strange and dangerous ways. See *Chaos/Entropy*, above, for more information.

CHEMICAL

Chemical attacks tend to have trouble getting through Dimensional Manipulation defenses, which by their very nature interfere with physical reality on some level. Subtract 1 DC from the Chemical attack before applying it to defenses. Similarly, Dimensional Manipulation attacks gain +1 DC versus Chemical defenses.

COSMIC ENERGY

Dimensional Manipulation has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

In general, Darkness has no special interaction with Dimensional Manipulation; it neither gains nor loses against this special effect. However, if Darkness powers result from “pulling” or “summoning” shadow or “dark energy” into the campaign setting from another dimension (a fairly common explanation for how Darkness powers work), then Dimensional Manipulation powers are more effective than normal against them, since they interfere with the character’s “access” to the dimension of Darkness: Dimensional Manipulation defenses gain +1 point of ED against Darkness attacks, while Darkness defenses suffer a -1 ED reduction before being applied against a Dimensional Manipulation attack.

EARTH/STONE

Nothing represents physical stability and solidity than Earth/Stone, which makes it particularly susceptible to the warping powers of Dimensional Manipulation. A Dimensional Manipulation attack typically receives +1 DC against an Earth/Stone defense before that defense applies to reduce damage, while Earth/Stone attacks are at -1 DC against Dimensional Manipulation defenses.

ELECTRICITY

Dimensional Manipulation has no special interaction with Electricity; it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Dimensional Manipulation has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Dimensional Manipulation has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Dimensional Manipulation has no special interaction with Fire/Heat; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Dimensional Manipulation has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

In general, Dimensional Manipulation has no special interaction with Gravity; it neither gains nor loses against this special effect. However, at the GM’s option, it’s possible that opening dimensional portals and otherwise altering the “fabric of reality” will interfere with gravitational fields in ways that none of the characters involved can predict — the pull of gravity might be temporarily negated, redirected, or altered, strengthened or weakened, or the like. The GM can either determine the results himself, or use the accompanying Dimensional Manipulation-Gravity Interaction table.

HOLY/UNHOLY

In general, Dimensional Manipulation has no special interaction with Holy or Unholy powers; Energy; it neither gains nor loses against this special effect. However, in settings where Holy and Unholy powers come to characters from other dimensions (the “realm of the gods,” or “the Netherworld,” or what have you), Dimensional Manipulation powers may “interfere” with them in ways that make them less effective — give Dimensional Manipulation attacks +1 DC (or more) against Holy/Unholy defenses, and Holy/Unholy attacks -1 DC against Dimensional Manipulation defenses.

ICE/COLD

Because Dimensional Manipulation attacks affect physical reality, they’re particularly effective against Ice/Cold powers with physical manifestations (such as ice armor, ice walls, ice darts, and hailstorms). A Dimensional Manipulation attack typically receives +1 DC against a physical Ice/Cold defense before that defense applies to reduce damage, while physical Ice/Cold attacks are at -1 DC against Dimensional Manipulation defenses. Ice/Cold powers involving pure “cold energy” or the like interact with Dimensional Manipulation powers normally.

KINETIC ENERGY

Dimensional Manipulation has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Dimensional Manipulation has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Dimensional Manipulation has no special interaction with Light; it neither gains nor loses against this special effect.

MAGIC

In general, Dimensional Manipulation has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction. Furthermore, if Magic always comes from other dimensions, it may suffer when compared to Dimensional Manipulation; see *Holy/Unholy*, above, for rules.

MAGNETISM

Dimensional Manipulation has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Typically Dimensional Manipulation has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, if the Matter Manipulation power involves a physical object as part of its attack or defense, use the rules for *Physical*, below.

MENTAL/PSIONIC

Dimensional Manipulation has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Dimensional Manipulation powers are more effective than normal against attacks or defenses involving Physical objects due to the way they affect physical reality. Dimensional Manipulation attack typically receives +1 DC against a Physical defense before that defense applies to reduce damage, while Physical attacks are at -1 DC against Dimensional Manipulation defenses.

PULSON ENERGY

Dimensional Manipulation has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Dimensional Manipulation has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Dimensional Manipulation has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Dimensional Manipulation has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

In general, Dimensional Manipulation has no special interaction with Time powers; it neither gains nor loses against this special effect. However, if Time is considered a dimension (as some theories posit), then Dimensional Manipulation powers might be unusually effective against it (Dimensional Manipulation attacks receive +2 DCs against Time defenses, while Time attacks are at -2 DCs before Dimensional Manipulation defenses apply to them). Alternately, time may be a “dimension” that Dimensional Manipulation powers simply can’t affect, making them neutral toward each other (or even granting benefits to Time powers).

VIBRATION

Typically, Dimensional Manipulation has no special interaction with Vibration powers; it neither gains nor loses against this special effect. However, in some settings different dimensions have specific “vibrational frequencies” that allow Vibration-based and speedster characters to

DIMENSIONAL MANIPULATION-
VIBRATION INTERACTION

Roll (2d6)	Effect
2	Great disharmony favoring Vibration — Vibration attack gains +2 DCs, Vibration defense gains +2 points
3-4	Disharmony favoring Vibration — Vibration attack gains +1 DC, Vibration defense gains +1 point
5-9	No effect (or, at the GM's option, a random "side effect," such as environmental damage or an explosion)
10-11	Disharmony favoring Dimensional Manipulation — Dimensional Manipulation attack gains +1 DC, Dimensional Manipulation defense gains +1 point
12	Great disharmony favoring Dimensional Manipulation — Dimensional Manipulation attack gains +2 DCs, Dimensional Manipulation defense gains +2 points

access them. In that case, the interaction of a Dimensional Manipulation power and a Vibration power may depend on how "harmonious" their relative frequencies are. The accompanying table provides one possible method of determining this, but the GM can make the decision however he sees fit.

WATER

Because Dimensional Manipulation attacks affect physical reality, they're particularly effective against Water, which manifests physically. A Dimensional Manipulation attack typically receives +1 DC against a Water defense before that defense applies to reduce damage, while Water attacks are at -1 DC against Dimensional Manipulation defenses.

CONCLUSION: THE SPECIAL EFFECT:
DIMENSIONAL MANIPULATION POWER
MODIFIER

Overall, Dimensional Manipulation has significantly more benefits than it has drawbacks. Therefore, *Special Effect: Dimensional Manipulation* constitutes a +¼ Advantage.

EXAMPLE DIMENSIONAL
MANIPULATION POWERS

Here are some example Dimensional Manipulation powers:

Offensive Powers

DIMENSIONAL RIP	
Effect:	Energy Blast 12d6, No Knockback
Target:	One character
Duration:	Instant
Range:	375"
END Cost:	7

Description: The character can cause a "rip," warp, or point of destabilization in the dimensional fabric right where another person stands. The resulting effect on space-time causes dimensional energies to tear at and buffet that person, inflicting significant injury.

Game Information: *Energy Blast 12d6, Special Effect: Dimensional Manipulation (+¼) (75 Active Points); No Knockback (-¼). Total cost: 60 points.*

DIMENSIONAL TRAP	
Effect:	Entangle 6d6, 6 DEF
Target:	One character
Duration:	Instant
Range:	300"
END Cost:	6

Description: The character can trap an enemy in a bubble of transdimensional space. When the character tries to step outside the bubble, it immediately teleports him right back inside. Additionally, the fluctuating nature of "reality" within the bubble prevents Accessible Foci (such as guns or magic wands) from functioning properly, so trapped characters cannot use them to break free. Only by straining the fabric of the bubble with personal strength or personal attacks can a victim shatter it and go free.

Game Information: *Entangle 6d6, 6 DEF (60 Active Points); Cannot Form Barriers (-¼), Vulnerable (dimensional attacks; -¼). Total cost: 40 points.*

GATE RAZOR

Effect: RKA 2d6, Indirect, Penetrating (x2)
Target: One character
Duration: Instant
Range: 410"
END Cost: 8

Description: Similar to Dimensional Rip (and often bought in a Multipower with it), this power gives a character the ability to open small dimensional portals next to or inside a target, such that the opening edge of the portal cuts through the target like a hot knife through butter. Even strong armor or similar defenses usually can't completely withstand the effect of a Gate Razor.

Game Information: RKA 2d6, Indirect (+½), Penetrating (x2; +1), Special Effect: Dimensional Manipulation (+¼) (82 Active Points); No Knockback (-¼). Total cost: 66 points.

Defensive Powers

DIMENSIONAL SHUNT FIELD

Effect: Force Field (25 PD/25 ED)
Target: One character
Duration: Constant
Range: Self
END Cost: 6

Description: The character establishes a field around himself that is an interface between this dimension and another, uninhabited one. The force and energy of incoming attacks intersects with this interface, causing much (if not all) of it to get shunted to the other dimension, leaving the character unharmed (or less harmed). Attacks that are too powerful overwhelm the interface, bypassing it and causing damage to "leak" through to the character.

Game Information: Force Field (25 PD/25 ED), Special Effect: Dimensional Manipulation (+¼). Total cost: 62 points.

Movement Powers

DIMENSIONAL TRANSIT

Effect: Teleportation 20"
Target: Self
Duration: Instant
Range: Self
END Cost: 4

Description: The character can travel instantly from one place to another in this dimension by traveling through an alternate dimension where points in space are "closer together." The character opens a portal to this other dimension, takes but a single step, and then exits through another portal back into this dimension, now as much as 260 feet from where he was just standing.

Game Information: Teleportation 20". Total cost: 40 points.

Miscellaneous Powers

DIMENSIONAL BYPASS

Effect: Desolidification
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character can shift his body into higher dimensions, allowing him to pass through three-dimensional objects and attacks as if they did not exist.

Game Information: Desolidification (affected by Dimensional Manipulation attacks, any attack with the Transdimensional Advantage, or magic). Total cost: 40 points.

EARTH/STONE



EARTH/STONE BASICS

Defense: PD

Knockback: Yes

Earth/Stone powers grant a character the qualities of, or ability to manipulate, rock and soil. (Powers based on crystals, metals, and sand relate closely to Earth/Stone powers — so closely, in fact, that there's often little functional difference between them. With a slight change, often just a change of name, you can convert an Earth/Stone power into, say, a metal power.) Characters with Earth/Stone powers often also possess great strength and resistance to injury. In short, they're usually "bricks," but with some added elemental capabilities that give them a lot more tactical options in combat.

In Antaeus-like fashion, many Earth-based characters can only use their abilities if they remain in contact with the ground. If someone picks them up off the ground, or they're on the second story of a building, or they're flying, they cannot use their superpowers. You can simulate this with the *Limitation Only When In Contact With The Ground*. It's worth -¼ if the character has to remain in contact with any type of ground (even paved ground or the floor of a building will do), and -½ if the character must stay in contact with natural earth, stone, and soil (pavement or a building floor would block the character's powers).

SECONDARY EFFECTS

The masses of rock and soil created by, or involved with, many Earth/Stone powers may cause problems for a character. Their great weight may damage floors and surfaces, or make it impossible for him to fit in some areas or be carried by some vehicles. Obtaining them may inflict significant damage on the nearby environment.

Depending on the nature of the Earth/Stone powers, there's the possibility of causing unintended geological side effects. This might be nothing more than making the ground crack here and there, or it could go all the way up to accidentally causing major earthquakes through overuse of Earth powers on a faultline.

EARTH/STONE AND OTHER SPECIAL EFFECTS

Here's how Earth/Stone interacts with other energies/special effects. To some extent these rules are similar to those for Physical powers and objects in general, though Earth/Stone is sometimes seen as more durable or strong. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid tends to have a hard time eating through durable Earth and Stone defenses; its attacks lose -2 DCs before the defense is applied. Earth/Stone attacks are similarly more effective than average against Acid defenses; the Acid defense is at -2 points of PD.

AIR/WIND

Even the most powerful and violent Air/Wind attacks seem somewhat ephemeral against the durability and solidity of Earth and Stone. Subtract -2 Damage Classes from them before the defense is applied. Earth/Stone attacks usually penetrate Air/Wind defenses a little more effectively, since even the toughest force-field of Air has difficulty resisting the ponderousness of stone; reduce the Air/Wind defense by -1 point of PD before applying the defense to the damage. However, in the case of Earth/Stone attacks involving sand, dust, tiny chips of stone, or other small, relatively lightweight objects, Air/Wind defenses are actually *more* effective than normal; add +2 PD before applying them to the damage.

BIOLOGICAL

Biological has no special interaction with Earth/Stone; it neither gains nor loses against this special effect.

CHAOS/ENTROPY

Earth/Stone tends to be one of the most stable and durable special effects (particularly when Magic is involved and powers can have symbolic as well as literal meaning). As such it resists the unpredictability and change of Chaos/Entropy better than most powers. A Chaos/Entropy attack suffers -1 DC before being applied to an Earth/Stone defense; a Chaos/Entropy defense is at -1 point before being applied to an Earth/Stone attack.



CHEMICAL

Earth/Stone tends to be resistant to Chemical attacks (assuming, of course, that they're not built as NNDs or the like so that they bypass conventional protections) — they get +1 defense before being applied to reduce the Chemical effect. Chemical defenses affect Earth/Stone attacks normally.

COSMIC ENERGY

Earth/Stone has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Earth/Stone has no special interaction with Darkness; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Nothing represents physical stability and solidity than Earth/Stone, which makes it particularly susceptible to the warping powers of Dimensional Manipulation. A Dimensional Manipulation attack typically receives +1 DC against an Earth/Stone defense before that defense applies to reduce damage, while Earth/Stone attacks are at -1 DC against Dimensional Manipulation defenses.

ELECTRICITY

Earth/Stone defenses insulate against Electricity attacks well; give them +2 ED before applying them to damage. Earth/Stone attacks interact with Electricity defense normally.

However, Metal powers (a subset of Earth/Stone, generally) are a different story. Most metals conduct electricity well. Reduce a Metal-based defense by 20% of its Active Points before applying it to reduce the damage of an Electricity attack. This would include most armor and shields common to *Fantasy Hero* campaigns, but not necessarily "powered armor" suits found in *Champions* and *Star Hero* games, which may have sufficient plastics, ceramics, force-fields, and shielding to prevent this effect from occurring. Metal attacks interact with Electricity defenses normally.

ELECTROMAGNETIC ENERGY

Compared to most physical barriers, Earth/Stone defenses insulate against Electromagnetic Energy attacks well; give them +1 ED before applying them to damage. Defenses made of Metal (a subset of Earth/Stone powers) are even better; give them +3 defense. Earth/Stone attacks interact with Electromagnetic defenses normally.

ENERGY MANIPULATION

Earth/Stone has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Earth/Stone defenses are particularly good at shielding people from heat and flame. Give them +3 ED before applying them to damage. Earth/Stone attacks penetrate Fire/Heat defenses pretty well, too; they gain +1 DC before the defense applies. (On the other hand, Metal defenses may conduct heat unusually well; they get no bonus against Fire/Heat, or possibly even lose -1 ED.)

FORCE MANIPULATION

Earth/Stone has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Gravity defenses are slightly better against Earth/Stone attacks than normal; add +1 point of defense before applying them to reduce the damage. Earth/Stone defenses interact with Gravity attacks normally.

HOLY/UNHOLY

In general, Earth/Stone has no special interaction with Holy and Unholy energies; it neither gains nor loses against this special effect. However, in Fantasy settings and other games featuring lots of magic and symbolism, Earth might have thematic meaning that would affect how it interacts with these special effects. For example, Earth is the source of life, so it might enhance Holy powers and be an especially effective defense against Unholy ones.

ICE/COLD

Earth/Stone has no special interaction with Ice/Cold; it neither gains nor loses against this special effect.

KINETIC ENERGY

Earth/Stone has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Earth/Stone has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Earth/Stone has no special interaction with Light; it neither gains nor loses against this special effect.

MAGIC

Earth/Stone has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

In general, Earth/Stone has no special interaction with Magnetism; it neither gains nor loses against this special effect. However, if the GM rules that a mass of soil or rock contains a high concentration of ferrous material or particles, that soil/rock may be more susceptible to Magnetism powers (it would suffer a -3 ED reduction as a defense against Magnetism attacks involving pure magnetic force, but at most a -1 against attacks involving thrown or projected metallic objects, and a -1 DC reduction as an attack against Magnetism defenses).

MATTER MANIPULATION

Since Earth/Stone powers involve physical substances, Matter Manipulation may be unusually effective against them; see the *Matter Manipulation* section, below, for information.

MENTAL/PSIONIC

Earth/Stone has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Earth/Stone has no special interaction with Physical powers; it neither gains nor loses against this special effect.

PULSON ENERGY

Earth/Stone has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Earth/Stone has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Earth/Stone defenses, which are often particularly rigid and tough, don't withstand the shaking, shattering effects of Sonic attacks well; they suffer a -2 penalty before being applied to reduce the Sonic damage. Earth/Stone attacks interact with Sonic defenses normally.

TELEKINETIC

Earth/Stone has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Earth/Stone has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Earth/Stone defenses, which are often particularly rigid and tough, don't stand up to Vibration powers very well. Reduce the protection they provide by -3 before applying them to reduce Vibration damage. Earth/Stone attacks are at -1 DC before Vibration defenses apply to reduce their damage.

WATER

Earth/Stone has no special interaction with Water; it neither gains nor loses against this special effect.

CONCLUSION: THE SPECIAL EFFECT: EARTH/STONE POWER MODIFIER

Overall, Earth/Stone has more benefits than it has drawbacks. Therefore, *Special Effect: Earth/Stone* constitutes a +20 Character Point Adder.

EXAMPLE EARTH/STONE POWERS

Here are some example Earth/Stone powers:

Offensive Powers

EARTHMOVING

Effect: Telekinesis (30 STR), Only Versus Earth/Rock
Target: See text
Duration: Constant
Range: 300"
END Cost: 6

Description: The character has such control over earth and rock that he can cause them to move without touching them. He can pick someone up on a column of stone and lift that person to the top of a building, create a gigantic earthen fist to smash his foes, or simply clear earth and rock out of the way. He can even shape earth and stone crudely, making simple shapes and "statues."

Game Information: *Telekinesis (30 STR), Special Effect: Earth/Stone (65 Active Points); Only Versus Earth/Rock (-½). Total cost: 52 points.*

EARTHQUAKE

Effect: Energy Blast 8d6, Explosion
Target: 8" Explosion
Duration: Instant
Range: No Range
END Cost: 10

Description: The character has the ability to create a mini-quake that affects the entire area around himself. While he doesn't suffer any injury, anything and anyone close to him that's in contact with the ground takes damage from the seismic shock, and may lose their footing.

Game Information: *Energy Blast 8d6, Special Effect: Earth/Stone, Explosion (+½), Personal Immunity (+¼) (105 Active Points); No Range (-½), Only Affects Targets On The Ground (-¼), Only Does Knockdown, Not Knockback (-0). Total cost: 60 points.*

ROCK BLAST

Effect: Energy Blast 8d6
Target: One character
Duration: Instant
Range: 275"
END Cost: 5

Description: The character can project a blast of rock and earth that injures opponents.

Game Information: *Energy Blast 8d6, Special Effect: Earth/Stone. Total cost: 60 points.*

STONY PRISON

Effect: Entangle 4d6, 6 DEF
Target: One character
Duration: Instant
Range: 250"
END Cost: 5

Description: The character can cause the ground and rock beneath a target's feet to rise up and engulf him. The ground may, at the character's option, take on a specific shape (like a large stony fist that "grabs" the target). Additionally, the character can cause earth and stone to rise up and form a wall to protect him.

Game Information: *Entangle 4d6, 6 DEF (50 Active Points); Only Affects Targets On The Ground (-¼). Total cost: 40 points.*

Defensive Powers

BODY OF STONE

Effect: Armor (15 PD/15 ED), plus others
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character's body is made of stone and rock, which makes it difficult to hurt him and has other effects. He should also take a Physical Limitation to represent the problems caused by weighing approximately 800 kg.

Game Information:

Cost Power

52 Armor (15 PD/15 ED), Special Effect:
 Earth/Stone; Visible (-¼)
 15 +15 STR
 3 +3 PD
 3 +3 ED
 6 Knockback Resistance -3"

Total cost: 79 points.

ROCKY SKIN

Effect: Armor (9 PD/9 ED)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character can cause his skin to become stony and tough, making it difficult to injure him.

Game Information: *Armor (9 PD/9 ED), Special Effect: Earth/Stone. Total cost: 47 points.*



Movement Powers

TUNNEL CREATION

Effect: Tunneling 8" through 8 DEF material
 Target: Self
 Duration: Constant
 Range: Self
 END Cost: 4

Description: The character can dig tunnels with great speed by controlling the earth — perhaps he burrows like an animal, perhaps he disintegrates the earth in front of him, perhaps he simply causes the earth in front of him to move out of the way. He can use the same ability to “dig” or tear through walls and like structures.

Game Information: *Tunneling 8" through 8 DEF material. Total cost: 40 points.*

ELECTRICITY



Electricity — be it a lightning bolt spell cast by a mage, an electric “zap” from a frightened robot, or a blast of pure electricity fired by a supervillain — is one of the most popular and common forms of energy used by energy projectors. In addition to its sheer offensive power, Electricity powers can involve activating, deactivating, or controlling the electrical devices so common in modern and Science Fiction societies.

ELECTRICITY TERMS

Since Electricity is such an important energy in real life, many of the terms that have arisen to describe it are well-known.

The rate at which a device produces or uses electric power is measured in *watts*. Typically a power plant produces electricity in megawatt (millions of watts) amounts, then transmits it through conductive wires to devices that use it at specified rates. For example, a 60-watt light bulb converts electricity to light at the rate of 60 watts.

Electric current, or the amount of electric charge per second, is measured in *amperes*, or “amps.”

Electrical impedance or resistance is measured in *ohms*. If 1 volt of electricity causes a current of 1 ampere to flow in a device, that device has 1 ohm of resistance. Similarly, a device that uses 1 ampere of current to dissipate 1 watt of electric power has 1 ohm of resistance.

Electric potential difference, or electromotive force — the ability of electricity to “do things,” so to speak — is measured in *volts*. When a 1 ampere current releases 1 watt of power, you have 1 volt of electricity. The accompanying Voltage Table lists examples of voltage, typically using figures for the United States (typical household voltage may vary in other countries, for example).

For game purposes, voltage is the easiest way to determine how much damage electrical

current does to a target — the more volts, the more damage. Alternately, you could consider a low ampere, high voltage attack as doing Normal Damage, and a high ampere, high voltage attack as doing Killing Damage.

ELECTRICITY IN THE REAL WORLD

There are many ways for characters to get electrocuted — being Knocked Back into a junction box, accidentally touching a live wire, or being struck by a random lightning bolt, for example. Three factors determine how much damage results:

- the voltage of the electricity;
- the current from the attack; and
- how well grounded the character is.

The voltage and current of most common wires are standardized (see the Voltage Table). Therefore the Electricity Table below suffices for most situations. In unusual circumstances, the GM can use the information here as guidelines for coming up with consistent damage and other effects. Alternately, the Optional Electricity Table provides different figures derived from the Voltage Table. These may be more “realistic,” but possibly also less dramatic and more potentially game-unbalancing.

Grounding

Grounding — how easily electricity can flow through the character and into the ground — can vary. Characters who are well-grounded have more electricity flow through them, and thus are more powerfully zapped.

For game purposes, you should define characters as Well Grounded, Poorly Grounded, or Insulated. *Well Grounded* includes such states as standing in water or holding onto a metal pipe stuck into the ground. *Insulated* includes flying, standing on a rubber mat, or wearing a special insulating suit. The rest of the time, the character can probably be considered *Poorly Grounded*.

Alternating And Direct Current

The attacks listed on the Electricity Table are all alternating current (AC). When a character is hit with an AC charge, his muscles spasm and throw him away from the source of the attack. If the character wants to hold on to the source (perhaps to prevent it from touching someone else), he must succeed with an EGO Roll (at -1 per 5 STUN (or fraction thereof) which he takes after applying defenses) to keep his grip; furthermore, he continues to take damage from the electricity every Segment.

ELECTRICITY BASICS

Defense: ED

Knockback: Yes

VOLTAGE TABLE

Source Of Electricity	Typical Volts
Automobile electrical system	12
Battery, alkaline	1.5
Battery, rechargeable lithium	3.75
Battery, single-cell NiMH/NiCD	1.2
Electrical train overhead lines	25 kV
Electrical train/subway “third rail”	600-700
Household electrical outlet	120
Lightning	100 MV
Power transmission lines	110 kV to 1.15 MV

kV: Kilovolt (thousands of volts)

MV: Megavolt (millions of volts)

ELECTRICITY TABLE

Power Type	Insulated	Poorly Grounded	Well Grounded
Automobile Spark Plug	2d6 S	5d6	2d6 K
Electric Train			
Overhead Line	5d6 S	8d6	3d6 K
Third Rail	3d6 S	5d6	2d6 K
Household Current			
Standard	1d6 S	2d6	1d6 K
Heavy	3d6 S	5d6	2d6 K
Industrial Current			
Light	5d6 S	8d6	3d6 K
Heavy	7d6	11d6	4d6 K
Lightning Bolt	5d6 S	10d6	4d6 K+
Power Transmission Line	9d6	14d6	5d6 K

S: STUN only damage

K: Killing Damage

OPTIONAL ELECTRICITY TABLE

Power Type	Insulated	Poorly Grounded	Well Grounded
Automobile Spark Plug	½d6 S	1d6	1 point K
Electric Train			
Overhead Line	6d6 S	8d6	2½d6 K
Third Rail	3d6 S	4d6	1d6 K
Household Current			
Standard	1d6 S	2d6	½d6 K
Heavy	2d6 S	5d6	1d6-1 K
Industrial Current			
Light	4d6 S	6d6	2d6-1 K
Heavy	6d6	8d6	2½d6 K
Lightning Bolt	20d6	30d6	20d6 K+
Power Transmission Line	15d6	25d6	10d6 K

S: STUN only damage

K: Killing Damage

This table derives its damage figures from the Voltage Table, with the assumption that 10,000 volts does approximately 1d6 Killing (3 DCs). Some adjustments are made on the upper and lower ends of the scale for ease of use (since a lightning bolt that does 1,000d6 Killing would put a damper on most campaigns).

Characters might instead encounter direct current (DC), which is less common than AC but used in some telephone and communications equipment/cables, some subway or train “third rails,” and some batteries. When a character touches a source of DC power, his muscles tend to lock themselves onto the source, thus causing him to take damage every Segment until he dies. To pull away, the character must succeed with an EGO Roll (at -1 per 5 STUN [or fraction thereof] which he takes after applying defenses).

Electricity Underwater

Pure water makes a fine insulator — but characters aren’t likely to encounter pure water outside of a laboratory setting. Impure water, such as lake or river water, is an excellent *conductor* of electricity, and salt water’s even better. This has several effects in game terms.

First, electrical attacks become more powerful. In fresh water, they’re 25% more effective; in salt water, they’re 30% more effective (use this percentage of the Active Points in the power, not the dice). (These effects are *not* cumulative with the rules for interaction between the Electricity

and Water special effects, described below; in an underwater fight the GM should use these rules and ignore the ones below.)

Second, Ranged electrical attacks (such as Energy Blasts or RKAs defined as a “lightning bolt”), or any other attack which involves channeling or projecting electricity through the water (as opposed to just touching a target with it) acts as if it had the *Area Of Effect (Line)* Advantage. Alternately, it may act as if it has the *Explosion* Advantage; this is most appropriate for attacks that propel something (like a speargun) through the water which then emits electricity when it approaches or contacts the target.

Third, electrical defenses become more powerful, just like attacks: +25% better in fresh water; +30% in salt water. At the GM’s option, a defense that surrounds a character with an electric field, like many electricity Force Fields, also becomes a Damage Shield (typically doing RKA 1d6 damage) when used underwater.

Fourth, characters using electricity powers without sufficient insulation (or Personal Immunity) may risk taking damage from their own attacks. At the GM’s option, every Phase a character uses an electricity power, the GM rolls 3d6. If he rolls 11-, the character experiences no problems. If he rolls 12 or above, the character gets shocked by his own power — take 25% of the Active Points in the most expensive power and use it to “buy” an RKA, then apply the RKA’s damage to the character with no defense (except defenses bought to apply only against electricity). If the character uses more than one electricity power in a Phase, reduce the roll by 1 for every additional power after the first.

Example: *Thunderbolt has electrical powers.*

In his Phase in Segment 12, he uses two: his Force Field (15 PD/25 ED) and his Energy Blast 12d6. If he were only using one, the GM would roll 11-, but since it’s two, he rolls 10-. He rolls 13 and fails. Therefore Thunderbolt takes RKA damage equal to 25% of the most expensive electricity power in use — the EB, with 60 Active Points. Thus, he takes (60 x .25 =) 15 points’ worth of RKA damage, or 1d6.

These effects are accounted for as part of the Special Effect: Electricity Adder (see below).

Real Electricity (-¼)

Players and GMs interested in creating “realistic” electrical attacks should consider adding a -¼ Limitation, *Real Electricity*, to appropriate offensive powers. A power with this Limitation does its listed damage to targets defined as Poorly Grounded. It does only half damage to Insulated characters, and converts to the equivalent DCs in Killing Damage against Well Grounded characters (if it’s already a Killing Attack, the GM may add 1-2 DCs, if he wishes). Alternately, the GM may simply impose this rule on Electricity attacks as a campaign ground rule, for no Limitation.

SECONDARY EFFECTS

The use of Electricity as a power has many possible implications and can cause all sorts of sec-

ondary effects. As always, the GM can use these, or not, as he sees fit.

Conductivity

Typically Electricity prefers to follow the path of least resistance, which means the path of the most conductive material in the vicinity until something grounds it. In “realistic” terms, a bolt of Electricity fired through the air would need a “carrier” trail of ionization to travel down to remain reasonably accurate.

At the GM’s option, an Electricity attack that doesn’t travel directly through highly conductive material (such as water or metal) suffers a -1 or greater OCV penalty — the more conductive materials that are nearby, the greater the penalty. In this situation, a missed Attack Roll usually means that some feature of the local environment that’s more conductive than the target attracted the Electricity attack and took the damage. Alternately, the GM can have characters make Activation Rolls to use Electricity attacks in the presence of lots of highly conductive materials; a failed roll means the attack “grounds” in some object and doesn’t affect the target at all.

On the other hand, the presence of conductive materials may make it possible for a character to project an Electricity attack with an Indirect effect. For example, if the character and his target are both standing on a metal floor or in the same body of water, the character could use his attack so that it strikes from the conductive material, rather than in a “straight line” between himself and his target. (“Realistically” this may require the character to have some control of conductivity; otherwise the Electricity may travel throughout the conductive substance, becoming a small Area Of Effect/Explosion attack or the like.) Doing this typically requires a successful Power: Electricity Tricks roll, or a roll with a similar Skill, but the GM may allow it automatically if preferred. Characters could also buy this as a Limited naked *Indirect* Advantage that could apply to any Electricity attack.

In a more “realistic” setting, an Electricity defense may be weakened if it comes into contact with a conductive surface or object, losing 25% or more of its Active Points of effect.

Electrical Devices

Out of combat (or similar crisis conditions), a character with Electricity powers may be able to turn common electrical devices (such as household appliances) on and off simply by touching them (or perhaps even over a range of up to 3”). He cannot use this ability in combat or in any way that has a combat effect; to do that, he has to buy it as a power (typically using Powers like *Dispel* and *Telekinesis*; see the *Cyberkinesis Powers* and *Electricity Powers* sections of the USPDs for examples). On the other hand, if a character doesn’t have sufficient control, he could easily overload a device, damaging or destroying it; this is particularly appropriate if the character fails an associated *Power Skill* roll.

Heat

Electricity also generates heat whenever it flows through something with resistance. The GM might apply the rules from the *Fire/Heat* section, below, when an Electricity attack strikes something that’s potentially flammable. If appropriate, reduce the roll to see if a flammable object catches on fire by 2 (or more).

Light

Electricity is bright due to its heat, and thus can provide light to a character who can manipulate it. Generally this doesn’t have a real game effect, but in some cases it might provide a +1 Sight PER Roll bonus to counteract modifiers for darkness, shadow, and the like. Similarly, Linking a Sight Group Flash to an Electricity attack is appropriate.

Magnetic Fields

The general rules regarding the interaction of Electricity and Magnetism are discussed below. But as an additional “side effect,” Electricity can interfere with nearby magnetic fields. This could possibly affect magnetic data storage, some types of sensitive electronic equipment, and so on. Again, this isn’t something that should have a measurable offensive effect unless the character buys it as a power.

Producing Gases

“Realistically,” using Electricity powers produces ozone and other gases as a “side effect.” Ordinarily this doesn’t matter, but in an enclosed space the concentrated gases could make characters feel woozy and lightheaded, or possibly could even be fatal. Fortunately, the time required for that much gas to build up probably exceeds the duration of most *HERO System* combats.

Recharging

The presence of so much electricity in the modern world (via outlets, transformers, machinery, and the like) may be useful to Electricity-manipulating characters. For example, perhaps a tired Electricity user, or one preparing for a big battle, could “recharge” himself or gather power from common sources. If he wants to do this frequently, he can model it as various powers (Limited REC for an Endurance Reserve, an Aid that only works in the presence of a source of electricity), but if he only does it rarely the GM might allow it with a successful Power: Electricity Tricks roll or the like.

Short-Circuiting An Electricity User

At the GM’s option, there might be ways to “short circuit” an Electricity user to either weaken his powers or prevent him from using them temporarily (probably 1d6 Segments, at the most, but possibly longer if appropriate for dramatic purposes). One way of doing this might be to soak him in water, but that could make it too easy for heroes to take Electricity-using villains out of the fight. Another possibility is to think of the Electricity user’s arms and legs as “live wires” — if another character can somehow “cross” them (perhaps by using STR to forcibly Grab both arms and literally cross them), that could play havoc with the Electricity user’s powers.

ELECTROMAGNETIC “STRENGTH”

“Realistically” speaking, Electricity, Electromagnetic Energy, Light, Magnetism, and Radiation do not really “interact” with other forms of energy (including any form other than themselves, generally). This means that defenses involving most forms of energy technically should provide no defense, or at most very little, against attacks involving one of these five special effects. Since that’s an extremely beneficial ability, GMs who want to take this into account should require characters to buy those attacks as NNDs, AVLDs, or the like.

ELECTRICITY AND OTHER SPECIAL EFFECTS

Here's how Electricity interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid attacks affect Electricity defenses normally. Acid conducts electricity as well as water does. Reduce an Acid defense by 33% (one-third) of its Active Points before applying it to reduce the damage from an Electricity attack.

Alternately, Electricity might break down an Acid through electrolysis, so that an Electricity attack causes an Acid defense to lose -1 defense (or more) until the Acid-using character can "repair" it by re-activating the power. Or an Electricity defense might reduce the END allocated to keep an Acid attack functioning.

Some types of batteries generate electrical power from the chemical interaction between an acid and another chemical substance (such as lead). Depending on how an Acid-using character's powers work, their interaction with other substances might generate electrical energy that an Electricity-based character could use somehow.

AIR/WIND

Air/Wind has no special interaction with Electricity powers; it neither gains nor loses against this special effect.

BIOLOGICAL

Biological has no special interaction with Electricity; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). If a character has "bioelectricity" powers, those are typically regarded as Electricity powers, not Biological.

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Electricity; it neither gains nor loses against this special effect.

CHEMICAL

Chemical has no special interaction with Electricity; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). However, exposure to strong electrical current may alter chemicals, cause them to combine, or work other changes in them. See the *Chemistry* section, above, for details and rules.

COSMIC ENERGY

Electricity has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Electricity; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Dimensional Manipulation has no special interaction with Electricity; it neither gains nor loses against this special effect.

EARTH/STONE

Earth/Stone defenses insulate against Electricity attacks well; give them +2 ED before applying them to damage. Earth/Stone attacks interact with Electricity defense normally.

However, Metal powers (a subset of Earth/Stone, generally) are a different story. Most metals conduct electricity well. Reduce a Metal-based defense by 20% of its Active Points before applying it to reduce the damage of an Electricity attack. This would include most armor and shields common to *Fantasy Hero* campaigns, but not necessarily "powered armor" suits found in *Champions* and *Star Hero* games, which may have sufficient plastics, ceramics, force-fields, and shielding to prevent this effect from occurring. Metal attacks interact with Electricity defenses normally.

ELECTROMAGNETIC ENERGY

Electricity has no special interaction with Electromagnetic Energy (in fact, in a technical sense it's simply a subset of electromagnetism generally); it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Electricity has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect. As a default, any "physical" objects or shapes created by Energy Manipulation powers are non-conductive, but the GM makes the final decision based on the nature of his campaign setting, the powers involved, and similar factors.

FIRE/HEAT

Electricity has no special interaction with Fire/Heat; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Electricity has no special interaction with Force Manipulation; it neither gains nor loses against this special effect. As a default, any "physical" objects or shapes created with Force powers are non-conductive, but the GM makes the final decision based on the nature of his campaign setting, the powers involved, and similar factors.

GRAVITY

Electricity has no special interaction with Gravity; it neither gains nor loses against this special effect.



HOLY/UNHOLY

In general, Electricity has no special interaction with Holy or Unholy powers; it neither gains nor loses against this special effect. However, if the setting defines lightning as having mystic or religious significance, that may affect the situation. For example, if lightning is thought to be the arrows of the king of the gods, then it might also be considered Holy.

ICE/COLD

Ice-based defenses are typically made of water ice, and water, as noted elsewhere in this section, is a superb conductor. Furthermore, for at least some conductive materials, such as some non-ferrous metals, cooling them reduces their resistance to Electricity (drastically so, in the case of superconducting materials like tin, aluminum, and some ceramics). Therefore Ice/Cold defenses made of ice are reduced 25% before being applied to an Electricity attack. Ice/Cold attacks interact with Electricity defenses normally, as do Cold defenses consisting of “pure Cold energy.”

KINETIC ENERGY

Electricity has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Electricity has no special interaction with Life Force Energy; it neither gains nor loses against this special effect. As a default, any “physical” objects or shapes created by Life Force powers are non-conductive, but the GM makes the final decision based on the nature of his campaign setting, the powers involved, and similar factors.

LIGHT

In general, Electricity has no special interaction with Light; it neither gains nor loses against this special effect. However, some Light-based attacks (such as lasers) may ionize the air, thus creating a “trail” for an Electricity attack to travel down. In that case, eliminate any OCV penalties or other restrictions imposed by the GM based on conductivity (see above).

MAGIC

Electricity has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Technically speaking, Electricity and Magnetism are closely related (hence the term “electromagnetic force”). Moving metal through a magnetic field creates an electric charge (the technology behind metal detectors works on this principle), and running an electric current through a wire creates a magnetic field around that wire. Thus, the two types of energy could work well together. For example, an Electricity projector and a Magnetism projector firing at the same target might receive a +2 or greater bonus to their Teamwork rolls to Coordinate their attacks. Similarly, a character might buy his Electricity or Magnetism powers with Variable Special Effects (+¼) so he could define them as the other type of energy if he wished. However, for general gaming purposes, Electricity has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Electricity has no special interaction with Matter Manipulation powers; it neither gains nor loses against this special effect.

MENTAL/PSIONIC

Electricity has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

In general, Electricity has no special interaction with Physical powers; it neither gains nor loses against this special effect. However, if a Physical object has high conductivity (like most metals do), then it may take +1 or more DCs of damage from an Electrical attack.

PULSON ENERGY

Electricity has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Electricity has no special interaction with Radiation (in fact, in a technical sense it's simply a subset of electromagnetism generally); it neither gains nor loses against this special effect.

SONIC

Electricity has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Electricity has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect. As a default, any "physical" objects or shapes created by Telekinetic powers are non-conductive, but the GM makes the final decision based on the nature of his campaign setting, the powers involved, and similar factors.

TIME

Electricity has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Electricity has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

As discussed above, pure water is a good insulator... but characters will almost never encounter pure water, and impure water is a superb *conductor* of Electricity. That makes Water a poor defense against it — reduce a Water defense by 33% (one-third) of its Active Points before applying it to reduce the damage from an Electricity attack. Water attacks interact with Electricity defenses normally... but as mentioned above, they might interfere with Electricity powers by "short circuiting" them. Even if the GM doesn't want a Water attack to shut off an Electricity power (or powers) completely, he might reduce the affected defense (and/or any other powers he prefers) by 1 Active Point per 10 Active Points in the Water attack. This effect is cumulative; the more Water attacks an Electricity user suffers, the weaker his powers become (perhaps with some predefined limit, like 50% effectiveness).

CONCLUSION: THE SPECIAL EFFECT: ELECTRICITY POWER MODIFIER

Electricity has more benefits than it has drawbacks. Therefore, *Special Effect: Electricity* constitutes a +10 Character Point Adder. In campaigns involving a lot of underwater adventuring, the GM may convert this to a +¼ Advantage.

EXAMPLE ELECTRICITY POWERS

Here are some example Electricity powers:

Offensive Powers

CONDUCTIVITY CHANNELING

Effect: Indirect for any Ranged Electricity power built on up to 150 Active Points; Only Through Conductive Materials
Target: Self
Duration: Instant
Range: No Range
END Cost: 7

Description: The character can control the flow of his Ranged attacks involving Electricity so that they move through conductive materials (such as a metal floor or wall) to strike the target from an unusual angle.

Game Information: Indirect (always originates from character, but can strike from any angle; +½) for any Ranged Electricity power built on up to 150 Active Points (75 Active Points); Only Through Conductive Materials (-1). Total cost: 37 points.

DIRECT CURRENT PARALYSIS

Effect: Entangle 3d6, 3 DEF, Takes No Damage From Attacks
Target: One character
Duration: Constant
Range: Touch
END Cost: 7

Description: The character can touch another person and project direct current (DC) electricity into his body, causing his muscles (or wiring) to lock up and prevent him from moving. The character must maintain his touch on the victim; as soon as he lets go, the effect ends (hence the *Lockout Limitation*). However, as long as he maintains his touch, he keeps the Entangle at full strength (the Continuous Advantage). He gets to roll the Entangle dice every Phase as an action that takes no time. If his BODY roll on the dice exceeds the Entangle's current BODY, the new, higher, BODY roll applies (note that rolls do not add together — only the highest total applies).

Game Information: *Entangle 3d6, 3 DEF, Continuous (+1), Takes No Damage From Attacks (+½) (75 Active Points); No Range (-½), Lockout (character must maintain contact with the victim with at least one hand; loss of contact immediately negates Entangle; -½), Vulnerable (electrical attacks; -1), Cannot Form Barriers (-¼), Only Versus Targets With Muscles Or Comparative Structures (-0). Total cost: 23 points.*

IONIZE

Effect: -5 DCV, Only Applies Versus Electricity, Magnetism, And Metal Attacks
Target: One character
Duration: Constant
Range: 185"
END Cost: 4

Description: The character can electrically charge an opponent's body, making him easier to hit with electrical, magnetic, or metal-based attacks.

This power requires the GM's permission, since it uses the optional rules for Negative Combat Skill Levels.

Game Information: *Negative Combat Skill Levels (-5 to opponent's DCV), Ranged (+½) (37 Active Points); Only Applies Versus Electricity, Magnetism, And Metal Attacks (-½). Total cost: 25 points.*

LIGHTNING BLAST

Effect: Energy Blast 9d6
Target: One character
Duration: Instant
Range: 275"
END Cost: 5

Description: The character can shoot a blast of electricity capable of badly injuring a normal person, stunning (and perhaps injuring) many superhumans, and destroying most objects.

Game Information: *Energy Blast 9d6, Special Effect: Electricity. Total cost: 55 points.*

PERSONAL ELECTRIC FIELD

Effect: RKA 1½d6, Damage Shield
Target: Self
Duration: Constant
Range: Touch
END Cost: 9

Description: The character can surround his body with a potent field of electrical energy that injures anyone who touches him, or whom he Grabs.

Game Information: *RKA 1½d6, Special Effect: Electricity, Continuous (+1), Damage Shield (+½). Total cost: 87 points.*

Defensive Powers**ELECTRIC SHIELD**

Effect: Force Field (16 PD/24 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 5

Description: The character surrounds himself with a shimmering field of electrical energy which protects him from attacks. It has significantly greater effect against energy attacks than physical attacks.

Game Information: *Force Field (16 PD/24 ED), Special Effect: Electricity. Total cost: 50 points.*

Movement Powers**RIDE THE LIGHTNING**

Effect: Flight 15", Only Along Electrical Wires
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character uses his control of electricity to "latch onto" the electricity in cables or wires and travel along with it. He can only fly where such cables and wires exist. This usually isn't too much of a problem in urban areas (though it may lead to some unusual flight paths), but it's often a significant problem in rural regions or unusual locales.

Game Information: *Flight 15" (30 Active Points), Only Along Electrical Wires (-¾). Total cost: 17 points.*

ELECTROMAGNETIC ENERGY



ELECTROMAGNETIC ENERGY BASICS

Defense: ED

Knockback: “Realistically” No, but Yes in many fantastic/cinematic settings and genres

Electromagnetic energy, or more accurately electromagnetic radiation (EM radiation), encompasses an enormous variety of energy phenomena. Ranging from highest to lowest frequency these include electricity, radio waves, microwave radiation, infrared light, visible light, ultraviolet light, x-rays, and gamma rays. For the purposes of this book, Electricity and Light (including infrared and ultraviolet) are covered in their own sections of this chapter. This section focuses on the other types: radio waves; microwaves; x-rays; and gamma rays.

RADIO WAVES

Radio devices — whether the kind in a car stereo that can only receive, or models that both receive and transmit — use the *radio spectrum*, a section of the electromagnetic spectrum, to send and/or transmit communications. The radio spectrum ranges from about just a few cycles, to thousands of cycles (kilohertz), to 300 gigacycles (gigahertz). It's divided into the following “bands,” from lowest to highest:

- **ELF** (extremely low frequency): The band from about 3-30 cycles is used to transmit signals to submerged submarines because those frequencies penetrate water well. However, the low frequency means messages take longer than normal to send, so they're usually restricted to short phrases and/or codes.
- **VLF** (very low frequency): From about 6,000 cycles (6 kilocycles, or kilohertz) to 30 kc. It's used primarily for maritime communication and navigation signals.
- **LF** (low frequency): From 30-300 kc. Also used primarily for maritime communication and navigation signals.
- **MF** (medium frequency): From 300 kc to 3 megacycles. AM broadcasting uses this band.
- **HF** (high frequency): From 3-30 mc. Ham radios, CB radios, law enforcement radios, international shortwave broadcasts, most alarm systems, garage door openers, most cordless phones, walkie-talkies, baby monitors, and radio-controlled (RC) toys use this band (some versions of some of these technologies use the VHF band instead).
- **VHF** (very high frequency): From 30-300 mc. Most bugs (listening devices) use the VHF band, as does FM radio and most television stations. For example, FM radio is assigned the band of frequencies between 88 and 108 MHz (megahertz, or millions of cycles per second).

■ **UHF** (ultrahigh frequency): From 300 mc to 3 gigacycles. UHF television broadcasters, police repeaters, and cell phones use this band.

■ **SHF** (superhigh frequency): From 3-30 gc. This is a microwave band used for various high-end communications and navigation purposes, satellite transmissions, the GPS system, and the like.

■ **EHF** (extremely high frequency): From 30-300 gc, approaching the realm of infrared light.

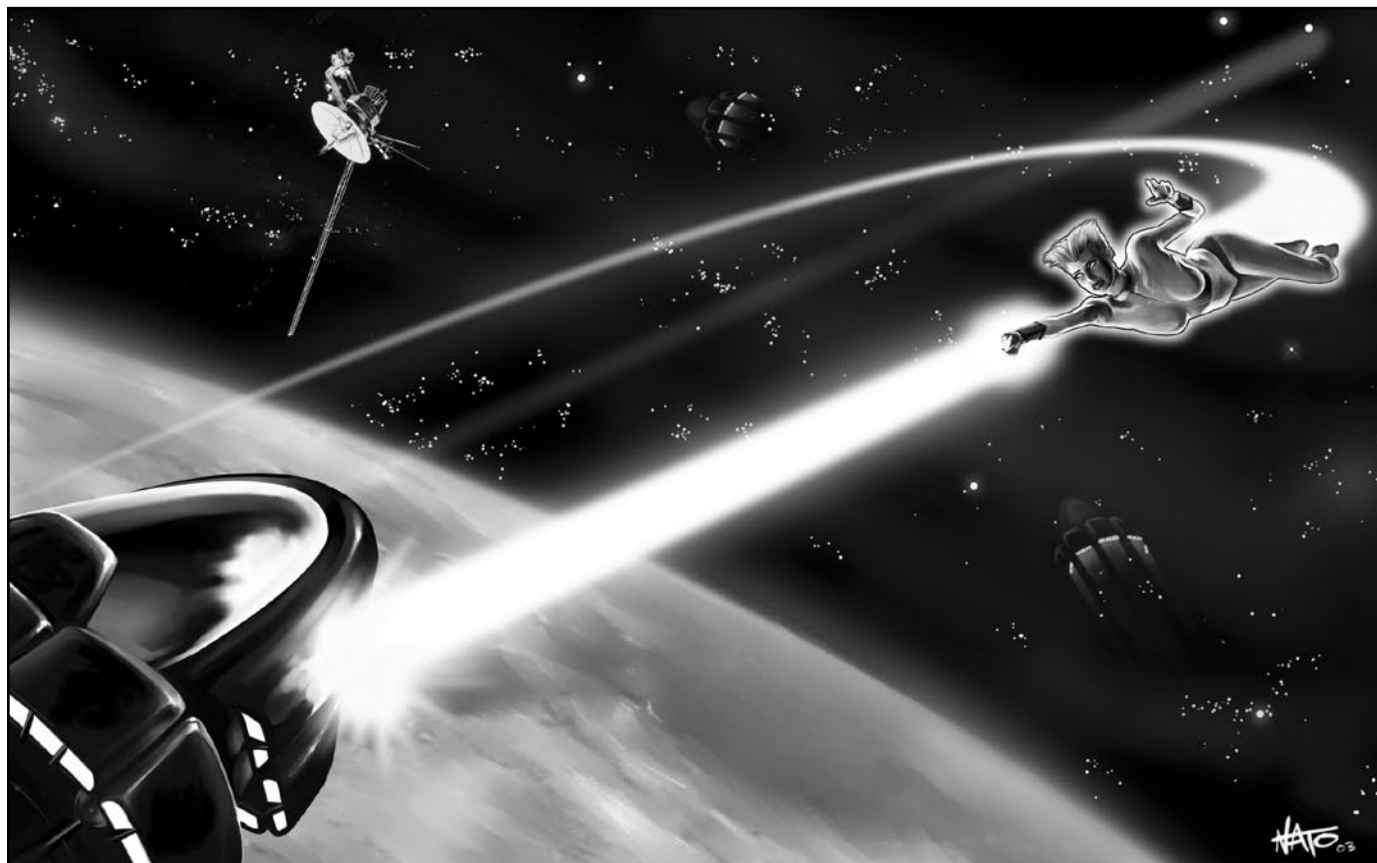
Lower frequency radio waves are “ground waves,” meaning they follow the curvature of the Earth and so tend to have limited range (though shortwave signals, such as in ham radio, can go all around the world). However, they can bounce off the “Heaviside layer” in the ionosphere (“skywave”) and thus travel further, especially at night (the season and sunspot activity also affect how far a radio transmission can travel). In the upper bands used with satellite transmissions and the like, a radio broadcast can reach anywhere in the world.

The exact range of any given radio depends on its power, the size of its antenna, and other factors. As a rule of thumb, assume a handheld unit (a walkie-talkie, for example) has a range of about 2-4 km, a backpack radio unit a range of 40-60 km, and a vehicle mounted radio a range of 300-500 km. At the GM's option, a character can make a Systems Operation roll to extend this range — +10% range for every point by which the roll succeeds. If the roll fails, the character gets no range bonus; if it fails badly (by 4 or more) reduce the range by 10% per point of failure. (These range rules apply primarily in more “realistic” campaigns; in cinematic campaigns radios may have much longer ranges depending on the needs of the story.)

Receiving and broadcasting using radio devices is usually pretty easy; after all they're meant for more or less public access in many ways. Intercepting, jamming, or tracking a radio signal may sometimes be difficult for this reason; the GM may impose modifiers of -1 or more.

MICROWAVES

Typically, *microwaves* are defined as electromagnetic energy with frequencies ranging from 1 to 1000 GHz (gigahertz), though alternate definitions exist and there's some overlap with Radio waves and infrared Light. The most common uses for microwaves are in the 1-40 GHz range. They're well-known to modern humans because of microwave ovens, which pass microwaves through food to heat the water, fat, and sugar molecules in them. Other uses include broadcasting and communications, some radar



applications, some wireless and networking technology, radio astronomy, masers (which are like lasers, but operate at microwave frequencies), long-range power transmission (at least experimentally), and cable television/Internet access.

X-RAYS

X-rays (or Roentgen rays, after the man generally credited with discovering them) are a form of electromagnetic radiation with frequencies ranging from 30 to 30,000 PHz (petahertz). They're measured in *rems*. Because they can pass through solid matter and make images of it on a medium behind that matter, they're often used for medical and dental imaging. Exposure to x-rays, which are a form of ionizing radiation, can be dangerous, though the average person is exposed to about 360 millirems of x-rays every year from various background sources.

GAMMA RAYS

Famed among comic book fans for having created the Marvel Comics character the Hulk, *gamma rays* (or gamma radiation) have the shortest wavelength, and thus the highest frequency and energy, of any part of the electromagnetic spectrum. This also makes them the most dangerous; exposure to them can lead to leukemia and many other forms of cancer. People are exposed to low amounts of gamma radiation normally; shielding people from higher doses usually requires lots of mass (such as soil, concrete, or lead). For these purposes, 1 cm of lead = 6 cm of concrete = 9 cm of packed soil. Gamma rays are used commercially to sterilize equipment, for some types of medical imaging, and similar purposes.

CHARACTERISTICS AND SECONDARY EFFECTS

The forms of Electromagnetic Energy described above have a few characteristics in common. First, they're invisible to the unaided human eye (though x-rays can be seen by a dark-adapted eye under experimental conditions, and when broadcast with sufficient intensity ionize the air with a white glow). In game terms this would justify buying the *Invisible To Normal Sight* (+¼), since for game purposes Infrared Perception or Ultraviolet Perception could still perceive them. Alternately, the GM might consider them Invisible as a default rule up to a certain amount of Damage Classes or Active Points (such as 6 DCs or 30 Active Points), but visible when used in greater amounts due to ionization or the like.

Second, they all penetrate most physical barriers easily (and the higher the frequency of the Electromagnetic Energy, the better the penetration). The interaction notes below discuss this (largely by giving Electromagnetic Energy attacks bonuses against physical defenses), but other approaches are possible. For example, the GM might require all such attacks to be bought with the *Armor Piercing*, *Indirect*, and/or *Penetrating* Advantages. However, it can be relatively easy to shield one's self against them. Conductive metal surrounding the target can block harmful EM radiation, even if it's just a metal mesh like the ones in microwave oven doors — the mesh's openings just have to be smaller than the radiation's wavelength. At the GM's option this may qualify the powers for a -¼ Limitation.

Third, the effects of exposure to electromagnetic radiation usually follow a spectrum based on the intensity of the energy, the length of the exposure, and similar factors. The effects result from the Electromagnetic Energy heating up tissue (*i.e.*, depositing energy into it). From least to worst harmful, they can include the following: temporary sterility; erythema (redness of the skin, *i.e.*, minor burning); burns (potentially very bad ones from ionizing radiation like x-rays and gamma rays, relatively mild ones from radio waves or microwaves); cataracts; permanent sterility; cancer. Obviously, in the real world most of these effects don't manifest themselves right away; they may take days, months, or years to show themselves. In a fictional setting involving fictional manipulation of EM radiation in ultra-intense amounts, they might show up within seconds (in other words, they might be combat-effective Electromagnetic Energy powers, bought as Drain, Transforms, or the like).

Generating large amounts of Electromagnetic Energy in an area might interfere with radio and television reception in that area, and nearby. The GM can treat this as a Change Environment that interferes with the PER Rolls of persons using those devices (*i.e.*, it makes it harder for the transmission to come through clearly, and thus for the user to hear/see it clearly), or even as a Darkness that blocks out the transmissions entirely.

If appropriate, the GM can use the rules for Radiation (the special effect) later in this chapter to model the effects of x-rays and gamma rays.

ELECTROMAGNETIC ENERGY AND OTHER SPECIAL EFFECTS

Here's how Electromagnetic Energy interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect (except perhaps as noted under *Acid*, above, regarding its interaction with energy in general).

AIR/WIND

Air/Wind defenses are a little better against Electromagnetic Energy than most forms of protection again; increase them by +2 before applying them to reduce Electromagnetic Energy damage. Air/Wind attacks and Radiation defenses interact normally.

BIOLOGICAL

Biological attacks have no special interaction with Electromagnetic Energy powers except as discussed above for energy powers generally. As discussed under *Electromagnetic Energy*, below, various forms of EM radiation tend to penetrate physical barriers well, so Biological defenses may suffer a reduction of -3 (or more) points before applying to Electromagnetic Energy attacks.

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect.

CHEMICAL

Chemical has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). At the GM's option, exposing Chemical powers to intense Electromagnetic Energy may have the same results as for Electricity (see under *Chemical*, above, for details).

COSMIC ENERGY

Electromagnetic Energy has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Dimensional Manipulation has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect.

EARTH/STONE

Compared to most physical barriers, Earth/Stone defenses insulate against Electromagnetic Energy attacks well; give them +1 ED before applying them to damage. Defenses made of Metal (a subset of Earth/Stone powers) are even better; give them +3 defense. Earth/Stone attacks interact with Electromagnetic defenses normally.

ELECTRICITY

Electricity has no special interaction with Electromagnetic Energy (in fact, in a technical sense it's simply a subset of electromagnetism generally); it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Electromagnetic Energy has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Electromagnetic Energy has no special interaction with Fire/Heat; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Electromagnetic Energy has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Electromagnetic Energy has no special interaction with Gravity; it neither gains nor loses against this special effect.

HOLY/UNHOLY

Electromagnetic Energy has no special interaction with Holy/Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Typically Electromagnetic Energy has no special interaction with Ice/Cold; it neither gains nor loses against this special effect. However, to the extent an Ice defense involves water or similar liquids that have been frozen, it may protect against Electromagnetic Energy better than normal (increase the Ice/Cold defense by +1 point before applying it to decrease the damage).

KINETIC ENERGY

Electromagnetic Energy has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Electromagnetic Energy has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Electromagnetic Energy has no special interaction with Light (which, as discussed above, is a form of electromagnetic radiation itself); it neither gains nor loses against this special effect.

MAGIC

Electromagnetic Energy has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Electromagnetic Energy has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Typically Electromagnetic Energy has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, to the extent a Matter Manipulation defense is a physical thing (e.g., a shield formed of matter), an Electromagnetic Energy attack may penetrate it more easily; reduce the Matter Manipulation defense by -2 points before applying it to decrease the damage.

MENTAL/PSIONIC

Electromagnetic Energy has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

General Physical defenses aren't much good against Electromagnetic Energy attacks; reduce them by -3 points before applying them to decrease the attack's damage. Physical attacks interact with Electromagnetic Energy defenses normally.

PULSON ENERGY

Electromagnetic Energy has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Electromagnetic Energy has no special interaction with Radiation (technically speaking they're all basically the same thing; see *Radiation*, below, for further discussion and more information); it neither gains nor loses against this special effect.

SONIC

Electromagnetic Energy has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Electromagnetic Energy has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Electromagnetic Energy has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Electromagnetic Energy has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Water defenses are a little better than most against Electromagnetic Energy attacks; increase them by +1 before applying them to reduce Electromagnetic Energy damage. Water attacks interact with Electromagnetic Energy defenses normally.

CONCLUSION: THE SPECIAL EFFECT: ELECTROMAGNETIC ENERGY POWER MODIFIER

Electromagnetic Energy has more benefits than it has drawbacks. Therefore, *Special Effect: Electromagnetic Energy* constitutes a +15 Character Point Adder.

EXAMPLE
ELECTROMAGNETIC
ENERGY POWERS

Here are some example Electromagnetic Energy powers:

Offensive Powers

GAMMA BLAST

Effect: RKA 2d6, NND, Does BODY, Indirect, No Knockback
Target: One character
Duration: Instant
Range: 200"
END Cost: 16

Description: The character can project a powerful blast of deadly gamma rays.

Game Information: RKA 2d6, Special Effect: Electromagnetic Energy, NND (defense is Life Support [Safe Environment: High Radiation]; +1), Does BODY (+1), Indirect (always originates with character and projects in a straight line from him, but passes through intervening barriers; +½) (157 Active Points); No Knockback (-¼), Limited Range (200"; -¼). Total cost: 105 points.

MICROWAVE BLAST

Effect: RKA 2d6, Armor Piercing (x2), Penetrating, Indirect, No Knockback
Target: One character
Duration: Instant
Range: 200"
END Cost: 13

Description: The character can project a powerful blast of microwave radiation.

Game Information: RKA 2d6, Special Effect: Electromagnetic Energy, Armor Piercing (x2; +1), Penetrating (+½), Indirect (always originates with character and projects in a straight line from him, but passes through intervening barriers; +½) (135 Active Points); No Knockback (-¼), Limited Range (200"; -¼). Total cost: 90 points.

Defensive Powers

ELECTROMAGNETIC SHIELD

Effect: Force Field (8 PD/14 ED/8 Power Defense)
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character can surround himself with a "shield" of electromagnetic force that protects him from attacks. It works better against Energy attacks than Physical ones.

Game Information: Force Field (8 PD/14 ED/8 Power Defense), Special Effect: Electromagnetic Energy. Total cost: 45 points.

Movement Powers

ELECTROMAGNETIC TELEPORTATION

Effect: Teleportation 20"
Target: Self
Duration: Instant
Range: Self
END Cost: 4

Description: The character transforms his body to pure electromagnetic energy, high-instantaneously travels to any location within 20", and then rematerializes.

Game Information: Teleportation 20". Total cost: 40 points.

Sensory Powers

ELECTROMAGNETIC SENSE

Effect: High-Range Radio Perception, Reception Only
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character can naturally perceive all sorts of electromagnetic waves, allowing him to receive radio and television broadcasts, sense radar emissions, and so forth. He cannot broadcast himself, only receive.

Game Information: HRRP (Radio Group) (12 Active Points); Reception Only (-1). Total cost: 6 points.

ENERGY MANIPULATION



Most characters with energy projection powers have the ability to manipulate a defined type or types of energy phenomena, such as Electricity, Fire/Heat, Ice/Cold, Radiation, or Sonic. *Energy Manipulation* powers are different, in several respects.

First, as the name implies they involve the ability to manipulate energy, often regardless of the specific type of energy involved. This may include some more direct energy projection powers, but in many cases characters with Energy Manipulation powers depend on the existence of other energy sources in the vicinity that they can draw on (power lines, energy projector PCs, fires...). In game terms you model these abilities primarily various Adjustment Powers.

Second, energy manipulators can often create shapes or other “constructs” out of a semi-solid form of pure energy. For example, they could make a gigantic hand out of energy to hold someone captive, or a staircase out of energy so their friends can walk up the side of a mountain. As with Force Manipulation or Telekinetic powers, this allows them to accomplish a wide variety of effects; Powers such as Entangle, Force Wall, Missile Deflection, and Telekinesis are often used to create these abilities, and many are Usable By Others powers as well.

SECONDARY EFFECTS

Because the energy involved in Energy Manipulation tends to be a “generic” sort of energy (perhaps it’s similar to Pulson Energy, which is discussed below), it doesn’t have any particular secondary effects *per se*. However, if a character uses Energy Manipulation powers to control other forms of energy, they may have their own secondary effects, as described in their sections.

ENERGY MANIPULATION AND OTHER SPECIAL EFFECTS

As a “generic” form of energy, Energy Manipulation powers typically has no special interaction with other special effects, though exceptions are noted in other special effects’ sections. If an energy manipulator uses some other form of energy, like Fire/Heat or Air/Wind, it interacts with other special effects as outlined in its own section of this chapter.

THE SPECIAL EFFECT: ENERGY MANIPULATION POWER MODIFIER

Since Energy Manipulation is neutral as to all other special effects, *Special Effect: Energy Manipulation* is a +0 Advantage.

EXAMPLE ENERGY MANIPULATION POWERS

Here are some example Energy Manipulation powers:

Offensive Powers

ENERGY BOLT

Effect: Energy Blast 10d6
Target: One character
Duration: Instant
Range: 250”
END Cost: 5

Description: This most basic of Energy Manipulation powers allows the character to project a bolt of energy powerful enough to cause significant injury.

Game Information: *Energy Blast 10d6*, *Special Effect: Energy Manipulation (+0)*. Total cost: 50 points.

ENERGY HAND

Effect: Telekinesis (30 STR)
Target: One character
Duration: Constant
Range: 225”
END Cost: 4

Description: The character can create a large hand (or talon, or like appendage) out of pure energy. The hand has enough cohesion to pick up and move objects and people without the character having to physically touch them.

Game Information: *Telekinesis (30 STR)*, *Special Effect: Energy Manipulation (+0)*. Total cost: 45 points.

Options:

1) Burning Hand: The character may, if he desires, increase the power of the energy in the hand so that it burns whatever it holds. Add Energy Blast 8d6, *Special Effect: Energy Manipulation (+0)* (40 Active Points); Linked (Instant Power can be used in any Phase Constant Power is active; -¼), No Knockback (-¼) (total cost: 27 points). 45 + 40 = 85 Active Points; total cost 45 + 27 = 72 points.

ENERGY MANIPULATION BASICS

Defense: ED

Knockback: Yes

ENERGY
MANIPULATION
MOVEMENT
POWERS

POWER-FLIGHT

Effect: Flight 20"
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character can use his energy powers to propel himself through the air.

Game Information: Flight 20". Total cost: 40 points.

ENERGY LEECHING

Effect: Drain Energy Powers 3d6
Target: One character
Duration: Instant
Range: 190"
END Cost: 5

Description: The character has the ability to drain the power from other energy powers. Typically this only works against other Energy Manipulation abilities, but at the GM's option it can affect any type of "energy," including forms such as Fire/Heat, Ice/Cold, Electricity, and so forth.

Game Information: Drain Energy Powers 3d6, any Energy Power one at a time (+¼), Ranged (+½), Special Effect: Energy Manipulation (+0). Total cost: 52 points.

ENERGY MAELSTROM

Effect: Energy Blast 8d6, Personal Immunity
Target: 11" Radius
Duration: Constant
Range: No Range
END Cost: 0

Description: The character can surround his body with a swirling maelstrom of deadly energy that harms anyone and anything that comes within about 70 feet of him.

Game Information: Energy Blast 8d6, Area Of Effect (11" Radius; +1), Continuous (+1), Personal Immunity (+¼), Reduced Endurance (0 END; +½), Special Effect: Energy Manipulation (+0) (150 Active Points); No Range (-½). Total cost: 100 points.

Defensive Powers

ENERGY SHIELD

Effect: Force Field (15 PD/25 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character can use his energy powers to create a protective field around himself. The field is more effective against energy attacks.

Game Information: Force Field (15 PD/25 ED), Special Effect: Energy Manipulation (+0). Total cost: 40 points.

Sensory Powers

SENSE ENERGY FIELDS

Effect: Detect Energy Fields, Discriminatory, Range, Sense
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character's Energy Manipulation powers attune him to the presence and nature of energy fields in general, allowing him to perceive when energy fields are near. He can distinguish the type of energy (e.g., magnetic, electric, pulson, sonic...), and to some extent the strength and quality of the field.

Game Information: Detect Energy Fields (INT Roll) (no Sense Group), Discriminatory, Range, Sense. Total cost: 22 points.

Miscellaneous Powers

BODY OF ENERGY

Effect: Various powers related to having a body made of energy
Target: Varies
Duration: Varies
Range: Varies
END Cost: Varies

Description: The character's body is made of pure energy, giving him a variety of powers. The character may buy as many of the powers listed below as he wishes. Any of the other Energy Manipulation powers would also be appropriate.

Game Information:

Cost	Power
40	Pure Energy Form: Desolidification (affected by any form of energy)
45	Pure Energy Form: Life Support (Total)
93	True Energy Sheath: Energy Blast 8d6, Continuous (+1), Damage Shield (+½), Reduced Endurance (0 END; +½), Persistent (+½), Special Effect: Energy Manipulation (+0) (140 Active Points); Always On (-½)
53	True Energy Shield: Force Field (15 PD/25 ED), Reduced Endurance (0 END; +½), Persistent (+½), Special Effect: Energy Manipulation (+0) (80 Active Points); Always On (-½)

FIRE/HEAT



Among the most popular types of energy for characters to use, and in some campaign settings nearly the *only* type available, Fire/Heat is one of the most spectacular and destructive forces characters can wield. Thematically it's commonly associated with damage and destruction, and therefore it comes as no surprise that most of the powers associated with this special effect are offensive in nature. In *Champions* campaigns they're often built as Energy Blasts, but “realistically” Fire is best modeled as an RKA due to its deadliness. However, Fire/Heat can represent more than just attack power. Fire is one of the things that makes civilization and many crafts possible, so you can also link it to creativity and social organization; if considered a gift from the gods it may have religious connotations as well (see *Holy/Unholy*, below). Fire can also preserve life by providing warmth, so you can associate it with healing and similar concepts.

The Limitation *No Knockback* is appropriate (if not, “realistically,” mandatory) for most Fire/Heat attacks in genres that feature Knockback. Fire/Heat has almost no forceful impact to Knock anyone Back, particularly for several meters.

CHARACTERISTICS AND SECONDARY EFFECTS

Fire is a chemical reaction between oxygen and some sort of fuel (a flammable material, such as wood, gasoline, paper, or the like). For combustion to occur, oxygen and fuel must be present, and the fuel has to be heated to its *ignition temperature* — in other words, the temperature at which it catches fire. In short, to have a fire, you need three things: fuel, oxygen, and heat. One of the things that makes fire so dangerous is that it's self-perpetuating: once a fire starts, it supplies enough heat to keep itself going as long as there's fuel and oxygen available.

Players and GMs desiring more “realism” in their games should apply the $-\frac{1}{4}$ Limitation *Requires Oxygen* to virtually all Fire powers (powers involving pure Heat don't require the Limitation). This means the powers won't work underwater or in a vacuum, and also deplete the available oxygen in the area (see below). However, many characters find ways to overcome these “realistic” restrictions (particularly in the Superheroes genre), so it's perfectly appropriate not to apply this Limitation if you prefer not to. Conversely, in games that involve spending a lot of time in the water (or other areas that lack sufficient oxygen to support fire), you should increase the Limitation's value to $-\frac{1}{2}$.

Putting out a fire involves depriving the fire of one of those three elements. Water can be used to remove the heat and/or raise the ignition temperature of substances; chemicals or smothering a fire with sand can remove the oxygen from the area and thus snuff the fire. Characters with Air/Wind, Matter Manipulation, Fire/Heat, Force Manipulation, Telekinetic, or Chemical powers may be able to find all sorts of ways to extinguish a fire.

On Earth and other planets, gravity determines how a flame burns. Since the hot gases in a flame are lighter than the surrounding air, they rise. That's why most fires spread in an upward direction, and flames tend to look “pointed” at the top and thicker at the bottom. In a microgravitic environment, fire forms a sphere.

FIRE IN THE REAL WORLD

Raging fires and devastating blasts of heat can emanate from many sources — bonfires, blast furnaces, torches, a house on fire. The Fire Table indicates some common sources of fire damage (other than weapons) and the damage they cause.

For large fires, assume the listed damage occurs *per hex*. Thus, if a character runs through a bonfire 4” wide, he takes bonfire damage for each hex (each attack applies to his defenses separately). Of course, the damage can vary from hex to hex; a raging fire may do 2d6 K at its center, but only $\frac{1}{2}$ d6 K in the hexes near the edge. The damage from fire or heat is energy damage.

See Chapter Four of *Villainy Amok* for advanced rules for how fires start, grow, spread, and inflict damage/injury.

FIRE/HEAT BASICS

Defense: ED

Knockback: “Realistically” No, but Yes in many fantastic/cinematic settings and genres; see text

FIRE TABLE

Fire Type	Heat Damage	Other Damage
Blast Furnace	6d6 K	12d6 Normal (physical), if in furnace
Boiling Oil or Tar	2-4d6 K	May have Sticky effect
Electric Burner/Heater	$\frac{1}{2}$ -1d6 K	
Lantern, Flaming Oil	1 pip to 1d6+1 K	
Molten Metal	4d6 K	14d6 Normal (physical)
Oil or Chemical Fire	1 pip to 3d6 K	Possible smoke damage (see text)
Rocket Exhaust	6-8d6 K	18d6 Normal (physical)
Superheated Steam	2-3d6 K	10d6 Normal (physical), if in blast
Torch	1 pip to 1d6 K	+2d6 HA if used as a club
Torch, Welding/Industrial		
Acetylene	2d6 K AP	
Oxy-Hydrogen	$2\frac{1}{2}$ d6 K AP	
Laser	3d6+1 K AP	
Plasma	4d6 K AP	
Wood or House Fire	1 pip to 2d6 K	Possible smoke damage (see text)

AP: Armor Piercing

K: Killing Damage

NND: No Normal Defense (STUN only)

BURNS

Fire/Heat damage to tissue is rated in four categories of *burns*. Burns can pose serious medical risks, including death, if they cover enough of the body or affect particularly sensitive areas (such as the lungs).

A first-degree, or superficial thickness, burn involves erythema (reddening of the skin), minor pain, and no blistering.

A second-degree, or partial thickness (superficial or deep), burn is similar to a first-degree burn but fills with clear fluid and features blistering; the worse versions have a whiter appearance. The amount of pain felt depends on how badly nerves are burned.

A third-degree, or full thickness, burn causes charring of the skin, leathery eschars (scabs), and often a purplish fluid. A third-degree burn is often painless due to destruction of the nerves.

A fourth-degree burn damages tissues under the skin, such as muscles or bones. Some experts break them down into fourth-degree (skin irretrievably lost), fifth-degree (muscle irretrievably lost), and sixth-degree (bone is charred) burns.

In game terms, typically taking 1 BODY damage from Fire/Heat causes a first-degree burn to a normal human, 2 BODY is a second-degree burn, 3 BODY is a third-degree burn, and 4 or more BODY is a fourth-degree burn. The GM determines how much of the character's body is affected based on the nature of the attack and the target. Depending on the area affected, a burn may make it difficult for a character to move (reductions to DEX Rolls and/or Running and other forms of physical movement), may cause significant, noticeable scarring (a loss of COM), or have other game effects.

SMOKE AND GASES

Fire creates smoke, and in a confined space it can build up to the point where it inflicts harm on living beings. It does NND Normal Damage; the defense is Life Support (Self-Contained Breathing). Treat this as a Constant area-affecting attack, but characters caught in a smokey area only take damage once in each of their Phases (or the fire's Phases, if you use the rules from *Villainy Amok*), not once per hex they move through. The accompanying Smoke Damage table indicates the amount of smoke damage.

SMOKE DAMAGE

Conditions	NND Damage
Confined area	
Trace of smoke	1 point
Moderate amount of smoke	½d6
Large amount of smoke	2d6
Open area, large amount of smoke	1 point
Chemical fire	+1d6

Characters who breathe through a filter (such as a wet cloth) take half damage from smoke inhalation (no damage in the case of "1 point").

It takes a fire time to fill an area with smoke. Assume that one hex of fire generates a hex of smoke per Turn, with lesser fires filling proportionately smaller volumes.

Smoke isn't the only dangerous gas that a fire can produce. Fires that burn some types of plastics, chemicals, and the like may produce fumes that can be sickening, or even fatal. In this case convert the NND damage on the Smoke Damage take to Normal Damage, NND, Does BODY damage; the defense is Life Support (Self-Contained Breathing or appropriate Immunity). Alternately, use the rules under *Chemical*, above to determine if Fire/Heat and Chemicals mix with dangerous results.

IGNITING THINGS

One of Fire/Heat's most deadly characteristics, and also one of the things that's most difficult to model in game terms, is its capacity to set things on fire that aren't already on fire. If the temperature rises to the "fire point" or "ignition temperature" of a substance (either because the heat itself increases, or direct exposure to fire does the trick), that substance catches on fire. The accompanying Ignition Table lists the temperatures of common types of fire and the ignition points of many objects. This may become important during play when characters use Change Environment to raise the Temperature Level (see pages 441-42 of *The HERO System 5th Edition, Revised* for more information) — it takes a lot of increased Temperature Levels to cause fires to spontaneously break out, but it is possible.

IGNITION TABLE

Type Of Fire/Heat	Temp (C)	Temp (F)
Blowtorch	1800°	2370°
Campfire	400-600°	750-1112°
Candle flame	760°	1400°
Cigarette	400-700°	750-1290°
Cigarette lighter	700°	1290°
Fireplace fire	400-600°	750-1112°
Match	700°	1290°
Oxyhydrogen flame	2000°	3645°
Torch	400-600°	750-1112°

Substance	Ignition Point (C)	Ignition Point (F)
Coal	300°	572°
Coal-tar oil	580°	1076°
Fuel oil	210-262°	410-505°
Gasoline	257°	495°
Kerosene	210°	410°
Magnesium	473°	883°
Natural Gas (methane)	580°	1076°
Paper	233°	451°
Propane	480°	842°
Wood	277-500°	530-930°

Igniting Things In Game Terms

Think of Fire/Heat as having properties similar to the *Sticky Advantage*. (In fact, many Fire/Heat powers are built with this Advantage, and if a character wants to use this property of Fire/Heat in combat/crisis situations, he should pay Character Points for it.) When an object's ignition point is reached, it catches on fire and takes 1 BODY damage per Phase (assume fire has SPD 2 for these



purposes). As discussed above, the fire keeps burning until it uses up the fuel or oxygen available, or is extinguished. While it's still burning, if it comes into contact with other flammable substances, it sets them on fire as well.

Alternately, instead of worrying about ignition temperatures and the like, the GM can use the accompanying Catching Fire Table to determine if something catches fire after being hit with a Fire/Heat attack. The GM can adjust the suggested rolls based on the circumstances. For example, paper is rated as "Highly Flammable" — but a thick ream of paper is less flammable than a few loose sheets, so the GM might reduce the roll by 1-2 points for a ream. Once an object catches fire, use the rules above to determine what happens.

LAVA

Lava — molten, liquid stone forced up from the depths of the earth by geologic pressure — is a sort of cross between Fire/Heat and Earth/Stone, but for the most part you should consider it as belonging to the Fire/Heat special effect. A character immersed in lava takes 4d6 Killing Damage (energy), Armor Piercing, every Phase he remains in it. If only part of a character's body suffers exposure — such as a hand or a foot — use the Hit Location table to adjust the damage accordingly.

LIGHT

Besides generating heat, Fire also creates light. The GM can allow Fire/Heat-using characters to generate useful light as a "side effect" of their powers, or if he prefers he can keep this to a minimum and require them to buy usable

CATCHING FIRE TABLE

Category	Chance To Catch Fire*	Examples
Highly Flammable	16-	Paper, gasoline, gunpowder, matches
Flammable	14-	Cloth, hair, fur, twigs/kindling/small wooden objects
Mildly Flammable	10-	Large wooden objects, many plastics
Inflammable	6-	Earth/stone, brick, most metals

*: Chance to catch fire assumes the Fire/Heat attack does at least 1 BODY damage after the object's DEF is applied. If not, reduce the roll by 3 or more.

amounts of light as an Images-based power. Here are some guidelines for how much light fires of different sizes provide:

Candle: A candle provides full illumination (no Sight PER Roll penalties for darkness) in a ½" radius. For the next ½" beyond that, it reduces the darkness penalty to -2. For the next 1" beyond that, it reduces the darkness penalty to -1. Beyond that distance (a total of 2" from the candle), it provides no meaningful illumination.

Torch: A torch provides full illumination (no Sight PER Roll penalties for darkness) in a 2" radius. For the next 2" beyond that, it reduces the darkness penalty to -2. For the next 2" beyond that, it reduces the darkness penalty to -1. Beyond that distance (a total of 6" from the torch), it provides no meaningful illumination.

Lantern: When lit, a standard lantern provides full illumination (no Sight PER Roll penalties for darkness) in a 1" radius. For the next 1" beyond that, it reduces the darkness penalty to -2. For the next 1" beyond that, it reduces the darkness penalty to -1. Beyond that distance (a total of 3" from the lantern), it provides no meaningful illumination.

Campfire, Hearth Fire: An average-size campfire provides full illumination (no Sight PER Roll penalties for darkness) in a 4" radius. For the next 4" beyond that, it reduces the darkness penalty to -2. For the next 4" beyond that, it reduces the darkness penalty to -1. Beyond that distance (a total of 12" from the fire), it provides no meaningful illumination.

See *Fantasy Hero*, pages 359-60, for more information.

Since Fire/Heat can be so bright, Linking a Sight Group Flash to a Fire/Heat power is appropriate.

OXYGEN

Fires require oxygen to burn... which means they use up oxygen just like they use up fuel. In most cases this has no game effect (though it causes air to flow into the areas losing oxygen), but in situations where characters are in an enclosed space using Fire/Heat powers could deprive the space of oxygen and cause everyone in side to suffocate. In most situations it's simplest for the GM to use oxygen deprivation as a dramatic device, but if you want more precise rules use the following.

Calculating the exact rate at which a fire uses up oxygen is difficult and depends on many factors, including the size and intensity of the fire. For game purposes, a cubic hex contains 7,000 liters (1,850 gallons) of air (which on Earth is 78% nitrogen, 21% oxygen, and 1% other gaseous substances; in some cases this is adjusted to allow for water vapor). That means there are approximately 1,470 liters of oxygen in a cubic hex. Assume that any Fire power uses 1 liter of oxygen per 10 Active Points per Phase of use. The GM can increase or decrease this rate to allow for area-affecting powers and the like.

Applying pure oxygen to a fire, in either gaseous or liquid form, causes a fire to burn with great speed and intensity. In game terms you can think of this as a large Aid to Fire damage, but with the effect that the flames use up their fuel much more quickly (perhaps even virtually instantaneously).

SCARRING AND CAUTERIZING

Like Acid attacks, Fire attacks and attacks involving heated materials (such as lava, molten metal, or steam) are more likely than most attacks to cause scarring. Use the guidelines for this under *Acid*, above, if desired.

Heat (whether from Fire or some other form of energy, such as Electricity) tends to cauterize flesh. In game terms, this may mean that such attacks do not invoke the optional Bleeding rules, that characters reduced to 0 BODY or less by one do not continue to "bleed to death" and lose BODY every Turn, and/or that either type of bleeding stops when the affected area is hit by one of them.

STARTING MINOR FIRES

At the GM's option, a character with Fire/Heat powers can start minor fires for everyday purposes (light a candle, a cigarette, prepared kindling for a campfire, or the like). Depending on the situation and the GM's preference, a character can do this automatically, or it may require a successful

Power Skill roll (in a *Champions* campaign, the Skill is Fire/Heat Tricks or the like; in a *Fantasy Hero* campaign it might be Fire Magic; and so on). The GM may modify the roll based on how flammable the substance is; setting a candle or piece of paper on fire is much easier than causing a wooden plank to burst into flame. Characters cannot do this in combat, or as a way of inflicting injury (e.g., by setting an enemy's clothing or hair on fire) unless they pay Character Points for the ability.

WARMTH

Fire/Heat powers generate warmth. This has several implications and possible uses.

First, a Fire/Heat-using character probably doesn't have to worry about feeling cold in most situations, since he can use his powers to keep himself warm. If he wants to have this as a combat-effective thing, he needs to buy Life Support (Safe Environment: Intense Cold), but if he just wants to walk around in the wintertime without a jacket it's not necessary to buy this as a power.

Second, in a similar fashion having a Fire/Heat-character nearby may help to keep other characters warm when it gets cold (when they're caught in a blizzard, locked in a freezer by a master villain, or the like). Again, this doesn't immunize them from damage or have any combat effect, but in everyday situations it's a nice way to give the Fire/Heat character a "perk" for choosing that special effect.

Third, the use of Fire/Heat powers can raise the temperature in an enclosed area (in a large area or the open air he'll still increase the temperature near himself, but it won't create a noticeable combat effect). For game purposes, add up the total Active Points of all the Fire/Heat powers a character uses in a Phase. For every Phase in which the total exceeds 100, the character raises the Temperature Level in his hex by 1; if it exceeds 200, it raises the TL by 2; if it exceeds 300, it raises the TL by 3; and so on. After the character has warmed his hex for 1 Phase, the warmth spreads to the "rings" of hexes around him, sort of like an Explosion. The ring of hexes immediately surrounding him becomes half as warm as his hex; the ring beyond that half again as warm (one-quarter of his hex's warmth), and so on until the Temperature Level reaches the ambient TL of the local environment. The longer the character uses his powers, the hotter it becomes around him, and the further out the noticeable heating spreads. If he's not careful, he may make it so hot that nearby objects catch fire!

See pages 441-42 of *The HERO System 5th Edition, Revised* for more information about Temperature Levels.

Ambient Heat In Fires

Even an area that's not on fire can be harmful if it's in the midst of a fire — the heat alone can burn and blister skin, dehydrate and exhaust people, and so forth. A hex that's surrounding by fire on three or more hexes that are on fire does one-quarter damage if a character stands in one place, and half damage if he attempts to move through the fiery area (standard rounding rules

apply). Characters with Life Support (Safe Environment: Intense Heat) do not suffer this damage.

OTHER EFFECTS

Some other possible damaging effects of a fire include:

Hot Metal: Inside a burning building, metal (doorknobs, steel desks, and the like) can become superheated. If touched, superheated metal without protection does 1d6 Normal Damage per DC of the deadliest surrounding fire's Killing Damage (e.g., metal heated in a normal house fire [1d6 KA, or 3 DCs] inflicts 3d6 Normal Damage). If a character uses something to handle the hot metal (such as a towel or wet rag), it may act as DEF against the damage, or in the GM's option may prevent him from taking any damage at all. If the character has personal Defense Powers (like an ED Force Field), they provide their usual protection.

Spray Of Sparks: When something begins to combust, there's often a spray of sparks. Anyone caught within 1" of a spark cascade takes 1d6 x 6 points of fire Killing Damage.

Solar/Celestial Powers

Closely related to Fire/Heat powers in many respects are Solar/Celestial powers, which tend to involve "sunfire" or "starfire" instead of regular fire. (And which, in many settings, also have Holy connotations.) Depending on the setting, you might simulate Solar/Celestial powers using the *Multiple Special Effects* Advantage to make them Fire/Radiation, or Fire/Holy. If you want to differentiate Solar/Celestial further, assume that it's particularly hot and intense compared to regular Fire/Heat; buy its attacks with slightly more DCs, and reduce the rolls on the Catching Fire Table by 1-2. Similarly, Solar/Celestial fire is brighter than terrestrial flame; increase the size of the area it can illuminate (see above) by 25-50% and consider Linking a Sight Group Flash to its attacks.

PLASMA

Plasma is an ionized gas considered to be the fourth state of matter (in addition to solids, liquids, and gases). Its ionization makes it electrically conductive, so it's easily channeled (or otherwise affected) by electromagnetic fields. Stars are balls of plasma heated by ongoing massive nuclear fusion reactions; lightning is an example of a plasma at Earth's surface, and ordinary fires are sometimes considered low-temperature partial plasmas. Plasma is also used in many technologies, such as plasma-screen televisions.

A plasma attack, be it a plasma rifle in a *Star Hero* game or a blast emitted by a supervillain in a *Champions* campaign, would "realistically" involve using a controlled fusion reaction to generate superhot plasma, then direct the plasma toward the target via a magnetic field. In game terms you can consider this a form of Solar/Celestial fire, or simply make it a particularly powerful Fire/Heat attack.

FIRE/HEAT AND OTHER SPECIAL EFFECTS

Here's how Fire/Heat interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

The intense heat of Fire defenses tends to burn away some of the power of Acid attacks (which may cause unintended chemical reactions or create gases with unpleasant or unhealthy effects); reduce the attacks by -1 DC before the defense is applied. Fire/Heat attacks interact with Acid defenses normally (though again, the possibility of a dangerous chemical reaction exists). If appropriate, you can use the rules under *Chemical*, above, for Fire-Acid interactions as well.

AIR/WIND

Air/Wind has an unusual relationship with Fire/Heat. On the one hand, a fast-blowing wind can easily put out a flame, as anyone who's ever blown out a candle knows. However, depending on the relative strength of the wind and the fire, as well as other environmental factors, Air/Wind can actually spread or stoke a fire, making it burn hotter or over a larger area (hence the use of a bellows in a smithy). The GM should keep this in mind when adjudicating how the two special effects interact on a broad scale. (See *Villainy Amok* for rules about how fires spread and burn.)

In terms of energy projectors' powers, which tend to involve intense uses of energy over a tightly-confined area, an Air/Wind attack tends to be effective against a Fire/Heat defense; add +1 DC before applying the defense. Fire/Heat attacks interact normally with Air/Wind defenses.

BIOLOGICAL

Due to their intense heat, Fire defenses are particularly effective against Biological powers that involve projecting spores, viruses, or the like through the air — they gain at least +3 defense, and possibly more. Other types of Biological attacks have no special interaction with Fire/Heat powers. Fire attacks are slightly more effective against Biological defenses than normal; reduce the Biological defenses by -1 point.

CHAOS/ENTROPY

Fire/Heat has no special interaction with Chaos/Entropy; it neither gains nor loses against this special effect.

CHEMICAL

Fire (and to a lesser extent any other form of energy that might generate intense heat) can react with Chemical powers in many different ways. See *Chemical*, above, for more information and rules. In some circumstances the GM may want to use those rules for Fire-Acid interactions as well.

COSMIC ENERGY

Fire/Heat has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Although Fire and Darkness aren't as directly opposed as Darkness and Light, in some thematic sense the opacity and "chill" of Darkness is antagonistic to the brightness and warmth of Fire/Heat. (This is particularly true when both are manifestations of Magic.) To represent this, make each of them slightly less resistant to the other's attacks: Fire/Heat defenses are at -1 ED versus Darkness attacks; and Darkness defenses are at -1 ED against Fire/Heat attacks.

DIMENSIONAL MANIPULATION

Dimensional Manipulation has no special interaction with Fire/Heat; it neither gains nor loses against this special effect.

EARTH/STONE

Earth/Stone defenses are particularly good at shielding people from heat and flame. Give them +3 ED before applying them to damage. Earth/Stone attacks penetrate Fire/Heat defenses pretty well, too; they gain +1 DC before the defense applies. (On the other hand, Metal defenses may conduct heat unusually well; they get no bonus against Fire/Heat, or possibly even lose -1 ED.)

ELECTRICITY

Fire/Heat has no special interaction with Electricity; it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Fire/Heat has no special interaction with Electromagnetic Energy; it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Fire/Heat has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Fire/Heat has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Fire/Heat has no special interaction with Gravity; it neither gains nor loses against this special effect.

HOLY/UNHOLY

In general, Fire/Heat has no special interaction with Holy or Unholy energies; it neither gains nor loses against this special effect. However, in some settings Fire may have mystic or religious connota-

tions that "align" it with one of these forces (thus making it opposed to the other). For example, Fire might be a gift from, and thus the province of, the gods, making it a Holy energy and therefore particularly effective against Unholy powers, the undead, and so forth. In another setting there might be Holy and Unholy forms of Fire/Heat, perhaps called Sacred Fire and Hellfire.

ICE/COLD

Fire attacks tend to be more effective than normal against Ice/Cold defenses, which melt under the withering, hot barrage; reduce the Ice/Cold defense by -2 points before applying it to decrease the Fire/Heat damage. Similarly, Fire/Heat defenses melt Ice/Cold attacks; add +1 to the Fire/Heat defense before applying it to reduce the Ice/Cold damage.

In either case, water is going to be a byproduct of the interaction between the two, possibly causing minor flooding or water damage to parts of the local environment. (To some extent this also applies when any form of energy that emits heat contacts Ice.) Usually the Ice is just reduced to water, but in some cases the Fire/Heat may be hot enough to then instantly convert the water to steam. See the *Water* rules later in this section for more information, but reduce any damage caused by at least half (to 0 for 1 point damage).

KINETIC ENERGY

Fire/Heat has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Fire/Heat has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Fire/Heat has no special interaction with Light; it neither gains nor loses against this special effect.

MAGIC

Fire/Heat has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Fire/Heat has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Fire/Heat has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, see *Physical*, below, regarding flammable defenses.

MENTAL/PSIONIC

Fire/Heat has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

In general, for ease of game play, it's assumed that Fire/Heat and Physical interact normally, with neither gaining or losing in the process — the contact is so brief that Fire/Heat attacks aren't likely to set Physical defenses on fire, and that Fire/Heat defenses don't melt or destroy Physical attacks.

However, for greater "realism," the GM can take these factors into account. Potentially flammable defenses (such as a wooden shield) have a chance to catch on fire whenever they contact a Fire/Heat attack. The GM determines the chance of this happening, from a 3- on 3d6 for defenses that are barely flammable to as much as 14- for highly flammable materials. (The latter extreme is unlikely, since few highly flammable materials make good defenses.)

Similarly, a Physical weapon contacting a Fire/Heat defense might catch on fire, thus potentially ruining it for future attacks... but briefly making it more dangerous because it might set other targets on fire in addition to cutting, stabbing, or bashing them! A "weapon" in this case could even include a character's fists, feet, or limbs, if they're wrapped in cloth or other flammable materials.

PULSON ENERGY

Fire/Heat has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Fire/Heat has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Fire/Heat has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Fire/Heat has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Fire/Heat has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Fire/Heat has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Fire and Water are, in both a proverbial and practical sense, opposites. Few substances or materials are as good at extinguishing a fire as water. Typically, a Water defense is at +3 ED versus a Fire/Heat attack, and a Fire/Heat defense is at -2 defense before being applied to reduce the damage of a Water attack.

But that's not the end of the story for GMs desiring greater "realism." The interaction of Fire and Water can produce steam, which may have other effects. Ordinary steam, with a temperature of 100° C (212° F) is uncomfortable, but likely to cause little, if any, damage. On the other hand, superheated steam — steam that's hotter than the boiling point of water due to rapid, undisturbed heating — can cause deadly scalding and may result in an "explosion" of steam and hot water... and unfortunately, the interaction of intense Fire/Heat powers with Water powers usually produces superheated steam.

In game terms, whenever Fire/Heat and Water powers interact, the GM should roll 3d6 and add +1 to the roll for every 10 Active Points in the Fire/Heat power. If the roll is 17 or less, the interaction creates a cloud of steam that's 1-2" in radius centered on the point of interaction. The steam lingers for ½d6 Segments (unless local conditions, such as wind, dissipate it sooner), causes 1 point of Killing Damage per Segment to anyone inside it, and imposes a -1 penalty on Sight PER Rolls made into, out of, or through it. If the roll is 18 or higher, an explosion of superheated steam results. The explosion itself does 10d6 Normal Damage (a physical attack) in a 1-3" radius centered on the point of interaction. Then that same area is filled with superheated steam for ½d6 Segments (unless local conditions, such as wind, dissipate it sooner), causes 2-3d6 Killing Damage per Segment to anyone inside it, and imposes a -1 penalty on Sight PER Rolls made into, out of, or through it.

CONCLUSION: THE SPECIAL EFFECT: FIRE/HEAT POWER MODIFIER

Fire/Heat has slightly more drawbacks than it has benefits when it interacts with other energy types/special effects, but can have some significant real-world benefits. Therefore, *Special Effect*: Fire/Heat constitutes a -0 Limitation.

EXAMPLE FIRE/HEAT POWERS

Here are some example Fire/Heat powers:

Offensive Powers

DESSICATE

Effect: Energy Blast 4d6, NND
Target: One character
Duration: Instant
Range: 200"
END Cost: 4

Description: Also known as Withering Heat, this power allows a character to create a zone of such intense heat around a target that it almost instantly dessicates and dehydrates him, causing him to experience pain and go into shock. Characters with a tolerance for intense heat are immune to the effect.

Game Information: *Energy Blast 4d6, NND (defense is Life Support [Safe Environment: Intense Heat]; +1) (40 Active Points); Special Effect: Fire/Heat (-0). Total cost: 40 points.*

FIERY PRISON

Effect: RKA 2d6
Target: One Hex
Duration: Constant
Range: 450"
END Cost: 0

Description: The character can surround a single hex with a cage made of flame. Persons trapped in the hex can leave — but they have to pass through the bars of the cage and take damage. Those who remain in the hex can attack anyone inside or outside it normally, though physical attacks that pass through the bars of the cage take damage.

Game Information: *RKA 2d6, Area Of Effect (One Hex; +½), Continuous (+1), Reduced Endurance (0 END; +½) (90 Active Points); Targets Only Take Damage If They Touch Cage Or Move Into/Out Of The Affected Hex (-½), Special Effect: Fire/Heat (-0). Total cost: 60 points.*

FIRE BLAST

Effect: RKA 2½d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 4

Description: The character can project a blast of flame capable of inflicting severe burns and injuries on targets.

Game Information: *RKA 2½d6 (40 Active Points); Special Effect: Fire/Heat (-0). Total cost: 40 points.*

FIREBALL

Effect: RKA 2½d6
Target: 8" Explosion
Duration: Instant
Range: 300"
END Cost: 6

Description: This classic Fire/Heat power consists of a huge blast of flame, usually sphere-shaped, that the character projects at his opponents. Few targets have the ability to avoid or resist the blast.

Game Information: *RKA 2½d6, Explosion (+½) (60 Active Points); Special Effect: Fire/Heat (-0). Total cost: 60 points.*

FLAME AURA

Effect: HKA 1½d6, Damage Shield
Target: Self
Duration: Constant
Range: Touch
END Cost: 0

Description: A sheath or mantle of flame covers the character's body. Anyone who touches him, or whom he Grabs, gets burned.

Game Information: *HKA 1½d6, Continuous (+1), Damage Shield (+½) (62 Active Points); No STR Bonus (-½), Special Effect: Fire/Heat (-0). Total cost: 41 points.*

PYROKINESIS

Effect: Telekinesis (30 "STR"), Only On Fire
Target: Special
Duration: Constant
Range: 225"
END Cost: 4

Description: The character has the power to "pick up" masses of flame doing up to 6 Damage Classes' worth of damage (see page 25). He can move the flame around without causing it to go out, and can "touch" targets with it to inflict damage (which "uses up" the flame, extinguishing it). He can also shape the fire into simple forms, such as geometric shapes, a bird of flame, or the like.

Game Information: *Telekinesis (30 "STR") (45 Active Points); Only Works On Fire (-1), Special Effect: Fire/Heat (-0). Total cost: 22 points.*



Defensive Powers

FIRE SHIELD

Effect: Force Field (16 PD/24 ED)
 Target: Self
 Duration: Constant
 Range: Self
 END Cost: 4

Description: The character surrounds himself with a mantle of fire that protects him from attacks. It has greater effect against Energy attacks than Physical attacks.

Game Information: *Force Field (18 PD/24 ED) (40 Active Points); Special Effect: Fire/Heat (-0). Total cost: 40 points.*

Movement Powers

FIERY FLIGHT

Effect: Flight 20"
 Target: Self
 Duration: Constant
 Range: Self
 END Cost: 4

Description: Virtually all characters with Fire powers have Flight, whether it derives from fiery wings, projecting flame behind the character to propel him like a rocket, creating thermals that lift and move the character, or some other method.

Game Information: *Flight 20". Total cost: 40 points.*

Sensory Powers

THERMAL VISION

Effect: Infrared Perception
 Target: Self
 Duration: Persistent
 Range: Self
 END Cost: 0

Description: The character can perceive heat differentials. Among other things, this often allows him to see in the dark.

Game Information: *Infrared Perception (Sight Group). Total cost: 5 points.*

Miscellaneous Powers

FIERY WARMTH

Effect: Life Support (Safe Environment: Intense Cold, Intense Heat)
 Target: Self
 Duration: Persistent
 Range: Self
 END Cost: 0

Description: The character's fire powers keep him warm in the coldest environments, and comfortably cool in the hottest ones.

Game Information: *Life Support (Safe Environment: Intense Cold, Intense Heat). Total cost: 4 points.*

FORCE MANIPULATION



FORCE MANIPULATION BASICS

Defense: Typically PD, but some attacks may affect ED instead

Knockback: Yes

Force Manipulation powers involve the control and manipulation of planes and fields of force, not only for defense but for various offensive purposes as well. The exact nature of the “force” involved isn’t necessarily clearly defined; it’s a sort of “rubber science” phenomenon common to some Superhero and Science Fiction settings; it can also appear in Fantasy settings as a sort of generic arcane energy that wizards use in defensive spells. It’s similar to the Energy Manipulation, Kinetic Force, and Telekinetic special effects in various respects.

SECONDARY EFFECTS

As a fictional form of energy, Force doesn’t have any unusual “side effects” — its existence and nature defy scientific laws. Thus, the GM can have Force function however he wants. For example, in some settings Force powers may interact with the air like Electricity, creating ozone and thus posing some risks in enclosed areas. In others it may not be possible to curve fields of Force, thus creating exploitable weak points wherever the straight planes intersect or “bend.” In some it may conduct Electricity; in others it’s a perfect insulator. The possibilities are limited only by the general nature of Force and the GM’s imagination.

Direct Force attacks usually work against Physical rather than Energy defenses, but again the GM can define things as he wishes.

FORCE MANIPULATION AND OTHER SPECIAL EFFECTS

As a “generic” form of energy, Force Manipulation powers typically has no special interaction with other special effects, though exceptions are noted in other special effects’ sections.

CONCLUSION: THE SPECIAL EFFECT: FORCE MANIPULATION POWER MODIFIER

Since Force Manipulation is neutral as to all other special effects, *Special Effect: Force Manipulation* is a +0 Advantage.

EXAMPLE FORCE MANIPULATION POWERS

Here are some example Force Manipulation powers:

Offensive Powers

FORCE BLAST

Effect: Energy Blast 10d6 (physical)
Target: One character
Duration: Instant
Range: 250”
END Cost: 5

Description: The character can project a bolt, blast, or beam of force that smashes targets with tremendous power.

Game Information: *Energy Blast 10d6 (physical), Special Effect: Force Manipulation (+0). Total cost: 50 points.*

FORCE SHACKLES

Effect: Entangle 4d6, 8 DEF
Target: One character
Duration: Instant
Range: 300”
END Cost: 6

Description: The character can shape force to create bindings to restrain other characters. The power may manifest as bands of force that wrap the victim from head to toe, glowing “energy chains” that wrap his wrists and feet, or the like. Regardless of the power’s appearance, the character can also re-shape it to form barriers.

Game Information: *Entangle 4d6, 8 DEF. Total cost: 60 points.*

FORCE SPEAR

Effect: RKA 3d6
Target: One character
Duration: Instant
Range: 225”
END Cost: 4

Description: The character can project a sharp-pointed blast of force capable of killing people or penetrating light tank armor.

Game Information: *RKA 3d6, Special Effect: Force Manipulation (+0). Total cost: 45 points.*



Defensive Powers

FORCE BARRIER

Effect: Force Wall (10 PD/10 ED; 5" long and 2" tall)
Target: Varies
Duration: Constant
Range: 300"
END Cost: 6

Description: The character can create a shimmering barrier of force that blocks attacks.

Game Information: *Force Wall* (10 PD/10 ED; 5" long and 2" tall), *Special Effect: Force Manipulation* (+0). *Total cost: 60 points.*

FORCE SHIELD

Effect: Force Field (30 PD/30 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 6

Description: The character can create a strong field of force around his body that protects him against attacks.

Game Information: *Force Field* (30 PD/30 ED), *Special Effect: Force Manipulation* (+0). *Total cost: 60 points.*

Movement Powers

FORCERIDING

Effect: Flight 10", Must Remain Within 15" Of A Solid Surface, Physical Manifestation
Target: Self
Duration: Constant
Range: Self
END Cost: 2

Description: The character can create a "column" or "arm" of force and move it, thus carrying himself through the air. However, he must have something solid to "anchor" the force to — typically the ground, but possibly the side of a building or the like (non-solid surfaces, such as a body of water, won't suffice). Furthermore, the column/arm manifests physically, so other characters may attack it, possibly causing the character to fall.

Game Information: *Flight 10"* (20 Active Points); *Must Remain Within 15" Of A Solid Surface* (-¼), *Physical Manifestation* (-¼). *Total cost: 13 points.*

GRAVITY BASICS

Defense: Typically ED, but attacks that involve the use of physical objects or physical effects affect PD instead

Knockback: Yes

GRAVITY



Gavity powers involve the manipulation or alteration of gravity. This allows for a wide range of effects, from creating zones of zero gravity, to making people too heavy to move, to moving enormous objects around at will, to flying, to a variety of gravitic blasts and attacks. They're mostly offensive and defensive in nature.

GRAVITY IN THE REAL WORLD

Gravity is one of the fundamental forces of reality. It's responsible for the creation of the galaxies and their contents (and thus for the existence of life on Earth), and it affects everything: all matter, all energy. All objects have a gravitational field that exerts an attracting force on all other things. In other words, all objects constantly try to pull all other things to themselves, or in more scientific terms apply acceleration to them in the direction of the object. The strength of an object's gravitational field depends on the object's size, is proportional to the target's size, and varies inversely with the square of the distance from the object. The gravitational field is constant — it keeps applying and applying its acceleration to the target object. Thus, a person falling to Earth falls at increasing speed every second until he reaches a "terminal velocity" dictated by wind resistance. The same applies to other gravitational fields (though they don't all have to cope with wind resistance).

Furthermore, according to Newton's Third Law, the object doing the gravitational attracting experiences an equal and opposite force to the target. To put it another way, as gravity makes a person fall toward the Earth, Newton's Third Law makes the Earth fall toward that person. It's just that the Earth has so much mass that its actual movement in this situation is incredibly small.

For game purposes gravity only becomes relevant when dealing with enormous objects — primarily planets and stars — or in situations where characters have the power to alter gravity artificially. The amount of gravity ordinarily exerted by a character, a vehicle, a monster, or the like simply isn't strong enough to matter.

GRAVITY IN GAME TERMS

Detailed rules about how gravity can affect characters, fighting in zero gravity environments, and the like are largely beyond the scope of this book. See *Star Hero*, pages 278-81, for detailed information and rules. This section addresses Gravity as an energy characters can manipulate.

Modeling Gravity in game terms can prove tricky due to the fundamental and absolute nature of gravity as a force. The gravity exerted by is rated

as Telekinesis with 5 STR that only pulls objects toward the center of the planet. That equals 1 gravity (1 G) of acceleration; each +5 STR equals +1 G of acceleration. In most situations this has no effect on the game; it's only important when dealing with planets that have stronger or weaker gravity, when someone artificially strengthens or weakens the gravitational field in an area, and so forth.

Gravity attacks often work against Physical defenses rather than Energy defenses, but it's up to the GM to make the final decision.

Basic Gravity Manipulation

For many forms of Gravity manipulation, the most applicable power is Telekinesis. The Gravity manipulator simply alters one or more gravitational fields to move the target around, hold him in place, or the like. This isn't an entirely accurate model of how Gravity works — among other things, it gives the victim a chance to break free from the gravity field(s), which technically is impossible — but for most in-game circumstances it works perfectly well.

Alternatively, Flight Usable As Attack can simulate changes in gravity. It doesn't allow the character to squeeze or crush his victim, or perform some other tasks by manipulating gravity, but it simulates applying a force the victim can't break free from the way he can with Telekinesis. Advantages like *Persistent* and *Uncontrolled* can make the power even more like "true" gravity. However, the rules do require a "reasonably common set of defenses" that stop an Uncontrolled power or negate a UAA power, and gravity should technically be inescapable. But since Gravity control itself isn't exactly "realistic," providing a way for victims to break free of it doesn't necessarily have to be "realistic" either.

As mentioned above, gravity affects everything, including energy — sufficiently intense gravitational fields can even bend energy. Since a character's control over Gravity usually allows for rather intense, focused uses, that could justify a wide range of primarily defensive powers, such as Force Field, Missile Deflection, and even Invisibility (bending light waves so they go around the character).

Strengthening, Negating, And Reversing Gravity

Characters who want to strengthen an existing gravitational field have several options. First, they can simply buy a lot of Telekinesis (or Change Environment with points of Telekinesis) with Limitations like *Only To Pull Target Straight Down To Earth* (-1). A character trying to move in spite of that would have to make STR Versus STR Rolls simply to move (the *Star Hero* rules mentioned above describe other implications and effects of increased gravity that would also come into play).

Second, he can Aid (or Succor) the standard local gravity of 1 G (5 STR Telekinesis). The stronger the “boost,” the stronger gravity becomes.

Negating gravity, or reversing it (or causing it to pull in some other directions) can be modeled in much the same way. Limited Telekinesis or Flight Usable As Attack are probably simplest, but Change Environment with a Telekinesis STR combat effect could also do the trick.

Gravity Defenses And Physical Objects

Gravity-based defenses often involve moving physical objects (bullets, biological spores, clouds of gas, thrown rocks...) to the side or dragging them to the ground. In this case, the substance in question isn't necessarily dissipated or neutralized; it may remain in the environment, still able to affect anyone who contacts it (at least until the substance fades away, “burns out,” or is otherwise rendered ineffective).

Absolute Power

Unlike many other abilities, Gravity powers should be fairly “absolute” — if they affect a character, they do so to an extreme degree (either normal gravity applies to him, or it doesn't). To simulate this, many Gravity powers have relatively high Active Point totals. If necessary you can scale them back, but the GM should keep the nature of the special effect in mind.

Gamemasters interested in “realistically” simulating the absolute and irresistible nature of Gravity might consider letting characters make powers like the ones described above No Normal Defense (the defenses being Desolidification, Extra-Dimensional Movement, Teleportation, or having Gravity powers of one's own). While expensive, this is likely to be extremely unbalancing, potentially violates several rules, and is not recommended... but it will certainly keep the average target from breaking free from Gravity-based Telekinesis.

GRAVITY AND OTHER SPECIAL EFFECTS

Here's how Gravity interacts with other energies/special effects. In general terms Gravity affects physical objects better than the “average” special effect — its attacks and defenses easily move them to the side (or drag them to the ground), disperse them, or punch through them. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Gravity defenses work better than average against Acid attacks for two reasons. First, as noted above, Acid tends to be more effective against physical defenses than ones made of energy. Second, the gravitic energy inherent in a Gravity defense tends to pull projected or thrown Acid to the ground, or otherwise skew its accuracy. As a result, Gravity defenses are at +1 ED against Acid attacks before being applied to reduce the damage. Gravity attacks interact with Acid defenses normally.

AIR/WIND

Air/Wind has no special interaction with Gravity powers; it neither gains nor loses against this special effect. (But see page 51 regarding how Gravity-induced changes of pressure might affect Air/Wind powers.)

BIOLOGICAL

Biological has no special interaction with Gravity; it neither gains nor loses against this special effect, except as discussed under *Biological*, above, for energy powers generally. However, in the case of a Gravity defense, the defense doesn't burn or destroy the physical manifestation of the power so much as it uses gravitic energy to drag it to the ground or hold it at bay.

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Gravity; it neither gains nor loses against this special effect.

CHEMICAL

Chemical has no special interaction with Gravity; it neither gains nor loses against this special effect, except as discussed under *Chemical*, above, for energy powers generally. However, in the case of a Gravity defense, the defense doesn't burn or destroy the physical manifestation of the power so much as it uses gravitic energy to drag it to the ground or hold it at bay.

COSMIC ENERGY

Gravity has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Gravity; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

In general, Dimensional Manipulation has no special interaction with Gravity; it neither gains nor loses against this special effect. However, at the GM's option, it's possible that opening dimensional portals and otherwise altering the “fabric of reality” will interfere with gravitational fields in ways that none of the characters involved can predict; see under *Dimensional Manipulation*, above, for more information and rules.

EARTH/STONE

Gravity defenses are slightly better against Earth/Stone attacks than normal; add +1 point of defense before applying them to reduce the damage. Earth/Stone defenses interact with Gravity attacks normally.

ELECTRICITY

Electricity has no special interaction with Gravity; it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Electromagnetic Energy has no special interaction with Gravity; it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Gravity has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Fire/Heat has no special interaction with Gravity; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Gravity has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

HOLY/UNHOLY

Gravity has no special interaction with Holy or Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Gravity has no special interaction with pure Cold energy; it neither gains nor loses against this special effect. However, against the physical manifestation of Ice, Gravity tends to be more effective than average. Ice defenses are at -1 ED before applying to reduce damage from Gravity attacks, and Gravity defenses are at +1 ED or PD against Ice attacks involving darts, chunks, blocks, or other physical manifestations of ice.

KINETIC ENERGY

In general, Gravity has no special interaction with Kinetic Energy powers; it neither gains nor loses against this special effect. However, if a Kinetic Energy attack involves shooting, throwing, or projecting a physical object at a Gravity defense, the defense gains +2 PD before being applied to reduce the damage.

LIFE FORCE ENERGY

Gravity has no special interaction with Life Force Energy powers; it neither gains nor loses against this special effect.

LIGHT

Gravity has no special interaction with Light; it neither gains nor loses against this special effect.

MAGIC

Gravity has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Gravity has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

In general, Gravity has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, if a Matter Manipulation attack involves shooting, throwing, or projecting a physical object at a Gravity defense, the defense gains +2 PD before being applied to reduce the damage.

MENTAL/PSIONIC

Gravity has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Gravity affects Physical objects strongly. Physical defenses are at -1 ED before applying to reduce damage from Gravity attacks, and Gravity defenses are at +2 PD against Physical attacks. (More “realistically,” fast-moving projectiles [anything that’s fired or shot] may suffer no penalty against Gravity defenses, while slow-moving ones [such as thrown objects] suffer a -1 or greater OCV penalty because Gravity has more time/opportunity to affect them.)

PULSON ENERGY

Gravity has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Gravity has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Gravity has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Gravity has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Gravity has no special interaction with Time powers; it neither gains nor loses against this special effect. (Alternately, since Gravity can distort spacetime, the intense gravitic fluctuations caused by Gravity powers may weaken Time attacks and defenses.)

VIBRATION

Gravity has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Gravity affects Physical better than average. Water defenses are at -1 ED before applying to reduce damage from Gravity attacks, and Gravity defenses are at +1 ED or PD against Physical attacks.

CONCLUSION: THE SPECIAL EFFECT: GRAVITY POWER MODIFIER

Gravity has more benefits than it has drawbacks. Therefore, *Special Effect: Gravity* constitutes a +20 Character Point Adder.

EXAMPLE GRAVITY POWERS

Here are some example Gravity powers:

Offensive Powers

GRAVITIC BLAST

Effect: Energy Blast 8d6 (physical)
Target: One character
Duration: Instant
Range: 300"
END Cost: 6

Description: The character can project a blast of concentrated gravitic energy that hits the target like a sledgehammer.

Game Information: *Energy Blast 8d6 (physical), Special Effect: Gravity. Total cost: 60 points.*

GRAVITIC MANIPULATION

Effect: Telekinesis (50 STR)
Target: One character
Duration: Constant
Range: 475"
END Cost: 9

Description: One of the most basic and common Gravity powers, this is the ability to alter or manipulate gravitic forces to move objects without having to touch them. The character's control is precise enough to allow him to throw, squeeze, or "punch" a target in addition to simply lifting and moving him.

Game Information: *Telekinesis (50 STR), Special Effect: Gravity. Total cost: 95 points.*

GRAVITY ALTERATION

Effect: Telekinesis (40 STR)
Target: 6" Radius
Duration: Constant
Range: 600"
END Cost: 12

Description: The character can create a field of altered gravity. He can either increase the gravity, pinning everyone inside the affected area to the ground, or he can cancel gravity and hold them all motionless off the ground. He must choose one or the other each time he uses the power; he cannot pin some people down while holding others up in the air.

Anyone in the affected area has to break out of the Telekinesis using STR before he can move his body in any way (including relatively trivial motions such as pulling a trigger or aiming an Energy Blast). If he succeeds, he can act normally, though he will have to make further rolls if he does not leave the affected area before the character's next Phase. Anyone who enters the affected area after it's established has to make rolls as well (see page 99 of *The HERO System 5th Edition*, Revised regarding Constant area-affecting powers).

If he pins the targets to the ground, the character can also cause STR damage to them as if performing a Grab and Squeeze. He cannot do this if he's holding them off the ground.

Game Information: *Telekinesis (40 STR), Area Of Effect (6" Radius; +1) (120 Active Points); Only To Pull Objects Straight Down To Earth Or Hold Them Off The Ground (-1). Total cost: 60 points.*

GRAVITY CANCELLATION

Effect: Flight 8", Usable As Attack
Target: One character
Duration: Constant
Range: 240"
END Cost: 6

Description: This power allows the character to cancel the effects of gravity on another person and move him around at will (though usually he just holds him off the ground, helpless). Unlike Telekinesis, which the victim can break free from using his STR, this power is built with Flight Usable As Attack, which leaves the victim with no means of escape.

Given the nature of this power, technically it should work on *any* object, but the rules limit the amount of object mass it can pick up (a character's mass does not matter). The GM may, in the interest of common sense and dramatic sense, allow the character to ignore the weight restriction if he feels that doing so won't cause game balance problems.

Game Information: *Flight 8", Usable As Attack (affects any character or any object of up to 1,600 kg; defense is Density Increase, Desolidification, Power Defense, or gravity-manipulation abilities; +2), Ranged (+½). Total cost: 56 points.*

Defensive Powers

GRAVITIC SHIELD

Effect: Force Field (22 PD/18 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 6

Description: The character can manipulate gravitic energy to create a protective field around himself. The field is slightly more effective against physical attacks.

Game Information: *Force Field (22 PD/18 ED), Special Effect: Gravity. Total cost: 60 points.*

Movement Powers

GRAVITON MANIPULATION

Effect: Flight 20"
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: By manipulating gravitons ("gravity particles"), the character can control the effects of gravity on his body with such precision that he can fly, often with a high degree of maneuverability.

Game Information: *Flight 20". Total cost: 40 points.*

HOLY/UNHOLY



HOLY/UNHOLY BASICS

Defense: ED

Knockback: Yes

In some campaign settings, particularly many Fantasy realms, the Holy power of gods, angels and their priests — and the corresponding Unholy energies of devils, demons, the undead, and their cultists — exist. They may take on the appearance of other energies, particularly Fire/Heat or Lightning (Electricity), but ultimately they derive from the gods (or their opposite numbers) and are their own special effects.

HOLY/UNHOLY AND OTHER SPECIAL EFFECTS

Ultimately the nature of Holy and Unholy energy depends largely on how the GM addresses the gods, religion, and similar matters in his game. In some settings Holy and Unholy energies are the most powerful special effects, and the setting's ground rules reflect this. For example, all other defenses might be at -2 ED versus them, and all attacks against them at -2 DCs. In other settings they may be relatively weak and ineffectual except against each other (see below), suffering corresponding penalties. Possibly one of them is particularly effective and powerful. For example, those who grant Unholy powers may give characters a way to take the cheap and easy path to power by selling their souls (or the like) — a recipient gets powerful abilities (+2 DCs versus all defenses except Holy; +2 defense against all attacks except Holy) at a great cost. But as a default, it's assumed that Holy and Unholy powers interact normally with all other special effects, neither gaining nor losing in comparison to them.

HOLY VERSUS UNHOLY

Even if the GM leaves Holy and Unholy neutral as to all other energies, he may want to give some thought to how they interact with each other. It's possible that they simply cancel each other's power out, neither gaining nor benefitting versus the other. Alternately, each of them might be particularly effective against the other, since they're polar opposites; in this situation, perhaps each of their attacks gains +2 DCs against the other's defenses (or the defenses suffer -2 ED). They might each be "neutral" ordinarily, but more powerful than normal against some targets (for example, Holy attacks might get +2 DCs against the undead).

ALLIED ENERGIES

In some settings, other types of energies have mystic connotations or qualities that "ally" them with Holy and Unholy — in other words, that

make them "Good" or "Evil." For example, Life Force Energy, Light, and Solar/Celestial are often considered Good/Holy, while Chaos/Entropy and Darkness are Unholy/Evil. In that case you can treat those energies just like Holy and Unholy, or perhaps consider them as manifestation special effects of a Holy or Unholy origination special effect.

CONCLUSION: THE SPECIAL EFFECT: HOLY/UNHOLY POWER MODIFIER

Since Holy and Unholy are by default neutral as to all other special effects, *Special Effect: Holy/Unholy* is a +0 Advantage.

EXAMPLE HOLY/UNHOLY POWERS

Here are some example Holy/Unholy powers:

Offensive Powers

BURNING CORRUPTION

Effect: RKA ½d6, NND, Does BODY
Target: One character
Duration: Constant
Range: 150"
END Cost: 3

Description: The character can harness pure Unholy power to corrupt and wither his foes; the effect continues as long as he keeps paying END.

Game Information: RKA ½d6, NND (defense is Power Defense; +1), Does BODY (+1), Continuous (+1), *Special Effect: Unholy* (+0). Total cost: 30 points.

HOLY FIRE

Effect: RKA 1d6 plus RKA 1d6, Only Versus Evil/Undead/Infernal Beings
Target: One character
Duration: Instant
Range: 75"
END Cost: 3

Description: The character can blast his enemies with Holy fire and light. This attack is particularly effective against evil beings, including demons and the undead.

Game Information: RKA 1d6, *Special Effect: Holy* (+0) (total cost: 15 points) **plus** RKA 1d6, *Special Effect: Holy* (+0) (15 Active Points); Only Versus Evil/Undead/Infernal Beings (-1) (total cost: 7 points). Total cost: 22 points.



Defensive Powers

HOLY SHIELD

Effect: Force Field (8 PD/8 ED/7 Mental Defense/7 Power Defense)
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character calls down divine Holy power to protect himself from harm.

Game Information: *Force Field (8 PD/8 ED/7 Mental Defense/7 Power Defense), Special Effect: Holy (+0). Total cost: 30 points.*

Sensory Powers

PERCEIVE EVIL

Effect: Detect Evil (INT Roll +3), Discriminatory, Range
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character's affinity with Holy energy allows him to perceive the opposite of holiness, evil. He can even distinguish general "types" of evil (undead, demonic, human, and so on) in addition to the evil's intensity.

Game Information: *Detect Evil (INT Roll +3) (no Sense Group), Discriminatory, Range. Total cost: 23 points.*

ICE/COLD



ICE/COLD BASICS

Defense: Typically Ice/Cold attacks, however defined, are considered Energy damage for ease of game play. However, in the interest of more “realistic” play the GM might divide them into two types. The first type, involving pieces of actual ice, would do Physical damage because they are, in fact, physical objects. This includes blocks of ice hurled at a target, invoked hailstorms, needle-sharp ice darts, snowballs, and the like. The second type, found primarily in the Super-heroes and Fantasy genres, uses pure “Cold energy” and does Energy damage.

Knockback: Yes

Ice/Cold is a flexible special effect that provides characters with a wide variety of power options (particularly attacks, though its defenses can be strong). In most cases, characters with Ice/Cold powers (sometimes known as *cryokinetics*) can create their icy, chilly effects without hindrance or difficulty, but there are a number of implications and options for GMs and players to consider from a more “realistic” perspective.

IMPLICATIONS AND SECONDARY EFFECTS

Cold, like Darkness, is technically the absence of something — heat — rather than something a character “creates.” That absence can be created by somehow conducting the heat away or through various chemical reactions and processes, but “realistically” using Ice/Cold powers will often generate heat in some fashion. A character using “realistic” Ice/Cold powers might himself become very hot (or make the area around himself, or where the power manifests, hot) as he draws local heat into himself to “create” cold and ice nearby. He might eventually have to find a way to rid himself of that heat or suffer negative effects. The GM could allow the character to represent this either as a Side Effect of one or more powers, or more generally as a Physical Limitation; in either case the exact consequences of absorbing so much heat and/or not getting rid of it would be more precisely defined in rules terms. (A local increase in heat could be a minor Change Environment of +1 Temperature Level; the possibly harmful effects of not “dumping” absorbed heat could be built many ways. A character might even have a mix of Ice/Cold and Fire/Heat powers, with Limitations requiring him to use the former as a way of “powering up” the latter to the point of effectiveness.)

Alternately, whether it’s realistic or not, an Ice/Cold using character might make the area around himself much colder — Change Environment (-1 Temperature Level, or more) as a Side Effect of generating so much “cold energy” or so much ice. If the effect is severe enough, he might need to pay Character Points for it as an area-affecting Damage Shield. Even if the character doesn’t have this full effect, his slight “cooling” effect on the area around him may make him popular during the summertime or when the characters have to venture into the lava tunnels leading to a villain’s lair.

Effects Of Extreme Cold

At extremely cold temperatures — ones approaching zero degrees Kelvin, or absolute zero (-273.15° Celsius, or -460° F) — standard material properties can change when they encounter

their thermal thresholds. Some substances become superconductive, conducting electricity with no resistance. Organic material can become ceramic-like, shattering easily, while metals behave like rubber. Liquified gases can actually flow uphill, and water ice becomes denser than water and sinks. A character who can “create” cold at this level, or who has the power to manipulate an object’s or substance’s thermal threshold, could achieve all sorts of similar, and potentially deadly, effects.

Local Moisture

For powers that involve or create actual ice, it’s often thought that the character uses the water vapor in the air (which makes up 1-4% of the atmosphere, depending on circumstances) as part of the process — he freezes it to make the ice. In that case, the powers may not work as well, or at all, when local conditions are too hot or dry.

With the GM’s permission, Ice/Cold manipulators can (or must) take the Limitation *Will Not Work In Hot Or Dry Conditions* for their powers. If the character’s likely to encounter those conditions occasionally, the Limitation is worth -¼; if he rarely encounters them, it’s -0. Also at the GM’s option, the degree to which a character can use a power with this Limitation depends on the local environment. If it’s extremely hot/dry (most deserts), he can’t use them at all. If it’s just ordinarily hot or dry (e.g., a drought in Kansas in midsummer), he can use them, but only at 50-75% effect. On the other hand, if he has access to lots of moisture — he’s in a rain forest, near a large body of water, or the like — he might become *more* powerful (add +1-2 DCs to attacks and 1-2 PD and ED to defenses, increase all powers by 10% Active Points, or the like).

The GM may also want to consider what happens as the character uses up the local moisture. “Realistically” he’s going to run out sometime unless he’s near the ocean or a similar large source of water. For game purposes, a cubic hex contains 7,000 liters (1,850 gallons) of air, which is typically 1-4% water vapor depending on conditions. That means there are 70-280 liters of water vapor per cubic hex. Assume that any Ice/Cold power that requires moisture uses 1 liter of water vapor per 10 Active Points per Phase of use. (The GM can increase or decrease this rate to allow for area-affecting powers and the like.) As the character uses up the moisture by converting it to Ice, the conditions become dryer and dryer until he begins to suffer loss of power as described above. Lack of available moisture is only likely to become a problem in enclosed areas, but it’s still a “realistic” factor the GM may want to keep in mind.



Of course, the character isn't literally "stealing" the local moisture and making it go away — he's simply re-arranging it, moving some of it from vapor or liquid form over *there* to blocks, chunks, sheets, or darts of Ice over *here*. After a long battle at the local park the water level in the lake may have dropped a few inches, while over near the jungle gym there are large blocks of ice that show where the Ice/Cold character used his powers. Eventually that ice will melt and the water will make its way back into the lake as runoff or rain. In some situations a character might even use this aspect of his powers in minor beneficial ways, like helping a rural community move water from a nearby river to an enclosed irrigation system.

Taken further, an Ice/Cold character's effect on moisture may justify buying powers that don't specifically relate to Ice and Cold. He could Drain or otherwise affect Water powers negatively, or even Transfer points from Water powers to his own.

Body Fluids

When considered "realistically," Ice/Cold powers have the potential to be deadly to living things. Living bodies are mostly liquid. If a character has the power to freeze that liquid, he could cause massive internal damage on the cellular level, rupture eyes by freezing their humors, cause blockages by freezing bits of blood or the like, and so on. These effects are rarely shown in genre fiction or games because they're so gruesome, but they may be appropriate for some campaign settings.

Energy And Physical Damage

Typically Ice/Cold attacks, however defined, are considered Energy damage for ease of game play. However, in the interest of more "realistic" play the GM might divide them into two types. The first type, involving pieces of actual ice, would do Physical damage because they are, in fact, physical objects. This includes blocks of ice hurled at a target, invoked hailstorms, needle-sharp ice darts, snowballs, and the like. The second type, found primarily in the Superheroes and Fantasy genres, uses pure "Cold energy" and does Energy damage.

Ice/Cold Underwater

"Realistically," Ice/Cold powers can have some unusual effects underwater.

First, remember that ice, even large masses of it, is buoyant — in other words, it floats, because unlike most substances it's *less* dense in solid form than liquid form. When characters create ice for an attack (such as many types of Ice Blast or Ice Darts), a defense (such as an Ice Wall, or Ice Armor), or as a form of movement (like Ice Slides), the following rules apply:

- the Range Modifier for Ranged attacks is *doubled*, to represent the fact that the ice starts to bob and rise in the water as soon as it's created
- static structures or objects made of ice, such as Ice Walls, rise to the surface at the rate of 3" per Segment beginning in the Segment after they're created unless they're anchored to something solid (such as the ocean floor or an undersea cliffside)

■ a character who protects himself with Ice Armor (*i.e.*, a “suit” of ice that protects him from attacks) will rise just like a static structure unless he has Density Increase or some other way to weigh himself down; the same applies to persons trapped in “block of ice” Entangles or the like

■ characters using Ice Slides (a form of Running) are limited to only 25% of their normal inches of movement, since the slides start to rise and break up as soon as they’re created, forcing the character to devote time and effort to keeping them solid enough for him to move on

Characters whose powers involve creating intense cold may find that activating such powers underwater causes the water to freeze around them. At the GM’s option, every Phase a character uses an ice/cold power underwater, the GM rolls 3d6. If he rolls 11-, the character experiences no problems. If he rolls 12 or above, the character traps himself in an ice Entangle — take 25% of the Active Points in the most expensive power and use it to “buy” an Entangle, then apply the Entangle to the character. If the character uses more than one ice/cold power in a Phase, reduce the roll by 1 for every additional power after the first.

But all is not gloom and doom for ice projectors. At the GM’s option, the vast amounts of water available for them to freeze underwater may increase the effects of their powers. An attack that involves creating ice often gains 1-2 additional Damage Classes — and perhaps more, depending on the nature of the attack (for example, a block of ice used to Entangle or ram someone gets much bigger and heavier than normal, and so might gain +3-4 DCs). An ice-based defense may gain +1-2 points of defense. An ice/cold-based Change Environment effect is often 25-50% larger than normal. As always, the GM should determine the exact effects based on the circumstances, common sense, dramatic sense, and game balance.

All of these factors are accounted for as part of the Special Effect: Ice/Cold Limitation.

ICE/COLD AND OTHER SPECIAL EFFECTS

Here’s how Ice/Cold interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Ice/Cold defenses tend to take physical form (ice shields, walls, armor, and the like) which are made of water, which neutralizes Acid. As the Acid melts through the defense, the resulting water counteracts it. In game terms, this reduces the Acid attack’s damage by -2 DC, but it weakens the Ice/Cold defense by -2 points of PD and ED until the character with that defense uses a Zero Phase Action to “renew” and strengthen the defense. Ice/Cold attacks interact with Acid defenses normally.

In some cases Acid may become totally inert when exposed to Ice/Cold... but when thawed go on to have their usual effect. The GM can handle this as he sees fit.

AIR/WIND

Generally speaking, Air/Wind has no special interaction with Ice/Cold powers; it neither gains nor loses against this special effect. However, some Ice attacks involve large chunks of ice projected or hurled at the target in some fashion; you can adjudicate these using the rules for Air/Wind-Physical interaction (or in the case of large amounts of tiny ice crystals or shards, refer to “Earth/Stone” in the *Air/Wind* section for information).

BIOLOGICAL

Biological has no special interaction with Ice/Cold powers; it neither gains nor loses against this special effect (except as discussed under *Biological* for energy powers generally).

CHAOS/ENTROPY

If an Ice/Cold defense involves some physical object (ice armor, an ice shield/wall, or the like), that defense is at -1 point before being applied to a Chaos/Entropy attack. Non-physical Ice/Cold defenses interact with Chaos/Entropy normally; Ice/Cold attacks interact with Chaos/Entropy defenses normally.

CHEMICAL

In general, Chemical has no special interaction with Ice/Cold powers; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). However, exposure to extreme cold may cause chemical reactions that inhibit (or, less likely, enhance) the power of a Chemical ability. At the GM’s option, when the two interact, roll 2d6. On a 2-3 the Chemical power gains +1 DC (or +1 point of defense); on a 12 it loses -1 DC (or -1 point of defense). For all other results the two interact normally.

COSMIC ENERGY

Ice/Cold has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy

manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

In general, Darkness has no special interaction with Ice/Cold; it neither gains nor loses against this special effect. However, if Darkness is associated with coldness, exposure to it may actually augment some Ice/Cold abilities. For example, perhaps every Darkness attack on an Ice/Cold defense that does not succeed at getting some BODY damage through the defense to the target improves the Ice/Cold defense by +1 ED that lasts for 1 Turn.

DIMENSIONAL MANIPULATION

Because Dimensional Manipulation attacks affect physical reality, they're particularly effective against Ice/Cold powers with physical manifestations (such as ice armor, ice walls, ice darts, and hailstorms). A Dimensional Manipulation attack typically receives +1 DC against a physical Ice/Cold defense before that defense applies to reduce damage, while physical Ice/Cold attacks are at -1 DC against Dimensional Manipulation defenses. Ice/Cold powers involving pure "cold energy" or the like interact with Dimensional Manipulation powers normally.

EARTH/STONE

Earth/Stone has no special interaction with Ice/Cold; it neither gains nor loses against this special effect.

ELECTRICITY

Ice-based defenses are typically made of water ice, and water, as noted in the *Electricity* section, is a superb conductor. Furthermore, for at least some conductive materials, such as some non-ferrous metals, cooling them reduces their resistance to Electricity (drastically so, in the case of superconducting materials like tin, aluminum, and some ceramics). Therefore Ice/Cold defenses made of ice are reduced 25% before being applied to an Electricity attack. Ice/Cold attacks interact with Electricity defenses normally, as do Cold defenses consisting of "pure Cold energy."

ELECTROMAGNETIC ENERGY

Typically Electromagnetic Energy has no special interaction with Ice/Cold; it neither gains nor loses against this special effect. However, to the extent an Ice defense is a physical thing (e.g., a shield or wall of ice), an Electromagnetic Energy attack may penetrate it more easily; reduce the Ice/Cold defense by -2 points before applying it to decrease the damage.

ENERGY MANIPULATION

Ice/Cold has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Fire attacks tend to be more effective than normal against Ice/Cold defenses, which melt under the withering, hot barrage; reduce the Ice/Cold defense by -2 points before applying it to decrease the Fire/Heat damage. (At the GM's option, the Fire/Heat may also

permanently weaken the Ice/Cold defense the same way Ice/Cold affects Physical; see below). Similarly, Fire/Heat defenses melt Ice/Cold attacks; add +1 to the Fire/Heat defense before applying it to reduce the Ice/Cold damage.

In either case, water is going to be a byproduct of the interaction between the two, possibly causing minor flooding or water damage to parts of the local environment. (To some extent this also applies when any form of energy that emits heat contacts Ice.) Usually the Ice is just reduced to water, but in some cases the Fire/Heat may be hot enough to then instantly convert the water to steam. See the "Water" rules in the *Fire/Heat* section for more information, but reduce any damage caused by at least half (to 0 for 1 point damage).

FORCE MANIPULATION

Ice/Cold has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Gravity has no special interaction with pure Cold energy; it neither gains nor loses against this special effect. However, against the physical manifestation of Ice, Gravity tends to be more effective than average. Ice defenses are at -1 ED before applying to reduce damage from Gravity attacks, and Gravity defenses are at +1 ED or PD against Ice attacks involving darts, chunks, blocks, or other physical manifestations of ice.

HOLY/UNHOLY

Ice/Cold has no special interaction with Holy/Unholy powers; it neither gains nor loses against this special effect.

KINETIC ENERGY

Ice/Cold has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Ice/Cold has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Typically Ice/Cold has no special interaction with Light; it neither gains nor loses against this special effect. However, the heat generated by Light may have some minor effects similar to those caused by Fire/Heat, just of much less power.

MAGIC

Ice/Cold has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Typically Ice/Cold has no special interaction with Magnetism; it neither gains nor loses against this

special effect. But extreme might actually *enhance* Magnetism powers by making the Magnetism-based character into a sort of “living superconductor” or the like. A character might buy this as a power (such as *Cold Weather Enhancement* in the USPD), or the interaction could arise spontaneously in combat. In the latter case, as a rule of thumb, when a Magnetism-based character is exposed to Ice/Cold powers in a way that would make him extremely cold, all his Magnetism powers gain an Aid with Active Points equal to 1/10 the Active Points in the Ice/Cold power. The gained points do not fade as long as the character remains exposed to the extreme cold. For these purposes, “exposed” typically means (a) being hit with an attack of pure Cold (not physical pieces of Ice), or (b) entering an area where the temperature has been reduced to -18° Celsius (0° F) via Change Environment or other means.

MATTER MANIPULATION

Pure Cold energy has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. But since Ice powers involve physical substances, Matter Manipulation may be unusually effective against them; see the *Matter Manipulation* section, below, for information.

MENTAL/PSIONIC

Ice/Cold has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Typically Ice/Cold has no special interaction with Physical; it neither gains nor loses against this special effect. (But see under “Physical” in the *Water* section regarding buoyancy.) However, extreme cold (such as that generated by Ice/Cold-using characters) can make Physical objects brittle, and thus easier to break. Characters can buy this as a power (such as *Brittize* in the USPD) or the GM might allow Ice/Cold attacks to have this effect as a campaign ground rule. In that case, it’s suggested that for every full 50 Active Points in an Ice/Cold attack involving “pure Cold energy” (as opposed to just a piece of actual ice), reduce a Physical defense’s Physical Defense protection against future attacks by -1 PD for the next Turn. (Thus, a 100 Active Point Ice/Cold power would subtract -2 PD, and so on.)

PULSON ENERGY

Ice/Cold has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Ice/Cold has no special interaction with Radiation; it neither gains nor loses against this special effect.

SONIC

Typically, Ice/Cold has no special interaction with Sonics; it neither gains nor loses against this special effect. However, in the GM’s judgment the vibratory nature of Sonics can weaken Ice/Cold

defenses based on actual ice. This works just like the Ice/Cold-Physical interaction described above, except that it’s the Ice/Cold defense that suffers, and the reduction applies to both PD *and* ED.

TELEKINETIC

Ice/Cold has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Ice/Cold has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Vibration affects Ice/Cold even more strongly than Sonics. This works just like the Ice/Cold-Physical interaction described above, but applies to both PD *and* ED and is -2 points of each for every full 50 Active Points in the Vibration attack.

WATER

Ice/Cold has no special interaction with Water (ice is, after all, just frozen water); it neither gains nor loses against this special effect. (But see under “Physical” in the *Water* section regarding buoyancy.)

CONCLUSION: THE SPECIAL EFFECT: ICE/COLD POWER MODIFIER

Ice/Cold has more drawbacks than it has benefits. Therefore, *Special Effect: Ice/Cold* constitutes a -1 Limitation.

EXAMPLE ICE/COLD POWERS

Here are some example Ice/Cold powers:

Offensive Powers

BLIZZARD

Effect: Change Environment (-3 Temperature Levels, -3 Sight Group PER)
Target: 32” Radius
Duration: Constant
Range: 250”
END Cost: 5

Description: The character can generate a small but intense blizzard that not only cools down the affected area, but makes it much harder to see.

Game Information: *Change Environment 32” radius, -3 Temperature Levels and -3 Sight Group PER Rolls, Multiple Combat Effects. Total cost: 50 points.*

DEEP FREEZE

Effect: Energy Blast 4d6, NND
Target: One character
Duration: Instant
Range: 200”

END Cost: 4

Description: The character can so quickly and thoroughly chill another character to the bone that he causes intense pain and weakness which may daze the target or make him pass out.

Game Information: *Energy Blast 4d6, NND (defense is Life Support [Safe Environment: Intense Cold]; +1). Total cost: 40 points.*

ICE BLAST

Effect: Energy Blast 8d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 4

Description: The character can injure his enemies with a blast of icy energy.

Game Information: *Energy Blast 8d6 (40 Active Points); Special Effect: Ice/Cold (-1). Total cost: 20 points.*

ICE BLOCK

Effect: Entangle 4d6, 6 DEF
Target: One character
Duration: Instant
Range: 250"
END Cost: 5

Description: The character creates a solid block of ice around the target, trapping him.

Game Information: *Entangle 4d6, 6 DEF (50 Active Points); Vulnerable (Fire/Heat; -1). Total cost: 25 points.*

ICE DART

Effect: RKA 3d6
Target: One character
Duration: Instant
Range: 225"
END Cost: 4

Description: The character can create and project a sharp dart of ice capable of piercing heavy defenses.

Game Information: *RKA 3d6 (45 Active Points); Special Effect: Ice/Cold (-1). Total cost: 22 points.*

MOISTURE MANIPULATION

Effect: Transfer 3d6 (any one Water power to any one Ice/Cold power)
Target: One character
Duration: Instant
Range: 12"
END Cost: 8

Description: The character's Ice/Cold powers involve control over moisture, and he can use that control to reduce the effectiveness of an enemy's Water power — he draws the water out of the Water power and uses it to make one of his own ice-based powers stronger.

Game Information: *Transfer 3d6, from any one Water power at a time (+¼), to any one Ice power at a time (+¼), Limited Range (12"; +¼). Total cost: 79 points.*

Defensive Powers

ICE ARMOR

Effect: Armor (22 PD/18 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 0

Description: The cryokinetic can surround his body with armor made of ice. The armor offers slightly more protection against physical attacks. If the character becomes Stunned or unconscious, the armor falls off or melts away; he'll have to re-create it when he regains his senses. Other people can see the armor, and hear it cracking and re-forming as the character moves.

Game Information: *Armor (22 PD/18 ED) (60 Active Points); Nonpersistent (-¼), Visible (-¼), Special Effect: Ice/Cold (-1). Total cost: 24 points.*

ICE WALL

Effect: Force Wall (12 PD/8 ED)
Target: One character
Duration: Constant
Range: 250"
END Cost: 5

Description: The character can create a solid wall of ice that protects him (and sometimes other people) from attacks. The wall offers more protection against physical attacks, since energy attacks are more likely to melt through it. He can also use it to englobe a single human-sized enemy.

Game Information: *Force Wall (12 PD/8 ED) (50 Active Points); Special Effect: Ice/Cold (-1). Total cost: 25 points.*

Movement Powers

ICE SLIDES

Effect: Running +9", Usable As Gliding
Target: Self
Duration: Constant
Range: Self
END Cost: 2

Description: The character can create narrow sheets of ice in front of himself on which he can "skate" at high speeds. Normally he just uses the slides to move along the ground, but if he starts above ground level, he can slide downward, provided he has a nearby solid surface (the ground itself, the side of a building, a large tree, or the like) to which he can anchor the slide. As the character "skates" downward, he can occasionally create a small "mogul" to give himself a little bit more altitude. Unfortunately, this power leaves large chunks of ice lying around after the character passes through the area, which may pose various hazards until they melt.

Game Information: *Running +9", Usable As Gliding (see text; +¼) (22 Active Points); Physical Manifestation (-¼), Side Effects (leaves big chunks of ice around the environment; -0). Total cost: 18 points.*

KINETIC ENERGY



KINETIC ENERGY BASICS

Defense: Typically ED, but attacks that involve the use of physical objects or physical effects affect PD instead

Knockback: Yes

For purposes of this book, Kinetic Energy powers involve control of, and the ability to manipulate, kinetic energy and related phenomena like inertia, momentum, and friction. Although these terms have precise scientific meanings (see below), in many cases those meanings have little or no effect on how the powers are built and used in game terms. This section discusses ways to model them more “realistically” if you choose, but for most games you can consider all these phenomena as part of the broad special effect of Kinetic Energy.

Because manipulating such fundamental forces often requires absolute, or nearly absolute, effects, many Kinetic Energy powers have high Active Point and Real Point costs. If necessary, the GM can adjust them downward, and then address the “absoluteness” of effect as part of a dramatic sense interpretation of game events.

KINETIC AND POTENTIAL ENERGY

Broadly speaking, all energy consists of one of two types. *Kinetic energy* is the energy an object has because of its motion. By technical definition, it's the amount of work (energy transferred by some force) required to accelerate the object to its current velocity from a state of motionlessness. Absent outside forces (such as friction), it keeps moving at that velocity. Negative work of the same amount brings the object back to a state of motionlessness.

Potential energy is the amount of “stored” energy an object has based on work done to it to change its position. It varies by the type of force applied in the work. For example, there's gravitational potential energy created by lifting an object off the ground (the most common type of potential energy likely to occur in a roleplaying game situation); and elastic potential energy created by deforming an elastic object with stress (such as a longbow), which when released returns the object to its original shape. Consider a book on a table. Work has been done — force has been applied, probably with someone's muscles — to move that book from the floor to the table. The book now has potential energy. If it's moved off the table the book crashes to the floor because its gravitational potential energy moves it down to the ground. A book on a shelf (higher off the ground than the table) has more potential energy than the book on the table; so does a book on the same table that has greater mass.

In terms of powers exhibited by characters, kinetic and potential energy can both be manipulated. A character might have the power to change or enhance a moving object's kinetic energy to

bring it to a dead stop, redirect it, or make it move faster. Or he could exploit an object's potential energy for various purposes.

FRICTION

Friction is a force that opposes the motion (or potential motion) of two physical objects in contact with one another. The friction (which consists of electromagnetic forces between the atoms of the two objects) transforms the kinetic energy of the two objects into heat (thermal energy). When it occurs between a solid object and a gas or liquid, friction is referred to as *drag*. Various methods and materials (such as lubricants) are used to reduce friction within the moving parts of machines and the like; the science of friction and lubrication is known as tribology.

In game terms, a character can manipulate friction to increase it (thus making it harder, or impossible, for a person or object to move) or decrease it (which could, among other things, let him run faster or escape from being Grabbed). Perhaps in the process he somehow taps the thermal energy friction creates and can use it for other purposes. To the extent a character who manipulates friction can also manipulate the thermal energy involved, you may want to consult the *Fire/Heat* section for potential special effects interactions and consequences.

INERTIA

Inertia is the property of physical objects to either remain at rest (if already at rest) or to remain in motion at a constant velocity (if already in motion) unless and until acted upon by an outside force. In a gaming context, manipulating kinetic/potential energy and manipulating inertia are essentially the same thing.

MOMENTUM

An object's *momentum* is a property derived by multiplying its mass by its velocity to get a figure of kilograms per meter per second. Electromagnetic fields can also have momentum when they move, even though their mass is minute or non-existent. You can also think of momentum as how difficult it is to stop a moving object, taking into account its inertia (resistance to being moved) and velocity. Thus, a slow-moving but very heavy object may have more momentum than a lightweight but fast object, since it takes more energy to get the heavy object to move. In other words, it's harder to stop a car rolling down a hill at 10 miles per hour than it is to stop a baseball moving at 100 miles per hour.

In game terms, manipulating an object's momentum can make it harder or easier to move, and thus potentially slower or faster. A character could use this to make a physical Ranged attack hit the target harder (or not as hard), to make another character move slower or faster, and so forth.

KINETIC ENERGY AND OTHER SPECIAL EFFECTS

Because kinetic energy, momentum, and similar concepts usually most clearly apply to physical objects, Kinetic Energy attacks typically involve physical objects or characters in some way — the character imparts kinetic energy to an object and uses it as a missile, robs a moving character of his kinetic energy and momentum to bring him to a dead stop instantly, enhances or diminishes another character's ability to move by manipulating friction and inertia, and so on. Despite the name, Kinetic Energy attacks usually don't involve energy (in the sense that they'd apply against Energy Defense); they work against PD or Power Defense...

...assuming any defense applies to them at all. Gamemasters interested in "realistically" simulating the absolute and irresistible nature of Kinetic Energy might consider letting characters make powers like the ones described above No Normal Defense (the defenses being Desolidification, Extra-Dimensional Movement, Teleportation, or having Kinetic Energy powers of one's own). While expensive, this is likely to be extremely unbalancing, potentially violates several rules, and is not recommended... but it will certainly keep the average target from breaking free from a Kinetic Energy-based Entangle.

Similarly, Kinetic Energy defenses tend to be more effective against Physical than Energy attacks — in other words, they're usually bought with more PD than ED. It's a simple matter for a Kinetic Energy controller to reduce the kinetic energy and momentum of a Physical missile so that it doesn't hit him as hard (or at all), or to siphon off the kinetic energy of a punch (and perhaps redirect that energy into someone else!). Taking the energy away from a Fire blast or a lightning bolt isn't quite so easy.

In game terms, if appropriate treat Kinetic Energy attacks as if they were Physical attacks (see *Physical*, below, for more information). Other types of Kinetic Energy attacks, and Kinetic Energy defenses, generally have no special interaction with other energy types/special effects; Kinetic Energy neither gains nor loses against them.

CONCLUSION: THE SPECIAL EFFECT: KINETIC ENERGY POWER MODIFIER

Kinetic Energy has more drawbacks than it has benefits. Therefore, *Special Effect: Kinetic Energy* constitutes a $-\frac{1}{2}$ Limitation.

EXAMPLE KINETIC ENERGY POWERS

Here are some example Kinetic Energy powers:

Offensive Powers

FRICTION MANIPULATION

Effect: Entangle 4d6, 4 DEF, Takes No Damage From Attacks
Target: One character
Duration: Instant
Range: 300"
END Cost: 6

Description: The character reduces the frictional forces around a character to the extent the target cannot move — all he can do is flail around helplessly. Unless he has enough strength to overcome the effect, or he has some physical object to grab hold of, he can't get enough traction to move. Alternately, the character may make the friction around his foe so intense that the target can't overcome it.

Game Information: *Entangle 4d6, 4 DEF, Takes No Damage From Attacks (+½) (60 Active Points); Cannot Form Barriers (-¼), Vulnerable (to any attack that creates a physical effect which gives the victim something to grab hold of; -½). Total cost: 34 points.*

KINETIC MISSILE

Effect: Energy Blast 8d6/RKA 2½d6, OIF (objects of opportunity), Beam
Target: One character
Duration: Instant
Range: 30"
END Cost: 4

Description: The character can impart kinetic energy into small objects (pebbles, eating utensils, ball bearings, salt shakers, marbles, pencils...) and cause them to fly toward the target with such speed and force that they inflict severe injuries. Blunt objects do Normal Damage; sharp or pointed ones Killing Damage. (Treat this as a Physical attack, not Kinetic Energy, for purposes of interaction.) The GM may, at his discretion, reduce the damage caused by larger, softer, or more fragile objects.

Game Information:

Cost Power

- 13 *Kinetic Missile*: Multipower, 40-point reserve; all slots OIF (objects of opportunity; $-\frac{1}{2}$), Limited Range (30"; $-\frac{1}{4}$), Beam ($-\frac{1}{4}$), Special Effect: Physical (-1)
 1u 1) *Blunt Objects*: Energy Blast 8d6; common Limitations described above
 1u 2) *Sharp Objects*: RKA 2½d6; common Limitations described above

Total cost: 15 points.

MOMENTUM SUBTRACTION

Effect: Suppress Movement Powers 6d6
Target: One character
Duration: Instant
Range: 260"
END Cost: 5

Description: The character’s control over kinetic energy, momentum, and similar forces allows him to reduce the velocity of objects or people to decrease the force with which they impact objects. The power does not affect Teleportation, Extra-Dimensional Movement, or some forms of Faster-Than-Light Travel, which do not involve kinetic motion.

Game Information: *Suppress Movement Powers 6d6, any kinetic energy-based Movement Power one at a time (+¼) (37 Active Points); Only Works On People/Objects Currently In Motion (-¼). Total cost: 30 points.*

SIPHONED PUNCH

Effect: Energy Blast 12d6 (physical), Only If Someone Is Punching
Target: One character
Duration: Instant
Range: 20"
END Cost: 6

Description: The character uses his control over kinetic energy and momentum to tap into the force of a punch being thrown nearby and direct that force injure someone else. He himself could be the target of the punch, but his intended victim cannot be. The target of the punch still takes damage from it; the character’s power merely siphons off some of the force of the punch, it doesn’t drain it away entirely. The victim takes damage up to 12d6 or the dice of damage in the punch, whichever is less.

Game Information: *Energy Blast 12d6 (physical) (60 Active Points); Only If Someone Is Punching Another Person Within 10" Of Character And Target (-1), Extra Time (character must Hold his Phase and act on same DEX as person throwing the punch; -0), Only Does 12d6 Or Damage Equal To Punch, Whichever Is Less (-0), Limited Range (20"; -¼), Special Effect: Kinetic Energy (-½). Total cost: 22 points.*

Defensive Powers

KINETIC SHIELD

Effect: Force Field (25 PD/15 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character uses his control over kinetic energy, potential energy, and other forces to establish a protective field around himself that deflects attacks. The field provides more protection against physical attacks than energy attacks.

Game Information: *Force Field (25 PD/15 ED) (40 Active Points); Special Effect: Kinetic Energy (-½). Total cost: 27 points.*

Movement Powers

FRICTION NEGATION

Effect: Running +20"
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character minimizes the friction between his feet and the ground, allowing him to “skate” or “slide” at tremendous speeds.

Game Information: *Running +20". Total cost: 40 points.*

LIFE FORCE ENERGY



Life Force Energy” is a largely (if not entirely) fictional form of energy that supposedly exists within the human body, or even within all life itself. Some possible examples include:

- the ability of skilled martial artists to use and manipulate their *ch'i* (“energy flow” or “breath”), a sort of internal energy that lets them accomplish all sorts of amazing physical feats (even semi-mystic ones, like healing injuries and illnesses, according to some sources). Many cultures have a similar concept: *ki* (Japan), *mana* (Hawaii), and *prana* or *ting* (India), among others.

- a character with powers of “spirit projection” who can send his “spirit,” or life energy “self,” outside his body to accomplish various effects

- a character with “bio-energy powers” who can somehow tap the energy of his body to fire destructive bolts, create protective shields, augment his physical abilities, and so forth

- a character who can use his control over Life Force Energy to temporarily “boost” his own or someone else’s personal attributes (in game terms, he can Aid, and perhaps Transfer or Drain, many Characteristics)

Life Force Energy powers are often low-key and subtle... but not necessarily ineffective.

In many cases, Life Force Energy powers are associated with “good,” “holy,” or “sacred” concepts or powers (see *Holy/Unholy*, below), but they don’t have to be. A character’s ability to separate his spirit from his body could result from a mutation, from mystic powers, or the like; the use of the terms “spirit” and “soul” don’t necessarily have religious connotations.

IMPLICATIONS AND SECONDARY EFFECTS

If a character’s using his own “life force” to generate an attack or defense, he may suffer negative consequences. The most severe would be actually “using up” his life force in doing so — in game terms, a mandatory Side Effect involving loss of BODY in some proportion to the power used. Somewhat less severe would be a Drain BODY, since the character would “regenerate” the “spent” BODY much more quickly, though the loss of BODY could still lead to his death in combat by making it easier for enemy attacks to reduce him to negative BODY. Less severe still would be using/Draining END or STUN to represent “life force,” instead of BODY.

If a character’s powers involve projecting his spirit/soul/life force beyond his physical body, he may be restricted in what he can do since he only has one “spirit” to go around — if he projects his spirit out of his body to Mind Control the Black Paladin, his spirit is “occupied” and can’t also Mind Control Foxbat at the same time. You can simulate this with the *Lockout* Limitation and similar Limitations. On the other hand, a highly adept character might be able to “split” his “spirit” into multiple parts to do many things at once.

Since a character’s using his own personal life force to power a Life Force Energy attack, it seems unlikely that it could hurt him if Reflected back at him. Therefore the *Personal Immunity* (+¼) Advantage is definitely appropriate for Life Force Energy attacks, and the GM may even make it mandatory.

Affecting The Target’s Life Force

Many Life Force Energy powers involve using the character’s *own* Life Force to generate powers and achieve effects, but some characters may also have the ability to manipulate a *target’s* Life Force. In game terms this usually involves attacks that affect the Characteristics associated with “life” — BODY and CON in particular, but to a lesser extent STUN, END, and perhaps STR or PRE. Besides “direct” attacks like Energy Blasts and RKAs, Drains, Transfers, and other Adjustment Powers affecting those Characteristics are appropriate for this type of Life Force powers. So are NNDs, with the typical defenses being Power Defense and/or Life Support (since the latter, both mechanically and conceptually, “protects” “Life Force” against various hostile/dangerous outside forces/phenomena).

Assuming that a Life Force attack literally affects the target’s own “life force” on some level to achieve its effect, several Power Modifiers may be appropriate or required. One is *Affects Desolidified* (+½), since even an intangible living being is still living. Another is the Limitation *Does Not Work Against Unliving Things* (-½), since the character couldn’t affect, say, a door, car, or wall. This may also include the undead, against whom the power would have no effect or a significantly reduced effect; in games featuring lots of undead opponents the GM might increase the value of the Limitation.

Anti-Life Energy

If Life Force Energy exists, it may have an opposite — “Anti-Life Energy,” “Negative Energy,” or whatever it’s called in the setting. (In the Hero Universe, Qliphothic Energy would best fit the bill.) If it exists, the two are polar opposites and somewhat vulnerable to each other; reduce defenses for

LIFE FORCE ENERGY BASICS

Defense: ED

Knockback: Yes

each of them by -2 points before reducing damage caused by the other type.

Biosphere Life Force

If Life Force Energy exists as a phenomenon in the campaign, then all living things — not just characters, but plants and animals — have it (though typically in lesser amounts than sentient beings). That may mean that the biosphere as a whole has a “Gestalt Life Force Energy” that a character could tap into or manipulate for his own purposes... or that a cosmic monster like the Marvel Comics villain Galactus wants to consume, rendering the entire planet a lifeless rock. If a character depends on the “Gestalt Life Force” for some or all of his powers, they may be weaker or non-existent in a vacuum (outer space), on lifeless planet(oid)s (such as the Moon), or in barren areas (like deserts); you can represent this with appropriate Limitations (such as *Only Works In A Biosphere* (-¼)).

In a broader philosophical sense, perhaps anything that can be referred to as “living” or “dying” has its own “Life Force” that a character could use. That might include historical eras, social movements, cultural phenomena (fads and the like), stars, dreams, and many other things. In that case, Life Force Energy might have connections with other appropriate special effects (such as Time or Solar/Celestial).

Dealing with these issues may also require a GM to define what “life” is and when it begins/arises, which could lead to some intriguing stories. For example, is an artificial intelligence computer “alive,” and if so at what point does its life begin?

LIFE FORCE ENERGY AND OTHER SPECIAL EFFECTS

As a more or less fictional form of energy, Life Force Energy has no special interaction with other energy types/special effects; it neither gains nor loses against them. (Though this may change depending on how the GM conceives of or defines Life Force Energy.) Exceptions are noted below. As always, these rules are optional; the GM may change or ignore them as he sees fit.

BIOLOGICAL

Because Biological attacks typically affect the target's life force on some level, Life Force Energy defenses tend to be good at keeping them out (+1 or more points of defense). Biological defenses have no special interaction with Life Force attacks.

CHAOS/ENTROPY

The powers of Life Force aren't as effective against the death, decay, and corruption of Chaos/Entropy. A Life Force defense is at -1 point before being applied to a Chaos/Entropy attack, whereas Chaos/Entropy defenses gain +1 point versus Life Force attacks.

CHEMICAL

Chemical has no special interaction with Life Force Energy; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). Depending on how the GM conceives of Life Force Energy, it might be particularly effective against poisons.

DARKNESS

In general, Darkness has no special interaction with Life Force Energy; it neither gains nor loses against this special effect. However, if Darkness is associated with absence, negation, and similar concepts, it may have an “anti-Life” aspect that makes it more effective against Life Force defenses (subtract -1 ED from them before applying them to Darkness attacks).

ELECTRICITY

Electricity has no special interaction with Life Force Energy; it neither gains nor loses against this special effect. As a default, any “physical” objects or shapes created by Life Force powers are non-conductive, but the GM makes the final decision based on the nature of his campaign setting, the powers involved, and similar factors.

HOLY/UNHOLY

Depending on the mystic/spiritual nature of the setting, Life Force may be associated with Holy, and Anti-Life Energy (see above) with Unholy. If that's the case, each is vulnerable to the other, as described above — for example, a Life Force Energy defense would be weaker than normal against an Unholy attack.

In this sort of campaign setting, the different powers may also have different general effects. Holy/Life Force powers tend to involve protection, healing, creation, fertility, and slow, long-term effects (usually positive ones). Unholy/Anti-Life powers usually involve attacks, destruction, death corruption, and decay (perhaps they relate to Chaos/Entropy in this respect), and they do their work quickly.

MAGIC

By default, Life Force Energy has no special interaction with Magic; it neither gains nor loses against this special effect. (though if Magic manifests with some other special effect [such as Fire or Darkness], use that special effect for determining the results of the interaction). However, if Life Force Energy is regarded as a “mystical” force of some sort, or is thought to have mystic aspects, it may interact with Magic in unusual ways. Depending on the nature of the magic and abilities involved, the two may enhance each other, be particularly ineffective against each other, discharge harmful energy of some sort when they interact, or the like.

PHYSICAL

Physical defenses don't stand up to Life Force Energy attacks well; the Life Force Energy can bypass them easily (reduce them by 1 ED before applying them to reduce the damage). Physical attacks and Life Force defenses interact normally.

CONCLUSION: THE SPECIAL EFFECT: LIFE FORCE ENERGY POWER MODIFIER

Life Force Energy has slightly more benefits than it has drawbacks. Therefore, *Special Effect: Life Force Energy* constitutes a +10 Character Point Adder.

EXAMPLE LIFE FORCE ENERGY POWERS

Here are some example Life Force Energy powers:

Offensive Powers**ANTI-LIFE ATTACK**

Effect: RKA 3d6, NND, Does BODY
Target: One character
Duration: Instant
Range: 50"
END Cost: 13

Description: This power harnesses Qliphothic or “negative Life” energies to kill.

Game Information: RKA 3d6, NND (defense is Power Defense or having Life Force powers; +1), Does BODY (+1) (135 Active Points); Limited Range (50”; -¼). Total cost: 108 points.

LIFE FORCE BLAST

Effect: Energy Blast 8d6, Personal Immunity
Target: One character
Duration: Instant
Range: 310"
END Cost: 6

Description: The character can project his life force as a bolt of energy. Because it’s his own life force, Reflecting it back, or otherwise using it against him, has no effect.

Game Information: Energy Blast 8d6, Special Effect: Life Force Energy, Personal Immunity (+¼). Total cost: 62 points.

SPIRIT MERGING

Effect: Mind Control 8d6, Only Works On One Person At A Time
Target: One character
Duration: Instant
Range: LOS
END Cost: 4

Description: The character can cause his spirit/life force to “merge” with that of another person, thus taking control of the other person’s spirit and forcing the victim to do his bidding. Visually, the character’s spirit (a ghostly form of himself) flies out of his body and into the target’s body. After Mind Control is achieved, someone who looks closely may be able to see the character’s spirit “overlaid” on the victim.

Because the character only has one spirit to project into and merge with other peoples’ spirits, he can only use this power on one person at a time. If he sends his spirit to Mind Control someone else, it leaves the body of the first victim, and the Mind Control immediately ceases to affect the first victim.

Game Information: Mind Control 8d6 (40 Active Points); Only Works On One Person At A Time (-½). Total cost: 27 points.

Defensive Powers**LIFE FORCE SHIELD**

Effect: Force Field (8 PD/8 ED/4 Power Defense)
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character can wrap himself in a sheath of bio-energy that provides protection against many forms of attack.

Game Information: Force Field (8 PD/8 ED/4 Power Defense), Special Effect: Life Force Energy. Total cost: 30 points.

Sensory Powers**SENSE LIFE FORCE**

Effect: Detect Life Force, Discriminatory, Range, Sense
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character’s Life Force powers attune him to the presence and nature of life forces in general, allowing him to perceive when other living beings or manifestations of life force are near. The character can distinguish the type of life force (e.g., human, dog, cockroach...), and to some extent the strength and quality of the life force.

Game Information: Detect Life Force (INT Roll) (no Sense Group), Discriminatory, Range, Sense. Total cost: 22 points.

LIGHT BASICS

Defense: ED

Knockback: “Realistically” No (especially for lasers), but Yes in many fantastic/cinematic settings and genres

Scientifically speaking, light is a form of electromagnetic radiation that’s visible to the naked eye. (For game purposes, this category also includes infrared and ultraviolet light, though humans cannot see those forms of light without devices to enhance sight.) It’s measured in terms of *intensity* (amplitude), or brightness; *frequency* (wavelength), which humans perceive as its color; and polarization (angle of vibration). It exhibits properties of both a wave and a particle (creating a mystery for physicists); its elementary particle is the *photon*.

In a roleplaying game situation, Light can range from benign effects like illumination all the way up to the devastating power of laser beams, “light blasts” fired by superhumans, and the like. Typically this involves powers like Images (to create light), Flashes of the Sight Group, Energy Blast, and RKA. Given light’s association with high speeds, many Light-based characters are quasi-speedsters, with DEXs and SPDs notably higher than the campaign average. But you don’t have to build Light characters that way; it’s possible to control Light without taking on all of its qualities.

Infrared Light

Infrared (“IR”) light (or, more properly, radiation) has a wavelength shorter than a radio wave, but longer than visible light. Humans cannot see it unaided, but with the aid of devices can perceive and project it for many purposes: telecommunications; television remote controls; various heating processes; target acquisition and tracking by weapons systems, and so on. Most importantly in a gaming context, perception of infrared radiation involves perception of heat — when a character refers to “perceiving infrared,” typically what he means is seeing the heat (or absence of heat) patterns in the environment, since heat generates infrared radiation (IR is not, itself, heat). A sufficiently powerful character or sophisticated device can determine all sorts of information about an object or person based on the infrared radiation it emits, see an object “through walls” by seeing its infrared heat patterns, and so forth. See *Dark Champions*, pages 276-77, for more information and write-ups of “nightvision” and “thermalvision” devices.

A pure Infrared attack could be considered a Heat attack rather than Light; see the *Fire/Heat* section, above, for more information.

Ultraviolet Light

Ultraviolet (“UV”) light (or again, more properly, radiation) has a wavelength longer than x-rays but shorter than visible light. It’s emitted



by stars (including Earth’s sun). Depending on its exact wavelength Earth’s atmosphere absorbs it, and some types of glass are opaque to some wavelengths of UV light. Ultraviolet light stimulates the production of Vitamin D by the skin, but overexposure to UV can lead to skin cancer, eye damage, and other health problems. (A character who can project or manipulate intense amounts of UV light might be able to generate some of these effects instantaneously.)

Lasers

A *laser* (an acronym for “light amplification by stimulated emission of radiation”) is a specially-generated beam of light. Using a gain medium and an optical cavity, a laser device emits a beam of coherent light — one in which all the light waves are in phase with one another. This makes the “laser beam” perfectly straight, allows it to remain tightly concentrated over long distances, and gives it a defined color (based on the medium) and significant burning power (see below). Higher-powered lasers use more energetic photons, like ultraviolet light, x-rays, or gamma rays.

Contrary to what’s seen in the movies, laser beams aren’t visible to the naked eye. A spot of light can be seen where they’re generated, and a spot of light where the light impacts a solid object, but there’s no “beam” connecting the two points they only show up in the air if smoke or other particulates render them visible). But of course, in a fictional setting the GM can make the beam visible if he wishes.

Since their development in the mid-twentieth century, lasers have become omnipresent in modern American society; they’re used to read compact disks and hard disks in music players and computers, scan bar codes in retail stores, perform surgery, and in various existing and in-development weapons system, rangefinding devices, and countless other applications. Characters with Light powers might be able to simulate, mimic, or control any of these functions — or they might just project powerful laser beams to injure their enemies.

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, living tissue burns. More powerful lasers pierce better, and x-rays do additional damage from radiation effects. A sufficiently powerful laser can “cut” through almost anything, leaving a tiny hole the size of the beam; move the beam slowly across an object and it will cut through that object. “Realistically” this may

take time, depending on the power of the laser and the substance being cut through. In combat, lasers are useful because it's very difficult to detect where they were fired from (see above), there is no recoil, and they can fire as long as the power holds out. Additionally, laser attacks usually have built in laser "targeting devices" — either literal devices built into a gun or the like, or in the case of a character who generates laser beams himself a beam of trivial power used to mark the target in advance — that use a low-power beam to "paint" a spot on the target before firing.

In game terms, a laser is usually bought as an RKA, often with the *Armor Piercing* and/or *Penetrating* Advantages to simulate its cutting power (the former is particularly appropriate for UV lasers, and both are appropriate for x-ray and gamma ray lasers). They always have the *Beam* (-¼) Limitation because they cannot be Spread. Depending on the exact nature of a laser power, the GM might require (or permit) a character to take the *Invisible Power Effects* Advantage for it, though typically this isn't any more necessary than it is for a gun that fires bullets (which also can't be seen by the naked eye). "Realistic" optical and ultraviolet lasers are partially or fully blocked by smoke and steam, depending on the thickness of the mist. In game terms, they take the *Limitation Blocked By Smoke Or Steam* (-¼); if the GM feels the mist isn't thick enough to block them entirely, he can reduce the attack's damage by an amount equal to the Sight PER Roll penalty the mist imposes (or some multiplier thereof). X-ray and gamma ray lasers are not blocked by ordinary smoke and fog, but special anti-laser aerosols do interfere with them normally. In games that feature Knockback, lasers should take the *No Knockback* (-¼) Limitation; they have no physical impact to speak of.

SECONDARY EFFECTS

Obviously, most Light powers are bright. Linking a Sight Group Flash to a Light power is usually very appropriate. Even if a character doesn't go that far, the GM might rule that anyone hit by a Light attack has to make a PER Roll at -1 or suffer a -1 OCV on his next Phase due to being dazzled. Infrared and Ultraviolet light would only Flash or affect Infrared Perception and Ultraviolet Perception, respectively.

Light also involves heat — though some animals (such as fireflies) can generate light without heat, humans generally cannot. The GM might apply the rules from the *Fire/Heat* section, above, when a Light attack strikes something that's potentially flammable... though even the most intense Light power isn't as hot as a Fire/Heat power with the same Active Points. If appropriate, reduce the roll to see if a flammable object catches on fire by 2 (or more).

Darkness, Opacity, And Transparency

As noted on page 145-46 of the rulebook, Darkness to Sight Group (the Power) is totally impenetrable to Sight, which means to light

— characters can't see into, out of, or through it, light generated inside it by Images or other sources cannot be seen at all, a Flash that affects the same Sense Groups can't penetrate it, and so forth. However, that doesn't mean Darkness stops *all* powers with a Light-based special effect. Just because it blocks ordinary light doesn't convert it into a "Drain/Suppress/stop all Light-based powers" ability. A Light-based attack, such as an Energy Blast or RKA, will penetrate a Darkness to Sight Group to affect a target inside it. The GM can rule otherwise if desired, but Darkness is not an absolute defense to Light powers (particularly those that can cause physical damage). However, see below regarding the interaction of Darkness (the special effect) and Light.

Similarly, just putting something opaque — be it a shield, a wall, an Opaque Force Wall, a piece of thick cloth, or something else — does not *per se* stop a Light-based power. That could easily constitute shielding one's eyes from a Light-based Sight Group Flash, but if a Light attack has physical effects and can cause actual injury, it's not going to be stopped just because ordinary light can't pass through some obstacle. Damaging Light is a far cry from normal illumination.

On the other hand, just because a defense is transparent to light doesn't mean it offers no protection against Light-based attacks. Most Force Walls are not Opaque, but they still stop Light-based attacks if built with the appropriate defense. However the GM may, in his judgment, decrease a transparent defense's effectiveness against a Light attack by -1 ED before applying it to reduce the attack's damage.

Other Powers

Similarly, don't let the special effect of a power change the way Light attacks affect a character. Invisibility defined as "I bend light around my body" does not make a character immune to Light attacks, and just because a Desolidified character can be seen doesn't mean Light attacks hurt him despite his intangibility.

Light Underwater

Water diffuses visible light, so being underwater weakens most powers with a Light special effect. Light-based attacks, including laser beams and many Sight Group Flashes, automatically have the *Reduced By Range* Limitation when used underwater. If the power already has that Limitation, double the number of DCs subtracted at each Range increment. If the water's particularly murky or cloudy, the GM might want to increase the DCs subtracted per Range increment by 1.

Light-based defense powers, such as a Force Field, usually lose 25% of their effectiveness. The GM should make a final determination based on the nature of the power.

Powers involving non-visible light — ultraviolet and infrared — work differently. Ultraviolet light powers aren't affected by being underwater at all; they work just as well in the water as in the air. Infrared light attacks have a maximum range of 2",

but can't affect targets beyond that at all; infrared light defenses lose 50% of their effectiveness.

At depths below 77-92 meters (250-300 feet, or 39-46"), there's usually insufficient light for powers that require ambient light to work, such as any power with Limitations like *Does Not Work In Darkness* or *Only Works In Sunlight*.

LIGHT AND OTHER SPECIAL EFFECTS

Here's how Light interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid has no special interaction with Light; it neither gains nor loses against this special effect (except perhaps as noted above regarding Acid's interaction with energy in general).

AIR/WIND

Air/Wind has no special interaction with Light powers; it neither gains nor loses against this special effect.

BIOLOGICAL

Biological has no special interaction with Light; it neither gains nor loses against this special effect (except as discussed under *Biological* for energy powers generally).

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Light; it neither gains nor loses against this special effect.

CHEMICAL

Chemical has no special interaction with Light; it neither gains nor loses against this special effect (except as discussed under *Chemical* for energy powers generally).

COSMIC ENERGY

Light has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Light and Darkness are opposites; they directly counteract one another. In the broader special effects sense, Light attacks receive +2 DCs before being applied to Darkness defenses, and Darkness attacks receive +2 DCs before being applied to Light defenses.

DIMENSIONAL MANIPULATION

Dimensional Manipulation has no special interaction with Light; it neither gains nor loses against this special effect.

EARTH/STONE

Earth/Stone has no special interaction with Light; it neither gains nor loses against this special effect.

ELECTRICITY

In general, Electricity has no special interaction with Light; it neither gains nor loses against this special effect. However, some Light-based attacks (such as lasers) may ionize the air, thus creating a "trail" for an Electricity attack to travel down. In that case, eliminate any OCV penalties or other restrictions imposed by the GM based on conductivity (see under *Electricity*, above).

ELECTROMAGNETIC ENERGY

Electromagnetic Energy has no special interaction with Light (which, as discussed above, is a form of electromagnetic radiation itself); it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Light has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Light has no special interaction with Fire/Heat; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Light has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Gravity has no special interaction with Light; it neither gains nor loses against this special effect.

HOLY/UNHOLY

As mentioned above under *Holy/Unholy*, in some settings Light may be considered "Good," and thus allied with or complementary to Holy (and/or opposite to or "an enemy of" Unholy). Based on how the GM defines such things in his campaign, that may affect the interaction between them, but in general, Light and Holy/Unholy have no special interaction.

ICE/COLD

Typically Ice/Cold has no special interaction with Light; it neither gains nor loses against this special effect. However, the heat generated by Light may have some minor effects similar to those caused by Fire/Heat, just of much less power.

KINETIC ENERGY

Light has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, above, Kinetic Energy attacks are often treated simply as Physical attacks; see below for any additional rules).

LIFE FORCE ENERGY

Light has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

MAGIC

Light has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Light has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Light has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect.

MENTAL/PSIONIC

Light has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Light has no special interaction with Physical powers; it neither gains nor loses against this special effect. However, at the GM's option, a Physical defense that's bright white might provide +1 ED against normal Light attacks, while a reflective one provides +2 ED (or more); a black or dark defense suffers a -1 ED (or worse) reduction.

PULSON ENERGY

Light has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Light has no special interaction with Radiation (and is, in fact, a form of radiation itself); it neither gains nor loses against this special effect.

SONIC

Light has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Light has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Light has no special interaction with Time powers (despite the theoretical effect on one's perception of Time that traveling at the speed of light would cause); it neither gains nor loses against this special effect.

VIBRATION

Light has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Light has no special interaction with Water; it neither gains nor loses against this special effect.

CONCLUSION: THE SPECIAL EFFECT: LIGHT POWER MODIFIER

As a special effect, Light neither especially benefits or suffers compared to the "average" special effect. Therefore, *Special Effect: Light* is a +0 Advantage. If the GM uses the optional rule about Light powers possibly causing opponents to experience an OCV penalty from being "dazzled," increase this to a +¼ Advantage. In campaigns involving significant amounts of underwater adventuring, the GM may reduce the Modifier's value by -¼, making it a -¼ Limitation (or +0 Advantage if the "dazzling" effects is included as well).

EXAMPLE LIGHT POWERS

Here are some example Light powers:

Offensive Powers**DISPELLING THE DARKNESS**

Effect: Dispel Darkness to Sight Group 20d6
Target: One character
Duration: Instant
Range: 300"
END Cost: 6

Description: The character's powers of light generation are so strong that he can instantly disrupt fields of darkness and shadow, whether it's the quasi-mystic inky blackness created by a superhero like Shadowdragon or a mere smoke grenade.

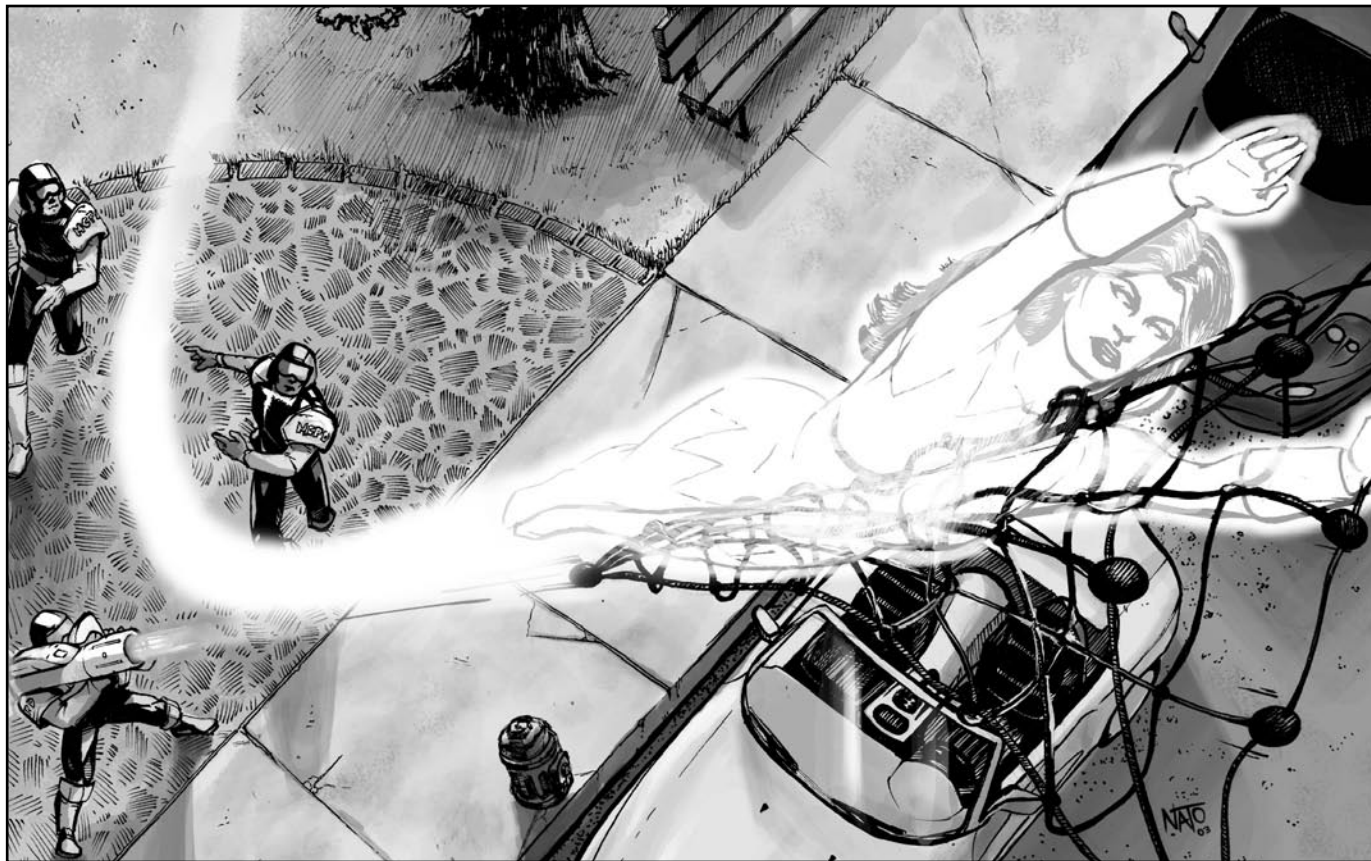
Game Information: *Dispel Darkness to Sight Group 20d6. Total cost: 60 points.*

HYPNOTIC LIGHTS

Effect: Mind Control 10d6
Target: One character
Duration: Instant
Range: 10"
END Cost: 5

Description: The character can create a pattern of lights in front of the target's eyes that instantly mesmerizes him, making him susceptible to the character's "suggestions." At the GM's option, it may be ineffective, or less effective, in bright light when it's harder to see the pattern clearly.

Game Information: *Mind Control 10d6 (50 Active Points); Limited Normal Range (10"; -½). Total cost: 33 points.*



INFRARED BLAST

Effect: Energy Blast 8d6 plus Infrared Perception Flash 4d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 5

Description: The character can attack his foes with a concentrated beam of infrared radiation. Treat the damaging part of the attack as a Heat power rather than Light; the blinding part is a Light special effect.

Game Information: Energy Blast 8d6 (40 Active Points); Special Effect: Heat (-0) (total cost: 40 points) plus Infrared Perception Flash 4d6, Special Effect: Light (+0) (20 Active Points); Linked (-½) (total cost: 13 points). Total cost: 53 points.

LASER BLAST

Effect: RKA 3d6
Target: One character
Duration: Instant
Range: 225"
END Cost: 4

Description: The character can focus his light-bolts down into narrow beams, with all the photons facing in the same direction. This gives the beams tremendous cutting power.

Game Information: RKA 3d6, Special Effect: Light (+0) (45 Active Points); Beam (-¼). Total cost: 36 points.

LIGHT BOLT

Effect: Energy Blast 8d6 plus Sight Group Flash 4d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 6

Description: The character can project a bolt of light so powerful that it strikes with an almost physical impact (it can even knock the target backwards sometimes), and so bright it blinds the target.

Game Information: Energy Blast 8d6, Special Effect: Light (+0) (40 Active Points) **plus** Sight Group Flash 4d6, Special Effect: Light (+0) (20 Active Points); Linked (-½) (total cost: 13 points). Total cost: 53 points.

ULTRAVIOLET FLARE

Effect: Major Transform 6d6 (sighted person to blind person), NND
Target: One character
Duration: Instant
Range: 10"
END Cost: 18

Description: The character can emit a flare of ultraviolet radiation so intense that it can permanently blind the target.

Game Information: Major Transform 6d6 (sighted person to blind person, heals back through eye transplant surgery), NND (defense is Sight Group Flash Defense; +1) (180 Active Points); Limited Range (10"; -¼), Limited Target (sighted living beings; -½). Total cost: 103 points.

Defensive Powers

PHOTONIC SHIELD

Effect: Force Field (12 PD/18 ED/10 Sight Group Flash Defense)
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character can protect himself from harm with a force-field of glowing light. The field provides better protection against energy attacks than physical attacks, but also protects the character's eyes against bright glare.

Game Information: *Force Field (12 PD/18 ED/10 Sight Group Flash Defense), Special Effect: Light (+0). Total cost: 40 points.*

Movement Powers

LIGHTSPEED TRAVEL

Effect: Flight 30"/ Teleportation 1" MegaScale/FTL Travel
Target: Self
Duration: Constant/Instant/Constant
Range: Self
END Cost: 6/5/0

Description: The character can transform himself into pure light for travel purposes. This makes it very easy to move long distances quickly. However, the character may need special visual powers (such as Light Manipulation, below) to see his destination so he doesn't overshoot it.

Game Information:

Cost Power

- 60 *Lightspeed Travel:* Multipower, 60-point reserve
 6u 1) *Slow Lightspeed Travel:* Flight 30"
 1u 2) *Atmospheric Lightspeed Travel:* Teleportation 1", MegaScale (1" = 30,000 km, can scale down to 1" = 1 km; +1¼)
 1u 3) *Space Lightspeed Travel:* FTL Travel (1 LY/year)

Total cost: 68 points.

Sensory Powers

LIGHT MANIPULATION

Effect: Various Enhanced Senses
Target: Self
Duration: Persistent/Constant
Range: Varies
END Cost: Varies

Description: This ability represents a suite of powers; Light-based characters can purchase as many of them as they wish, in whatever order they wish. All involve bending and manipulating light waves to carry visual information to the character. The Far-Off Light power is particularly useful for characters who can travel at lightspeed.

Game Information:

Cost Power

- 5 *Enhanced Light:* Nightvision
 10 *Surrounding Light:* Increased Arc Of Perception (360 Degrees) for Sight Group
 45 *Distant Light:* +30 versus Range Modifier for Sight Group
 62 *Far-Off Light:* Multipower, 62-point reserve
 3u 1) *Far-Off Light I:* Clairsentience (Sight Group), 8x Range (800")
 6u 2) *Far-Off Light II:* Clairsentience (Sight Group), 2x Range (200"), MegaScale (1" = 1,500 km, can scale down to 1" = 1 km; +1½)

Miscellaneous Powers

CREATE LIGHT

Effect: Images to Sight Group, +4 to PER Rolls, Only To Create Light
Target: 8" Radius
Duration: Constant
Range: 190"
END Cost: 4

Description: The character can illuminate an area, making it easier for everyone to see.

Game Information: *Images to Sight Group, +4 to PER Rolls, Increased Size (8" radius; +¾) (38 Active Points); Only To Create Light (-1). Total cost: 19 points.*

LIGHTBENDING

Effect: Invisibility to Sight Group, No Fringe
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character can conceal himself by bending light waves around his body. Unless someone hears him or happens to bump into him accidentally, no one will ever know he's there.

Game Information: *Invisibility to Sight Group, No Fringe. Total cost: 30 points.*

MAGIC BASICS

Defense: Varies based on type of spell

Knockback: Varies based on type of spell

Magic is one of the most common forms of energy in many campaigns — sometimes it's really the only one, aside from perhaps Fire, that characters can actively use. Depending on the campaign setting, how the GM defines Magic, and other factors, it can range from being an awesomely powerful, world-altering phenomena to something so rare and subtle that its existence can't even be definitively proven.

From the perspective of *The Ultimate Energy Projector's* rules on energy/special effect interaction, by default Magic interacts with all other types of energy/special effects equally — it neither gains nor benefits when compared to them. However, the final answer really depends on how the GM defines Magic in his game. In some campaigns the GM may want Magic to be particularly effective due to the fact that by its sheer existence it defies conventional notions of Reality and Science; in that case its attacks and defenses might be better than

MAGIC

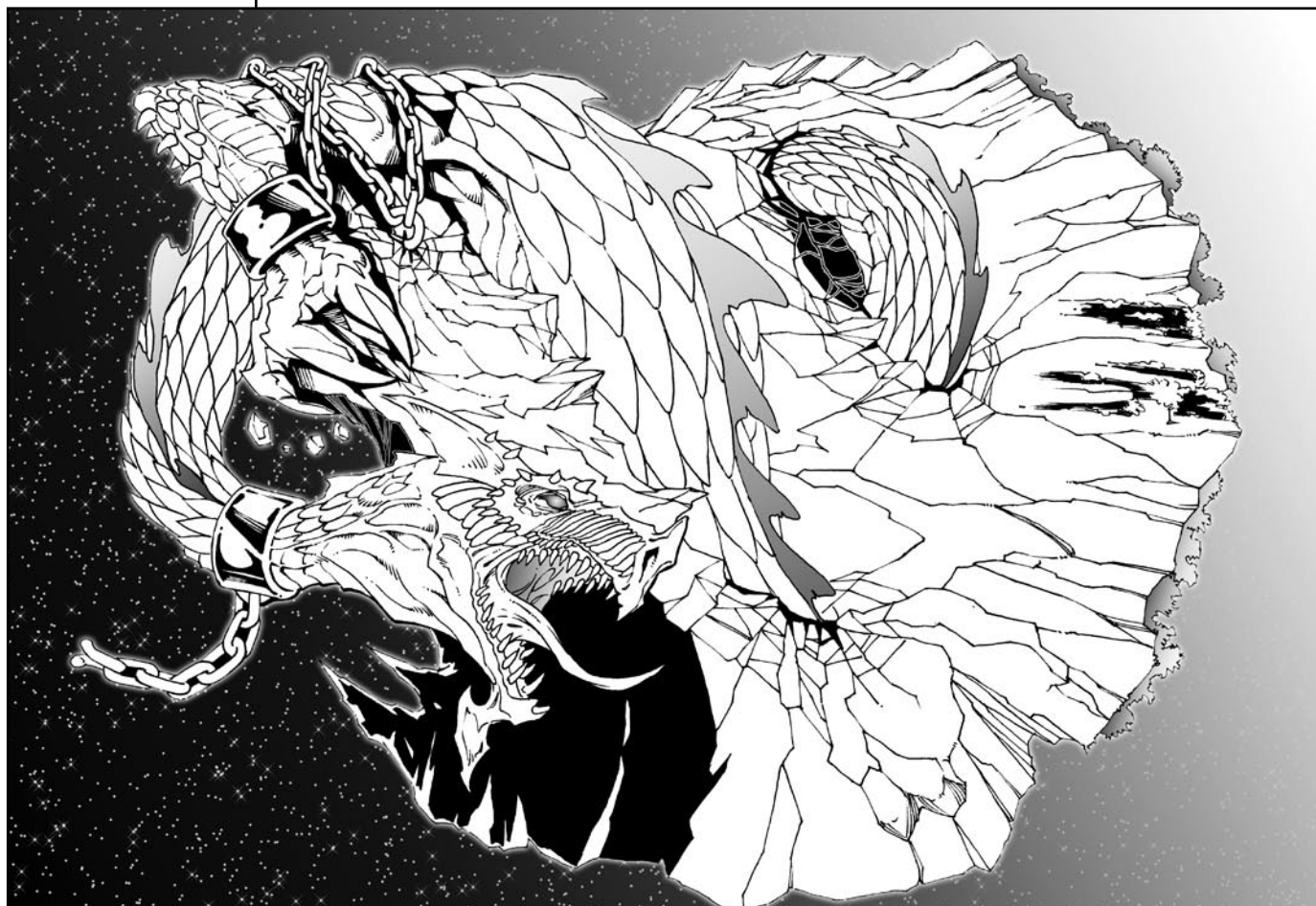


average (perhaps *much* better) against other energies/special effects (particularly those with physical manifestations). In other settings its “unreal” nature might be deemed to make it *less* effective than normal. It all depends on the setting and its magic system — and there are nearly as many different magic systems as there are GMs!

See Chapter Four of *Fantasy Hero* for a detailed discussion of Magic and magic systems, including *HERO System* rules for creating them; *The Mystic World* for an example magic system suitable to Superhero settings; and *The Ultimate Mystic* for all sorts of general information about magic in its many forms.

CONCLUSION: THE SPECIAL EFFECT: MAGIC POWER MODIFIER

Since Magic is by default neutral as to all other special effects, *Special Effect: Magic* is a +0 Advantage.



MAGNETISM



Magnetism is a physical phenomenon by which materials exert an attracting or repelling force on other objects. Magnetic properties are most easily detected in ferrous metals, such as iron, steel, nickel, and magnetite, but to some degree (however small), all objects are subject to the presence of magnetic fields.

Magnetism powers typically give a character the ability not only to use or manipulate magnetic force directly — for example, to fire magnetic blasts, erect protective shields of magnetic energy, or fly by harnessing magnetic fields — but to manipulate objects (primarily metallic ones) by “picking them up” with magnetism and moving them. Scientifically, Magnetism is closely related to Electricity and Gravity; a character with powers based on one of these special effects could easily develop the other type(s) if appropriate.

The most basic Magnetism power tends to be Telekinesis (“magnetokinesis”), possibly with Limitations restricting what it can affect (see below). But as with Matter Manipulation powers, that basic concept can be expanded to allow characters with Magnetism power to manipulate and alter objects in many ways.

IMPLICATIONS AND SECONDARY EFFECTS

The breadth of Magnetism powers depends on how “realistic” the GM wants to be. At their most “realistic,” Magnetism powers (particularly attacks) require Limitations like *Only Works On Ferrous Metals* or *Requires Ferrous Metals* (both typically -½, though the value depends on how common ferrous metals are in the campaign). This allows Magnetism Telekinesis (and other powers) to affect iron, steel, and the like, but not lead (of which bullets are made), copper, tin, aluminum, or zinc.

One step away from “realistic” is to change those Limitations so the character can affect any metal, not just ferrous ones. That’s usually a -¼ Limitation, but possibly a -0 in settings where metal is very common.

The least “realistic” view of Magnetism powers lets them affect *anything* — the character is so powerful he can manipulate the Earth’s magnetic field, or the minute magnetic field emitted by any material, to affect objects and people regardless of what they’re made of.

Diamagnetism

Technically speaking, most substances referred to as “nonmagnetic” are actually *diamagnetic*, meaning they’re repelled by both poles of a magnet. (To put it another way, they only exhibit magnetic

properties in an external magnetic field.) Compared to standard ferromagnetism, diamagnetism is extremely weak, but in theory it could be just as strong, so Magnetism characters might use it to justify affecting non-ferrous substances. Water, acid, and DNA/biological matter are all diamagnetic.

Iron In Flesh And Blood

The human body contains as much as 3-4 grams of iron, a substance that’s necessary for life but toxic in high concentrations. (A poorly-nourished person might have significantly less than 3-4 grams.) About 2.5 of those grams are in hemoglobin, which allows blood to carry oxygen throughout the body; another 400 milligrams are used by cellular proteins for various biological processes like storing oxygen or performing redox reactions. Iron is crucial for oxygen transportation; anemia (iron deficiency) can become severe enough to cause death or organ damage.

A sufficiently broad definition of Magnetism powers, even ones restricted to only ferrous materials, would allow a Magnetism-based character to manipulate aspects of the human body by affecting the iron in the body. At the simplest level the iron would let a Magnetism character magnetokinetically pick up or affect someone even if that person wasn’t wearing/carrying any ferrous metal. More sophisticated or delicate uses could include:

- altering the blood flow to the brain to cause unconsciousness, hallucinations, loss of memories, or even outright Mind Control
- cause aneurysms, heart attacks, strokes, and similar medical conditions
- killing someone by removing all the iron from his body, inducing fatal anemia, or the like

The Magnetosphere

Planets, stars, and other astronomical objects have *magnetospheres* — regions around them which are organized or otherwise affected by their strong magnetic fields. For example, Earth’s magnetosphere extends about 70,000 kilometers from Earth’s center on the side of the planet facing the Sun. Some characters’ Magnetism powers may derive from their ability to manipulate Earth’s magnetosphere in subtle but powerful ways; a character with self-generated Magnetism powers may be powerful enough to alter Earth’s magnetosphere to achieve various effects (such as interfering with telecommunications systems). In game terms that sort of effect could be built as a Suppress, Area Of Effect, MegaScale.

Cyberkinetic Powers

Given how many machines feature metal-

MAGNETISM BASICS

Defense: Typically ED, but attacks that involve the use of physical objects or physical effects affect PD instead

Knockback: Yes

lic parts, and how modern information systems often uses magnetic technology to store data and the like, Magnetism powers may allow a character to control machinery in Cyberkinesis-like ways (see the *Cyberkinesis Powers* sections of the USPDs for many example powers). Characters might buy a Side Effect for their Magnetism powers to indicate how they interfere with magnetic storage media and the like; alternately, the GM may rule that the powers work that way by default, for no Limitation value.

MAGNETISM AND OTHER SPECIAL EFFECTS

Here's how Magnetism interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit. Typically Magnetism attacks

ACID

Acid has no special interaction with Magnetism; it neither gains nor loses against this special effect (except perhaps as noted under *Acid* regarding its interaction with energy in general).

AIR/WIND

Air/Wind has no special interaction with Magnetism; it neither gains nor loses against this special effect.

BIOLOGICAL

Biological has no special interaction with Magnetism; it neither gains nor loses against this special effect (except as discussed under *Biological* for energy powers generally).

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Magnetism; it neither gains nor loses against this special effect.

CHEMICAL

Chemical has no special interaction with Magnetism; it neither gains nor loses against this special effect (except as discussed under *Chemical* for energy powers generally).

COSMIC ENERGY

Magnetism has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Magnetism; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Dimensional Manipulation has no special interaction with Magnetism; it neither gains nor loses against this special effect.

EARTH/STONE

In general, Earth/Stone has no special interaction with Magnetism; it neither gains nor loses against this special effect. However, if the GM rules that a mass of soil or rock contains a high concentration of ferrous material or particles, that soil/rock may be more susceptible to Magnetism powers (it would suffer a -3 ED reduction as a defense against Magnetism attacks involving pure magnetic force, but at most a -1 against attacks involving thrown or projected metallic objects, and a -1 DC reduction as an attack against Magnetism defenses).

ELECTRICITY

Technically speaking, Electricity and Magnetism are closely related (hence the term "electromagnetic force"). Moving metal through a magnetic field creates an electric charge (the technology behind metal detectors works on this principle), and running an electric current through a wire creates a magnetic field around that wire. Thus, the two types of energy could work well together. For example, an Electricity projector and a Magnetism projector firing at the same target might receive a +2 or greater bonus to their Teamwork rolls to Coordinate their attacks. Similarly, a character might buy his Electricity or Magnetism powers with Variable Special Effects (+¼) so he could define them as the other type of energy if he wished. However, for general gaming purposes, Electricity has no special interaction with Magnetism; it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Electromagnetic Energy has no special interaction with Magnetism; it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Magnetism has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Fire/Heat has no special interaction with Magnetism; it neither gains nor loses against this special effect. However, at the GM's option Magnetism defenses gain +3 ED against Plasma attacks.

FORCE MANIPULATION

Magnetism has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Gravity has no special interaction with Magnetism; it neither gains nor loses against this special effect.

HOLY/UNHOLY

Magnetism has no special interaction with Holy/Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Typically Magnetism has no special interaction with Ice/Cold; it neither gains nor loses against this special effect. But extreme might actually *enhance* Magnetism powers by making the Magnetism-based character into a sort of “living superconductor” or the like. A character might buy this as a power (such as *Cold Weather Enhancement* in the USPD), or the interaction could arise spontaneously in combat. In the latter case, as a rule of thumb, when a Magnetism-based character is exposed to Ice/Cold powers in a way that would make him extremely cold, all his Magnetism powers gain an Aid with Active Points equal to 1/10 the Active Points in the Ice/Cold power. The gained points do not fade as long as the character remains exposed to the extreme cold. For these purposes, “exposed” typically means (a) being hit with an attack of pure Cold (not physical pieces of Ice), or (b) entering an area where the temperature has been reduced to -18° Celsius (0° F) via Change Environment or other means.

KINETIC ENERGY

Magnetism has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, above, Kinetic Energy attacks are often treated simply as Physical attacks; see below for any additional rules).

LIFE FORCE ENERGY

Magnetism has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Light has no special interaction with Magnetism; it neither gains nor loses against this special effect.

MAGIC

Magnetism has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MATTER MANIPULATION

In general, Matter Manipulation has no special interaction with Magnetism; it neither gains nor loses against this special effect. However, to the extent a Matter Manipulation defense uses physical objects or materials, and those materials are ferrous, that defense may be more susceptible to Magnetism powers (it would suffer a -3 ED reduction as a defense against Magnetism attacks involving pure magnetic force, but at most a -1 against attacks involving thrown or projected metallic objects, and a -1 DC reduction as an attack against Magnetism defenses).

MENTAL/PSIONIC

In general, Mental/Psionic has no special interaction with Magnetism; it neither gains nor loses against this special effect. But Magnetism manipulators powerful enough to redirect the flow of blood to the brain may have Mental Defense defined as “subtly weakening the mentalist’s powers” or the like.

PHYSICAL

In general, Physical has no special interaction with Magnetism; it neither gains nor loses against this special effect. However, to the extent a Physical power uses ferrous objects or materials, that defense may be more susceptible to Magnetism powers (it would suffer a -3 ED reduction as a defense against Magnetism attacks involving pure magnetic force, but at most a -1 against attacks involving thrown or projected metallic objects, and a -1 DC reduction as an attack against Magnetism defenses).

PULSON ENERGY

Magnetism has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Radiation has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

SONIC

Magnetism has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Magnetism has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Magnetism has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Magnetism has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Magnetism has no special interaction with Water; it neither gains nor loses against this special effect.

CONCLUSION: THE SPECIAL EFFECT: MAGNETISM POWER MODIFIER

Magnetism has more benefits than it has drawbacks. Therefore, *Special Effect: Magnetism* constitutes a +20 Character Point Adder.

EXAMPLE MAGNETISM POWERS

Here are some example Magnetism powers:

Offensive Powers

MAGNETOKINESIS

Effect: Telekinesis (40 STR), Only Works On Ferrous Metals
Target: One character or object
Duration: Constant
Range: 400"
END Cost: 8

Description: The most basic of Magnetism powers, the one from which all others typically derive, is the ability to move and manipulate ferrous metal objects without touching them.

Game Information: *Telekinesis (40 STR), Special Effect: Magnetism (80 Active Points); Only Works On Ferrous Metals (-½). Total cost: 53 points.*

GAUSS BLAST

Effect: Energy Blast 9d6, RKA 3d6
Target: One character
Duration: Instant
Range: 225"
END Cost: 4

Description: The character uses his control over magnetism to pick up small metal objects and "throw" them at a target with tremendous force. (Treat this power as a Physical attack, not Magnetism, for purposes of interaction.)

Game Information:

Cost Power

- 18 *Gauss Blast:* Multipower, 45-point reserve; all OIF (-½), Special Effect: Physical (-1)
 2u 1) *Blunt Object Gauss Blast:* Energy Blast 9d6; OIF (small, blunt ferrous metal objects of opportunity; -½), Special Effect: Physical (-1)
 2u 2) *Sharp Object Gauss Blast:* RKA 3d6; OIF (small, sharp ferrous metal objects of opportunity; -½), Special Effect: Physical (-1)

Total cost: 22 points.

INTENSE MAGNETIC FIELD

Effect: Change Environment, -4 to Radio Group PER Rolls
Target: 32" radius
Duration: Constant
Range: 195"
END Cost: 4

Description: The character can create a field of intense magnetic energy that inhibits the use of radar, the transmission or reception of radio waves, and the functioning of other Radio Group senses.

Game Information: *Change Environment 32" radius, -4 to Radio Group PER Rolls. Total cost: 39 points.*

MAGNETIC BLAST

Effect: Energy Blast 8d6
Target: One character
Duration: Instant
Range: 300"
END Cost: 6

Description: The character can project a bolt of pure, concentrated magnetic energy to injure his foes.

Game Information: *Energy Blast 8d6, Special Effect: Magnetism. Total cost: 60 points.*

PAIN IN VEIN

Effect: Ego Attack 4d6, NND, Based On CON
Target: One character
Duration: Instant
Range: 400"
END Cost: 8

Description: The character's control of magnetic energy is so precise that he can disrupt the flow of blood within the human body, causing intense headaches and pain.

Game Information: *Ego Attack 4d6, NND (defense is not having blood, a Magnetism-based Force Field or Force Wall, or Power Defense; +1) (80 Active Points); Based On CON (-1). Total cost: 40 points.*

Defensive Powers

MAGNETIC SHIELD

Effect: Force Field (20 PD/20 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 6

Description: The character can manipulate magnetic energy to create a protective field around himself.

Game Information: *Force Field (20 PD/20 ED), Special Effect: Magnetism. Total cost: 60 points.*

Movement Powers

MAGNETIC FORCE RIDING

Effect: Flight 20"
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: By manipulating the Earth's magnetic field, the character can pick himself up and fly through the air.

At the GM's option a character using this power moves slightly faster (+1-2") when flying north or south, and slightly slower (-1-2") when flying east or west.

Game Information: *Flight 20". Total cost: 40 points.*

MATTER MANIPULATION



Matter Manipulation powers involve the ability to create, destroy, alter, and otherwise affect matter in its many forms. Usually this reflects some ability to control molecules and atoms, highly advanced forms of Telekinetic Powers (see page 160), or the like.

At its simplest level, Matter Manipulation simply allows characters to move objects. But for most characters it goes beyond that into animating and rearranging matter, and in some cases even altering it on the molecular or atomic level. Taken to extremes, a Matter Manipulation character can instantly transmute one object into another, (dis)assemble the most complex objects in the blink of an eye, disintegrate matter, unleash the energy from matter in various ways (such as by initiating and controlling nuclear explosions), and so on. In a truly cosmic campaign, this special effect is virtually limitless in terms of what it can do.

Because manipulating matter on such a fundamental level often requires absolute, or nearly absolute, effects, many Matter Manipulation powers have high Active Point and Real Point costs. If necessary, the GM can adjust them downward, and then address the “absoluteness” of effect as part of a dramatic sense interpretation of game events.

IMPLICATIONS AND SECONDARY EFFECTS

Most Matter Manipulation abilities are offensive abilities, often quite powerful ones. Defenses are relatively rare, and usually involve physical objects — either disintegrating them before they hit the character, or telekinetically imposing a physical object to block an attack. But while a matter manipulator may rarely get hurt by Physical objects, his defenses against Energy attacks may be lower-powered.

In many cases Matter Manipulation powers apply primarily to inorganic matter. Fantasy wizards who can turn people into frogs and the like are an exception, and the GM may grant others as he sees fit; given their control over the physical world, some matter manipulators may even be able to create life or heal the injured! If appropriate, the GM may reduce the effectiveness of Matter Manipulation powers used directly against living matter by as much as 50% (either as a campaign ground rule for no point savings, or by forcing matter manipulators to buy half of each attack power’s DCs with the Limitation *Does Not Work Against Living Matter* (-1)).

“Realistically,” a Matter Manipulation attack’s damage may depend on the objects

or substances a character has to work with. If he’s near a lot of rock he could create a “rock lance” to strike his enemies, or move a rock over someone’s head and drop it on him (in either case he’d do the full damage that he bought with the attack); but if he’s only near soft or malleable substances he may not be able to do full damage (or have his full intended effect).

MATTER MANIPULATION AND OTHER SPECIAL EFFECTS

In general, Matter Manipulation’s interactions with other special effects generally fall into one of three categories:

- if a Matter Manipulation attack or defense involves the use of a physical object (an animated statue, a “lance” of rock striking up from the ground, a telekinetically-manipulated shield, a controlled avalanche, skin transformed into metal, or the like), use the rules for the *Physical* special effect later in this chapter (or possibly as some other relevant physical special effect, such as Earth/Stone).
- if a Matter Manipulation attack involves disintegrating, re-arranging, or transmuting a physical defense (or uses those abilities as a defense to stop physical attacks), reduce the physical defense by -3 points before applying it to reduce the damage (or reduce the incoming physical attack by -3 DCs)
- if a Matter Manipulation attack involves transmuting air or some other substance into something dangerous (e.g., air into poisonous gas), use the appropriate rules for the special effect of the object/substance created (such as Chemical)

Exceptions to these guidelines are noted below. Matter Manipulation generally has no special interaction with special effects involving pure energy (such as Fire/Heat, Light, Pulsion Energy, and the like); it neither gains nor loses against those special effects.

CHAOS/ENTROPY

In some respects you might consider Chaos/Entropy powers as a subset of Matter Manipulation powers, which can affect matter in many ways other than destroying it. But Chaos/Entropy is in some ways more powerful than its “larger cousin.” Matter Manipulation defenses involve altering or enhancing the physical properties of objects (such as flesh or the skin), or even creating physical barriers... and such things do not withstand Chaos well. Add

MATTER MANIPULATION BASICS

Defense: PD

Knockback: No

+1 DC to a Chaos/Entropy attack before applying a Matter Manipulation defense to it. Matter Manipulation attacks that involve transmutation or alteration of matter generally interact with Chaos/Entropy defenses normally, while attacks that involve actual physical objects (such as a “matter lance” or animated piece of furniture) are less effective — the Chaos/Entropy defense gains +1 point before being applied to reduce the damage.

ELECTROMAGNETIC ENERGY

Typically Electromagnetic Energy has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, to the extent a Matter Manipulation defense is a physical thing (e.g., a shield formed of matter), an Electromagnetic Energy attack may penetrate it more easily; reduce the Matter Manipulation defense by -2 points before applying it to decrease the damage.

GRAVITY

In general, Gravity has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, if a Matter Manipulation attack involves shooting, throwing, or projecting a physical object at a Gravity defense, the defense gains +2 PD before being applied to reduce the damage.

MAGNETISM

In general, Matter Manipulation has no special interaction with Magnetism; it neither gains nor loses against this special effect. However, to the extent a Matter Manipulation defense uses physical objects or materials, and those materials are ferrous, that defense may be more susceptible to Magnetism powers (it would suffer a -3 ED reduction as a defense against Magnetism attacks involving pure magnetic force, but at most a -1 against attacks involving thrown or projected metallic objects, and a -1 DC reduction as an attack against Magnetism defenses).

**CONCLUSION: THE SPECIAL EFFECT:
MATTER MANIPULATION POWER MODIFIER**

Matter Manipulation has more benefits than it has drawbacks. Therefore, *Special Effect: Matter Manipulation* constitutes a +25 Character Point Adder.

**EXAMPLE MATTER
MANIPULATION POWERS**

Here are some example Matter Manipulation powers:

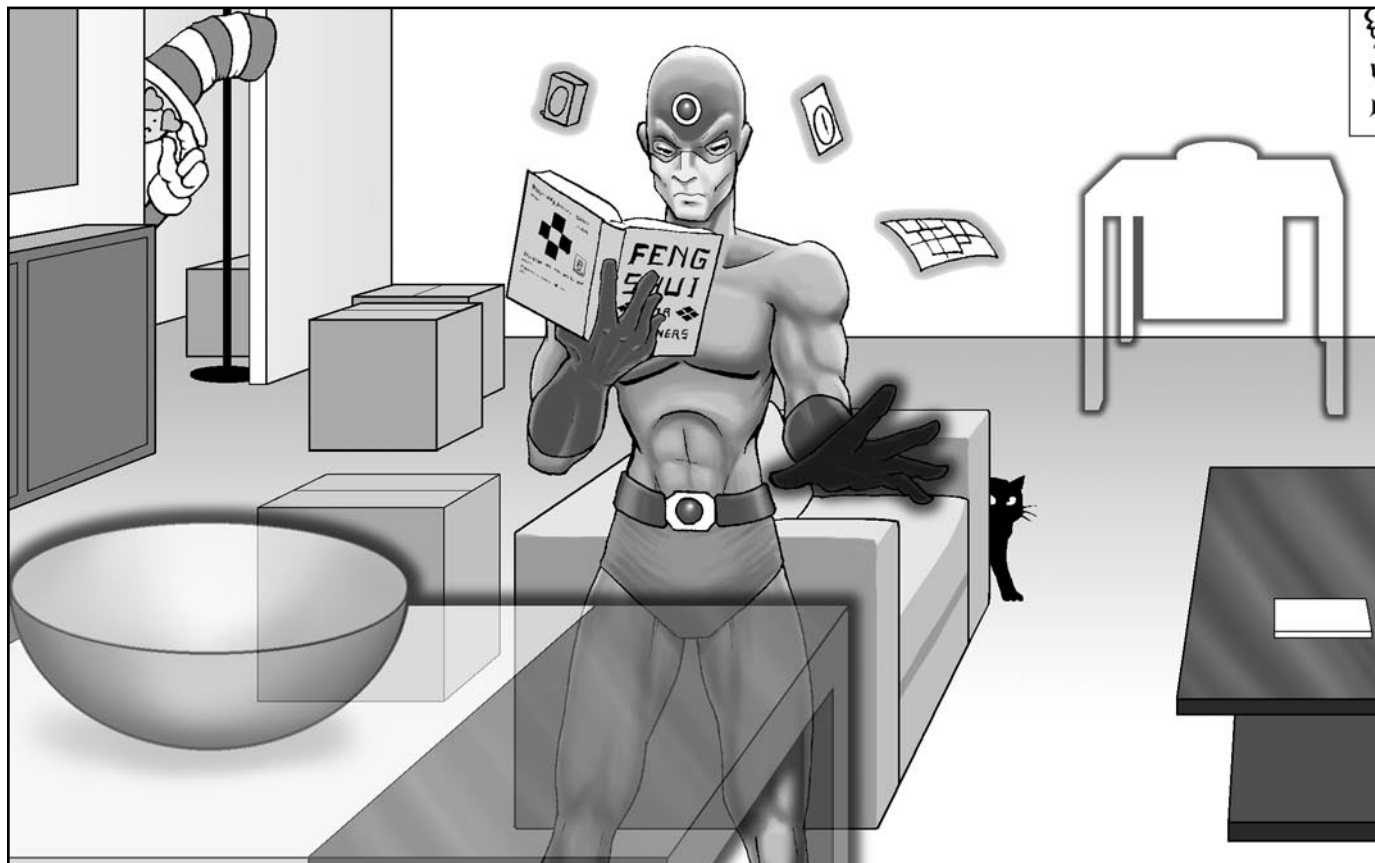
Offensive Powers

MATTER CONTROL

Effect: Telekinesis (30 STR), Fine Manipulation
Target: One character
Duration: Constant
Range: 400”
END Cost: 8
Description: The character can move, throw, and otherwise manipulate matter without having to touch it.
Game Information: *Telekinesis (30 STR), Fine Manipulation, Special Effect: Matter Manipulation. Total cost: 80 points.*

MATTER CREATION ATTACK

Effect: Entangle 6d6, 6 DEF/Energy Blast 9d6, Indirect
Target: One character
Duration: Instant
Range: 300”/280”
END Cost: 6/6
Description: The character can use his power to create matter in offensive ways. First, he can create rock, metal, or similar materials around a target, imprisoning him. Second, he can create chunks of similar material above the target to drop on him and cause injury. (Treat this as a Physical attack for purposes of interaction.)
Game Information:
Cost Power
30 *Matter Creation Attack:* Multipower, 60-point reserve; all Special Effect: Physical (-1)
3u 1) *Matter Envelope:* Entangle 6d6, 6 DEF; Special Effect: Physical (-1)
3u 2) *Matter Dropping:* Energy Blast 9d6, Indirect (always from above; +¼); Special Effect: Physical (-1)
Total cost: 36 points.



MOLECULAR INCOHESION

Effect: RKA 2d6, Armor Piercing, Penetrating (x2)
Target: One character
Duration: Instant
Range: Touch
END Cost: 14

Description: The character can remove the cohesion between molecules, thus allowing him to rip, tear, or pull apart an object with ease. Even the toughest materials have little chance against this power.

Game Information: RKA 2d6, *Special Effect:* Matter Manipulation, Armor Piercing (+½), Penetrating (x2; +1) (137 Active Points); No Range (-½), Reduced STUN Multiplier (1d6-3; -½), No Knockback (-¼). Total cost: 61 points.

OBJECT CREATION

Effect: Major Transform 4d6 (create objects out of thin air)
Target: One object
Duration: Instant
Range: No Range
END Cost: 7

Description: The character can transmute air to create objects. Typically this means simple objects that have little (if any) game effect or game definition, such as a coffee mug, a thin board, a shrub, a backpack, or clothes. Creating more complex objects (such as a computer, a marionette, a mechanical or electronic lock, or the like) requires special skills; the character has to know how to build or work with such devices

before he can create working versions of them. In any event, the character cannot create (a) weapons or other objects that should be built and defined using other Powers or rules, (b) objects that improve or enhance a character's ability to perform Skills, (c) living objects, or (d) objects that could reasonably be considered the special effect of some other power or ability. As always, the GM should apply common sense, dramatic sense, and considerations of game balance when deciding whether to allow specific uses of this power.

A character cannot use this power to create flawless duplicates of other objects, unless (a) he has an appropriate *Forgery* Skill, and (b) the GM allows him to.

Game Information:

Cost Power

- 50 *Object Creation:* Multipower, 75-point reserve; all No Range (-½)
- 5u 1) *Simple Object Creation:* Major Transform 4d6 (create objects out of thin air; "heals" back by being broken or re-Transformed), Improved Results Group (simple objects; +¼); No Range (-½)
- 4u 2) *Complex Object Creation:* Major Transform 4d6 (create objects out of thin air; "heals" back by being broken or re-Transformed), Improved Results Group (complex objects; +¼); No Range (-½), Requires A Skill Roll (whatever Skill is most appropriate to using or working with the object, such as Computer Programming to create a computer; -¼)

Total cost: 59 points.

Defensive Powers

MOLECULAR COHESION

Effect: Damage Resistance (20 PD/20 ED) plus Force Field (0 PD/2 ED), Only Versus Disintegration
Target: Self
Duration: Constant
Range: Self
END Cost: 2

Description: The character can enhance the cohesion of the molecules in his body, making it much more difficult for attacks to penetrate his flesh. Additionally, his control over his own personal molecules prevents other matter manipulators from disintegrating him. (Treat this defense as Biological for purposes of interactions.)

This write-up assumes the character has 20 PD and 20 ED. If not, adjust the Damage Resistance and cost to suit.

Game Information: *Damage Resistance (20 PD/20 ED) (20 Active Points); Costs Endurance (-½), Special Effect: Biological (-¾) (total cost: 9 points) plus Force Field (0 PD/2 ED) (2 Active Points); Only To Protect Against Disintegration (-1), Special Effect: Biological (total cost: 1 point). 20 + 2 = 22 Active Points; total cost 9 + 1 = 10 points.*

OBJECT SHIELD

Effect: Force Field (10 PD/10 ED), Ablative
Target: Self
Duration: Constant
Range: Self
END Cost: 2

Description: The character uses his powers of molecular control to create a ring of protective matter around himself. Attacks gradually wear down the “shield,” forcing the character to re-create it.

Game Information: *Force Field (10 PD/10 ED) (20 Active Points); Ablative (-½), Special Effect: Physical (-1). Total cost: 8 points.*

Sensory Powers

MATTER AWARENESS

Effect: Spatial Awareness
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character’s innate awareness of matter allows him to perceive things he cannot see with the naked eye, even if other physical obstacles (like walls) are in the way.

Game Information: *Spatial Awareness (INT Roll) (no Sense Group), Discriminatory, Analyze, Increased Arc Of Perception (360 Degrees), Range. Total cost: 42 points.*

Miscellaneous Powers

CLOTHES HORSE

Effect: Cosmetic Transform 2d6 (clothing into any other clothing)
Target: One set of clothes
Duration: Instant
Range: Touch
END Cost: 1

Description: The character can transmute his clothes into any other type of clothes. He cannot grant the clothing any unusual or protective properties; he can only change their appearance.

Game Information: *Cosmetic Transform 2d6 (clothing into any other clothing, heals back through another application of this power), Improved Results Group (any type of clothing; +¼) (12 Active Points); Limited Target (character’s own clothes; -½), No Range (-½). Total cost: 6 points.*

MENTAL/PSIONIC



Mental/Psionic powers are the powers of the mind: the ability to read, control, alter, and otherwise manipulate minds and thoughts, or do other things with mental power. (This includes, by many settings' definition, various forms of psychokinetic (telekinetic) manipulation, but those are covered under the *Telekinetic* category, below.)

Mental/Psionic powers is such a vast and detailed topic that it could fill a book of its own (and has — see *The Ultimate Mentalist*). Unlike many of the energy types/special effects covered in this chapter, which are typically only found, or found most often, in the Superheroes genre, Mental powers are common to many genres (in fact, arguably they're more common in Science Fiction than in comic books, though usually not as powerful). They also appear in Fantasy as various forms of magic, in occult-oriented Dark Champions games as powers possessed by monsters and freaks, and in Pulp as psychic “weird talents.”

Like Magic, the Mental/Psionic is so broad, so varied from setting to setting, and so subject to defi-

nition by the GM that there's no one “right” way to address them and how they interact with other energy types/special effects. Therefore, in general, Mental/Psionic has no special interaction with the other types of powers described in this chapter; it neither gains nor loses against them. (The other sections of this chapter may have some additional information or note exceptions to this general rule.)

CONCLUSION: THE SPECIAL EFFECT: MENTAL/PSIONIC POWER MODIFIER

Since Mental/Psionic powers are by default neutral as to all other special effects, *Special Effect: Mental/Psionic* is a +0 Advantage.

EXAMPLE MENTAL/ PSIONIC POWERS

See *The Ultimate Mentalist* for hundreds of example Mental/Psionic powers. Since Special Effect: Mental/Psionic is a +0 Advantage, their costs remain the same.

MENTAL/PSIONIC BASICS

Defense: Varies based on type of attack, but typically Mental Defense

Knockback: No



PHYSICAL



PHYSICAL BASICS

Defense: PD

Knockback: Yes

Physical, obviously, is not really an “energy type,” since it’s not energy at all — it’s just a special effect. It refers to any type of physical object or effect not covered by another category in this chapter. Examples might include thrown objects, guns and other weapons, claws and fangs, objects that fall on or are dropped on people, punches and kicks (and other attacks involving parts of the body), rail guns and similar weapons, armor, and the like. In other words, it’s one of the most common, if not *the* most common, general special effect in many campaign settings, and therefore is likely to interact with other energy types/special effects frequently.

PHYSICAL AND OTHER SPECIAL EFFECTS

Here’s how Physical interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid attacks tend to be slightly more effective against Physical defenses; add +1 BODY before applying defenses (or rolling a STUN Multiplier). Physical attacks interact with Acid defenses normally.

AIR/WIND

Air/Wind attacks typically interact with Physical defenses normally. The interaction of Air/Wind defenses and Physical attacks depends on the nature of the Physical attack — specifically, how fast it moves and how heavy it is. See the *Air/Wind* section for more information and rules.

BIOLOGICAL

Biological has no special interaction with Physical; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). However, an airtight Physical defense (such as a hazmat suit) may keep out Biological powers that involve projecting spores, viruses, or the like through the air; typically the attack itself reflects this with an Advantage like *No Normal Defense*, but the GM may reduce the effectiveness of such attacks (or negate them entirely) even if that’s not the case.

CHAOS/ENTROPY

Physical objects and abilities fare poorly when they contact Chaos/Entropy. Chaos/Entropy attacks gain +1 DC against Physical defenses; Physical attacks are at -1 DC before being applied to Chaos/Entropy defenses.

CHEMICAL

Chemical has no special interaction with Physical; it neither gains nor loses against this special effect. However, an airtight Physical defense (such as a hazmat suit) may keep out Chemical powers that involve projecting gases or the like through the air; typically the attack itself reflects this with an Advantage like *No Normal Defense*, but the GM may reduce the effectiveness of such attacks (or negate them entirely) even if that’s not the case.

COSMIC ENERGY

Physical has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Physical powers; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Dimensional Manipulation powers are more effective than normal against attacks or defenses involving Physical objects due to the way they affect physical reality. Dimensional Manipulation attack typically receives +1 DC against a Physical defense before that defense applies to reduce damage, while Physical attacks are at -1 DC against Dimensional Manipulation defenses.

EARTH/STONE

Earth/Stone has no special interaction with Physical powers; it neither gains nor loses against this special effect.

ELECTRICITY

In general, Electricity has no special interaction with Physical powers; it neither gains nor loses against this special effect. However, if a Physical object has high conductivity (like most metals do), then it may take +1 or more DCs of damage from an Electrical attack.

ELECTROMAGNETIC ENERGY

General Physical defenses aren't much good against Electromagnetic Energy attacks; reduce them by -3 points before applying them to decrease the attack's damage. Physical attacks interact with Electromagnetic Energy defenses normally.

ENERGY MANIPULATION

Physical has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

In general, for ease of game play, it's assumed that Fire/Heat and Physical interact normally, with neither gaining or losing in the process — the contact is so brief that Fire/Heat attacks aren't likely to set Physical defenses on fire, and that Fire/Heat defenses don't melt or destroy Physical attacks. For greater "realism," see the *Fire/Heat* section above for more information and rules.

FORCE MANIPULATION

Physical has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Gravity affects Physical objects strongly. Physical defenses are at -1 ED before applying to reduce damage from Gravity attacks, and Gravity defenses are at +2 PD against Physical attacks. (More "realistically," fast-moving projectiles [anything that's fired or shot] may suffer no penalty against Gravity defenses, while slow-moving ones [such as thrown objects] suffer a -1 or greater OCV penalty because Gravity has more time/opportunity to affect them.)

HOLY/UNHOLY

Physical has no special interaction with Holy/Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Typically Ice/Cold has no special interaction with Physical; it neither gains nor loses against this special effect. However, extreme cold (such as that generated by Ice/Cold-using characters) can make Physical objects brittle, and thus easier to break. Characters can buy this as a power (such as *Brittelize* in the USPD) or the GM might allow Ice/Cold attacks to have this effect as a campaign ground rule. In that case, it's suggested that for every full 50 Active Points in an Ice/Cold attack involving "pure Cold energy" (as opposed to just a piece of actual ice), reduce a Physical defense's Physical Defense protection against future attacks by -1 PD for the next Turn. (Thus, a 100 Active Point Ice/Cold power would subtract -2 PD, and so on.)

KINETIC ENERGY

Physical has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, above, Kinetic Energy attacks are often treated simply as Physical attacks).

LIFE FORCE ENERGY

Physical defenses don't stand up to Life Force Energy attacks well; the Life Force Energy can bypass them easily (reduce them by 1 ED before applying them to reduce the damage). Physical attacks and Life Force defenses interact normally.

LIGHT

Light has no special interaction with Physical powers; it neither gains nor loses against this special effect.

MAGIC

Physical has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

In general, Physical has no special interaction with Magnetism; it neither gains nor loses against this special effect. However, to the extent a Physical power uses ferrous objects or materials, that defense may be more susceptible to Magnetism powers (it would suffer a -3 ED reduction as a defense against Magnetism attacks involving pure magnetic force, but at most a -1 against attacks involving thrown or projected metallic objects, and a -1 DC reduction as an attack against Magnetism defenses).

MATTER MANIPULATION

See the *Matter Manipulation* section, above, for information and rules about how Matter Manipulation powers affect Physical ones.

MENTAL/PSIONIC

Physical has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PULSON ENERGY

Physical has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

General Physical defenses aren't much good against Radiation attacks; reduce them by -3 points before applying them to decrease the attack's damage. Physical attacks interact with Radiation defenses normally.

SONIC

Typically Sonic has no special interaction with Physical; it neither gains nor loses against this special effect. However, particularly rigid Physical defenses may suffer the way Earth/Stone does when hit by a Sonic attack (see under *Sonic*, below).

TELEKINETIC

Physical has no special interaction with Telekinetic; it neither gains nor loses against this special effect.

TIME

Physical has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Physical has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Typically, Physical has no special interaction with Water; it neither gains nor loses against this special effect. However, the GM may want to consider several factors. An object that's hydrodynamic may have an easier time passing through a Water defense (reduce the defense by -1 PD or more). A buoyant object (such as Ice) may have a harder time; increase the defense by +1 PD or more.

CONCLUSION: THE SPECIAL EFFECT:
PHYSICAL POWER MODIFIER

Physical has more drawbacks than it has benefits. Therefore, *Special Effect: Physical* constitutes a -1 Limitation.

EXAMPLE PHYSICAL
POWERS

Here are some example Physical powers:

Offensive Powers

CLAWS

Effect: HKA 1d6 (up to 2d6 with STR), Reduced Penetration
Target: One character
Duration: Instant
Range: Touch
END Cost: 1

Description: The character has claws, or can grow claws, making him a lethal hand-to-hand combatant. If he has claws on his feet, he may call this power Talons instead.

Game Information: *HKA 1d6 (up to 2d6 with STR) (15 Active Points); Reduced Penetration (-¼), Special Effect: Physical (-1). Total cost: 7 points.*

POWER PUNCH

Effect: HA +3d6
Target: One character
Duration: Instant
Range: Touch
END Cost: 1

Description: The character knows how to punch particularly hard or well.

Game Information: *HA +3d6 (15 Active Points); Hand-To-Hand Attack (-½), Special Effect: Physical (-1). Total cost: 6 points.*

Defensive Powers

PROTECTIVE SKIN

Effect: Damage Resistance (8 PD/8 ED)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character's skin is unusually tough or resilient. It might be scaly like a snake's, an insectile exoskeleton, made of metal, or the like.

Game Information: *Damage Resistance (8 PD/8 ED) (8 Active Points); Special Effect: Physical (-1). Total cost: 4 points.*

PULSON ENERGY



Pulson Energy refers to the generic “energy” featured in many Superhero settings (and occasionally some other genres, such as Science Fiction). If a character or weapon uses a type of energy that’s not more precisely defined, or you want rules for a type of energy not covered by these rules, use the Pulson Energy rules for it. Typically a Pulson Energy attack features a concentrated stream of strongly-aligned, highly energetic particles that generates a beam with both burning and concussive force. Pulson Energy defenses tend to be force-fields and similar constructs that provide broad-spectrum protection from both physical attacks and most wavelengths of energy.

SECONDARY EFFECTS

Defining exactly how Pulson Energy works is ultimately up to the GM, but you can use these guidelines for general purposes:

- like Light and Electricity, Pulson Energy generates enough heat that it may set flammable objects on fire. Use the rules from the *Fire/Heat* section, above, when a Pulson Energy attack strikes something that’s potentially flammable... though even the most intense Pulson Energy power isn’t as hot as a Fire/Heat power with the same Active Points. If appropriate, reduce the roll to see if a flammable object catches on fire by 2 (or more).
- Pulson Energy is bright, and thus can provide light to a character who can manipulate it. Generally this doesn’t have a real game effect, but in some cases it might provide a +1 Sight PER Roll bonus to counteract modifiers for darkness, shadow, and the like. Similarly, Linking a Sight Group Flash to a Pulson Energy attack is appropriate.
- At the GM’s option, as a “universal” form of energy, Pulson Energy can affect any type of energy (including itself) using the *Interference Combat Maneuver* (page 196). If the GM allows this, he should increase the value of the Special Effect: Pulson Energy to a +15 Character Point Adder.

PULSON ENERGY AND OTHER SPECIAL EFFECTS

As a “generic” fictional form of energy, Pulson Energy has no special interaction with the other types of powers described in this chapter; it neither gains nor loses against them. (The other sections of this chapter may have some additional information or note exceptions to this general rule.)

CONCLUSION: THE SPECIAL EFFECT: PULSON ENERGY POWER MODIFIER

Since Pulson Energy is by default neutral as to all other special effects, *Special Effect: Pulson Energy* is a +0 Advantage.

PULSON ENERGY BASICS

Defense: ED

Knockback: Yes

EXAMPLE PULSON ENERGY POWERS

Here are some example Pulson Energy powers:

Offensive Powers

PULSON BEAM

Effect: Energy Blast 10d6
Target: One character
Duration: Instant
Range: 250”
END Cost: 5

Description: The character can project a beam of pure Pulson Energy.

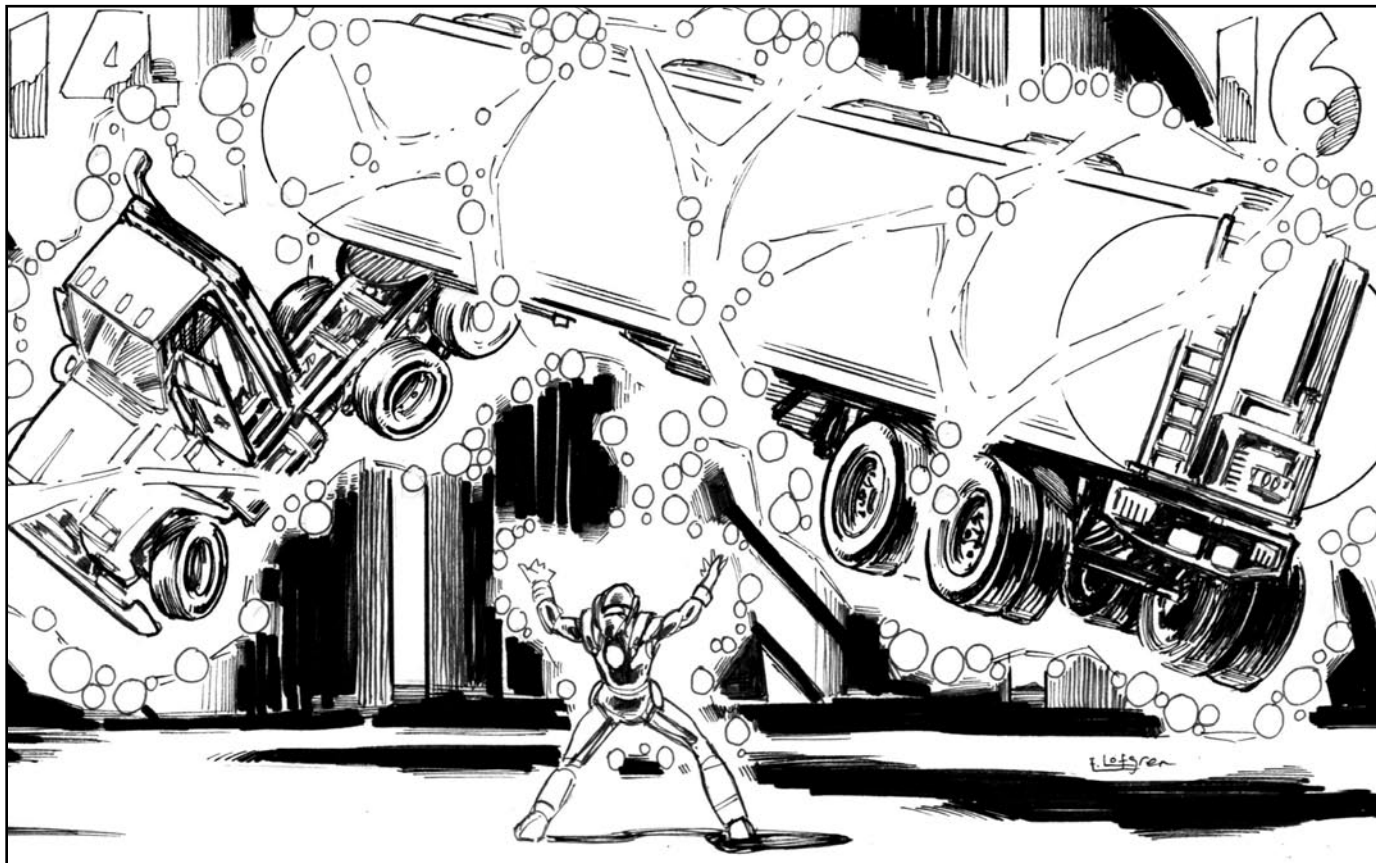
Game Information: *Energy Blast 10d6, Special Effect: Pulson Energy (+0). Total cost: 50 points.*

PULSON BOLT

Effect: RKA 3d6
Target: One character
Duration: Instant
Range: 225”
END Cost: 4

Description: The character can project a bolt of deadly Pulson Energy.

Game Information: *RKA 3d6, Special Effect: Pulson Energy (+0). Total cost: 45 points.*



PULSON CONE

Effect: Energy Blast 8d6
Target: 9" Cone
Duration: Instant
Range: No Range
END Cost: 8

Description: The character can project a blast of Pulson Energy in the form of a large cone, thus allowing him to hit many targets at once.

Game Information: *Energy Blast 8d6, Area Of Effect (9" Cone; +1), Special Effect: Pulson Energy (+0) (80 Active Points); No Range (-½). Total cost: 53 points.*

Defensive Powers

PULSON SHIELD

Effect: Force Field (15 PD/25 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character can use his energy powers to create a protective field around himself. The field is more effective against energy attacks.

Game Information: *Force Field (15 PD/25 ED), Special Effect: Pulson Energy (+0). Total cost: 40 points.*

Movement Powers

PULSON FLIGHT

Effect: Flight 20"
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character projects Pulson Energy behind him to propel himself through the air like a rocket.

Game Information: *Flight 20". Total cost: 40 points.*

RADIATION



Technically speaking, the term “radiation” covers the entire electromagnetic spectrum — light, magnetism, electricity, x-rays, gamma rays, microwaves, radio, and so on. But for purposes of this book, the *Radiation* energy type/special effect is considered separately, since in many genres (including Superheroes) it’s often treated as a distinct, dangerous thing without regard to the “realistic” implications and explanations. For GMs preferring more “realism,” assume that Radiation refers to any form of ionizing radiation (see below), and convert Electromagnetic Energy (see earlier in this chapter) to non-ionizing forms of radiation.

RADIATION IN THE REAL WORLD

Technically speaking, “radiation” can be divided into two types: non-ionizing and ionizing. *Non-ionizing radiation* cannot damage organic molecules by impacting them and imparting energy to them. This includes microwaves, radio waves, and infrared radiation. Thus, a microwave oven or infrared-based remote control device cannot make someone “radioactive” or cause cancer. *Ionizing radiation* is much more dangerous, and can damage organic molecules by impacting them and imparting energy to them (which makes the target radioactive, can cause cancer [or make it more likely to occur], and so forth). Solar and cosmic radiation in outer space, alpha and beta particles, some ultraviolet radiation, x-rays, and gamma rays are all ionizing forms of radiation. The rest of the discussion in this section generally refers to ionizing radiation, since that’s what PCs in a roleplaying game setting tend to be concerned about.

RADIATION LEVEL TABLE

Source	Rads
Occupational Safety Limit	5 per year
Medical X-Ray	0.01 to 0.05 per shot
X-Ray Laser	1 per die of Killing Damage
Cosmic Rays (in space)	30 per year
Lunar surface	15 per year
Earth surface	0.03 per year
Jovian Radiation Belt	1,000 per hour
Solar Flare (Earth orbit)	100-1,000 per event
Nuclear Fallout (within plume)	240 per year
Plutonium (1 gram)	1 per second
Reactor Core (unshielded)	7,000 per second

RADIATION EFFECTS

Exposure (Rads) is...	Effect
Greater than 5 x CON	<i>Radiation Sickness:</i> Individual loses 1d6 CON. Victim loses 1 point of CON in the Segment when his exposure reaches this limit, and the rest (if any) at the rate of 1 point of CON per Hour. This loss of CON heals at the rate of REC per Month.
Greater than 10 x CON	<i>Serious Sickness:</i> Lose 2d6 CON. Victim loses 1-3 points of CON in the Segment when his exposure reaches this limit, and the rest (if any) at the rate of 1 point of CON per Hour. This loss of CON heals at the rate of REC per Month.
Greater than 20 x CON	<i>Internal Damage:</i> Lose 2d6 CON and 1d6 BODY. Victim loses 1 point each of CON and BODY in the Segment when his exposure reaches this limit, and the rest (if any) at the rate of 1 point of CON and BODY per Hour. This loss of CON and BODY heals at the rate of REC in CON and BODY per Month.
Greater than 30 x CON	<i>Lethal Threshold:</i> Lose 3d6 CON and 2d6 BODY. Victim loses 1-3 points of both CON and BODY in the Segment when his exposure reaches this limit, and the rest (if any) at the rate of 1 point of CON and BODY per 20 Minutes. This loss of CON and BODY heals at the rate of (REC/2) in CON and BODY per Month.
Greater than 50 x CON	<i>Fatal Dose:</i> Lose 4d6 CON and 3d6 BODY. Victim loses 1-6 points of both CON and BODY in the Segment when his exposure reaches this limit, and the rest (if any) at the rate of 1 point of CON and BODY per 20 Minutes. This loss of CON and BODY does not heal; if the character survives, both Characteristics are permanently reduced (though he may spend Character/Experience Points to buy them up from their new amounts). Armor and other defenses do not reduce BODY damage from radiation; consider it as NND Does BODY damage, with the defense being Life Support: Safe Environment (High Radiation).

REALISTIC RADIATION

The following general rules explain how Radiation works “realistically” in game terms.

General Principles

Radiation harms living things as by delivering intense amounts of energy to a small area. It can damage individual cells’ DNA (which can lead to cancer); at higher doses it can cause cataracts, burns (either skin burns or deep tissue/organ burns), permanent sterility, and other effects.

Radiation exposure is measured in *Rads*, short for “Radiation Absorbed Dose.” One rad is defined as 100 ergs of energy per gram of material. The Radiation Level Table lists the radiation level of various sources of radioactivity; the Radiation Effects table describes the effects of exposure. Radiation, like all forms of energy, is subject to the

RADIATION BASICS

Defense: ED

Knockback: “Realistically” No, but Yes in many fantastic/cinematic settings and genres

RADIATION SHIELDING

SUBSTANCE	RADIATION MULTIPLIER
Real World Substances	
Atmosphere	
Standard (per meter)	.75
Thin (per meter)	.9
Trace (per meter)	.98
Dense (per meter)	.9
Brick (per cm)	.75
Lead (per mm)	.8
Radiation Suit	.7
Rock (per cm)	.75
Soil (per cm)	.75
Spacesuit	.9
Steel (per mm)	.9
Vehicle Hull (per point of DEF)	.9
Water (per cm)	.9
Wood or Plastic (per cm)	.95
Fictional Substances	
Armor*	.5 per full 3 ED†
Force Field/Wall	.5 per full 3 ED†
Dwarven Steel (per mm)	.85
Elven-Silver (per mm)	.8
Questionite (per mm)	.8

*: This refers to the *Armor* Power. If the special effect of the *Armor* is one of the Real World Substances listed above, use that substance's value instead. For game purposes, assume every 10 Active Points of *Armor* (both PD and ED) is 2 mm thick for purposes of resisting radiation.

†: If the defense is *Hardened*, multiply the ED by the value of the *Hardened* to determine its effectiveness at reducing radiation (with a minimum of +1 ED).

Radiation protection is exponential. Steel plating reduces rad levels by .9 per millimeter, so a layer of steel 5 millimeters thick would reduce it by a factor of (.9 x .9 x .9 x .9 x .9), or about .59 overall.

inverse square rule — so divide the rad level given on the table by the square of the distance to the source to determine a character's exposure.

Fallout And Half Life

Fallout is radioactive material released by nuclear weapons explosions. Typically, a nuclear bomb going off scatters bits of radioactive material high into the atmosphere, creating a long plume, extending hundreds of miles, where the radiation levels are temporarily higher than normal. The problem with fallout is that it affects an area — the radiation level rises over the whole region covered by the plume.

Some sources of radiation, like ongoing nuclear reactions, emit radiation at a constant level. Others, like radioactive isotopes or fallout, have a *half life*. The half life is the amount of time it takes for half of the radioactive material to decay to a stable form. Because of the way radioactive decay works, this time is constant, so the rad level drops by half for each half life increment. The process of decay is gradual — the radiation level doesn't suddenly drop when the half-life period is up.

Radiation Shielding

Radiation shielding absorbs high-energy particles. In practice, different materials stop different kinds of radiation better than others, but for the sake of simplicity you can lump them all together as “radiation shielding.” The Radiation Shielding table gives the amount of protection for different materials.

COMIC BOOK RADIATION

But of course, not all genres or settings treat radiation “realistically.” In the Superheroes genre and some others (such as mutant-filled Post-Apocalyptic games), Radiation isn't necessarily the insidious, deadly thing it is in real life. It *can* be, but it can also cause fictional mutations both beneficial and hideous. For example, many well-known superhumans, including the Marvel Comics heroes Spider-Man, the Hulk, the Fantastic Four, and Daredevil, got their superpowers from Radiation in some form. Therefore, in some games Radiation may sometimes be more “helpful” than it is dangerous.

Additionally, Radiation attacks and defenses in the Superhero genre (and other such cinematic genres) tend to function more like other types of energy — they can have concussive impact and/or cause immediate burns, they don't just make people sick or cause long-term mutations. Radiation defenses work like other types of force-fields and the like.

IMPLICATIONS AND SECONDARY EFFECTS

“Realistically” ionizing Radiation strong enough to function as an attack is best represented in *HERO System* terms either as (a) an RKA, or (b) a Drain CON and BODY (and possibly also STUN, END, and/or STR). In either form it should have the Advantages *NND* (defense is Life Support [Safe Environment: High Radiation]) and *Does BODY*; the Limitation *No Knockback* is appropriate. (For greater “realism,” you can also apply the *Gradual Effect* Limitation — the exposure happens instantaneously, but the full effects of exposure take time to build up and manifest.) The RKA method has the virtue of being highly fatal; the Drain method can be bought with the *Delayed Return Rate* Advantage to simulate how long Radiation damage takes to heal. (At the GM's option, even Normal or Killing Damage BODY caused by Radiation should heal only one-third as fast as other types of damage.)

In more cinematic settings, Radiation could instead be an ordinary Energy Blast or RKA, a standard *NND*, or various Drains. The example powers below tend more toward the cinematic.

Radiation burns may cause scarring and hair loss (and thus permanently reduce a character's COM). See the *Acid* section, above, for rules you can apply, though you may want to reduce the effects slightly.



Irradiation

One significant downside of Radiation powers is that they tend to irradiate people and objects around the character using them — not to mention the character himself, but the odds are he'll have Life Support (Safe Environment: High Radiation). (Technically speaking, the term “irradiate” simply means “to expose to radiation,” but for ease of reference *The Ultimate Energy Projector* here uses it inaccurately to mean “to make radioactive.”) “Realistically” a person exposed to ionizing rarely becomes radioactive, he simply suffers the burns and other effects of exposure, but for dramatic and cinematic purposes a Radiation attack can make someone radioactive.

Add up the Active Points of all the Radiation powers a character uses in a Phase, then divide by 15. That's the number of Rads of damage everyone and everything near him is subjected to. His hex receives the full dose; each 1" out from there receives half that much (the radiation stops radiating outward in the ring of hexes in which the damage drops to 5% of the full amount or less). If any of the character's powers are Constant, their Rads apply every Segment; if any of his powers cover an Area, their Rads apply to everything in that area in full, then expand outward from there as described above. At the GM's option, constant use of Radiation powers in the same area causes the irradiated zone to expand, increasing its radius to 2", 3", and so on.

Irradiation may occur automatically, and doesn't entitle a character to any Limitation or the like. In other campaigns, irradiation does not occur automatically (perhaps the character absorbs the radiation he emits, or his powers are somehow “clean”). In that case characters can

take irradiation as a Side Effect. It's worth $-\frac{1}{4}$ at its base level and always occurs, for a final value of $-\frac{1}{2}$.

Of course, in a cinematic campaign, irradiation may not cause problems — it might cause a character to spontaneously develop superhuman powers! (Hence the classic term “radiation accident” to explain the origin of a character's powers, or sudden change in powers.)

Cancer

Exposure to radiation increases a person's chances of developing cancer. Generally this is beyond the scope of a roleplaying game, since it takes years or decades to develop. (Though a supervillain could, for example, buy an “inflict people with cancer immediately” power based on Radiation, if he wanted.) However, GMs interested in greater “realism” might want to rule that exposure to any Radiation power has a Major Transform effect on any character who doesn't have Life Support (Safe Environment: High Radiation). The Transform accumulates slowly, perhaps only .3-1.0 points per exposure (or some rate based on the total Active Points in the Radiation powers the character's exposed to, such as .1 point per 10 Active Points)... but eventually enough exposure adds up to the point where the Transform occurs and the character develops cancer. The cancer grows normally from that point; the GM determines what type of cancer the character contracts.

Decontamination

A character or object who's been irradiated can undergo *decontamination* to prevent or reduce the effects. Decontaminating surface exposure to

radiation is easier than decontaminating internal exposure (from, say, eating irradiated food). Typical procedures involve stripping off irradiated (or possibly irradiated) clothing, a full shower, and then dressing in clean clothes.

In game terms, a character who undergoes formal decontamination procedures within 1 hour of exposure to radiation reduces the damage he suffers (per the Radiation Effects table) by half. If he's already taken more damage than this, he doesn't get any CON and/or BODY back, but he takes no further damage. If a character undergoes informal decontamination, he reduces damage by one-quarter (25%).

RADS AND DAMAGE

For GMs desiring maximum "realism," 1 Active Point in a Radiation attack equals 1 Rad of exposure. Instead of applying the damage in the usual fashion, convert it to Rads, use the Radiation Shielding table to determine how much the character's defenses reduce it, and then convert the final Rads back into damage and apply it to the character (he gets no further subtraction for his defenses, of course).

RADIATION AND OTHER SPECIAL EFFECTS

Here's how Radiation interacts with other energies/special effects. Generally speaking, Radiation attacks are more effective than average at penetrating physical defenses (though a few physical defenses are better than normal protection against Radiation). These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid has no special interaction with Radiation; it neither gains nor loses against this special effect (except perhaps as noted under *Acid*, above, regarding its interaction with energy in general).

AIR/WIND

Air/Wind defenses are a little better against Radiation than most forms of protection again; increase them by +2 before applying them to reduce Radiation damage. Air/Wind attacks and Radiation defenses interact normally.

BIOLOGICAL

Biological attacks have no special interaction with Radiation powers except as discussed above for energy powers generally. Radiation tends to penetrate physical barriers well, so Biological defenses may suffer a reduction of -3 (or more) points before applying to Radiation attacks.

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Radiation; it neither gains nor loses against this special effect.

CHEMICAL

Chemical has no special interaction with Radiation; it neither gains nor loses against this special effect (except as discussed above for energy powers generally). At the GM's option, exposing Chemical powers to intense Radiation may have the same results as for Electricity (see under *Chemical*, above, for details).

COSMIC ENERGY

Radiation has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Radiation; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Dimensional Manipulation has no special interaction with Radiation; it neither gains nor loses against this special effect.

EARTH/STONE

Compared to most physical barriers, Earth/Stone defenses insulate against Radiation attacks well; give them +2 ED before applying them to damage. Earth/Stone attacks interact with Radiation defenses normally. Defenses made of Metal (a subset of Earth/Stone powers) aren't quite as good; give them +1 defense.

ELECTRICITY

Electricity has no special interaction with Radiation (in fact, in a technical sense it's simply a subset of electromagnetism generally); it neither gains nor loses against this special effect.

ELECTROMAGNETIC ENERGY

Radiation has no special interaction with Electromagnetic Energy (technically speaking they're all basically the same thing; see *Radiation*, below, for further discussion and more information); it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Radiation has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Radiation has no special interaction with Fire/Heat; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Radiation has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Radiation has no special interaction with Gravity; it neither gains nor loses against this special effect.

HOLY/UNHOLY

Radiation has no special interaction with Holy/Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Typically Radiation has no special interaction with Ice/Cold; it neither gains nor loses against this special effect. However, to the extent an Ice defense involves water or similar liquids that have been frozen, it may protect against Radiation better than normal (increase the Ice/Cold defense by +1 point before applying it to decrease the damage).

KINETIC ENERGY

Radiation has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, below, Kinetic Energy attacks are often treated as Physical attacks).

LIFE FORCE ENERGY

Radiation has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Light has no special interaction with Radiation (and is, in fact, a form of radiation itself); it neither gains nor loses against this special effect.

MAGIC

Radiation has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Magnetism defenses aren't as effective against Radiation attacks as most forms of energy; reduce their protection by -1 point before applying them to reduce the attack's damage. Magnetism attacks interact with Radiation defenses normally.

MATTER MANIPULATION

Typically Radiation has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, to the extent a Matter Manipulation defense is a physical thing (e.g., a shield formed of matter), an Radiation attack may penetrate it more easily; reduce the Matter Manipulation defense by -2 points before applying it to decrease the damage.

MENTAL/PSIONIC

Radiation has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

General Physical defenses aren't much good against Radiation attacks; reduce them by -3 points before applying them to decrease the attack's damage. Physical attacks interact with Radiation defenses normally.

PULSON ENERGY

Radiation has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

SONIC

Radiation has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Radiation has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Radiation has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Radiation has no special interaction with Vibration; it neither gains nor loses against this special effect.

WATER

Water defenses are a little better than most against Radiation attacks; increase them by +1 before applying them to reduce Radiation damage. Water attacks interact with Radiation defenses normally.

**CONCLUSION: THE SPECIAL EFFECT:
RADIATION POWER MODIFIER**

Radiation has slightly more drawbacks than it has benefits. Therefore, *Special Effect: Radiation* constitutes a -0 Limitation. (If the GM uses the "realistic" rules for irradiation and other negative side effects of Radiation powers, he may increase this value to -¼ or more.)



EXAMPLE RADIATION POWERS

Here are some example Radiation powers:

Offensive Powers

DEADLY RADIATION

Effect: RKA 3d6, Living Beings Only
Target: One character
Duration: Instant
Range: 225"
END Cost: 4

Description: The character can project a blast of radiation that's so intense it can kill living beings instantly through cellular disruption and decay. It has no effect on non-living material.

Game Information: RKA 3d6 (45 Active Points); Only Works On Living Beings (-½), Special Effect: Radiation (-0). Total cost: 30 points.

Options:

1) Deadly Radiation Variant: You can also define this power as an NND. Change to RKA 3d6, NND (defense is Life Support [Safe Environment: High Radiation] or not being alive; +1), Does BODY (+1) (135 Active Points); Special Effect: Radiation (-0). Total cost: 135 points.

RADIATION BLAST

Effect: Energy Blast 8d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 4

Description: The character can fire a bolt of radiation so intense that it can inflict serious physical injury, and even propel a target backwards.

Game Information: Energy Blast 8d6 (40 Active Points); Special Effect: Radiation (-0). Total cost: 40 points.

RADIATION SICKNESS

Effect: Drain CON 4d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 6

Description: The character can project a blast of withering radiation that sickens living beings.

Game Information: Drain CON 4d6, Ranged (+½). Total cost: 60 points.

RADIOACTIVE ZONE

Effect: Change Environment (create radiation)
Target: 16" radius
Duration: Constant
Range: 225"
END Cost: 4

Description: The character can create a field of intense radiation equal to 300 rads — about one-twentieth of the radiation emitted by an unshielded nuclear reactor core. Characters exposed to such intense radiation often sicken, and may die.

For purposes of this power, every 50 rads of radiation beyond the initial, free, 50 rads costs 4 Character Points as a combat effect (see the Combat Effects Costs table on page 136 of *The HERO System 5th Edition, Revised* for the cost of other effects). Compare the rads received to the character's CON and consult the accompanying table to determine the effect. The GM may, if necessary, adjust the results of the table to keep this power from unbalancing or hindering the game, since its effects can be somewhat more extreme than a typical damaging Change Environment power. See above regarding the effects of radiation exposure.

Game Information: *Change Environment 16" radius, create radiation of 300 rads. Total cost: 45 points.*

Defensive Powers

RADIATION RESISTANCE

Effect: Life Support (Safe Environment: High Radiation)
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character's powers make him naturally immune to the effects of ordinary radiation.

Game Information: *Life Support (Safe Environment: High Radiation). Total cost: 2 points.*

RADIATION SHIELD

Effect: Force Field (15 PD/15 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character can create a screen of protective radiation around himself.

Game Information: *Force Field (15 PD/15 ED) (30 Active Points); Special Effect: Radiation (-0). Total cost: 30 points.*

Sensory Powers

HUMAN GEIGER COUNTER

Effect: Detect Radiation
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character can perceive and analyze radiation (not all types of energy, or even all types of electromagnetic radiation, but the sort of hard radiation that geiger counters detect).

Game Information: *Detect Radiation (INT Roll) (no Sense Group), Discriminatory, Analyze, Range. Total cost: 20 points.*

SONIC BASICS

Defense: Typically ED, but some GMs may interpret the vibratory impact of Sonic attacks as a Physical effect

Knockback: Yes

Captain Jack Harkness: Okay, this can function as a sonic blaster, a sonic cannon, and a triple and full sonic disruptor. Doc, what you got?

The Doctor: I've got a sonic... errr, never mind.

Captain Jack Harkness: What?

The Doctor: It's sonic, okay, let's leave it at that.

Captain Jack Harkness: Disruptor? Cannon? What?

The Doctor: It's sonic, totally sonic, I am soniced up!

Captain Jack Harkness: A sonic what?

The Doctor: Screwdriver!

Captain Jack Harkness: Who has a sonic screwdriver?

The Doctor: I do!

Captain Jack Harkness: Who looks at a screwdriver and thinks "Oooh, this could be a little more sonic"?

The Doctor: What? You never been bored? Never had a long night? Never had a lot of cabinets to put up?

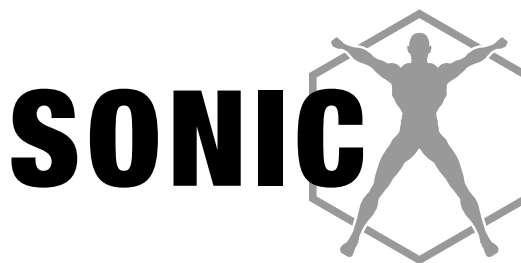
—from the *Doctor Who* episode,
"The Doctor Dances"

Sonic (or Sonics) powers involve the control and manipulation of sound energy. Control of sound allows a character to create a wide range of effects — amplifying low-level sounds to make tasks easier, preventing people from speaking, generating deafening shrieks, using sound for sensory purposes (sonar, ultrasound medical devices), or creating beams of focused sound powerful enough to cut through objects or liquify flesh.

SOUND IN THE REAL WORLD

Generally speaking, sound falls into three categories: sound that's audible to the human ear; ultrasound (frequencies too high for the human ear to hear unaided); and infrasound (frequencies too low for the human ear to hear unaided).

The upper limit of the human ear is about 20 kiloHertz; the lower limit about 16 kiloHertz. These limits exist because the middle ear serves as a filter. If sound contacts the skull bone and cochlea without having to pass through the middle ear, a human can hear frequencies up to about 50 kHz. Younger people can often hear sounds of higher frequency than older people, since the ability to hear deteriorates with age. (Some shopping districts in the United Kingdom have reportedly used ultrasonic devices to discourage teenagers from lingering in the area, since they can hear [and be discomfited by] the ultrasonic sound but older customers cannot.) Many animals (such as dogs, bats, dolphins, various rodents, and some insects) can hear higher frequencies than humans.



Volume

Sound is rated in *decibels* (dB). It becomes painful to humans in the 120-130 dB range, and sustained exposure to sound as low as 90-95 decibels can cause hearing loss. The accompanying Decibel Table has a list of some common sources of noise rated in their average decibels, for purposes of comparison.

Ultrasound

Ultrasound (or ultrasonics) is used for a wide variety of applications. Ultrasound sensors can reveal a wide range of medical problems without the need for invasive surgery, and can help track the progress of pregnancies. Sonar uses some ultrasound, which allows for very precise close-up measurements of range but doesn't work as well as audible sound over long distances (500" or more). Ultrasonics can clean jewelry, lenses, and the like, be used to find flaws in industrial materials, help to speed up or initiate certain chemical processes, and can disintegrate cells and bacteria (for example, ultrasound is sometimes used to sterilize sewage).

In game terms, characters with Ultrasonic Perception (usually defined as belonging to the Hearing Group) can perceive the full range of ultrasound. Even though normal humans can't hear it, ultrasound can still affect the mind (the "hyper-sonic effect").

Infrasound

Infrasound (or infrasonics) also has many uses. Seismographs use this range of sound to detect earthquakes. (Infrasound can also result naturally from volcanoes, meteors, tornadoes, waves, and avalanches.) Because nuclear and chemical explosions can generate infrasound, agencies who monitor for such things use infrasonic detection devices.

Many animals have the ability to perceive infrasound on some level. Because they can sense the advancing infrasonic wave from an impending disaster (like an earthquake or tidal wave), they know to flee the area long before humans are aware of any problem. Some animals (including whales, giraffes, elephants, rhinoceri, alligators, and hipopotami) use infrasound to communicate — infrasound can cover long distances and travel around obstacles with relatively little dissipation.

Experiments have shown that exposure to infrasound can induce feeling of fear, anxiety, dread, unease, revulsion, sorrow, and nervousness in humans. (Some older reports go so far as to claim infrasound can induce nausea and vomiting, though modern experts question this.) Some scientists suggest that ambient infrasound may explain some hauntings or similar "supernatural" phenomena.

In game terms, characters with a new Enhanced Sense, *Infrasonic Perception* (usually defined as belonging to the Hearing Group) can perceive the full range of infrasound. Infrasonic Perception costs 3 Character Points and functions just like Ultrasonic Perception, just for a different range of sound frequencies.

Sonic Weapons

Humans have experimented with the use of sound as a weapon. The most blatant and crude sonic weapons simply use intensely loud audible sound to rupture victims' eardrums, cause pain, or possibly induce vertigo, but many more sophisticated or less obvious uses might be possible (and are, or may be, currently under research and development as of early 2007):

- infrasonic shock waves can knock people over and injure them
- infrasonic sound can cause feelings of mild nervousness and discomfort (and possibly nausea, but see above) in groups, making it easy to disperse crowds nonviolently
- high-decibel ultrasound can cause headaches, feelings of nausea, confusion, vertigo, and similar symptoms with no visible cause
- infrasound in sufficient volume can shake buildings and rupture internal organs in some cases
- infrasound can vibrate the eyeballs, causing distortion of vision
- ultrasonic weapons may be particularly effective underwater, making it easier (or even easy) to stun or kill targets

Some sonic weapons are designed for direct, offensive use, while others are more passive/defensive. For example, a "sonic barrier" might keep people out of secured areas by making them feel sick and dizzy when they try to cross it. Some sonic weapons can even penetrate buildings to affect the occupants (in *HERO System* terms, they're Indirect).

"Realistically," both ultrasound and infrasound are difficult to aim and use, making them impractical for some situations and purposes. Audible sound may hold the best hope for practical, workable sonic weapons.

IMPLICATIONS AND SECONDARY EFFECTS

Sound requires a medium to propagate through — typically air or water, but it could be a solid substance, an acid, or the like. Thus, in the vacuum of space, Sonic powers generally don't work. This is usually represented with a $-\frac{1}{4}$ Limitation, *Does Not Work In A Vacuum* (which is really a shorthand way of saying "doesn't work in any situation where there's no medium for sound waves to propagate through"). In games where characters are rarely exposed to vacuum or similar situations, the GM should reduce the value of the Limitation to -0.

Sound has difficulty passing from a medium of one density to another. This may affect a character who is, for example, in the air firing a Sonic

DECIBEL TABLE

DeciBel Level	Situation/Source Of Sound
0	Faintest possible perceptible sound
10	Quiet recording studio
20-30	Quiet living room or office
40	Quiet conversation
50	Average living room or office
60	Average conversational speech
70	Normal piano music, a small orchestra
80	Typical home stereo listening level; a busy street; telephone dial tone
90	Heavy truck traffic; train whistle 500 feet away
100	A subway; most musical instruments are in the 85-115 dB range
110	Typical power tools; lawnmower
120	Amplifier at full volume; planes on an airport runway; a cymbal crash; a jackhammer
130	Threshold of pain for humans; pneumatic riveter
140	Loud rock concert
150	Drums or trumpets played at full volume 5-6 inches away
160	A jet engine (close up)
180	Hearing tissue is killed
194	Loudest sound possible

An increase of 10dBs is approximately twice as loud; one of 20 dBs is approximately four times as loud.

attack against a target who's underwater. At the GM's option this may entail a -1 point (or worse) reduction in the Sonic attack's damage.

"Realistically," aiming or controlling Sonics may be difficult. The GM may require characters to buy them as Areas Of Effect/Explosions, or to take the *Inaccurate* Limitation (from USPD) for them.

"Realistically," Sonic has relatively little physical impact, though as noted above some Sonic shock waves are powerful enough to knock people over. Depending on the nature of the campaign and the powers, the GM might require a Sonic power to take the Limitations *No Knockback* ($-\frac{1}{4}$) or *Only Does Knockdown* (-0), or convert the *Does Knockback* ($+\frac{1}{4}$) Advantage into *Does Knockdown* (+0 or $+\frac{1}{4}$).

Some Sonic attacks, particularly ones based on infrasound, can cover long distances and travel around obstacles without dissipating significantly. In *HERO System* terms, it might be appropriate to buy Advantages like *Indirect* ($+\frac{1}{2}$) and *No Range Modifier* ($+\frac{1}{2}$) for them. On the other hand, ultrasound works better over short ranges; an ultrasound-based attack might have the *Reduced By Range* ($-\frac{1}{4}$) Limitation.

Defenses

Typically Sonic attacks apply against Energy defenses. However, characters may want to define some of them, such as an attack that shakes rigid, nonliving objects apart with sonic vibrations, as applying against Physical defenses instead.

Deafening

Unless they rely exclusively on infrasound or ultrasound, Sonic powers tend to be loud — their volume reflects their power. At the GM's option, a Sonic power may function as a Hearing Group Flash attack, with 1d6 of effect per 10 Active Points in the power, to anyone in the same hex as the character using the power. (Or the GM can treat the effect as an Explosion, so that people in the same

hex as the Sonic character suffer the full effect, and those who are only close by a lesser effect.) Alternately, being in the same hex may be the equivalent of a Darkness to Hearing Group 1" radius (or a Change Environment 1" radius that imposes a -3 penalty on Hearing Group PER Rolls), and once a character leaves that hex he continues to suffer the penalty for a number of Segments equal to the Segments he spent in the hex. (In this case, 3 or more points of Hearing Group Flash Defense is sufficient to counteract the penalty.)

If the GM allows Sonic attacks to "deafen" characters automatically this way, increase the value of the *Special Effect: Sonic Advantage* described below by an additional +¼. Even if the GM doesn't want to allow these effects for free, characters can take it for Sonic powers as a -0 Side Effect Limitation. In either case, the effect applies to the character using the Sonic power unless the power has the Personal Immunity (+¼) Advantage or he has enough Hearing Group Flash Defense to counteract it.

Shattering Glass

A common "side effect" of high-pitched Sonic powers is to shatter nearby glass — a not unreasonable result, given that even in the real world some singers can shatter glass by hitting the proper high note. If the GM wants to take this into account, use the following rule: when a character uses Sonic powers, any glass within (Active Points in the Sonic power/divided by 10) hexes suffers an RKA 1d6. This only applies to ordinary glass, mirrors, crystal, and the like; it can't damage other characters or have any significant combat effect. (Alternately, the GM can require characters to take this as a -½ Side Effect, or permit them to do so.)

Sonics Underwater

Sonic powers are particularly effective underwater; water conducts sound well (in fact, sound travels about 4.5 times faster in water than in air). Thus, Sonic powers become more effective beneath the waves.

Sonic non-Ranged attacks typically gain as much as 25% additional power. Sonic Ranged attacks usually automatically gain the Advantage *Area Of Effect (Cone)* (the attack retains its normal Range). If the character doesn't want that effect (*i.e.*, he wants to attack more precisely, so he hits only one target), he may make a *Power Skill Roll* at +2, or if the GM prefers an INT Roll, to control his power and keep it from "spreading." Alternately or in addition, the GM might increase the Damage Classes of a Sonic Ranged attack by as much as 25%.

Sonic defense powers become 20% more effective. Other Sonic powers may gain as much as 10-20% effectiveness, at the GM's option.

In campaigns that feature little adventuring underwater, the GM can consider all of this as part of the Special Effect: Sonic Advantage. In games with a lot of underwater activity, increase the value of that Advantage; see below.

SONIC AND OTHER SPECIAL EFFECTS

Here's how Sonic interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

Acid conducts sound as well as water does, making Sonic powers more effective. An Acid defense is at -3 ED before being applied to reduce a Sonic attack. Acid attacks and Sonic defenses interact normally.

AIR/WIND

Air/Wind has no special interaction with Sonic powers; it neither gains nor loses against this special effect.

BIOLOGICAL

Biological has no special interaction with Sonics; it neither gains nor loses against this special effect (except as discussed under *Biological* for energy powers generally).

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Sonics; it neither gains nor loses against this special effect.

CHEMICAL

Chemical has no special interaction with Sonics; it neither gains nor loses against this special effect (except as discussed under *Chemical* for energy powers generally).

COSMIC ENERGY

Sonic has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Sonics; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Dimensional Manipulation has no special interaction with Sonics; it neither gains nor loses against this special effect.

EARTH/STONE

Earth/Stone defenses, which are often particularly rigid and tough, don't withstand the shaking, shattering effects of Sonic attacks well; they suffer a -2 penalty before being applied to reduce the Sonic damage. Earth/Stone attacks interact with Sonic defenses normally.

ELECTRICITY

Electricity has no special interaction with Sonics; it neither gains nor loses against this special effect.



ELECTROMAGNETIC ENERGY

Electromagnetic Energy has no special interaction with Sonics; it neither gains nor loses against this special effect.

ENERGY MANIPULATION

Sonic has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Fire/Heat has no special interaction with Sonics; it neither gains nor loses against this special effect.

FORCE MANIPULATION

Sonic has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Gravity has no special interaction with Sonics; it neither gains nor loses against this special effect.

HOLY/UNHOLY

Sonic has no special interaction with Holy/Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Typically, Ice/Cold has no special interaction with Sonics; it neither gains nor loses against this special effect. However, in the GM's judgment the vibratory nature of Sonics can weaken Ice/Cold defenses based on actual ice. This works just like the Ice/Cold-Physical interaction

described under *Ice/Cold*, above, except that it's the Ice/Cold defense that suffers, and the reduction applies to both PD *and* ED.

KINETIC ENERGY

Sonic has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, above, Kinetic Energy attacks are often treated simply as Physical attacks; see below for any additional rules).

LIFE FORCE ENERGY

Sonic has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Sonic has no special interaction with Light; it neither gains nor loses against this special effect.

MAGIC

Sonic has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Magnetism has no special interaction with Sonics; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Typically Sonic has no special interaction with Matter Manipulation; it neither gains nor loses against this special effect. However, particularly rigid physical defenses may suffer the way Earth/Stone does (see above).

MENTAL/PSIONIC

Sonic has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Typically Sonic has no special interaction with Physical; it neither gains nor loses against this special effect. However, particularly rigid Physical defenses may suffer the way Earth/Stone does (see above).

PULSON ENERGY

Sonic has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Radiation has no special interaction with Sonics; it neither gains nor loses against this special effect.

TELEKINETIC

Sonic has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Sonic has no special interaction with Time powers; it neither gains nor loses against this special effect.

VIBRATION

Typically, Sonic has no special interaction with Vibration; it neither gains nor loses against this special effect. However, since both involve vibrations, it's possible that a Sonic attack could be particularly "harmonious" (or disharmonious) with a Vibration defense, making it more (or less) effective. (The same could apply in reverse.) The two are also good candidates for the *Interference Combat Maneuver* described in Chapter Four.

WATER

As mentioned above, water conducts sound well, making Sonic powers more effective. A Water defense is at -3 ED before being applied to reduce a Sonic attack. Water attacks and Sonic defenses interact normally.

CONCLUSION: THE SPECIAL EFFECT: SONIC POWER MODIFIER

Overall, Sonic has more benefits than drawbacks. Therefore, *Special Effect: Sonic* constitutes a +15 Character Point Adder in most campaigns.

In campaigns where the characters are frequently underwater and the GM uses the rules that improve Sonic powers in that environment, increase this to a +25 Adder.

If the GM allows Sonic attacks to "deafen" characters automatically as discussed above, consider that a separate +10 Character Point Adder. (Thus, if both the "underwater" and "deafening" additions apply, the total value of Special Effect: Sonic is +35 points.)

EXAMPLE SONIC POWERS

Here are some example Sonic powers:

Offensive Powers

FEEDBACK

Effect: Dispel Sonic Powers 14d6
Target: One character
Duration: Instant
Range: 260"
END Cost: 5

Description: The character can generate feedback, distortion, and opposing harmonics that distort, cancel out, and ruin other sounds. The effect is often temporary — it may only last for a Phase if whoever or whatever generated the opposing sound can easily create another sound — but the character can use this ability defensively to block incoming attacks if he times it right. In some cases, such as sonic powers generated by devices, the feedback may disable the machine for some time (at least until someone repairs it).

Game Information: *Dispel Sonic Powers 14d6, any Sonic power one at a time (+¼). Total cost: 52 points.*

INFRASONIC DREAD

Effect: Drain PRE 1d6
Target: One character
Duration: Instant
Range: 75"
END Cost: 1

Description: The character can emit an infra-sonic pulse that makes the target feel edgy, nervous, even fearful.

Game Information: *Drain PRE 1d6, Ranged (+½). Total cost: 15 points.*

SHRIEK

Effect: Hearing Group Flash 12d6
Target: One character
Duration: Instant
Range: 180"
END Cost: 4

Description: The character can project a beam of sound so loud that it temporarily deafens whom-ever it hits.

Game Information: *Hearing Group Flash 12d6 (36 Active Points); Does Not Work In A Vacuum (-¼). Total cost: 29 points.*

SONIC BLAST

Effect: Energy Blast 8d6
Target: One character
Duration: Instant
Range: 275"
END Cost: 5

Description: The character can project a beam of focused sound capable of inflicting serious injury.

Game Information: *Energy Blast 8d6, Special Effect: Sonic (55 Active Points); Does Not Work In A Vacuum (-¼). Total cost: 44 points.*

SONIC LIQUIFICATION

Effect: RKA 3d6
Target: One character
Duration: Instant
Range: 300"
END Cost: 6

Description: The character can emit a blast of sound so powerful, and so focused, that it liquifies flesh, crumbles bone and other solid materials to powder, and otherwise wreaks havoc on targets.

Game Information: *RKA 3d6, Special Effect: Sonic (60 Active Points); Does Not Work In A Vacuum (-¼). Total cost: 48 points.*

Defensive Powers**SONIC SCREEN**

Effect: Force Field (20 PD/20 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 5

Description: The character can create a screen or shield of intensely-focused sound waves to protect his body. The compact sound waves disrupt energy attacks, and either disintegrate or deflect physical attacks.

Game Information: *Force Field (20 PD/20 ED), Special Effect: Sonic (55 Active Points); Does Not Work In A Vacuum (-¼). Total cost: 44 points.*

Sensory Powers**SONAR**

Effect: Active Sonar, Increased Arc Of Perception (360 Degrees)
Target: Self
Duration: Constant
Range: Self
END Cost: 2

Description: Like a dolphin or a bat, the character can emit ultrasonic "pings" and, by judging how they impact objects and return to his ears, "see" the world around him.

Game Information: *Active Sonar (Hearing Group), Increased Arc Of Perception (360 Degrees) (20 Active Points); Costs Endurance (-½). Total cost: 13 points.*

SONIC PROBE

Effect: Find Weakness 11- with all Sonic attacks
Target: Self
Duration: Persistent
Range: Self (but see text)
END Cost: 2

Description: The character can emit a sonar-like pulse of sound that allows him to sense the minute cracks, stress points, and other weaknesses in certain defenses.

Game Information: *Find Weakness 11- with all Sonic attacks (Resistant Defenses) (20 Active Points); Costs Endurance (-½), Only Works On Targets Within 20" (-¼). Total cost: 11 points.*

TELEKINETIC



TELEKINETIC BASICS

Defense: PD

Knockback: Yes

Telekinetic powers reflect a character's ability to move and affect objects without touching them. This may involve a form of psionic power, the ability to manipulate planes of force, or the like. Although some people in real life claim to have telekinetic/psychokinetic powers of some sort, by and large this is an entirely fictional energy type/special effect and thus can be defined however seems appropriate to the GM. Telekinetic powers are common in both the Science Fiction and Superheroes genres, but occur in some form in just about any genre that allows characters to have unusual powers.

Obviously the primary Power associated with this energy type/special effect is Telekinesis, but Telekinetic powers can do many other things. See the USPDs and *The Ultimate Mentalist* for many examples.

Telekinetic is a broad and flexible energy type/special effect that can relate to many others, include Force Manipulation, Matter Manipulation, and Mental/Psionic. Any ability to move objects (or even energy) without physically touching them is often referred to as a “-kinesis” — magnetokinesis (the Magnetism-based power to move ferrous metal), pyrokinesis (control over fire), cyberkinesis (control of machines), and so forth.

SECONDARY EFFECTS

As a fictional form of energy, Telekinetic force doesn't have any unusual “side effects” — its existence and nature defy scientific laws. Thus, the GM can have Telekinetic powers function however he wants. For example, in some settings Telekinetic powers may generate or give off heat, posing certain environmental risks but potentially expanding the range of what characters can do with them. In some it may conduct Electricity; in others it's a perfect insulator. The possibilities are limited only by the general nature of Telekinetic powers and the GM's imagination.

Similarly, characters can define their Telekinetic powers in many different ways, then work out the implications from there. For example:

■ Gravitron's Telekinetic powers work by selectively negating the effects of gravity around an object. This means his Telekinesis should take the *Affects Whole Object* (-¼) Limitation, since he can't squeeze or “punch” objects. It also restricts just how far he can go with Telekinetic as a special effect; Telekinesis may really be the only power he has. On the other hand, he may have more Gravity powers.

■ Telektron can create a “hand” of pure Telekinetic energy and use it to manipulate objects. Since he can create a “hand,” he can probably also create Telekinetic shields, walls, flying platforms, chains, and other objects. He might want to look at the Energy Manipulation section for more ideas.

■ Magnetron can magnetically manipulate ferrous metals (defined as Telekinesis, RKA, Transform, and other powers with the Magnetism special effect and appropriate Limitations). Although his Telekinesis has a Limitation that restricts it to ferrous metal only, he might be able to form enough ferrous metal into a “hand” that can scoop up non-ferrous objects and “carry them along” as it's moved. If he only does this occasionally, it's no cause for concern; if he does it frequently, the GM should make him buy off the *Only Works On Ferrous Metals* (-½) Limitation for his Telekinesis, since he's effectively found a way to bypass that restriction. (For greater “flavor,” maybe Magnetron buys the Limitation off as a “naked Advantage” with Limitations like Extra Time or Concentration — thus he can use his “Magnetokinesis” power readily and easily, but his “Pick Up Objects With Big Steel Hand” power requires a little more effort.)

■ Mentatron has vast psionic powers, including psychokinesis — the ability to move objects with sheer mental power. He buys Telekinesis with the *Based On ECV* Advantage and various other Power Modifiers, as described in *The Ultimate Mentalist*.

All four of those characters could be considered “Telekinetic” characters if properly built and defined... but each of them gets to that destination via a different route, and each route has its own implications and restrictions.

TELEKINETIC AND OTHER SPECIAL EFFECTS

As a “generic” form of energy, Telekinetic powers typically has no special interaction with other special effects, though exceptions are noted in other special effects’ sections. Exceptions are noted below.

ELECTRICITY

Electricity has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect. As a default, any “physical” objects or shapes created by Telekinetic powers are non-conductive, but the GM makes the final decision based on the nature of his campaign setting, the powers involved, and similar factors.

CONCLUSION: THE SPECIAL EFFECT: TELEKINETIC POWER MODIFIER

Since Telekinetic is neutral as to all other special effects, *Special Effect: Telekinetic* is a +0 Advantage.

EXAMPLE TELEKINETIC POWERS

Here are some example Telekinetic powers:

Offensive Powers

TELEKINESIS

Effect: Telekinesis (30 STR), Fine Manipulation
Target: One character or object
Duration: Constant
Range: 275”
END Cost: 5

Description: The character can move, damage, and otherwise manipulate objects without having to physically touch them. He can even perform fine work, like typing or playing the piano (assuming he knows how to do those things).

Game Information: *Telekinesis (30 STR), Fine Manipulation, Special Effect: Telekinesis (+0).*
Total cost: 55 points.

CLOSE YOUR EYES

Effect: Sight Group Flash 3d6, NND
Target: One character
Duration: Constant
Range: 185”
END Cost: 4

Description: The character can telekinetically grab the target’s eyelids and shut them, preventing him from seeing. Ordinary defenses against being blinded, such as a tolerance for bright lights, don’t apply, but the character has to be able to see the target’s eyes to use the attack.

Game Information: *Sight Group Flash 3d6, NND (defense is anything that prevents the character from clearly seeing the victim’s eyes, or not having eyelids; +½), Continuous (+1).*
Total cost: 37 points

CRUSHING AND RENDING

Effect: RKA 3d6, Indirect
Target: One character
Duration: Instant
Range: 335”
END Cost: 7

Description: The character has such power and precise control with his telekinesis that he can selectively crush, expand, twist, tear, and pull at a target’s form, inflicting terrible wounds or damage.

Game Information: *RKA 3d6, Indirect (+½), Special Effect: Telekinesis (+0) (67 Active Points); No Knockback (-¼).* *Total cost: 54 points.*

TELEKINETIC BLAST

Effect: Energy Blast 9d6 (physical)
Target: One character
Duration: Instant
Range: 225”
END Cost: 4

Description: The character can telekinetically “punch” or “smash” his enemies. (Treat this as a Physical attack for purposes of interactions.)

Game Information: *Energy Blast 9d6 (physical) (45 Active Points); Special Effect: Physical (-1).*
Total cost: 22 points.

Defensive Powers

TELEKINETIC SHIELD

Effect: Force Field (25 PD/20 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character can create a field of telekinetic energy to protect himself from attacks.

Game Information: *Force Field (25 PD/20 ED), Special Effect: Telekinesis (+0).* *Total cost: 45 points.*

TELEKINETIC WALL

Effect: Force Wall (12 PD/8 ED)
Target: Varies
Duration: Constant
Range: 250”
END Cost: 5

Description: The character can create a barrier of telekinetic energy to protect himself, and sometimes others, from attacks.

Game Information: *Force Wall (12 PD/8 ED), Special Effect: Telekinesis (+0).* *Total cost: 50 points.*



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Movement Powers

TELEKINETIC FLIGHT

Effect: Flight 12"
 Target: Self
 Duration: Constant
 Range: Self
 END Cost: 2

Description: The character can telekinetically pick himself up, thus using his powers to fly.

Game Information: *Flight 12"*. Total cost: 24 points.

Sensory Powers

TELEKINETIC AWARENESS

Effect: Radar
 Target: Self
 Duration: Persistent
 Range: Self
 END Cost: 0

Description: The character emits pulses of telekinetic energy that rebound from physical objects and return to him, allowing him to "feel" an area even if he cannot see it. However, the presence of large amounts of physical matter around him — such as when he's in a sandstorm, rainstorm, or blizzard — may create "static" that hinders or blinds his "radar."

Game Information: *Radar (no Sense Group), Discriminatory, Increased Arc Of Perception (360 Degrees), Range, Sense*. Total cost: 32 points.



Time powers represent a character's ability to manipulate time and "chronal energy," and perhaps to travel through time as well. He can speed things up, slow them down, and even stop time to create various effects. It's a powerful, flexible energy type/special effect.

Because manipulating such a fundamental force as time often requires absolute, or nearly absolute, effects, many Time powers have high Active Point and Real Point costs. If necessary, the GM can adjust them downward, and then address the "absoluteness" of effect as part of a dramatic sense interpretation of game events.

TIME IN THE REAL WORLD

Theories about the nature of time differ. One school of thought considers time part of the fundamental nature of the universe — an objective, linear dimension that one can measure, and in which events occur in sequence. Modern physics has even hypothesized the chronon, a quantum of time (though this theory also suggests that time is not continuous). The other view considers time to be more of a mental way people quantify and measure events, rather than an objective thing. Most time travel stories, and most characters who have Time powers, are based more on the first theory, which has more dramatic implications and uses.

SECONDARY EFFECTS

Typically Time powers involve artificially speeding things up, slowing them down, or otherwise "changing" them with regard to the standard, objective, temporal frame of reference. In game terms these powers are often represented with Adjustment Powers (Draining or Aiding SPD, for example), but taken to extremes a Time character's powers could Transform (person into younger/older version of himself) or kill (by aging something to the point of death or disintegration). Time powers that effective are often bought as NNDs (the defense being Life Support (Longevity), typically), with Does BODY if necessary. After all, who can resist the passage of time?

Taken to extremes, Time powers could affect just about anything and generate all kinds of super-power-like effects. Speeding up or slowing down chemical or energy reactions could create effects like Fire/Heat, Cyberkinesis, or Ice/Cold powers, or enhance other abilities.

TIME AND OTHER SPECIAL EFFECTS

With a couple of exceptions (see below), Time has no special interaction with any other energy type/special effect. Time affects all things the same.

CHAOS/ENTROPY

It's said that in the long term, Chaos/Entropy wins out over everything; all things decay and dissolve. But Time defenses tend to involve *very* long periods of time, or manipulation of time in ways that thwart Chaos. Chaos/Entropy attacks are at -1 DC before being applied to Time defenses. Time attacks affect Chaos/Entropy defenses normally.

DIMENSIONAL MANIPULATION

In general, Dimensional Manipulation has no special interaction with Time powers; it neither gains nor loses against this special effect. However, if Time is considered a dimension (as some theories posit), then Dimensional Manipulation powers might be unusually effective against it (Dimensional Manipulation attacks receive +2 DCs against Time defenses, while Time attacks are at -2 DCs before Dimensional Manipulation defenses apply to them). Alternately, time may be a "dimension" that Dimensional Manipulation powers simply can't affect, making them neutral toward each other (or even granting benefits to Time powers).

CONCLUSION: THE SPECIAL EFFECT: TIME POWER MODIFIER

Since Time is (with a few minor exceptions) neutral as to all other special effects, *Special Effect: Time* is a +0 Advantage.

TIME BASICS

Defense: ED

Knockback: No

TACHYONS

The *tachyon* is a theoretical particle that can travel faster than the speed of light. As a tachyon gains energy, it loses speed, though the slowest it can move is the speed of light. In theory this would allow a tachyon to be sent into the past, creating a causality problem if the theory of special relativity is accurate. Therefore, if tachyons exist, logically the theory of special relativity is wrong and time has a specific order for all beings in the Universe.

In dramatic terms, tachyons can serve as a pseudo-scientific explanation for all sorts of phenomena — time travel and manipulation, faster-than-light travel and communications, and so on. A character with Time or Light powers might actually be manipulating tachyons in some way to achieve his effects.

EXAMPLE TIME POWERS

Here are some example Time powers:

Offensive Powers

AGE MANIPULATION

Effect: Major Transform 8d6 (aging)
Target: One character
Duration: Instant
Range: 750"
END Cost: 15

Description: The character can advance a person backward or forward through time, making him into a younger or older version of himself. This may cause related changes as well; for example, a mutant whose powers manifested during puberty loses those powers if he's regressed to age 5, and a person aged to the point of senility probably loses most (if not all) of his abilities.

Game Information: *Major Transform 8d6 (anything into older/younger/newer version of itself; heals via the application of any chronal manipulation power), Improved Result Group (+¼), Special Effect: Time (+0). Total cost: 150 points.*

FAST TIME BUBBLE

Effect: Aid SPD 5d6, Costs Recipient END
Target: One character
Duration: Instant
Range: 250"
END Cost: 0

Description: The character can put himself or another person in a bubble of fast time, thus making it look and act as if the subject is moving in "fast forward" while the rest of the world moves at normal speed. This tires the subject out quickly; he must spend 2 END per point of SPD gained per Phase (every Phase, not just the extra ones) while the Aid remains in effect.

Game Information: *Aid SPD 5d6, Ranged (+½) (75 Active Points); Recipient Must Spend 2 END Per Point Of Extra SPD Gained Per Phase While Aid Remains In Effect (-½). Total cost: 50 points.*

NO SLEEP 'TIL BROOKLYN

Effect: Energy Blast 8d6, NND
Target: One character
Duration: Instant
Range: 400"
END Cost: 8

Description: The character rapidly accelerates the target through time for a day or more, until the target is too sleepy to stay awake.

Game Information: *Energy Blast 8d6, NND (defense is temporal/dimensional manipulation powers or Life Support [Diminished Sleep]; +1). Total cost: 80 points.*

Defensive Powers

TIME SHIFT FIELD

Effect: Force Field (24 PD/24 ED), Hardened
Target: Self
Duration: Constant
Range: Self
END Cost: 6

Description: The character surrounds himself with a time manipulation field and advances time within the field by a microsecond. The temporal barrier thus created provides protection against attacks. Only strong attacks can overwhelm the time differential horizon and injure the character.

Game Information: *Force Field (24 PD/24 ED), Hardened (+¼), Special Effect: Time (+0). Total cost: 60 points.*

Movement Powers

TIME TRAVEL

Effect: Extra-Dimensional Movement (time travel)
Target: Self
Duration: Constant
Range: Self
END Cost: 7

Description: The character can travel through time, instantly reaching any date he desires. This power can cause significant problems in the game, and requires a lot of reasonable interpretation by the GM.

Game Information: *Extra-Dimensional Movement (any date in history or the future, cannot physically travel between locations). Total cost: 67 points.*

Sensory Powers

FORESIGHT

Effect: Danger Sense
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: By maintaining a partial glimpse into the future of the immediate vicinity, the character can perceive (and hopefully avoid) dangers before they occur.

Game Information: *Danger Sense (immediate vicinity, out of combat, Sense) INT +6. Total cost: 33 points.*

VIBRATION



Vibration is a fictional form of energy/special effect encountered almost exclusively in Superhero settings. Vibration powers involve control over vibratory energy and related vibration phenomena. In some cases Vibration powers are regarded as being related to Earth/Stone (seismic) powers, Sonic powers, or speedsters' abilities, but for purposes of *The Ultimate Energy Projector* Vibration is considered to be a distinct, discrete energy type/special effect.

SECONDARY EFFECTS

Depending on the intensity of a character's Vibration powers, many potential "side effects" are possible. The worst of them would be the chance to trigger earthquakes and tremors, though "realistically" this is probably only possible if (a) the character is on or very near a major faultline, and (b) is using a *lot* of vibrational energy (say, at least 250 Active Points' worth, combined). On a smaller scale, if the character vibrates constantly, he might in turn continuously vibrate the air around him and thus affect people nearby. Possible effects include nausea (a small Drain CON), vertigo (a small Drain DEX), or blurred vision due to vibrating the eyeballs (a Change Environment with -1 to Sight Group PER Rolls, or a small Sight Group Flash). If the character wants to use abilities like this offensively, he should probably pay points for them, but if the GM feels like these effects should hinder the Vibration character's friends as much as his foes, he might let the character buy it as a *Side Effect* Limitation (typically a Minor one worth $-\frac{1}{4}$, multiplied to $-\frac{1}{2}$ if it occurs all the time).

For many types of Vibration powers, the Limitation *Does Not Work In A Vacuum* ($-\frac{1}{4}$) may be appropriate. Just like sound, this type of vibration pulse needs a medium to propagate through, such as air or water.

Defenses

Typically Vibration attacks apply against Physical defenses due to the shaking, shattering, tearing nature of the damage they cause. However, characters may want to define some of them, such as an attack that infuses the target with pure vibrational energy, as applying against Energy defenses instead.

VIBRATION AND OTHER SPECIAL EFFECTS

With a few exceptions (see below), Vibration has no special interaction with any other energy type/special effect.

DIMENSIONAL MANIPULATION

Typically, Dimensional Manipulation has no special interaction with Vibration powers; it neither gains nor loses against this special effect. However, in some settings different dimensions have specific "vibrational frequencies" that allow Vibration-based and speedster characters to access them. See under *Dimensional Manipulation*, above, for further information and details.

EARTH/STONE

Earth/Stone defenses, which are often particularly rigid and tough, don't stand up to Vibration powers very well. Reduce the protection they provide by -3 before applying them to reduce Vibration damage. Earth/Stone attacks are at -1 DC before Vibration defenses apply to reduce their damage.

ICE/COLD

Vibration affects Ice/Cold defense strongly, if the defense is based on actual physical ice. For every full 50 Active Points in a Vibration attack, reduce an Ice/Cold defense's PD and ED by -2 points for the next Turn. (Thus, a 100 Active Point Ice/Cold power would subtract -4 PD and ED, and so on.) Ice/Cold attacks interact with Vibration attacks normally.

SONIC

Typically, Vibration has no special interaction with Sonic; it neither gains nor loses against this special effect. However, since both involve vibrations, it's possible that a Sonic attack could be particularly "harmonious" (or disharmonious) with a Vibration defense, making it more (or less) effective. (The same could apply in reverse.) The two are also good candidates for the *Interference* Combat Maneuver described in Chapter Four.

CONCLUSION: THE SPECIAL EFFECT: VIBRATION POWER MODIFIER

Since Vibration has more benefits than drawbacks, *Special Effect: Vibration* is a +15 Character Point Adder.

VIBRATION BASICS

Defense: Typically Vibration attacks apply against Physical defenses due to the shaking, shattering, tearing nature of the damage they cause. However, characters may want to define some of them, such as an attack that infuses the target with pure vibrational energy, as applying against Energy defenses instead.

Knockback: Yes



EXAMPLE VIBRATION POWERS

Here are some example Vibration powers:

Offensive Powers

QUAKE BLAST

Effect: Energy Blast 8d6, Explosion
Target: 8" radius
Duration: Instant
Range: 410"
END Cost: 8

Description: The character projects a wave of vibratory energy into the ground, causing a sort of intense mini-earthquake that can injure anyone standing on the ground.

Game Information: *Energy Blast 8d6, Special Effect: Vibration, Explosion (+½) (82 Active Points); Only Affects Targets On The Ground (-¼), Extra Time (Full Phase; -½), Only Does Knockdown, Not Knockback (-0). Total cost: 47 points.*

SHAKEN APART

Effect: Dispel Technological Object 16d6
Target: One object
Duration: Instant
Range: 300"
END Cost: 6

Description: Many technological devices, such as powered armor suits, computers, and guns, have delicate parts and/or rigid materials that do not withstand prolonged, severe shaking very well. By directing his vibro-blasts at such objects, the character can literally shake them apart.

Game Information: *Dispel Technological Object 16d6, any one Technological Object power one at a time (+¼). Total cost: 60 points.*

VERTIGO GENERATION

Effect: Drain DEX 4d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 6

Description: The character's vibro-energy plays havoc with inner ears, gyroscopes, and the like, causing characters to lose their perspective on "up" and "down," and become so disoriented and dizzy that they can't stand or hold on to objects.

Game Information: *Drain DEX 4d6, Ranged (+½). Total cost: 60 points.*

VIBRO-BLAST

Effect: Energy Blast 8d6
Target: One character
Duration: Instant
Range: 275"
END Cost: 5

Description: The character can project a blast of vibratory energy powerful enough to knock a target's fillings loose.

Game Information: *Energy Blast 8d6, Special Effect: Vibration. Total cost: 55 points.*

Defensive Powers**VIBRO-FIELD**

Effect: Force Field (15 PD/15 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character can establish a field of vibro-energy that protects his body by shaking apart or deflecting physical missiles and disrupting energy attacks.

Game Information: *Force Field (15 PD/15 ED), Special Effect: Vibration. Total cost: 45 points.*

Movement Powers**VIBRO-GLIDING**

Effect: Running +15"
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character's feet vibrate as he moves, allowing him to "skate" along virtually any surface far faster than most people can run.

Game Information: *Running +15". Total cost: 30 points.*

Sensory Powers**VIBRO-SENSE**

Effect: Detect Physical Vibrations
Target: Self
Duration: Persistent
Range: Self
END Cost: 0

Description: The character can sense vibrations and tremors in the earth, making it possible for him to track the movements of people even if he's blinded.

Game Information: *Detect Physical Vibrations (INT Roll) (Touch Group), Discriminatory, Range, Targeting (30 Active Points); Only When In Contact With The Ground (-¼). Total cost: 24 points.*

Miscellaneous Powers**VIBRO-PHASING**

Effect: Desolidification
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character vibrates his body in such a way that he can pass through solid objects like walls, or allow most attacks to pass harmless through him.

Game Information: *Desolidification (affected by sonic-, vibration-, and air-based attacks). Total cost: 40 points.*

WATER BASICS

Defense: PD

Knockback: Yes

The fourth of the energy types/special effects based on the classical Four Elements, Water powers involve the manipulation and control of water — everything from generating powerful blasts of water to transforming one's body into water. This category could also include steam-based powers (see *Fire/Heat*, above) if preferred.

Water is one of the most common chemical substances on Earth (covering approximately 71% of the planet's surface) and is, according to conventional modern science, necessary for life to arise and exist (witness, for example, how all major human civilizations began along or near the sources of water necessary for human survival and comfort). It's a significant component of the physical form; approximately 70% of the fat-free mass of the human body is water. Philosophically/mythologically, Water is often associated with healing, birth, fertility, growth, and change.

IMPLICATIONS AND SECONDARY EFFECTS

Water powers can work one of two ways: either the character can generate the water he needs out of nothingness, or he requires a nearby source of water to draw from to “fuel” his powers. In the latter case, the GM may allow (or require) characters to take a -¼ Limitation, *Requires Nearby Source Of Water*, for Water powers. For the purposes of this Limitation:

- a Water power uses 1 liter of water per Active Point; if a character has access to less than this, he has to use his powers at less than full effect
- “Nearby” means within 10”. At the GM's option, a Water character can use these type of powers if there's enough water further away, but his powers suffer a -5 Active Point reduction for every +1” distance beyond 10” to the source of water.

In most urban areas there should be enough water available in pipes and the like to keep Water powers functioning normally. Lack of water is only likely to become a significant factor in some wilderness areas, outer space, and the like. The accompanying table lists some examples of how much water is in various bodies.

Forms Of Water

Water as an energy type/special effect refers to the standard, liquid, state of water. Solidified water is ice, and gaseous water as water vapor, so a broader view of Water as a special effect might allow a character to also have some Ice/Cold- or steam-based powers.

Heavy water is water in which the regular hydrogen is replaced with deuterium, a hydrogen



isotope. Chemically the two are almost identical, but heavy water has some useful properties. For example, it's used in nuclear reactors to slow down neutrons, and if consumed by humans in sufficient quantity to replace 25-50% of the body's water mass could prove fatal. A character who could convert water to heavy water could perhaps take advantage of some of these properties to achieve various effects.

Properties Of Water

Water has a number of intriguing properties that Water-based characters could use or manipulate to achieve various effects.

Water has strong cohesion (its molecules “stick” to each other well) and adhesion (they also “stick” to other surfaces well). This creates a high “surface tension” along a body of water, and allows for capillary action (the ability of water to rise up a tube, against the pull of gravity, to the point where gravity counteracts the adhesive force due to the water's mass). A character who can manipulate these properties could, for example, strengthen surface tension so he could walk on water, temporarily enhance a Water-based defense by augmenting its water's cohesion, “walk up walls” by strengthening adhesion, or the like. On the other hand, if someone can find a way to reduce the cohesion/surface tension of water (for example, by dumping soap or detergent into it, or by heating it), he might weaken a Water-using character's powers.

Water's often referred to as a “universal solvent” — most substances and objects left in water eventually dissolve, though this may take millennia. A Water character might have the power to “speed up” this process to cause instantaneous rusting or the like.

Water Powers Underwater

At the very worst, Water powers have their normal effect when used underwater. At the GM's

VOLUME OF WATER TABLE

Body Of Water	Volume (Liters)
Atlantic Ocean	325 trillion
Hudson Bay	160 billion
Indian Ocean	291 trillion
Lake Erie	484 million
Lake Superior	12 billion
Mediterranean and Black Seas	4.2 trillion
Pacific Ocean	707 trillion
Swimming pool, Olympic (2m depth)	2.5 million
Water pipe	Varies with size

1,000 liters = 1 cubic meter of water

1 billion cu meters of water = 1 cubic kilometer of water

option, using Water powers underwater might make them more powerful — as much as 25% more effective. The GM may prefer to express this by adding an Advantage, such as *Area Of Effect (One Hex)*, *Double Knockback*, or *No Range Modifier* instead of just adding Damage Classes. Increasing the effectiveness of Water powers is particularly appropriate for powers that draw on ambient water, as opposed to ones where the character generates the water himself.

Defenses

Water attacks that involve projecting or otherwise “hitting” the target with large masses of water work against Physical Defense. More exotic attacks, like dehydrating the target, are usually bought as NNDs (or the like) and have specially-defined defenses.

WATER AND OTHER SPECIAL EFFECTS

Here's how Water interacts with other energies/special effects. These rules are optional; the GM may change or ignore them as he sees fit.

ACID

As discussed under *Acid*, above, water neutralizes Acid; immersion in water quickly stops an Acid attack from harming its victim. In terms of comparing an Acid attack to a Water defense, reduce the Acid attack's damage by 25% before applying defenses. Similarly, Water attacks are at +1 DC against Acid defenses.

The typical laboratory safety rule when mixing water and acid is to add acid to water, never the other way around. At the GM's option, an Acid attack against a Water defense may generate a lot of heat (which has potential effects described in the *Fire/Heat* section of this chapter); a Water attack against an Acid defense may cause a lot of splattering and boiling.

AIR/WIND

Air/Wind has no special interaction with Water; it neither gains nor loses against this special effect.

BIOLOGICAL

Biological has no special interaction with Water; it neither gains nor loses against this special effect.

CHAOS/ENTROPY

Chaos/Entropy has no special interaction with Water. While it's true that Water is physical, and thus would normally suffer in comparison to Chaos/Entropy, Water's constantly flowing, shifting, and changing nature counteracts that effect.

CHEMICAL

Chemical powers tend to be weak when compared to Water powers, since the Water easily washes the Chemicals away (but see page 63 regarding chemicals that react in water). Chemical attacks are at -1 DC against Water defenses,

while Water attacks are at +1 DC against Chemical defenses.

COSMIC ENERGY

Water has no special interaction with Cosmic Energy; it neither gains nor loses against this special effect. However, if the Cosmic Energy manifests with some other special effect (such as Fire or Sonics), use that special effect for determining the results of the interaction.

DARKNESS

Darkness has no special interaction with Water; it neither gains nor loses against this special effect.

DIMENSIONAL MANIPULATION

Because Dimensional Manipulation attacks affect physical reality, they're particularly effective against Water, which manifests physically. A Dimensional Manipulation attack typically receives +1 DC against a Water defense before that defense applies to reduce damage, while Water attacks are at -1 DC against Dimensional Manipulation defenses.

EARTH/STONE

Earth/Stone has no special interaction with Water; it neither gains nor loses against this special effect.

ELECTRICITY

As discussed above under *Electricity*, pure water is a good insulator... but characters will almost never encounter pure water, and impure water is a superb *conductor* of Electricity. That makes Water a poor defense against it — reduce a Water defense by 33% (one-third) before applying it to reduce the damage from an Electricity attack. Water attacks interact with Electricity defenses normally... but as mentioned under *Electricity*, they might interfere with Electricity powers by “short circuiting” them. Even if the GM doesn't want a Water attack to shut off an Electricity power (or powers) completely, he might reduce the affected defense (and/or any other powers he prefers) by 1 Active Point per 10 Active Points in the Water attack. This effect is cumulative; the more Water attacks an Electricity user suffers, the weaker his powers become (perhaps with some predefined limit, like 50% effectiveness).

ELECTROMAGNETIC ENERGY

Water defenses are a little better than most against Electromagnetic Energy attacks; increase them by +1 before applying them to reduce Electromagnetic Energy damage. Water attacks interact with Electromagnetic Energy defenses normally.

ENERGY MANIPULATION

Water has no special interaction with Energy Manipulation; it neither gains nor loses against this special effect.

FIRE/HEAT

Fire and Water are, in both a proverbial and practical sense, opposites. Few substances or mate-

WEATHER POWERS

For purposes of *The Ultimate Energy Projector*, weather powers — the ability to control and manipulate the weather and weather-related phenomena such as wind and lightning — are not considered a distinct energy type/special effect because weather manipulation simply involves a mix of more fundamental special effects grouped together using a common theme. (To put it another way, “weather control” is an origin special effect, but what really matters are the various manifestation special effects it uses.) You should treat individual weather powers as whatever they manifest as: lightning bolts are Electricity; wind control and fog are Air/Wind; hail is Ice/Cold; rain is Water; and so forth.



rials are as good at extinguishing a fire as water. Typically, a Water defense is at +3 ED versus a Fire/Heat attack, and a Fire/Heat defense is at -2 defense before being applied to reduce the damage of a Water attack.

See also *Fire/Heat*, above, regarding how the interaction of Fire/Heat and Water can produce steam.

FORCE MANIPULATION

Water has no special interaction with Force Manipulation; it neither gains nor loses against this special effect.

GRAVITY

Gravity affects Physical better than average. Water defenses are at -1 ED before applying to reduce damage from Gravity attacks, and Gravity defenses are at +1 ED or PD against Physical attacks.

HOLY/UNHOLY

Water has no special interaction with Holy/Unholy powers; it neither gains nor loses against this special effect.

ICE/COLD

Ice/Cold has no special interaction with Water (ice is, after all, just frozen water); it neither gains nor loses against this special effect. (But see under *Physical*, below, regarding buoyancy.)

KINETIC ENERGY

Water has no special interaction with Kinetic Energy; it neither gains nor loses against this special effect (though as noted under *Kinetic Energy*, above, Kinetic Energy attacks are often treated simply as Physical attacks; see below for any additional rules).

LIFE FORCE ENERGY

Water has no special interaction with Life Force Energy; it neither gains nor loses against this special effect.

LIGHT

Light has no special interaction with Water; it neither gains nor loses against this special effect.

MAGIC

Water has no special interaction with Magic; it neither gains nor loses against this special effect. However, if Magic manifests with some other special effect (such as Fire or Darkness), use that special effect for determining the results of the interaction.

MAGNETISM

Magnetism has no special interaction with Water; it neither gains nor loses against this special effect.

MATTER MANIPULATION

Water has no special interaction with Matter Manipulation powers; it neither gains nor loses against this special effect.

MENTAL/PSIONIC

Water has no special interaction with Mental/Psionic powers; it neither gains nor loses against this special effect.

PHYSICAL

Typically, Physical has no special interaction with Water; it neither gains nor loses against this special effect. However, the GM may want to consider several factors. An object that's hydrodynamic may have an easier time passing through a Water defense (reduce the defense by -1 PD or more).

A buoyant object (such as Ice) may have a harder time; increase the defense by +1 PD or more.

PULSON ENERGY

Water has no special interaction with Pulson Energy; it neither gains nor loses against this special effect.

RADIATION

Water defenses are a little better than most against Radiation attacks; increase them by +1 before applying them to reduce Radiation damage. Water attacks interact with Radiation defenses normally.

SONIC

As discussed under *Sonic*, above, water conducts sound well, making Sonic powers more effective. A Water defense is at -3 ED before being applied to reduce a Sonic attack. Water attacks and Sonic defenses interact normally.

TELEKINETIC

Water has no special interaction with Telekinetic powers; it neither gains nor loses against this special effect.

TIME

Water has no special interaction with Time; it neither gains nor loses against this special effect.

VIBRATION

Water has no special interaction with Vibration; it neither gains nor loses against this special effect.

CONCLUSION: THE SPECIAL EFFECT: WATER POWER MODIFIER

Overall, Water has slightly more benefits than drawbacks. Therefore, *Special Effect: Water* constitutes a +5 Character Point Adder in most campaigns. In campaigns where the characters are frequently underwater and the GM uses the rules that improve Water powers in that environment, increase the Adder to +10 points (or more).

EXAMPLE WATER POWERS

Here are some example Water powers:

Offensive Powers

DEHYDRATE

Effect: Energy Blast 5d6, NND
Target: One character
Duration: Instant
Range: 250"
END Cost: 5

Description: With this power, a character can remove or dry up the liquid in another person's body, causing intense pain and shock due to dehydration. The effect wears off quickly if the target is immersed in water (he gets a "free" Recovery of this damage every Phase as an Action that takes no time).

Game Information: *Energy Blast 5d6, NND (defense is Power Defense or a body that lacks liquids; +1) (50 Active Points); Victims At Least 50% Immersed In Water Get A Free Recovery Of This Damage Each Phase (-½). Total cost: 33 points.*

Options:

1) Dessicate: The character's ability to dry up liquids in the body is powerful enough to kill. Change to: RKA 1d6, NND (defense is Power Defense or a body that lacks liquids; +1), Does BODY (+1) (45 Active Points); Victims At Least 50% Immersed In Water Get A Free Recovery Of This Damage Each Phase (-½). Total cost: 30 points.

RUST ATTACK

Effect: RKA 1d6, Only Versus Ferrous Metal Objects
Target: One ferrous metal object
Duration: Instant
Range: 75"
END Cost: 1

Description: The character uses his control over water to cause ferrous metal objects to rust instantly, often to the point where they fall apart or become useless for their intended purpose. ("Realistically," instantaneously rusting objects like this would release a tremendous amount of heat, which could have unintended side effects.)

Game Information: *RKA 1d6, Special Effect: Water (20 Active Points); Only Versus Ferrous Metal Objects (-½). Total cost: 13 points.*

WATER BLAST

Effect: Energy Blast 8d6
Target: One character
Duration: Instant
Range: 200"
END Cost: 4

Description: The character can project a powerful blast of water that hits the target like a battering ram.

Game Information: *Energy Blast 8d6, Special Effect: Water. Total cost: 45 points.*

Defensive Powers

WATER SHIELD

Effect: Force Field (18 PD/12 ED)
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character can protect himself by wrapping his body in a protective field of water.

Game Information: *Force Field (18 PD/12 ED), Special Effect: Water. Total cost: 35 points.*

Movement Powers

SUPER-SWIMMING

Effect: Swimming +30"
Target: Self
Duration: Constant
Range: Self
END Cost: 3

Description: The character can move through the water faster than the fastest fish or submarine.

Game Information: *Swimming +30". Total cost: 30 points.*

WALK ON WATER

Effect: Flight 6", Only In Contact With Level Water Surface
Target: Self
Duration: Constant
Range: Self
END Cost: 1

Description: The character has the power to walk on water. The surface of the water has to be reasonably level and calm; he can't walk on a raging sea, river rapids, or a waterfall.

Game Information: *Flight 6" (12 Active Points), Only In Contact With Level Water Surface (-½). Total cost: 8 points.*

Miscellaneous Powers

BODY OF WATER

Effect: Desolidification, Damage Reduction (50% Physical, 25% Energy)
Target: Self
Duration: Constant
Range: Self
END Cost: 4

Description: The character can transform his body into water.

Game Information: *Desolidification (affected by water, fire, and cold attacks) (40 Active Points); Cannot Pass Through Solid Objects (-½) (total cost: 27 points) plus Physical Damage Reduction, Resistant, 50% (30 Active Points); Costs Endurance (-½) (total cost: 20 points) plus Energy Damage Reduction, Resistant, 25% (15 Active Points); Costs Endurance (-½) (total cost: 10 points). 40 + 30 + 15 = 85 Active Points; total cost 27 + 20 + 10 = 57 points.*

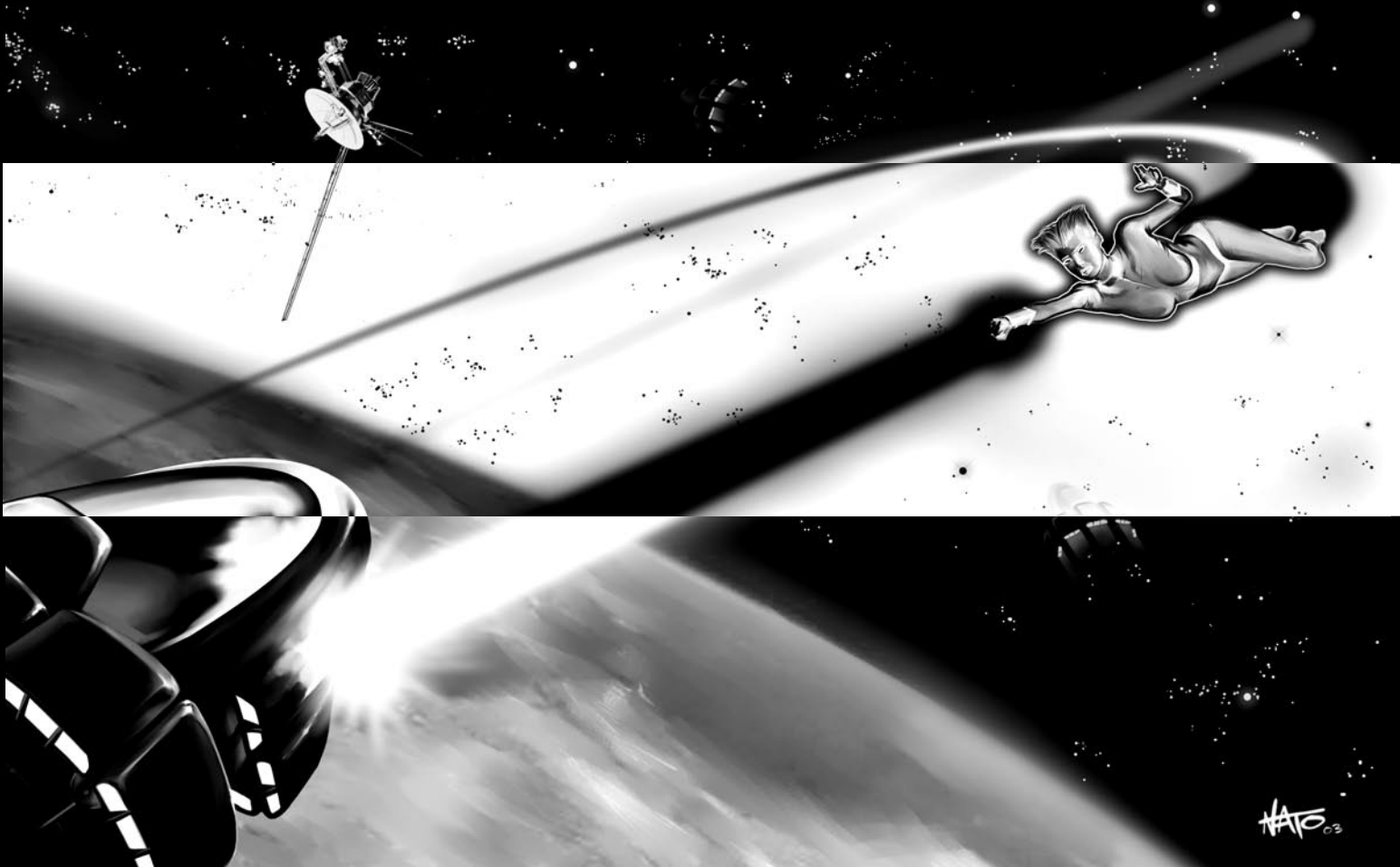
FILL 'ER UP

Effect: Major Transform 3d6 (create water out of nothing)
Target: Self One character
Duration: Instant
Range: No Range
END Cost: 4

Description: The character can create water out of thin air. For every BODY rolled on the Transform dice, he creates 4 liters (approximately 1 gallon) of pure water. Unless he has a container of some sort he can put the water in, it simply splashes all over the ground.

Game Information: *Major Transform 3d6 (create water out of nothing) (45 Active Points); No Range (-½). Total cost: 30 points.*

chapter three:



ENERGY PROJECTORS GENRE BY GENRE

CHAMPIONS



Energy projectors are most common in the Superheroes genre, where characters who can fire beams of energy and protect themselves with energy shields are everyday encounters. Any type of energy, and any type of way to manipulate or use it, could be encountered in a *Champions* campaign.

Because the rules in Chapter Two are optional, they're not applied to the powers and abilities in these character sheets (or the others in this chapter). The exception is the character sheet for Howler, to demonstrate how a character sheet using the energy spectrum rules might look.

AURA

Val	Char	Cost	Roll	Notes
10	STR	0	11-	Lift 100 kg; 2d6 [1]
23	DEX	39	14-	OCV: 8/DCV: 8
30	CON	40	15-	
15	BODY	10	12-	
13	INT	3	12-	PER Roll 12-
10	EGO	0	11-	ECV: 3
25	PRE	15	14-	PRE Attack: 5d6
16	COM	3	12-	
8	PD	6		Total: 18 PD (10 rPD)
12	ED	6		Total: 24 ED (12 rED)
6	SPD	27		Phases: 2, 4, 6, 8, 10, 12
20	REC	24		
150	END	45		
40	STUN	5		Total Characteristics Cost: 223

Movement: Running: 6"/12"
Flight: 20"/40"

Cost	Powers	END
80	<i>Life Force Projection And Manipulation:</i> Multipower, 80-point reserve	
7u	1) <i>Life Force Blast:</i> Energy Blast 12d6, Personal Immunity (+¼)	7
7u	2) <i>Life Force Leeching:</i> Drain BODY 4d6, Ranged (+½), Reduced Endurance (½ END; +¼)	3
7u	3) <i>Life Force Exchange I:</i> Transfer 2d6, BODY to STUN, Transfer To Other (self or another person; +1), Ranged (+½)	7
7u	4) <i>Life Force Exchange II:</i> Transfer 2d6, BODY to BODY, Transfer To Other (self or another person; +1), Ranged (+½)	7
8u	5) <i>Life Force Anodyne:</i> Healing BODY and STUN 4d6, two Characteristics simultaneously (+½), Ranged (+½)	8
7u	6) <i>Cure Disease:</i> Healing Characteristics 5d6, any one Characteristic at a time (+¼), Reduced Endurance (½ END; +¼)	3
33	<i>Life Force Field:</i> Force Field (10 PD/	

12 ED), Reduced Endurance (0 END; +½) 0
40 *Life Force Flight:* Flight 20" 4
12 *Aura Vision:* Detect Aura 14-
(Sight Group; see text), Discriminatory 0

Perks

1 Fringe Benefit: License To Practice Medicine

Skills

6 +2 with *Life Force Projection And Manipulation* Multipower
3 Acrobatics 14-
3 Deduction 12-
3 Paramedics 12-
3 Persuasion 14-
15 Power: Life Force Manipulation Abilities 18-
2 SS: Biology 11-
2 SS: Medicine 11-
3 Stealth 14-

Total Powers & Skills Cost: 249

Total Cost: 472

200+ Disadvantages

10 Distinctive Features: Mutant
(Not Concealable; Always Noticed;
Detectable Only By Unusual Senses)
20 Hunted: DEMON 8- (Mo Pow, NCI, Kill)
20 Hunted: VIPER 8- (Mo Pow, NCI, Capture)
20 Psychological Limitation: Code Versus Killing (Common, Total)
15 Psychological Limitation: Must Preserve Human Life (Common, Strong)
15 Social Limitation: Secret Identity (Amelia Bynum) (Frequently, Major)
10 Vulnerable: 2 x STUN from Necromantic Magics (Uncommon)
10 Vulnerable: 2 x BODY from Necromantic Magics (Uncommon)
152 Experience Points

Total Disadvantage Points: 472

Background/History: Amelia Bynum discovered she was special one day when she was eight and found a dead squirrel. It made her very sad, and she wished as hard as she could that the squirrel hadn't died. And suddenly, before her eyes, his injuries healed, then he woke up and scampered away!

From then on Amelia made a point of helping all the hurt animals she could. She never brought another dead one back to life (and later realized, when she was older, that the squirrel must just have been badly injured, not dead), but she repaired many a broken wing or leg. And whenever she hurt herself playing, she could make it all better without even needing her mom to kiss it. But she instinctively kept her "secret magic" from other kids

and adults, somehow knowing that they wouldn't understand.

When she got older, Amelia knew exactly what she wanted to do: become a doctor. That way she could use her power on people, subtly and carefully, and make them better without having to expose herself to a media frenzy. After graduating from Millennium City University School of Medicine, she became a doctor at a clinic serving lower-income people from throughout the former Detroit area.

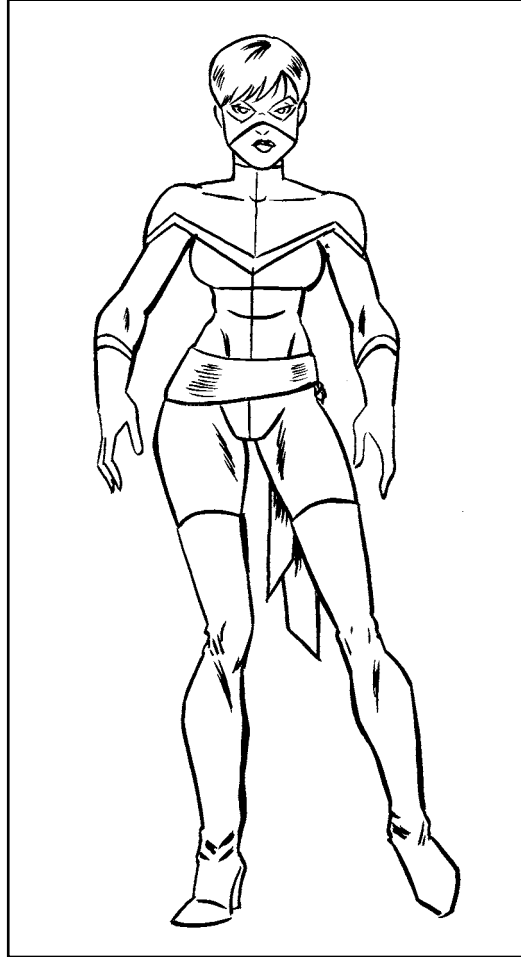
One day while she was on her way to work

she found herself an innocent bystander at a superhero battle. Nightwind and Ironclad were fighting a ragtag band of villains that included Freakshow, Ankylosaur, Ambush, and Esper. The heroes were getting the best of the villains thanks to teamwork and clever tactics when Nightwind got a *little* too close to Ankylosaur's tail... and paid for it by taking a blow to the chest so hard that Amelia could hear his ribs break all the way across the street.

Heedless of her own personal safety, Amelia rushed to the fallen hero and began using her medical training. But it soon became apparent that conventional medicine wouldn't be enough; it looked like he had a badly-punctured lung. While everyone else was paying attention to the battle, she used her healing powers to save his life.

After the battle, the grateful Nightwind realized what had happened and offered to introduce Amelia to people who could train her to use her powers better. She didn't particularly like the idea until he pointed out that wearing a costume and being a superhero would let her use her powers openly and save even *more* people than she already was. That sold her... and a few months later Aura made her debut.

Personality/Motivation: Aura isn't your typical superhero. She's not so much concerned with fighting crime as she is with protecting and healing the victims of supercrime, and superheroes and villains who suffer injury in battle. She regard all human life as worth preserving; she'd gladly sacrifice her own life to save someone else's, even if it was Dr. Destroyer's or the Black Harlequin's. Nighthawk (among others) has tried to make her think a little more "practically," but she refuses to compromise her convictions one bit.



Quote: "All human life is precious... no matter how a person chooses to live."

Powers/Tactics: Aura's mutant genetic structure somehow allows her to "tap into" her own life force and the life force of other people. In the hands of a villainous or mercenary person this ability could become a deadly and irresistible weapon, but she's chosen to ignore that side of her powers to focus on the positive side — healing and succoring the injured and sick. Most of her powers either involve healing people directly and permanently (they use the *Power Healing*) or shifting life force from one person to another for temporary "healing" or boosts of health (they use the *Power Transfer*). At the GM's option she can use her Transfer on herself to sacrifice some of her own BODY for a short time to help someone else (this may require a Life Force Manipulation Abilities roll, or the GM may "charge" her

an extra BODY or two for the privilege).

If push comes to shove and Aura has to fight, she primarily relies on her Energy Blast and her Drain BODY (though she dislikes having to use the latter), with the Transfers held in reserve to help her comrades (or even injured enemies, since she refuses to let anyone, no matter how villainous, die or suffer pain if she can help it). She can also channel her life force energy to fly, and can see other peoples' life force

AURA PLOT SEEDS

The classic Aura plot: someone important is in desperate need of Aura's healing powers... but she's missing! It's up to the heroes to find her in time to save the VIP's life.

VIPER decides that having a "living hospital" in its ranks would be ideal, so it kidnaps Aura and begins brainwashing her. The heroes have to rescue her before she becomes a puppet of the Supreme Serpent!

The Circle of the Scarlet Moon believes that Aura's powers make her the *perfect* sacrifice for its most important ritual ever... one that will identify the new Archmage-to-be and put him under the Circle's control! If the heroes don't uncover the Circle's plot in time to thwart it, or at the very least rescue Aura before the ritual takes place, mystic evil will reign!

(their “auras”; see *The Ultimate Mentalist*, page 161, or *The UNTIL Superpowers Database*, page 160, for details on her Detect Aura power).

Because Aura’s powers involve sensing and manipulating life force, she feels the effects of attacks that strike directly at her life force — necromantic magic, in other words — more strongly than most heroes do. The GM may extend this to some “death touch” powers and the like, if appropriate.

Campaign Use: Aura can be both an incredibly helpful ally and an enormous thorn in the side of your PCs. Her healing powers make her invaluable for dangerous missions... but her tendency to heal villains as well as heroes may not sit well with some of the player characters (particularly those of more vigilante or “Iron Age” bent).

To make Aura more powerful, expand the range of what she can Transfer from and to, allowing her to affect any Primary Characteristic and most Figured ones. To reduce her effectiveness, put Limitations like *Extra Time* and *Concentration* on most of her attacks so she can’t use them easily in combat.

Aura doesn’t Hunt anyone.

Appearance: Aura is a white female, 5’9” tall with a slender, attractive figure and short blonde hair well-styled. Her costume is a one-piece bodystocking in light blue, white, and light gold. A narrow band of light gold forms a sort of broad V along her décolletage, running up to the shoulders and then down sharply onto her upper arms just above the armpit. The costume above this band of light gold, including her half-face mask, is white. Below the band it’s light blue (this includes the arms below where the band terminates). Her gloves and boots are light gold, and she wears a white sash as a belt.

EMP				
Val	Char	Cost	Roll	Notes
15	STR	5	12-	Lift 200 kg; 3d6 [1]
25	DEX	45	14-	OCV: 8/DCV: 8
25	CON	30	14-	
15	BODY	10	12-	
15	INT	5	12-	PER Roll 12-
20	EGO	20	13-	ECV: 7
25	PRE	15	14-	PRE Attack: 5d6
10	COM	0	11-	
8	PD	5		Total: 28 PD (20 rPD)
10	ED	5		Total: 50 ED (40 rED)
6	SPD	25		Phases: 2, 4, 6, 8, 10, 12
8	REC	0		
50	END	0		
50	STUN	14		Total Characteristics Cost: 179

Movement: Running: 6”/12”
Teleportation: 30”/60”

Cost	Powers	END
210	<i>Electromagnetic Energy Attacks:</i> Multipower, 210-point reserve	
12u	1) <i>Electromagnetic Blast:</i> Energy Blast 10d6, Indirect (passes through physical barriers, see text; +½), Penetrating (+½), Reduced Endurance (0 END; +½)	0
7u	2) <i>Concentrated Electromagnetic Blast:</i> RKA 2d6, Indirect (passes through physical barriers, see text; +½), Penetrating (+½), Reduced Endurance (0 END; +½)	0
13u	3) <i>EMP Burst:</i> Dispel Electronic Device powers 15d6, all Electronic Device powers simultaneously (+2), Area Of Effect (16” Radius; +1), Reduced Endurance (0 END; +½); No Range (-½)	0
21u	4) <i>Focused EMP Blast:</i> Dispel Electronic Device powers 20d6, all Electronic Device powers simultaneously (+2), Reduced Endurance (0 END; +½)	0
12u	5) <i>Radio Interference Blast:</i> Radio Group Flash 20d6, Indirect (passes through physical barriers, see text; +½), Reduced Endurance (0 END; +½)	0
18u	6) <i>Disrupt Energy Powers:</i> Drain 8d6, any one Energy power at a time (+¼), Ranged (+½), Reduced Endurance (0 END; +½)	0
45	<i>Electromagnetic Energy Powers:</i> Elemental Control, 90-point powers	
45	1) <i>Electromagnetic Shield:</i> Force Field (20 PD/40 ED), Reduced Endurance (0 END; +½)	0
45	2) <i>Energy Form Travel:</i> Teleportation 30”, Reduced Endurance (0 END; +½)	0
34	3) <i>Radio Interference Field:</i> Darkness to Radio Group 11” radius, Personal Immunity (+¼), Reduced Endurance (0 END; +½); No Range (-½)	0
48	<i>Broad Radio Interference Field:</i> MegaScale (1” = 10 km; +½) for Radio Interference Field	4
15	<i>Energy Sense:</i> Radio Group Flash Defense (15 points)	0
45	<i>Energy Form:</i> Life Support (Total)	0

5	<i>Energy Mind</i> : Mental Defense (9 points total)	0
10	<i>Energy Form</i> : Power Defense (10 points)	0
25	<i>Energy Sense</i> : Radar (Radio Group), Discriminatory, Increased Arc Of Perception (360 Degrees)	0
22	<i>Energy Sense</i> : HRRP (Radio Group), Discriminatory, Analyze	0
5	<i>Energy Sense</i> : Infrared Perception (Radio Group)	0
5	<i>Energy Sense</i> : Ultraviolet Perception (Radio Group)	0

Skills

9	+3 with <i>Electromagnetic Energy Attacks</i> Multipower
1	Computer Programming 8-
3	Electronics 12-
2	KS: The Superhuman World 11-
2	PS: Play Computer Games 11-
2	SS: Electronic Engineering 11-
3	SS: Physics 12-

Total Powers & Skills Cost: 664**Total Cost: 843****200+ Disadvantages**

20	Hunted: UNTIL 8- (Mo Pow, NCI, Capture)
20	Hunted: PRIMUS 8- (Mo Pow, NCI, Capture)
15	Psychological Limitation: Totally Callous; Has No Regard For Or Interest In "Ordinary" Humans Anymore (Common, Strong)
15	Social Limitation: Secret Identity (Barton Schwartz) (Frequently, Major)
10	Susceptibility: takes 1d6 per Turn when in intense magnetic fields (Uncommon)
10	Vulnerability: 2 x Effect from Drains/Transfers of Energy Powers (Uncommon)
10	Vulnerability: 2 x STUN from Magnetism attacks (Uncommon)
10	Vulnerability: 2 x BODY from Magnetism attacks (Uncommon)
533	Experience Points

Total Disadvantage Points: 843

Background/History: Barton Schwartz was a graduate student studying high-energy particle physics. Arrogant, high-handed, condescending, and standoffish, he wasn't exactly popular with anyone else in the department. In fact, some of his less mature colleagues took to playing practical jokes on him practically every week. He simply ignored their juvenile antics... which only made them try harder.

One day Schwartz was working on some experiments involving Millennium City University's cutting-edge experimental particle accelerator. The radical design of the accelerator was allowing scientists to perform work that was previously impossible or impractical, and Schwartz wanted to take full advantage of his limited time on the machine. He started the countdown while still preparing the chamber, knowing he had plenty of time to finish the preparations before the countdown finished. But then his colleagues' latest practical joke backfired, locking him inside! Unable to stop the countdown, he banged helplessly on the door right up until the accelerator activated.

Somehow being bombarded with high-energy particles by the experimental accelerator changed Schwartz. He blacked out shortly after the machine began working, and when he came to he was no longer entirely human. His flesh body was gone, replaced by some sort of human-shaped "energy matrix" that granted him vast powers over electromagnetic radiation. But it also changed his mind, making him cold-hearted and cruel. He realized what had happened and knew who was responsible. Using his new powers he blasted his way to freedom, killed the men who'd been tormenting him for years, and then teleported away to become a supervillain. The media soon christened him "EMP," and he, liking the sound of that name, kept it.

Personality/Motivation: EMP (pronounced ee-em-pee, like the abbreviation for "electromagnetic pulse," not "emp") is no longer human in body or mind. The accident that gave him his powers also unhinged him, making it impossible for him to truly identify with ordinary humans anymore. To him they're lesser beings, mired in their flesh and the limitations it imposes. He's a higher, more perfect entity, a creature of pure energy who's so much more than they can ever hope to be. He feels nothing when he kills, hurts, abuses, or exploits them; it's about the same as a normal person crushing an ant.

EMP longs for the power to "enter worlds of pure energy" (as he puts it) and "leave fleshly existence truly behind." What he means by this isn't exactly certain, but he may mean something like the "cybernet" depicted in Cyberpunk science fiction, or simply become small enough to interact with atomic particles. If he could find a way to "enter" these "worlds," it's possible he might leave Earth altogether and never return.

Quote: (delivered in an eerie, slightly crackling, "electronic"-sounding voice) "You are a thing of flesh. Your weaknesses are manifest, while mine are non-existent."

Powers/Tactics: EMP has the power to control electromagnetic energy in various ways. (If you need a more precise special effect, assume his powers involve microwaves, but for the most part you can assume he can use any of the types of energy described under "Electromagnetic Energy" in Chapter Two.) He can project energy for various effects, not just to damage but also to interfere with radio, television, and the like. He's often hired by mercenary groups and other military forces to disrupt enemy communications.

EMP's attacks are Indirect, defined at the +½ level as allowing them to pass through physical barriers. The attack always originates with EMP, but due to the nature of his energy it can pass through any physical barrier between itself and the target. Primarily this means walls, and does *not* allow the attack to ignore a target's personal defenses. However, since EMP doesn't have N-Ray Perception or the like, he may not be able to perceive a target through a barrier (or perceive it imperfectly at best), which affects his OCV per the standard rules.

EMP PLOT SEEDS

The authorities tell the PCs that there seems to be proof that EMP's activities in Millennium City are causing a *massive* rise in the rate of cancer among the citizens. It's time to capture him for good... or put a stop to him permanently. Are the authorities telling the truth, or do they have an ulterior motive for wanting EMP eliminated?

EMP believes that gaining the power to "enter worlds of energy" somehow involves siphoning off the energy of a character who can Shrink. If a PC has that power, EMP goes after him; otherwise the PCs will have to rescue the likes of Shriner or Hummingbird... and some of them may not want to, thinking that if EMP succeeds it will eliminate two villains at one stroke.

EMP decides to recreate the accident that gave him his powers so he'll become even *more* powerful. He takes the staff at the particle accelerator hostage and forces them to help him. The PCs have to effect a rescue before EMP becomes too powerful to stop!



EMP thinks of himself as both powerful and invulnerable, so he usually fights aggressively. He opens up with a few Energy Blasts or RKAs, switching to more “sophisticated” attacks if the frontal assault doesn’t work well or he can neutralize an enemy advantage that way.

Campaign Use: EMP is a mercenary supervillain whom your PCs could encounter in a variety of situations. He works not only for money (which he uses to buy equipment and other things he needs for his own schemes) but for unusual technology, access to strange forms of energy, and the like.

You have several options if you want to make EMP more powerful. First, you could expand his powers to cover the entire electromagnetic spectrum — give him a Multipower of Light Powers and one of Radiation Powers. Second, you could give him more “body of energy” powers, such as Desolidification, MegaScaled Teleportation, or FTL Travel. To weaken him, reduce his DEX to 20 and SPD to 5, and cut the DCs in his attacks to about 75-80% of what he currently has.

EMP only Hunts heroes if hired to, in which case he follows orders. He’d only Hunt someone on his own initiative if that person possessed energy powers (or related abilities) that intrigue him for some reason.

Appearance: EMP is a human male... or rather, he used to be. He still looks human, though in fact his body’s composed as much of energy as it is of flesh. His eyes glisten and glow with this energy, and occasionally crackles of it surround his hands. He no longer has any hair on his head (or anywhere else on his body, for that matter). His costume is a simple dark blue bodystocking and matching boots; the costume ends at the wrists and neck, leaving his hands and head uncovered.

HOWLER

Val	Char	Cost	Roll	Notes
13	STR	3	12-	Lift 150 kg; 2½d6 [1]
26	DEX	48	14-	OCV: 9/DCV: 9
23	CON	26	14-	
10	BODY	0	11-	
13	INT	3	12-	PER Roll 12-
13	EGO	6	12-	ECV: 4
20	PRE	10	13-	PRE Attack: 4d6
18	COM	4	13-	
7	PD	4	Total: 27 PD (20 rPD)	
7	ED	2	Total: 27 ED (20 rED)	
5	SPD	14	Phases: 3, 5, 8, 10, 12	
8	REC	0		
46	END	0		
30	STUN	1	Total Characteristics Cost: 121	

Movement: Running: 6”/12”
Flight: 20”/40”

Cost	Powers	END
27	<i>Sonic Powers:</i> Elemental Control, 80-point powers; all OIF (amulet; -½)	
27	1) <i>Sonic Scream I:</i> Energy Blast 13d6, Special Effect: Sonic; OIF (-½)	8
67	2) <i>Sonic Scream II:</i> Energy Blast 11d6, Special Effect: Sonic, Variable Advantage (+½ Advantages; +1); OIF (-½)	var
73	3) <i>Sonic Scream III:</i> Energy Blast 7d6, Special Effect: Sonic, Variable Advantage (+1 Advantages; +2); OIF (-½)	var
27	4) <i>Deafening Scream:</i> Hearing Group Flash 18d6, Reduced Endurance (0 END; +½); OIF (-½)	0
28	5) <i>Sonic Liquification:</i> RKA 2½d6, Special Effect: Sonic, +1 Increased STUN Multiplier (+¼), Reduced Endurance (½ END; +¼)	3
28	6) <i>Sonic Screen:</i> Force Field (20 PD/20 ED), Special Effect: Sonic, Hardened (+¼), Reduced Endurance (½ END; +¼); OIF (-½)	3
33	7) <i>Riding The Soundwaves:</i> Flight 30”, Reduced Endurance (0 END; +½); OIF (-½)	0
48	<i>Pump Up The Volume:</i> Absorption 6d6 (energy), all Sonic powers simultaneously (+2), Delayed Return Rate (points fade at the rate of 5 per Minute; +¼); OIF (amulet; -½), Limited Phenomena (sonics only; -½)	0
30	<i>Sonic Immunity:</i> Energy Damage Reduction, Resistant, 75%; OIF (amulet; -½), Only Works Against Limited Type Of Attack (sonics; -½)	0
20	<i>Sonar:</i> Active Sonar (Hearing Group), Increased Arc Of Perception (360 Degrees)	0
3	<i>Enhanced Hearing:</i> Ultrasonic Hearing (Hearing Group)	0
6	<i>Enhanced Hearing:</i> +3 PER with Hearing Group	0

Talents

- 3 Perfect Pitch

Skills

- 12 +4 with *Sonic Powers* Elemental Control attacks
- 5 Mimicry 13-
 2 AK: Africa 11-
 2 AK: The Middle East 11-
 2 AK: Millennium City University 11-
 4 KS: Ancient History 13-
 3 KS: The Archaeological World 12-
 2 PS: Archaeologist 11-
 2 PS: Professor 11-
 3 PS: Singing 13-
 2 SS: Archaeology 11-
 2 SS: Sonics 11-
 3 Stealth 14-
 5 Ventriloquism 13-

Total Powers & Skills Cost: 469

Total Cost: 590

200+ Disadvantages

- 40 Dependence: must remain in contact with her amulet or take 2d6 damage per Turn (Uncommon)
- 5 Distinctive Features: sultry voice (Easily Concealable, Noticed And Recognizable)
- 20 Hunted: Sentinels 8- (Mo Pow, NCI, Capture)
- 20 Hunted: UNTIL 8- (Mo Pow, NCI, Capture)
- 20 Psychological Limitation: Code Versus Killing (Common, Total)
- 15 Psychological Limitation: Superstitious (Common, Strong)
- 15 Psychological Limitation: Xenophobia; Fears Aliens Will Try To Take Amulet Away (Common, Strong)
- 5 Rivalry: Professional (with another archaeologist)
- 15 Social Limitation: Secret Identity (Susan Sonderheim) (Frequently, Major)
- 20 Vulnerability: 2 x STUN from Electricity (Common)
- 215 Experience Points

Total Disadvantage Points: 590

Description: This character sheet revises Howler using the rules from Chapter Two of this book, and expands her powers slightly. See *Conquerors, Killers, And Crooks*, page 162, for full information on her background, personality, and tactics.



PULSON PLOT SEEDS

Pulson achieves his dream... his powers expand to the point where he no longer needs his Rifle! Unfortunately they also seem to be consuming him alive, "eating" his life force away bit by bit with every Energy Blast he fires. He needs the PCs' help before he kills himself by using his powers one too many times.

The military wants to study Pulson, believing his biology may hold the key to a procedure for creating superhumans on demand. But it doesn't want anyone to know what it's up to, so it decides to use the PCs as its pawns to capture him.

In an attempt to enhance his powers, Pulson attacks a nuclear reactor facility. The PCs have to get there and stop him before he succeeds, causes a meltdown, or both.

PULSON				
Val	Char	Cost	Roll	Notes
10	STR	0	11-	Lift 100 kg; 2d6 [1]
18	DEX	24	13-	OCV: 6/DCV: 6
15	CON	10	12-	
12	BODY	4	11-	
13	INT	3	12-	PER Roll 12-
12	EGO	4	11-	ECV: 4
15	PRE	5	12-	PRE Attack: 3d6
10	COM	0	11-	
6	PD	4		Total: 21 PD (15 rPD)
10	ED	7		Total: 25 ED (15 rED)
4	SPD	12		Phases: 3, 6, 9, 12
5	REC	0		
30	END	0		
30	STUN	5		Total Characteristics Cost: 78

Movement: Running: 6"/12"

Cost	Powers	END
28	<i>Pulson Power:</i> Endurance Reserve (80 END, 20 REC)	0
30	<i>Pulson Amplification Rifle:</i> Multipower, 60-point reserve; all OAF (-1)	
3u	1) <i>Standard Pulson Beam:</i> Energy Blast 12d6; OAF (-1)	6
3u	2) <i>Focussed Pulson Beam:</i> Energy Blast 8d6, Armor Piercing (+½); OAF (-1)	6
3u	3) <i>Long-Range Pulson Beam:</i> Energy Blast 8d6, No Range Modifier (+½); OAF (-1)	6
3u	4) <i>Modulated Pulson Beam:</i> Energy Blast 6d6, NND (defense is ED Force Field; +1); OAF (-1)	6
1u	5) <i>High-Intensity Pulson Beam:</i> RKA 3d6; OAF (-1), Increased Endurance Cost (x3 END; -1)	12
30	<i>Body Armor:</i> Armor (15 PD/15 ED); OIF (-½)	0
5	<i>Helmet Polarized Faceplate:</i> Sight Group Flash Defense (8 points); OIF (-½)	0
6	<i>Helmet Communications System:</i> HRRP (Radio Group); OIF (-½), Affected As Sight And Hearing Groups As Well As Radio Group (-½)	0
10	<i>Lucky Stiff:</i> Luck 2d6	0

Skills

12	+4 with <i>Pulson Amplification Rifle</i> Multipower
3	Computer Programming 12-
1	Demolitions 8-
3	Electronics 12-
1	KS: The Superhuman World 8-
1	SS: Chemistry 8-
2	SS: Force Field Physics 11-
2	SS: Physics 11-
2	SS: Pulson Physics 11-
1	Systems Operation 8-

Total Powers & Skills Cost: 150

Total Cost: 228

200+ Disadvantages

- 5 Distinctive Features: distinctive burn scars along left arm and side (Easily Concealed; Noticed And Recognizable)
- 20 Hunted: PRIMUS 8- (Mo Pow, NCI, Capture)
- 15 Psychological Limitation: Greedy (Common, Strong)
- 10 Psychological Limitation: Eager For Ways To Increase/Improve His Powers (Common, Moderate)
- 15 Social Limitation: Secret Identity (Robert Jefferson) (Frequently, Major)

Total Disadvantage Points: 265

Background/History: Robert Jefferson was a junior-grade technician working at a Harmon Industries research division that specialized in energy weapons and other cutting-edge military technology. Despite being well-qualified for the position, he rarely seemed to take his job seriously; he was always cracking jokes, playing pranks, and disrupting projects. He got his work done without fail, but attitude kept him from advancing in the company.

One day Robert's luck ran out. He had a *great* joke in mind to play on some of his co-workers, but he didn't see the warning signs that the lab was in the middle of a weapons test. He walked right into the middle of a delicate procedure... and the whole experiment went to hell. He felt a *zap* like getting hit with a lot of static electricity, and then there was a *boom*, and then a *BOOM*, and he passed out.

He woke up in the hospital two days later. He was relieved to learn that no one had died, and no one been hurt worse than he... and he wasn't surprised when he lost his job. There was no way his employer could overlook this, no matter how good his work record was. Not sure what he was going to do with his life, he started to feel depression creeping in around the edges.

That changed one night when he woke up and wanted some water. Straining to reach the pitcher on the table beside his hospital bed, he shot a tiny bolt of pulson energy into the pitcher, shattering it! He was so surprised he nearly fell out of bed backing away. When he got out of the hospital a few days later he began experimenting in earnest and learned that he could project tiny amounts of pulson energy very short distances... just a few inches, really. It was a superpower, but hardly one to write home about.

Convinced he could find a way to augment his new powers, he began researching them intensely, once or twice even breaking into the Harmon facility to use its equipment at night. Within a few months he'd developed the Pulson Amplification Rifle that let him fire beams as powerful as any superhero's. Christening himself *Pulson*, he set out to make his name in the Superhuman World.

Personality/Motivation: Pulson desperately wants to be considered "a real, powerful superhuman" and "a member of the Superhuman World." The fact that his powers depend on a device has given him a real inferiority complex. He'd love to find a way to "boost" or "expand" his powers so that he could toss his Rifle aside and use them like a normal energy

projector. Beyond that, he's the typical sort of small-minded, greedy supervillain so often encountered by heroes... and he still loves a good practical joke.

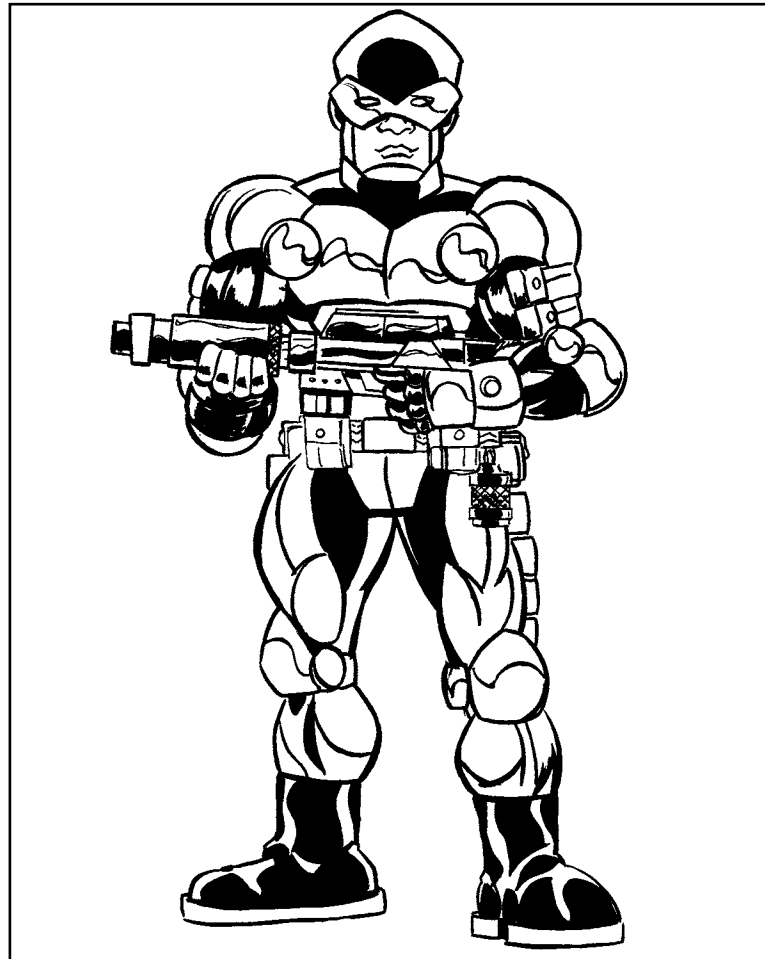
Quote: "Even you can't stand up to a blast of pure energy!"

Powers/Tactics: The accident in the energy weapons lab gave Pulson superpowers... just very low-grade ones. He has the power to project pulson energy, but in its natural state it's so weak that he can't do much more than produce a neat light show and perhaps (with some effort) light a candle with the heat from the energy. To make his powers strong enough to be combat-effective he designed the Pulson Amplification Rifle that he now carries. With the Rifle, he can project devastating pulson energy bolts in various configurations; without it, he's basically helpless in a super-battle (though the accident did enhance his body, making him faster and more fit than most humans).

In combat Pulson usually prefers to go on the offensive (his way of covering up for his general feelings of inadequacy). But he's smart enough not to be overconfident or tactically stupid, and enough in awe of "real" supervillains that he has no problem taking orders from an employer or team leader.

Campaign Use: Pulson is a fairly low-end supervillain-for-hire. He doesn't really have the motivation or smarts to concoct schemes of his own most of the time; he'd rather work for someone else with a hefty budget.

The easiest way to make Pulson more powerful is to eliminate the need for the Pulson Amplification Rifle, either wholly or partly (in the latter case, he buys about one-third of his attack DCs without the *Focus* Limitation, and the rest with). Another point of SPD would also be a big help. To weaken him, remove about one-fourth of the Active Points in his attacks.



Pulson only Hunts heroes if hired to, in which case he follows orders. The only reason he'd go after a hero on his own is if he thought that hero was somehow the key to amplifying his powers.

Appearance: Pulson is a half-black, half-Hispanic male, 5'11" tall with the athletic, muscular build of someone who engages in intensive regular exercise. He wears a suit of blue-grey body armor with a matching helmet (which covers most of his head, and has lenses over his eyes, but leaves his lower face visible), gloves, and thick-soled boots. There are several pockets along his upper arms, thighs, and belt to hold various small gadgets and weapons. His weapon, the Pulson Amplification Rifle, is a high-tech energy blaster rifle that's mostly bronze-colored.

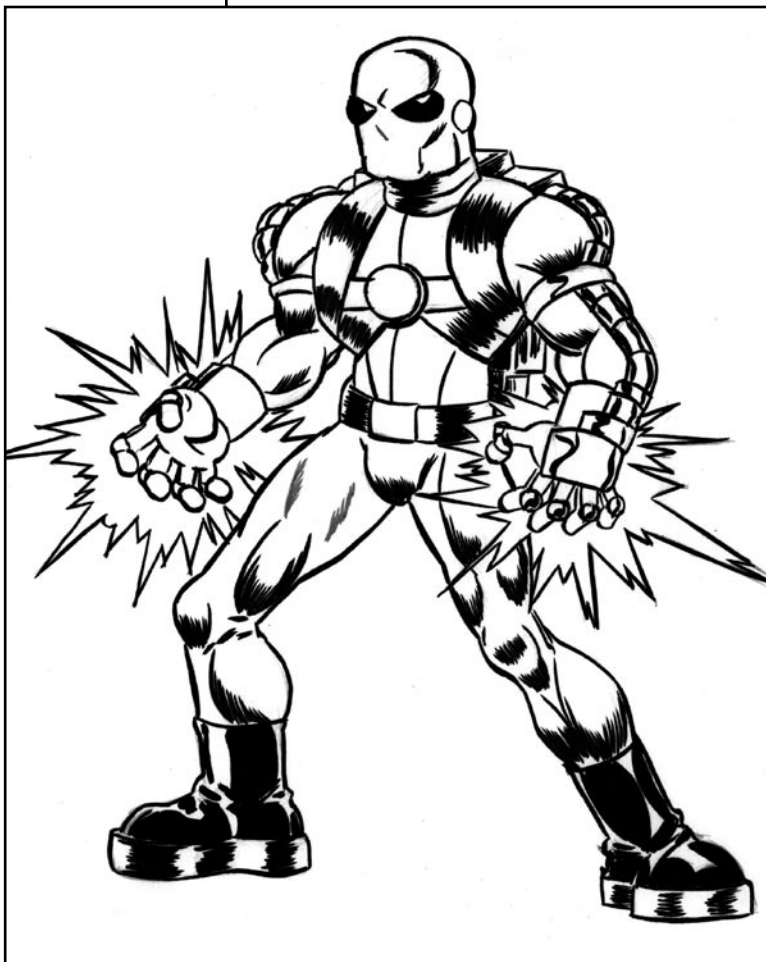
HEROIC GENRES



While energy projectors are most common in *Champions* campaigns, they also exist in other genres. After all, superheroes and villains don't have a monopoly on using and manipulating energy! Here are a few examples of the Energy Projector archetype in other genres.

DARK CHAMPIONS

Energy projectors are rare in Dark Champions games; the gritty world of modern-day action-adventure just doesn't lend itself to energy projection and manipulation powers. Most "energy projectors" are characters who use weapons that project some "realistic" form of energy — flamethrowers, tasers, and the like.



VOLTAIC

Val	Char	Cost	Roll	Notes
10	STR	0	11-	Lift 100 kg; 2d6 [2]
15	DEX	15	12-	OCV: 5/DCV: 5
13	CON	6	12-	
10	BODY	0	11-	
10	INT	0	11-	PER Roll 11-
10	EGO	0	11-	ECV: 3
10	PRE	0	11-	PRE Attack: 2d6
8	COM	-1	11-	
4	PD	2		Total: 10 PD (6 rPD)
4	ED	1		Total: 10 ED (6 rED)
3	SPD	5		Phases: 4, 8, 12
5	REC	0		
26	END	0		
22	STUN	0		Total Characteristics Cost: 28

Movement: Running: 6"/12"

Cost	Powers	END
15	<i>Battery Packs:</i> Endurance Reserve (120 END, 10 REC); OIF (-½)	0
30	<i>Voltaic Gauntlets:</i> Multipower; 45-point reserve; all OIF (-½)	
2u	1) <i>Taser Touch I:</i> Energy Blast 4d6, NND (defense is insulated rED; +1); OIF (-½), No Range (-½)	4
1u	2) <i>Taser Touch II:</i> Energy Blast 3d6, NND (defense is insulated rED; +1), Continuous (+1); OIF (-½), Lockout (can't use other Multipower slots while maintaining this slot; -½), No Range (-½), Must Maintain Touch To Maintain Effect (-¼)	4
2u	3) <i>Taser Blast:</i> Energy Blast 4d6, NND (defense is insulated rED; +1); OIF (-½), Limited Range (6"; -¼)	4
1u	4) <i>DC Grip:</i> Entangle 3d6, 3 DEF, Takes No Damage From Attacks (+½); OIF (-½), No Range (-½), Lockout (can't use other Multipower slots while maintaining this slot; -½), Must Maintain Touch To Maintain Effect (-¼), Costs Endurance (every Phase, to maintain; -½)	4
2u	4) <i>Deadly Touch I:</i> RKA 3d6; OIF (-½), Increased Endurance Cost (x2 END; -½), No Range (-½)	8
1u	5) <i>Deadly Touch II:</i> RKA 1d6+1, Continuous (+1); OIF (-½), Increased Endurance Cost (x2 END; -½), No Range (-½), Must Maintain Touch To Maintain Effect (-¼)	8

2u	6) <i>Lightning Blast</i> : RKA 3d6; OIF (-½), Increased Endurance Cost (x2 END; -¼), Limited Range (6"; -¼)	8
27	<i>Electrified Armor</i> : HKA 1d6+1, Continuous (+1), Damage Shield (does damage in HTH combat; +¾); OIF (-½), No STR Bonus (-½)	5
5	<i>Impressive Electrification</i> : +15 PRE; OIF (-½), Linked (to Damage Shield; -½), Only For Fear-/Intimidation-Based Presence Attacks (-1)	0
12	<i>Insulated Body Armor</i> : Armor (6 PD/6 ED); OIF (-½)	0
4	<i>Insulated Body Armor</i> : Armor (+6 ED); OIF (-½), Only Versus Limited Type Of Attack (electricity; -½)	0
5	<i>Helmet</i> : Sight Group Flash Defense (8 points); OIF (-½)	0
Skills		
6	+2 with <i>Voltaic Gauntlets</i> Multipower	
3	Combat Driving 12-	
1	Computer Programming 8-	
1	Electronics 8-	
1	Mechanics 8-	
1	Security Systems 8-	
3	Stealth 12-	
1	Streetwise 8-	

Total Powers & Skills Cost: 126

Total Cost: 154

75+ Disadvantages

20	Hunted: HCPD 8- (Mo Pow, NCI, Capture)
20	Hunted: US Army 8- (Mo Pow, NCI, Capture)
10	Hunted: DarkAngel 8- (As Pow, Capture)
20	Psychological Limitation: Casual Killer (Very Common, Strong)
15	Psychological Limitation: Greedy (Common, Strong)
15	Social Limitation: Secret Identity (Andy Detwiler) (Frequently, Major)

Total Disadvantage Points: 175

Background/History: Andy Detwiler was a five-time loser who escaped a long jail term only by virtue of being so lousy at crime that he never got involved in any truly significant schemes. During the time he did spend in jail he at least had the good sense to spend his time trying to better himself through correspondence TV repair courses and things like that.

After he got out of jail for the fifth time in 2003, he got lucky and found a job working for Dr. Emerson Sloane. Sloane was a genius of selfish and eccentric bent who put his talents to work designing weapons and other gadgetry for members of the underworld. He'd finally decided to build one for himself and make some *real* money. He'd been studying a 1930s criminal known as "the Electricutioner" and felt he could re-create his suit, making it better and more powerful. But he needed an assistant to help with the work. Andy looked like the perfect man for the job — he knew enough to be useful, but not enough to ask questions or go into business for himself, and he didn't expect much in the way of wages compared to what others were asking.

But Andy, it turned out, had a ruthless streak no one had ever known about. He realized that what the Doc was building could set a man up for life. He waited patiently and did the work without causing any fuss, paying close attention to everything Sloane did. And when the suit was finished and ready for regular use, he killed Sloane and took it for himself. Choosing the name *Voltaic*, he's been a part of the Hudson City underworld, and a thorn in the side of the HCPD, ever since.

Personality/Motivation: Becoming Voltaic has made a new man out of Andy Detwiler. Gone is the relatively laid-back, not particularly disciplined or driven second-rate crook he used to be, replaced by someone who's been transformed by power. Now he's cold, calculating, and efficient — and what's worse, quick to use lethal force on anyone who gets in his way. With the trail of bodies he's left behind him there's a hard storm coming for him... it's just a question of whether that storm takes the form of a police beating and a life sentence, or a vigilante's bullet between the eyes.

Quote: "Ready to ride the lightning, hero?"

Powers/Tactics: Voltaic's powers all involve the battery-charged suit Emil Sloane built. The batteries in the "backpack" structure feed power to the gauntlets. Depending on how he controls the flow of power, Voltaic can project bolts of electricity for short distances (6"), touch people for deadly, paralytic, or taser-like effects, and so on. The armor also protects him from his opponents' attacks.

Voltaic thinks he knows a lot more than he really does. More than once he's gotten himself (or an employer) in trouble because he thought he'd have "no problem" bypassing a security system or defeating a particular hero. Sooner or later this (admittedly mild) streak of overconfidence could cause him major problems.

Campaign Use: Voltaic is a "throwaway" costumed criminal for Dark Champions campaigns. Since his powers all come from his suit, you can let your heroes gun him down pretty much whenever they want to... then let someone else come along and put on the suit.

To make Voltaic tougher, increase his SPD to 4 and improve his Skills to full Characteristic-based rolls. To weaken him, give most (or all) of the suit's attacks Activation Rolls.

Voltaic doesn't Hunt heroes unless hired to, in which case he follows orders.

Appearance: Voltaic is six feet tall with a moderately muscular build. His costume is a somewhat bulky-looking suit of modified body armor. Attached to the back is a backpack-like device containing the batteries used to operate the suit. Wires run from the battery pack down to his gauntlets, which have metal tips on the fingers so he can easily deliver electric shocks; concealed wires throughout the suit allow him to electrify his entire body if necessary. His boots have thick rubber soles to insulate him better. To conceal his identity he wears a large, barrel-like helmet with a smoked glass eyepiece.

VOLTAIC PLOT SEEDS

Unknown to Andy Detwiler, Dr. Sloane kept several backup copies of the plans for the suit hidden away. Someone must have found one of the copies, because now there's a *second* Voltaic out there! The PCs have to find and capture (or kill) both of them before their conflict over "who's the *real* Voltaic" hurts innocent civilians.

The Army's interested in Voltaic's suit. It hires/persuades/blackmails the PCs into investigating Voltaic and obtaining a copy of his suit and/or the plans used to build it.

A job goes bad, and Voltaic flees... right into one of the city's biggest power stations! Now he's got a dozen hostages and is threatening to black out the city if his demands aren't met. The police seem paralyzed with indecision; it's time for the PCs to take action....

FANTASY HERO

In Fantasy campaigns, energy projectors are mostly wizards and other types of spellcasters. The most classic example of the archetype in Fantasy is the “elemental wizard,” who commands spells and beings pertaining to one or more of the four classical elements of Air, Earth, Fire, and Water. In some settings wizards can also specialize in “elements” such as Shadow, Chaos, Ice, Time, or Holy/Unholy. Similarly, some feature “mixed” elements that combine two of the classical ones. Examples include Smoke (Fire and Air), Ice (Air and Water), Mud (Earth and Water), and Lava or Ash (Fire and Earth). Typically Air and Earth are regarded as “opposites” that don’t mix (or mix poorly); the same applies to Fire and Water.

ARKOSH STONEFLAME

Val	Char	Cost	Roll	Notes
8	STR	-2	11-	Lift 75 kg; 1½d6 [2]
14	DEX	12	12-	OCV: 5/DCV: 5
14	CON	8	12-	
10	BODY	0	11-	
20	INT	10	13-	PER Roll 13-
18	EGO	16	13-	ECV: 6
20	PRE	10	13-	PRE Attack: 4d6
10	COM	0	11-	
4	PD	2		Total: 4 PD (0 rPD)
7	ED	4		Total: 7 ED (0 rED)
3	SPD	6		Phases: 4, 8, 12
5	REC	0		
28	END	0		
21	STUN	0		Total Characteristics Cost: 66

Movement: Running: 6”/12”

Cost Spells

32	<i>Reserves Of Mystical Power:</i> Endurance Reserve (120 END, 20 REC)	0
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Air Magic

11	Blaithelock’s Call To The Wind (FHG 63)
2	Blaithelock’s Sphere Of Air (FHG 70)
5	Calm The Winds (FHG 64)
9	Donver’s Whirlwind (FHG 65)
5	Fogbreaking (FHG 65)
2	Freshen Air (FHG 72)
5	Lightning Bolt (FHG 66)
2	Mage’s Wind (FHG 66)
2	Mistshaping (FHG 73)
6	The Spell Of The Deadly Cloud (FHG 67)
5	Stelrane’s First Spell Of The Slumbrous Vapors (FHG 68)
7	Ulgar’s Spell Of Deadly Deprivation (FHG 69)
4	Wall Of Cloud (FHG 70)
3	Wings Of The Wind (Free version) (FHG 71)

Earth Magic

4	Dereketh’s Catapult (Quick version) (FHG 74)
3	Earthenroad (FHG 81)
5	Hands Of Stone (FHG 75)
16	Meldana’s Spell Of The Shaking Earth (FHG 76)
10	Stone Into Mud (FHG 77)
3	Stoneshaping (FHG 82)

1	Stonyskin (FHG 79)
6	Wall Of Stone (FHG 81)
Fire Magic	
11	Blaithelock’s Call To Flame (FHG 87)
4	Enflame (FHG 89)
2	Everburning Flame (FHG 99)
5	Fiery Arrow (FHG 89)
4	Fiery Aura (FHG 90)
5	Fiery Orbs (FHG 91)
6	Fireball (FHG 91)
9	Fireshaping (FHG 92)
7	Firestorm (FHG 93)
5	Harthuvian’s Vaultflame (FHG 93)
5	Hasari’s First Spell Of The Dragon’s Fire (FHG 94)
3	Khelred’s Flammifer (FHG 94)
5	Magefire (FHG 95)
3	Protection From Fire (FHG 96)
4	Quench Flame (FHG 95)
10	Wall Of Fire (FHG 97)

Water Magic

5	Control The Waters (FHG 101)
3	Fist Of The Waters (FHG 102)
5	Meldana’s Harnessed Waves (FHG 103)
1	Oldrusân’s Spell Of Aquatic Comfort (FHG 104)
1	Water-Walking (FHG 105)

Wizardry

1	Detect Magic (FHG 221)
4	Stelrane’s Spell Of Dispersion (FHG 223)
1	Wizard’s Scribe (FHG 244)
3	Wizard’s Shield (FHG 231)

Perks

10	Money: Wealthy
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Talents

5	Magesight
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Skills

9	+3 with Spells
3	Conversation 13-
2	Cryptography 13-; Translation Only (-½)
3	Deduction 13-
3	Inventor (Spell Research) 13-
2	Language: Aarnese (fluent conversation; Umbrian is Native)
2	Language: Trade-Talk (fluent conversation)
2	Language: Vestrian (fluent conversation)
1	Literacy
25	Power: Air Magic 24-
29	Power: Earth Magic 26-
29	Power: Fire Magic 26-
23	Power: Water Magic 23-
17	Power: Wizardry 20-
3	Stealth 13-
3	Scholar
2	1) KS: Air Magic 13-
2	2) KS: Arcane And Occult Lore 13-
2	3) KS: Earth Magic 13-
2	4) KS: Famous Wizard And Enchanted Items 13-
2	5) KS: Fire Magic 13-
2	6) KS: History Of Ambrethel 13-
2	7) KS: History Of Magic 13-

- 2 8) KS: Legends And Lore 13-
- 2 9) KS: Mystic Theory And Philosophy 13-
- 2 10) KS: Water Magic 13-
- 2 11) KS: Wizardry 13-

Total Powers & Skills Cost: 453

Total Cost: 519

75+ Disadvantages

- 20 Hunted: Seven Sorcerers of Vfran 8- (Mo Pow, NCI, Capture/Kill)
- 20 Psychological Limitation: Wants To Prove The Superiority Of Elemental Magic (Common, Total)
- 5 Rivalry: Professional, with master practitioners of various other arcana of magic
- 399 Experience Points

Total Disadvantage Points: 519

ARKOSH STONEFLAME'S ENCHANTED ITEMS

Arkosh acquired many enchanted items during his adventuring career, but most have long since been used up or put on a shelf to gather dust. Some of the favorites that he still keeps with him most of the time include:

Master Elementalist's Staff: This powerful staff enhances Elemental Magic in various ways. (+4 with all rolls related to Elemental Magic; Aid Elemental Magic 6d6, Self Only, 4 Charges; Armor (6 PD/6 ED) only versus Elemental Magic and related powers.)

Imperial Magus Robes: Able to change color (and to some extent style) to suit the wearer, these silk robes both protect him and enhance his mystic powers. (Armor (4 PD/4 ED); +4 with all types of the *Magic Skill*)

Ring of the Thunderbolt Sphere: This ring emits a blast of lightning all around the wearer. (RKA 3d6, 16" Radius, Personal Immunity, No Range; 4 Charges (out of 6) remaining.)

Amulet of Domination (Mind Control 10d6, Telepathic, ½ END)

Background/History: In his younger days, Arkosh Stoneflame was an adventuring mage of the first water. Together with his companions, the Brotherhood of the Fiery Blade, he explored the depths of the Sunless Realms, fought infernal horrors summoned by foul cultists, bearded dragons in their lairs, and stood opposed to those who would oppress the weak and helpless. But time takes its toll on all men, even wizards, and the day came when Arkosh no longer felt up to the rigors of the road. With the good wishes of his companions, he retired to the life of a scholar-mage.

Ensnared in his tower in Mezendria, Arkosh began a comprehensive review of Elemental Magic, seeking to add scholarly depth of understanding to the breadth of experience and power he'd obtained as an adventurer. Slowly but surely, he lost contact with the outside world — he stopped maintaining contact with his friends or visiting the nearby towns and cities, content to stay home, study, and

provide for his own needs via magic or enchanted servitors. He withdrew entirely into his world of books, scrolls, and theories... and in time, he made a profound discovery.

Arkosh realized that it was Elemental Magic, and Elemental Magic alone, that was the foundation of Ambrethel and its magic. All other magics were corruptions of the true Art of the Four, and their corruption poisoned all of existence, creating the woes of the world and strengthening the Scarlet Gods.

Breaking the habit of long years, Arkosh contacted his brother wizards and told them of his discovery. They laughed at him and told him he was deeply mistaken. In the face of their scorn, he had another revelation — and with this revelation came purpose. Only *he* could see the Truth of the World, and thus only he could set the world to rights. It was up to him to sweep away the corrupt magics and establish his beloved Elemental Magic in its deserved place of supremacy.

Once again he got out his scrolls and books and set to work....

Personality/Motivation: As the years have passed and Arkosh has become more and more focused on his studies, he's become convinced that Elemental Magic is vastly superior to all other arcana. In fact, based on what he's learned through his research he believes that all other arcana are just flawed permutations and debasements of Elemental Magics. He now wants to "purify" magic by somehow "eliminating" all the other arcana and subsuming them into Elemental Magic in their "correct" forms. Were he somehow to succeed, the very nature of reality in Ambrethel would be forever altered....

Quote: "You cannot see past the shell of the world, the veil the Scarlet Gods have cast before your eyes. But I have delved more deeply than you, and I know the Truth... and nothing will stop me from serving that Truth."

Powers/Tactics: Arkosh is a master Elemental Mage who can know many powerful spells pertaining to the Four Elements, as well as general Wizardry. (The "FHG" notation after each spell refers to the page of *The Fantasy Hero Grimoire* where you can find the full text of the spell.) Although he hasn't adventured in years, he remembers well how to respond to threats and violence; he won't lose his head or waste time with useless actions when combat starts. His first act is to cast one or more defensive spells on himself, like Stonyskin or Wizard's Shield; he values his life too much to lose it to a lucky sword-blow. Then he lays his foes low with all the Elemental power at his command, usually favoring Fire and Air spells for this purpose.

Campaign Use: Arkosh is a zealot in service of a cause only he believes in... and that makes him dangerous. He thinks he needs to "destroy" all other types of magic to make Elemental Magic the One True Magery, and the actions he takes toward that goal could damage all Reality. Even if they don't literally unmake the world, they could have a nigh-equal effect — such as, for example, freeing the



gods of Thùn. It's up to the PCs to stop him; of the handful of people who know what he believes, none consider him a threat.

In essence, Arkosh is a walking plot device. Whether he attracts the attentions of the PCs by hiring them to accomplish some secondary goal that's a part of his overall plan, or simply appears full-blown on the stage as a major enemy for part of the campaign, he's certain to make their lives interesting.

Arkosh is already powerful, but if you need him to be more powerful still, there are several good ways to go about it. First, you can give him more enchanted items; during his career as an adventurer he could have found nearly anything you want him to. Second, you could give him one or more servants, lieutenants, or henchmen who are powerful in their own right — constructs he's created, demons he's summoned and bound, just about anything is possible. To weaken him, just start stripping away spells and other abilities until he's at the right level of power.

Arkosh doesn't Hunt heroes; he has bigger things to deal with.

Appearance: In his prime, Arkosh Stoneflame was a handsome man with the fit build and confident look of a seasoned adventurer. Now that he's old enough to have a long white beard, the fitness has mostly faded and the handsomeness has been replaced by a look of dignity, but the confidence remains. He typically wears well-tailored blue robes (enchanted, of course) cinched at the waist with a leather belt, and keeps his hair out of his eyes with a silver fillet. He carries a Master Elemental's Staff, a straight black staff shod in silver with a silver pyramid for a cap. Orbiting the cap in a perfectly equidistant "square" are a gout of mageflame, a tiny cloud of grey-white fog, a spar of smoky quartz crystal, and a sphere of water.

GALAVANDRIAN TWELVEFIRES

Val	Char	Cost	Roll	Notes
10	STR	0	11-	Lift 100 kg; 2d6 [2]
15	DEX	15	12-	OCV: 5/DCV: 5
13	CON	6	12-	
10	BODY	0	11-	
15	INT	5	12-	PER Roll 12-
13	EGO	6	12-	ECV: 4
15	PRE	5	12-	PRE Attack: 3d6
11	COM	1	11-	
4	PD	2		Total: 4 PD (0 rPD)
4	ED	1		Total: 4 ED (0 rED)
4	SPD	15		Phases: 3, 6, 9, 12
5	REC	0		
26	END	0		
22	STUN	0		Total Characteristics Cost: 56

Movement: Running: 7"/14"

Cost Spells

Wizardry

- 1 Detect Magic (FHG 221)
- 4 The First Spell Of The Crimson Ring (Lengthy version) (FHG 232)
- 4 Stelrane's Spell Of Dispersion (FHG 223)
- 1 Wizard's Eye (Attentive version) (FHG 235)
- 2 Wizard's Power (Weak version) (FHG 228)
- 1 Wizard's Scribe (FHG 244)
- 2 Wizard's Shield (Weak version) (FHG 231)

Powers

END

- 2 *Fleet-Footed:* Running +1" (7" total) 1

Skills

- 3 Conversation 12-
- 1 KS: Arcane And Occult Lore 8-
- 1 KS: Wizardry 8-
- 1 Literacy
- 3 Persuasion 12-
- 15 Power: Wizardry 18-
- 1 Sleight Of Hand 8-
- 3 Stealth 12-
- 2 WF: Blades, Bows

Total Powers & Skills Cost: 47

Total Cost: 103

75+ Disadvantages

- 20 Hunted: Red Talon Guild 8- (Mo Pow, NCI, Kill)
- 15 Psychological Limitation: Greedy (Common, Strong)
- 10 Psychological Limitation: Coward (Common, Moderate)
- 10 Psychological Limitation: Lazy; Always Looks For The Easy Way (Common, Moderate)

Total Disadvantage Points: 130

Background/History: Some years ago, Galavandrian Bortellson, now better known as Twelfefires, was a simple wizard's apprentice... and not a very good one at that. His eternally-suffering master, a paragon of patience, tried repeatedly to improve Galavandrian's work ethic and knowledge of the Arts Arcane, but against the young man's natural laziness he was fighting an uphill battle.

GALAVANDRIAN TWELVEFIRES'S ENCHANTED ITEMS

Galavandrian's collection of enchanted items mainly consists of the twelve wands that give him his sobriquet.

Baneful Wand Of Charge Depletion (Major Transform 10d6, enchanted item with Charges to the same item with only 1d6 Charges; 18 Charges left)

Featherbright Wand (Telepathy 5d6, only to communicate with animals; costs END)

Iron Serpent Wand (Entangle 8d6, 8 DEF; Range Based On STR, 1 Recoverable Charge)

Wand Of Enervation (Drain STR 4d6, Ranged; 21 Charges left)

Wand Of Fireballs (RKA 4d6, Explosion; 9 Charges left)

Wand Of The Five Fires (various Fire-based attacks; see *The Turakian Age*, page 264 or *Enchanted Items*, page 192; 29 Charges left)

Wand Of Healing (Simplified Healing 4d6; 6 Charges left)

Wand Of Mystic Might (RKA 2½d6, 32" Line; 18 Charges left)

Wand Of Night's Shadow (various Shadow Magic-based powers, many of which are useless to Galavandrian, see *Enchanted Items*, page 193; 15 Charges left)

Wand Of Secret Door And Trap Detection (Detect Secret/Concealed Doors and Traps 18-; 30 Charges left)

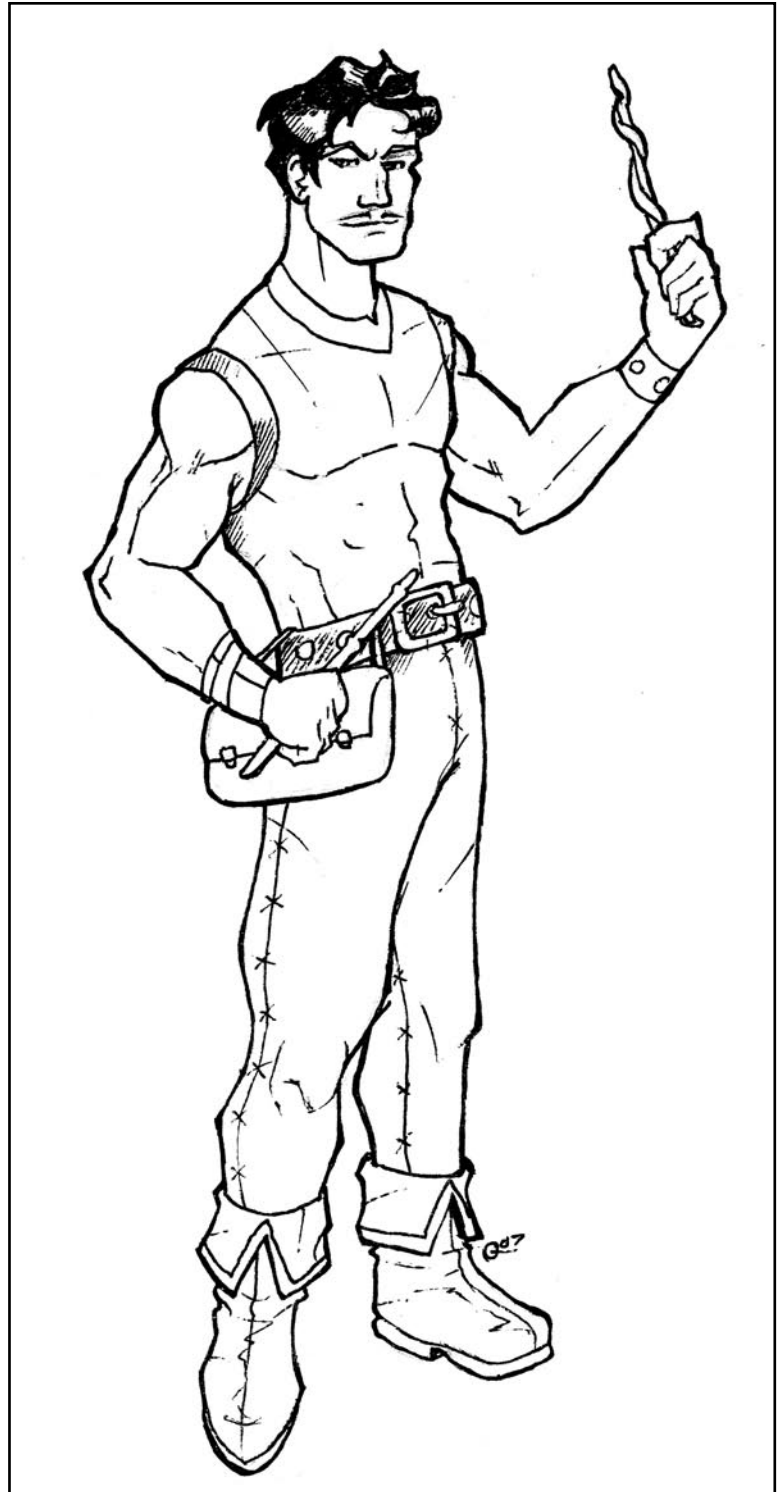
Wand Of Transformation (Major Transform 7d6, humanoids into animals; 11 Charges left)

Wand Of The Wilds (Summon any one animal built on up to 250 Character Points; 1 Charge per day)

Things might have gone on that way for years, with Galavandrian learning a bit here and there and never really becoming a journeyman (much less a true wizard) had his master not dropped dead one day of a heart attack. At first sad (for he was truly fond of the old man) and unsure of what to do, Galavandrian eventually realized that the wizard's tower was a treasure-trove. He took what he wanted, including several magical wands and various other minor enchanted items, and sold the rest of it for a handsome sum.

But it wasn't handsome enough. A year or two of living high on the hog and Galavandrian was about out of money, and with no prospects in sight. Then fate took a hand on his behalf. As he was passing through a small town a group of bandits descended on the place, intent on robbery and rapine. Galavandrian used his wands to fight off the attack, earning the accolades of the townsfolk and a rich reward as well.

Since then Galavandrian's made his way in the world as a sort of "wizard" for hire or mystic mercenary. He uses his wands — the ones he took from his master, plus others he's obtained over the years — to accomplish missions for his employers. He's not the most powerful mercenary out there, but sometimes he's just the right one for the job.



Personality/Motivation: Three personality traits dominate Galavandrian's mind: his greed; his laziness; and his cowardice. Typically the first wars with the second (and sometimes also the third) as he tries to find ways to make money or launch some scheme to improve his lot in life. Although he's a fairly bright and witty person, he isn't nearly as clever as he thinks he is. He often gets himself in trouble by pretending to have more magical power than he really does, claiming to know things he really doesn't, and being able to do things he can't.

Galavandrian is becoming increasingly concerned about using up the power in his wands

GALAVANDRIAN TWELVEFIRES PLOT SEEDS

The classic Galavandrian plot #1: the PCs have something that some powerful person wants, but doesn't want to be directly associated with. Through intermediaries he hires Galavandrian to get it for him.

The classic Galavandrian plot #2: in one of his (mis)adventures Galavandrian learns something really valuable, but he needs the PCs' help to exploit the information (e.g., to follow a treasure map to a rich hoard of gold). Can the heroes trust him not to try to get all the wealth for himself?

The classic Galavandrian plot #3: something that Galavandrian's master used to own, and that Galavandrian sold, turns out to be crucial to the PCs. They have to somehow learn from him who he sold it to (and possibly what it is). This works best if for some reason they can't let him know who they are and why they want the information.

(especially his Wand of Healing, which is nearly depleted). He's always on the lookout for new wands he can obtain, or even better ways to "recharge" the ones he has, and a solid lead on either is often enough to overcome his natural "caution" (as he puts it) about dangerous situations like dragons' lairs or the Sunless Realms.

Quote: "With the powers I have at my command, we are assured of success!"

Powers/Tactics: Galavandrian typically deals with crisis and combat situations by coming on strong, hoping to bring events under control with enough force or impressiveness. First he casts his Wizard's Shield to protect himself, then opens up with one of his more powerful offensive wands. He'll stand his ground as long as he's not too badly injured or close to getting Knocked Out, but when things start to look bad he'll try to find a way to escape immediate danger and regroup. If necessary he tries to buy enough time to use his Crimson Ring spell to Teleport away, then keeps Teleporting until he feels completely safe.

Campaign Use: Depending on the nature of your group of PCs, Galavandrian could be an ally, a foil, or a target. If the PCs are weak and need a boost of firepower for an adventure, Galavandrian might be just the help they're looking for... in exchange for a generous share of the loot, of course. In other situations he might be a sort of comic relief, a rival who often comes up against them and at first seems to have the upper hand, but in the end always gets tripped up by a combination of his own flaws and the PCs' virtues and cleverness. If your PCs are powerful enough that they just see him as a source of magical treasure, you can rein the problem in by reducing the Charges on most (or all) of his wands so it turns out he really doesn't have that much firepower for them to steal.

To make Galavandrian a tougher foe, give him some other magical items — a ring or two to protect him or make it easier for him to get out of danger, boots or a cloak that expand his movement capabilities, or the like. To weaken him, reduce his SPD to 3.

Galavandrian isn't likely to Hunt heroes unless hired to, in which case he follows orders. But if he hears that a PC has a particularly interesting or powerful wand, he just might try to obtain it for himself...

Appearance: Galavandrian Twelvefires is 5'7" tall with a slender build and short black hair. He has a rather roguish appearance, one that's accentuated by the simple, sturdy leather clothing he favors — to most eyes he looks more like a thief than the accomplished wizard he is. He wears a broad pouch along his right hip to hold most of his twelve wands.

PULP HERO

MORDECAI BRAND

The Element-Master

Val	Char	Cost	Roll	Notes
10	STR	0	11-	Lift 100 kg; 2d6 [2]
15	DEX	15	12-	OCV: 5/DCV: 5
14	CON	8	12-	
12	BODY	4	11-	
15	INT	5	12-	PER Roll 12-
15	EGO	10	12-	ECV: 5
15	PRE	5	12-	PRE Attack: 3d6
12	COM	1	11-	
5	PD	3		Total: 5 PD (0 rPD)
10	ED	9		Total: 10 ED (2 rED)
4	SPD	15		Phases: 3, 6, 9, 12
5	REC	0		
28	END	0		
24	STUN	0		Total Characteristics Cost: 75

Movement: Running: 6"/12"

Cost	Powers	END
21	<i>Temperature Control:</i> Multipower, 42-point reserve; all Concentration (½ DCV throughout use; -½), No Range (-½)	
2u	1) <i>Make It Hotter:</i> Change Environment 16" radius, +4 Temperature Levels, Reduced Endurance (½ END; +¼); Concentration (½ DCV throughout use; -½), No Range (-½)	1
2u	2) <i>Make It Colder:</i> Change Environment 16" radius, -4 Temperature Levels, Reduced Endurance (½ END; +¼); Concentration (½ DCV throughout use; -½), No Range (-½)	1
25	<i>Object Heating:</i> Multipower, 25-point reserve	
1u	1) <i>Heat Worn/Carried Metal:</i> RKA 1 point, Continuous (+1), Penetrating (+½); Concentration (½ DCV throughout use; -½), Limited Range (8"; -¼), Only Versus Persons Wearing/Carrying Metal (see text; -½)	1
1u	2) <i>Heat Metal Locks:</i> RKA ½d6, Continuous (+1), Penetrating (+½); Concentration (0 DCV throughout use; -1), Extra Time (Full Phase; -½), No Range (-½), Only Versus Metal (-1)	2
1u	3) <i>Heat Flammable Objects:</i> RKA 1 point, Continuous (+1), Penetrating (+½), Reduced Endurance (0 END; +½), Sticky (only affects flammables; +¼), Uncontrolled (power ends when it runs out of fuel or oxygen, or someone extinguishes the flames; +½); Concentration (½ DCV when activating; -¼), Extra Time (Full Phase; -½), Limited Range (8"; -¼)	0
1	<i>Temperature Resistance:</i> Damage Resistance (2 ED)	0
4	<i>Temperature Resistance:</i> Life Support (Safe Environments: Intense Cold; Intense Heat)	0

Perks

- 5 Money: Well-Off

Skills

- 4 +2 OCV with *Object Heating* Multipower
 3 Conversation 12-
 1 AK: The Orient 8-
 2 CK: Hudson City 11-
 2 KS: Hudson City Underworld 11-
 1 Language: Mandarin Chinese (basic conversation; English is Native)
 1 Language: Tibetan (basic conversation)
 1 SS: Archaeology 8-
 1 SS: Chemistry 8-
 1 SS: Physics 8-
 3 Stealth 12-
 3 Streetwise 12-

Total Powers & Skills Cost: 86

Total Cost: 161

75+ Disadvantages

- 20 Hunted: HCPD 8- (Mo Pow, NCI, Capture)
 20 Hunted: Captain Battle and the Science Police 8- (Mo Pow, NCI, Capture)
 15 Psychological Limitation: Arrogant And Vain; Has To Prove Himself To Be The Best (Common, Strong)
 15 Psychological Limitation: Greedy (Common, Strong)
 15 Social Limitation: Public Identity (Frequently, Major)
 1 Experience Points

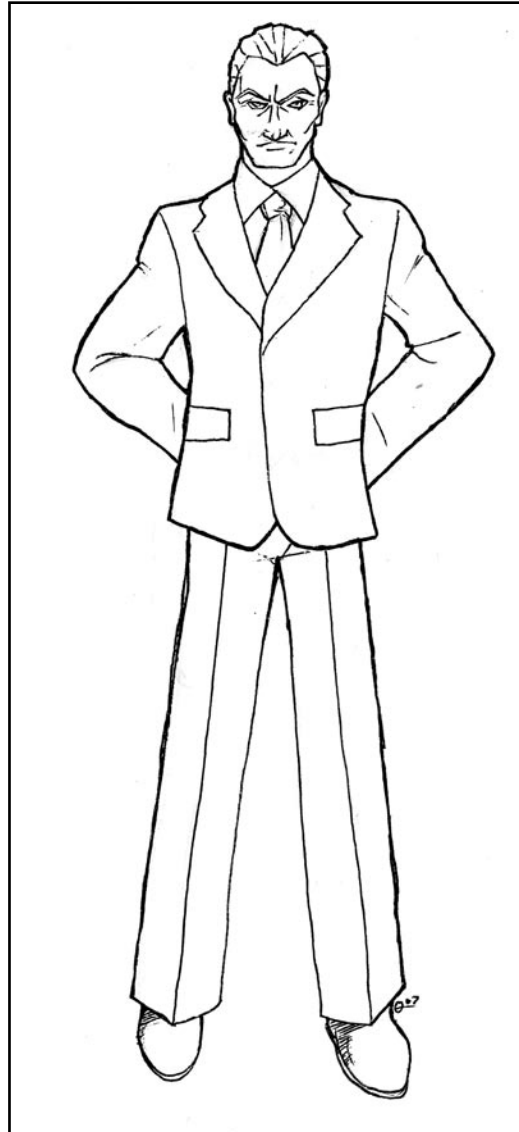
Total Disadvantage Points: 161

Background/History: Mordecai Brand was a young archaeology student whose research convinced him that a long-lost civilization once ruled most of Asia and the Pacific. Scorned by his professors and peers for his “wild-eyed” notions, he went to the Orient to find the proof he needed and make laughing-stocks of them all.

While exploring a remote part of western China, Brand happened upon an old man who'd been trapped by a landslide. Freeing the helpless fellow, Brand took the old man back to his hut and nursed him to health. When the old man had recovered sufficiently, he revealed to Brand that he was a Tibetan mystic, and out of gratitude offered to pass some of his secret wisdom on to the young American.

Intrigued, and thinking this might be a way to further his researches, Brand accepted. At first the mystic only taught him basic Eastern philosophy, but in time revealed to Brand that he possessed certain strange powers that came from intense study. Brand pressed him to reveal more, and eventually the mystic gave in, teaching Brand the secret of controlling temperature with his mind.

Brand practiced diligently with his new-found powers, using them to make his life in the cold Himalayan foothills much more comfortable. But when he asked the mystic to teach him more, the old man refused — he could sense that Brand's plans for mystic wisdom were not benign. Furious, Brand began to force the old



man to teach him more powers... but he forced too hard, and the mystic died.

Abandoning his quest for the long-lost Asian civilization, Brand returned home to Hudson City. Unable to find a teaching position due to his arrogant demeanor and strange theories, he soon ran out of money. Eventually he decided to steal what he needed. His powers made it easy to melt locks on doors and safes, and soon he had plenty of money.

Becoming more and more self-confident, Brand decided to recruit a gang and take over the underworld. He dubbed himself “the Element Master” and put his grand scheme in action. It would have worked.... had Captain Battle and the Science Police not discovered what he was up to and captured him. Revealed to the public as a criminal mastermind, he was put on trial and sentenced to life in prison. But what matters prison to a man who can melt metal with his mind? Eventually the authorities slipped up and left him alone too long, allowing him to make his escape. Now he lurks in the underworld once more, no doubt plotting revenge against Captain Battle and society for not recognizing his genius.

MORDECAI BRAND PLOT SEEDS

Brand decides to steal the museum's Tibetan exhibit and reference materials in the hopes of finding greater mystic powers he can wield. He finds them... but they may be too much for him to control. If the PCs don't stop him, he may end up destroying the city instead of ruling it!

Hoping the two groups of heroes will finish each other off, Brand plants evidence with Captain Battle that the PCs are secretly Nazi spies!

Brand kidnaps a reclusive scientist and forces him to invent a Weird Science device that magnifies his "element control" powers considerably. To defeat him, the PCs have to rescue the scientist; only he has studied Brand and the device closely enough to know their weak points.

Personality/Motivation: Between his intellectual vanity, his confidence in his "awesome powers of elemental control!" (as he calls them), and his generally high-handed attitude, Mordecai Brand is arrogance personified. As he sees it, Captain Battle "only narrowly defeated me through treachery and deceit" — which, even if true, completely ignores the fact that Brand uses treachery and deceit whenever it suits him. He refuses to acknowledge anyone his superior, and in fact is determined to do whatever he must to prove that he is the superior man in any confrontation.

Quote: "Don't be a fool — what hope have the likes of you against the Element Master?"

Powers/Tactics: Tibetan mystic training has given Mordecai Brand a limited ability to alter the local temperature, or the temperature of certain objects, with his mind. At their most basic level his powers allow him to make it up to 80 degrees Fahrenheit hotter or colder over an approximately 100 foot radius area around him. This rarely has any combat effect, though it can be dangerous with long-term exposure. But he's also learned how to focus his powers to heat up metal objects, or cause flammable objects to catch fire. He uses the former ability to injure opponents carrying guns, knives, and other metal objects — the objects become red-hot and keep burning the person holding, carrying, or wearing them. Most heroes quickly drop a heated weapon rather than suffer burns to their hands. (At the GM's option, 2 BODY or more damage to the hands from a red-hot object causes injuries that impose DEX Roll penalties equal to the amount of BODY taken, minus 2; also at the GM's option a character has to make an EGO Roll to hold onto a red-hot metal object.) When he has more time to concentrate, Brand can even make metal hot enough to melt, a power he most often uses on locks and vault doors.

Campaign Use: Mordecai Brand is a "weird" or "occult" crime boss and second-rate master villain suitable for Pulp adventures that take place in the Big City. He's not powerful enough to stand up to the PCs by himself, but with a lot of thugs to support him he can strike some telling blows with his powers.

To make Brand a tougher foe, remove some of the Limitations on his powers to make them more combat-effective, and perhaps give him one or two more. For example, maybe he can instantly create small gouts of flame (RKA 1d6 or Sight Group Flash 6d6, range 2"). To weaken him, reduce his DEX and CON to 13 each.

Brand is a grandiose and grandiloquent Hunter, the type who likes to take his enemies captive, put them in deathtraps, and then deliver a long speech describing the doom that's about to befall them before he pulls the lever.

Appearance: Mordecai Brand usually wears a finely-tailored men's suit and tie to emphasize his personal class and sophistication. He's got a heavy, severe-looking face topped by black hair.

STAR HERO

BOSS SATURN

Val	Char	Cost	Roll	Notes
0	STR	-10	9-	Lift 25 kg; 0d6 [1]
20	DEX	30	13-	OCV: 6/DCV: 6
20	CON	20	13-	
10	BODY	0	11-	
25	INT	20	14-	PER Roll 14-
20	EGO	20	13-	ECV: 7
25	PRE	20	14-	PRE Attack: 5d6
10	COM	0	11-	
6	PD	6		Total: 6 PD (6 rPD)
10	ED	6		Total: 10 ED (10 rED)
4	SPD	10		Phases: 3, 6, 9, 12
10	REC	12		
60	END	10		
30	STUN	10		Total Characteristics Cost: 154

Movement: Running: 0"/0"
Flight: 6"/12"
FTL Travel: 1 LY/year

Cost	Powers	END
60	<i>Az'arc'a Energy Projection:</i> Multipower, 60-point reserve	
4u	1) <i>Standard Blast:</i> Energy Blast 8d6	4
3u	2) <i>Intense Blast:</i> RKA 2d6; Increased Endurance Cost (x2 END; -½)	8
7	<i>Pushed Standard Blast:</i> Energy Blast +4d6 (adds to Standard Blast); Increased Endurance Cost (x3 END; -1), Side Effect (automatically loses 1 BODY per 1d6 used, heals back normally; -1)	6
5	<i>Pushed Intense Blast:</i> RKA +1d6 (adds to Intense Blast); Increased Endurance Cost (x3 END; -1), Side Effect (automatically loses 1 BODY per DC used, heals back normally; -1)	6
15	<i>Az'arc'a Telekinesis:</i> Telekinesis (6 STR), Fine Manipulation; Affects Whole Object (-¼)	2
60	<i>Az'arc'a Energy Absorption:</i> Absorption 6d6 (energy; to BODY, REC, END, or STUN), any one of four Characteristics at a time (+¼), Delayed Return Rate (points fade at the rate of 5 per 20 Minutes; +¾)	0
8	<i>Energy Form:</i> Damage Resistance (6 PD/10 ED)	0
47	<i>Energy Form:</i> Life Support (Total except for Diminished Eating, and including Longevity: Immortality)	0
-12	<i>Energy Form:</i> Running -6" (0" total)	
12	<i>Drifting:</i> Flight 6"	1
10	<i>Az'arc'a Space Travel:</i> FTL Travel (1 LY/year)	0
12	<i>Az'arc'a Perception:</i> HRRP (Radio Group)	0

Perks

5	Criminal Rank: major crimelord in the Del-tanis system
10	Money: Wealthy

Talents

3	Lightning Calculator
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3 Perfect Pitch

Skills

- 3 Bribery 14-
- 1 Bureaucratics 8-
- 3 Computer Programming 14-
- 3 Deduction 14-
- 3 Electronics 14-
- 3 Streetwise 14-
- 3 Scientist
 - 2 1) SS: Astronomy 14-
 - 2 2) SS: Astrophysics 14-
 - 2 3) SS: Electronic Engineering 14-
 - 2 4) SS: Human Psychology 14-
 - 2 5) SS: Mathematics 14-
 - 2 6) SS: Physics 14-
- 3 Scholar
 - 2 1) KS: Deltanis Underworld 14-
 - 2 2) KS: Detective Fiction 14-
 - 1 3) KS: Galactic Underworld 11-
 - 2 4) KS: History Of Human Crime 14-
 - 8 5) KS: All Sorts Of Unusual Stuff He's Learned Over Dozens Of Human Lifetimes 20-

Total Powers & Skills Cost: 301**Total Cost: 455****75+ Disadvantages**

- 10 Physical Limitation: Alien Physiology (has difficulty getting medical attention and the like, see page 64 of *Star Hero*) (Infrequently, Greatly Impairing)
- 15 Hunted: other Deltanis crime bosses 8- (As Pow, NCI, Kill)
- 15 Psychological Limitation: Fascinated By Human Behavior, Particularly Criminal And Romantic/Sexual (Common, Strong)
- 340 Experience Points

Total Disadvantage Points: 455

Background/History: Among the many strange and mysterious species Humanity has encountered, the Az'arc'a certainly rank near the top. Energy beings native to a radiation belt surrounding a gas giant in a system far too close to the Galactic Core to support physical life, they have a psychology that Human scholars have found largely unfathomable. Most seem content to remain by themselves or among their own kind, venturing out among "flesh-beings" (as they call corporeal races) only when necessary and keeping interaction to a bare minimum.

But a few members of the species differ. Some seem intrigued by larger galactic society and eager to mingle with it on some level. Most of these Az'arc'a develop some fascination or obsession with some field of study — Se'cra art, Perseid scientific research, Human architecture, Mon'dabi dance, or any of a trillion other subjects — and pursue it with devotion and zeal. Some Humans like them, or find them intriguing, and others are disturbed by them, but no one who meets one can totally ignore him.

Boss Saturn is one such Az'arc'a. Unfortunately for the inhabitants of the Deltanis system, a loosely-settled system of 14 planets on a second-

ary but important trade route coreward of the Mandaarian Road, Boss Saturn's obsession is with Human behavior... particularly its uglier sides, such as crime. What's worse is that he wasn't content simply to study these phenomena — he decided to get personally involved.

For the past decade, Boss Saturn has been one of the leading figures in the active Deltanis underworld. Living primarily on a secret, specially-constructed zero-g space station located somewhere in Deltanis space and shielded by powerful cloaking technology, he has his "fingers" in many pies... and he seems to enjoy using his energy powers to flash-fry anyone who tries to get a piece.

Personality/Motivation: Uncertain. Trying to figure out exactly what an Az'arc'a is thinking, or why he does what he does, is largely an exercise in futility for Human psychologists. There are times he seems a lot like any other crimelord — greedy, ruthless, macho, powerhungry. But there are other times when he ignores his "job" to spend the day studying the mathematician Fibonacci and running strange Fibonacci sequences, or to order his minion to atomize various Human foods and spritz him with them. Law enforcement treats him like a highly eccentric Human crime boss, and that seems to work.

Boss Saturn's minions have noticed that sometimes his grasp on Humanity's time-frame is tenuous. Occasionally he'll concoct plans that won't come to fruition for several decades, forcing his underlings to remind him that their enemies need to be disposed of *now*, not years from now.

Quote: ("spoken" via special translation devices) "The flesh-being Carboli has tried to double-cross us. Bring him to me and I'll show him what it means to truly get burned."

Powers/Tactics: Boss Saturn is an Az'arc'a, with all the usual energy powers of his species. As an energy being he's largely immune to phenomena that Humans can't tolerate, like extremes of temperature or the vacuum of space. He can project bolts of energy as deadly attacks, absorb the power from lasers and other energy attacks and use it to make himself stronger, fly through the air at the same speed a Human can run, and fly unaided through space at the speed of light.

Boss Saturn can "push" his offensive powers to the extreme, allowing him to do up to 50% more damage than normal, but at a severe price — not only does this tire him out much more quickly, it actually uses up some of his personal "essential energy," in effect injuring him. (In theory he can use his Energy Absorption to "heal" these losses temporarily, and thus possibly attack to the point where he'd otherwise begin to disincorporate. But in practice the boost from his Absorption fades so quickly that this simply means he takes longer to die unless he receives immediate medical attention of a sort rarely available among flesh-being societies.)

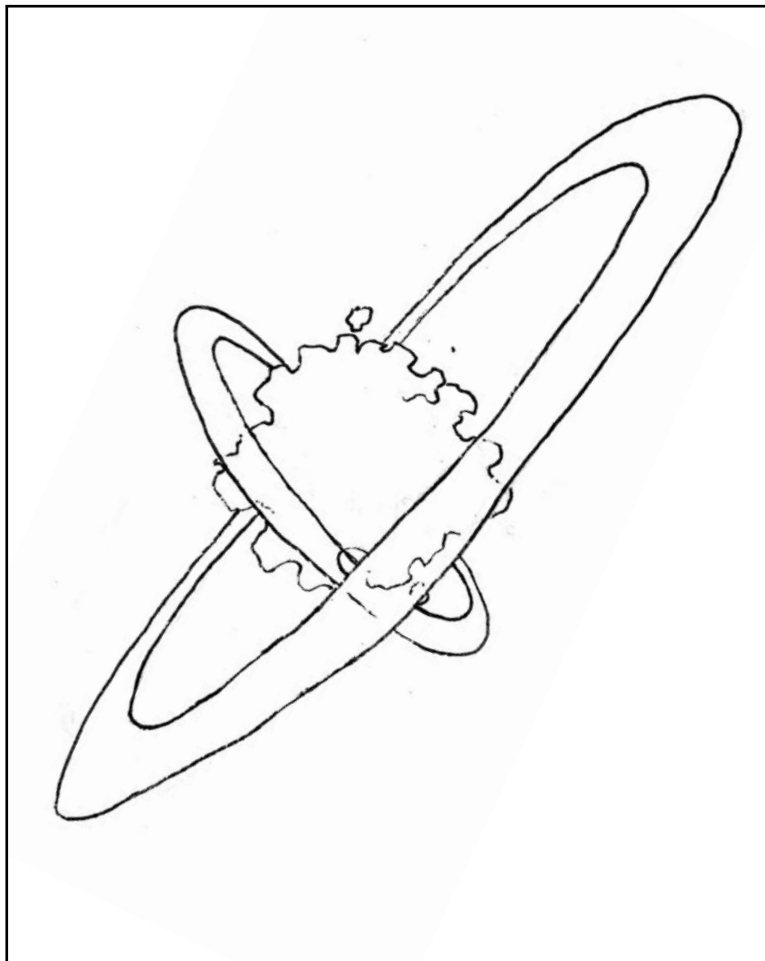
In addition to his personal powers, Boss Saturn can call on a large criminal organization that he painstakingly built over the past four decades. The people serving him — mostly

**BOSS SATURN
PLOT SEEDS**

While passing through the Deltanis system, the PCs are arrested on suspicion of being part of one of Boss Saturn's smuggling rings. The only way to prove their innocence is to bring the Az'arc'a crimelord in themselves!

When Boss Saturn contracts some mysterious Az'arc'a "disease," he hires the PCs to get the cure... which involves infiltrating and robbing a heavily-guarded power plant.

Boss Saturn decides to start collecting microchips. Some device the PCs own has a particularly rare or unusual one, and he simply *must* have it....



Humans, but with a smattering of members of other species — are among the most clever, vicious, and vindictive criminals in Deltanis space (or anywhere else), and Boss Saturn has no qualms about using them.

Campaign Use: Boss Saturn is a twist on the typical “crimelord” villain, since his non-Human nature makes even the most eccentric of criminal masterminds seem normal. When dealing with him the PCs should never be entirely sure what he’s going to do. His vast intelligence, simultaneously linear and non-linear way of thinking, and lifetimes of experi-

ence and knowledge should make him a difficult foe for even the most powerful group of PCs to grapple with.

To make Boss Saturn a tougher foe, expand his energy powers. The ones on his character sheet are typical for an Az’arc’a — but perhaps Boss Saturn is atypical in more ways than one. A wider variety of energy beams, including some STUN-only ones, would make him an even tougher opponent, and to face some groups he might need to have a Force Field for additional defense. To weaken him, decrease his END and increase the END cost of his energy powers.

As a Hunter, Boss Saturn is both tenacious and unpredictable. He may start with the direct approach of sending some of his goons after the PCs... but if that doesn’t work he’ll escalate things until he’s trying stratagems that seem totally bizarre to the PCs but seem perfectly plausible to him.

Appearance: For the most part Boss Saturn looks like a typical Az’arc’a: he’s a nearly spherical mass of pulsing rings and/or loops of plasma occupying a volume of up to 10 meters across. But since (like other Az’arc’a) he has a small degree of control over his form, he’s chosen to give himself a slightly more coherent central form surrounded by a light “ring” of energy, leading to his underworld nickname. Whether he did this with the intention of earning such a sobriquet is unknown.

chapter four



ADVENTURING WITH ENERGY PROJECTORS

ENERGY PROJECTORS IN COMBAT



Like other archetypes, energy projectors raise a few issues when it comes to combat (and similar crisis situations).

PERCEIVING ENERGY PROJECTORS

Of all the different character archetypes, energy projectors tend to be the “flashiest” — their powers are brighter, more noticeable, more visually striking than those of other character types. Even when they’re at rest they often glow, have colored energy leaking from their eyes, or otherwise provide visual evidence of what types of powers they have and how powerful they are. This can have several implications in *HERO System* terms.

PERCEIVING AN ENERGY POWER

First, consider your character’s perceivability in light of the rules for perceivable special effects and the *Invisible Power Effects* Advantage. Even if an energy projector has energy powers that are Persistent or bought to be Invisible to ordinary eyesight, “realistically” one can only do so much to hide the sort of energy output most energy projectors have. Virtually all types of energy should be perceivable by Infrared Perception either as giving off heat or, in the case of types like Ice/Cold, as an absence of heat. Similarly, most energies are perceivable by Ultraviolet Perception. In some cases this may entitle a character to a slight reduction in the value of Invisible Power Effects.

Radio Interference

And even if an onlooker has none of these senses, energy powers may cause interference with that radio he’s carrying — static and the like. Any energy type from the electromagnetic spectrum is particularly likely to interfere with telecommunications signals. As a general rule, assume that any source that can broadcast or receive communications that’s within (Active Points in energy power/10) hexes from a character using that power suffers interference. If the source is within one-quarter of that radius the interference is intense; at best someone receiving a transmission made from or to that area suffers a -6 PER Roll penalty. If the source is within half that radius, at best someone receiving a transmission made from or to that area suffers a -3 PER Roll penalty. Beyond that the PER Roll penalty is no more than -2 (at most), and may even be as low as -0.

Example: *Thunderbolt controls the awesome power of electricity. He’s using his Lightning Blast (Energy Blast 15d6), which has 75 Active Points. Therefore any communications source within (75/10 =) 7” suffers interference from his power. Within 2” of him, sources suffer a -6 PER Roll penalty. Within 2-3” of him, sources suffer a -3 PER Roll penalty. Beyond 3” from him, sources suffer at most a -2 PER Roll penalty, and possibly less.*

DISTINCTIVE FEATURES

Second, in some cases an energy projector’s “visibility” may rise to the level of a Distinctive Feature. This is most appropriate when (a) the visual effect of the power can’t be turned off (for example, the character always glows, even when not actively using his powers), and (b) that causes significant drawbacks for the character. In many settings just looking “unusual” isn’t enough; there has to be some other problem connected with being distinctive that isn’t covered by other Disadvantages (like Physical Limitation and Social Limitation). For example, maybe the character’s appearance reveals what type of energy he uses, and it’s a type that inspires a Major or Extreme Reaction. For example, how many people are likely to want to spend time around someone they think is highly radioactive?

COMBAT MODIFIERS

Here are a few additional rules about various Combat Modifiers and how they specially apply to energy projectors.

BOUNCING AN ATTACK

As stated in the rules, typically a character uses 1 Combat Skill Level with an attack for each Bounce he performs. However, some characters may want to be skilled with Bouncing An Attack in general, regardless of the type of attack used. At the GM’s option, characters can buy 3-point Combat Skill Levels with Bouncing An Attack. These CSLs don’t increase a character’s OCV at all; they simply allow him to Bounce his Ranged attacks.

COORDINATED ATTACKS: ENHANCEMENT

At the GM’s option, energy projectors can use an expanded form of Coordinated Attacks known as *Enhancement*. This Combat Modifier takes advantage of the fact that certain energy types com-



plement, or enhance, one another in ways energy projectors can exploit.

To use Enhancement, two (or more) energy projectors must each be using a type of energy that is somehow related to or complementary with the type the other uses. It's up to the GM to decide which types of energy are "related to" other types; here are a few examples of types that are usually considered "related":

- Any type of energy relates to itself
- Electricity, Electromagnetic Energy, Light, Magnetism, Gravity, and Radiation all relate to each other
- Sonic and Vibration
- Magnetism relates to Ice/Cold, but not vice-versa (Ice/Cold can be used to Enhance Magnetism, but Magnetism cannot Enhance Ice/Cold) (the same may apply to Electricity and Ice/Cold)
- Depending on the nature of the GM's setting, other "related" energy types may be obvious. For example, in a Fantasy setting where Shadow and Ice magic are considered "evil," Darkness, Ice/Cold, and Unholy may all be related to one another. On the other hand, some types of energy are "opposites" and never relate to one another, like Fire/Heat and Ice/Cold, Fire/Heat and Water, and Darkness and Light.

If the GM determines that the two energy types are sufficiently "related," the two characters can try to gain an Enhancement bonus. Enhancement works just like an ordinary Coordinated attack — the characters involved have to act on the same DEX in the same Phase, must succeed with

Teamwork Skill rolls, and so forth. If all that applies (if they successfully Coordinate, in other words), then each of them must make an appropriate *Power* Skill roll. If both rolls succeed, they have successfully made an Enhanced attack. What occurs here is that the two energy types work together constructively, sort of like two ocean waves traveling in the same direction coming together to form one larger wave.

An Enhanced attack multiplies the damage caused by the larger of the two powers (the one with the most Active Points or most dice, whichever the characters involved prefer) by 50% — for example, it makes an 8d6 attack do 12d6 damage. (This effect is instead of, not in addition to, Coordinated Attack bonuses; characters using Enhancement do not also get a Coordinated attack as well.) The smaller attack does not damage the target at all; its power went into Enhancing the larger attack. The attack has the same energy type/special effect as the larger attack.

Characters can only use Enhancement with the same sorts of attacks they can Coordinate with — attacks that do STUN damage. The GM may, at his discretion, allow Enhancement of other types of effects (for example, using a Sonic attack to enhance a Vibration-based Drain DEX defined as inducing vertigo), but if so he may wish to reduce the bonus provided by Enhancement or impose penalties on the rolls involved to represent the difficulty of the task.

Enhancement can only be used with Autofire attacks if *all* attacks involved are Autofire attacks (though they don't have to have or use the same number of "shots"). The characters only have to make one *Teamwork* roll to "Coordinate," but

they have to make a separate *Power Skill* roll for *each* shot used; if either of them miss on any shot, they cannot try to Enhance any later shots in that sequence (though they could try to Enhance their attacks again in a later Phase). The damage bonus applies to each shot successfully Enhanced.

Enhancement only works with Area Of Effect/Explosion attacks if *all* attacks involved have either of these Advantages, *and* all cover areas at least as large as the area covered by the “larger” power (the one that gets Enhanced). The Enhancement bonus only applies to the area covered by the larger power, and the smaller power used to Enhance it does not cause any damage beyond its boundaries if the smaller power covers a larger area.

Coordinating Autofire Attacks

If two characters with Autofire attacks make their Teamwork rolls to coordinate their attacks, the two first hits add together and are applied to defenses as usual for Coordination, the two second hits add together and are applied to defenses as usual for Coordination, and so on until one person's number of hits runs out and the other's are applied by themselves (if that happens at all).

SPREADING AN ATTACK

A character can only Spread a multiple-Power attack if he can Spread all the powers used in the attack. He must Spread both of them equally, and though the Spreading reduces both powers' DCs, he only gets one OCV bonus. For example, if a character has an Energy Blast and an RKA, he can reduce both by 3 DCs to obtain +3 OCV with them in a multiple-Power attack (he only gets +3, not +6).

Characters may not Spread non-damaging or non-harmful “attacks” or Powers, such as Aid.

Specific Powers

The rules on page 380 of *The HERO System 5th Edition, Revised* rulebook explain how to Spread most attacks. Here are the rules for some unusual attacks.

Adjustment Powers: Since Drain costs 10 points per die, use the “10-point” column on the Damage Class Table to determine how a Drain loses “Damage Classes” when Spread. For a Transfer, use the “Killing” column; for a Suppress, use the “Normal” column.

Entangle: When Spread, an Entangle loses 1 BODY and 1 DEF per +1 OCV or +1 hex filled. If the GM is willing to accept a little complication, the character can subtract 1 BODY or 1 DEF, alternating, from the Entangle for each +1 OCV or +1 hex.

Flash: When Spread, a Flash loses 1d6 of effect for every +1 OCV or +1 hex filled.

Transform: On the Damage Class Table, use the “Killing” column for Major Transforms, the “10-point” column for Minor Transforms, and the “Normal” column for Cosmetic Transforms, to determine how a Transform loses “Damage Classes” when Spread.

COMBAT MANEUVERS

Here are two new Optional Combat Maneuvers intended primarily for energy projectors.

INTERFERENCE

Interference is a new Optional Combat Maneuver that the GM can allow in the campaign. It's primarily intended for energy projectors, but the GM can allow other characters to use it as well in appropriate circumstances. It's based on the fact that certain energy types can “counteract” each other in ways energy projectors can exploit. What occurs here is that the two energy types interact negatively, work together constructively, sort of like two ocean waves crashing together and destroying or weakening one another.

To use Interference, a character must have two things:

1. An Action available. Typically this means he's Held his Action in anticipation of using Interference, but at the GM's option a character can Abort to Interfere. (The GM can even allow a character to Abort to Interfere with an attack directed at someone other than himself, if that seems appropriate and properly heroic.)
2. A Ranged attack power that (a) is a non-Mental Power that directly causes damage, such as Energy Blast, RKA, Drain, or Telekinesis, and (b) is of a type of energy that's related to the attack the character wants to interfere with. “Related” in this situation means that the two powers have the same energy type (*i.e.*, both are Sonic attacks, both are Fire/Heat attacks) or are conceptually opposed to or opposites of each other (*e.g.*, Fire/Heat and Ice/Cold, Darkness and Light, Fire/Heat and Water). At the GM's option, characters can use Interference with powers that are not so closely “related”; use the definition provided under *Coordinated Attack: Enhancement*, above, as a guideline. The GM has the final say about whether one attack can be used to Interfere with another.

To use Interference, a character must make an Attack Roll that pits his OCV against the OCV of the character using the power he wants to Interfere with (similar to Block). The character suffers a -2 OCV penalty and -2 DCV penalty for using the Maneuver. If the roll succeeds, the character's power has Interfered with the other power — their “harmonics” or “frequencies” or “wavelengths” interact in ways that diminish the other power, or their opposed forces simply cancel each other out. The character using the other power subtracts the Active Points of the Interfering power from the Active Points of his power. If the result is 0 or less, his attack is totally Interfered with and does no damage; if the result is higher than 0, he can still try to hit his intended target, but his attack only has Active Points equal to the result. (The GM may rule that there's a certain minimum of effect, such as 1d6, regardless of the results of Interference.)

An attack used to Interfere does *not* have to be based on the same power (*i.e.*, a character can counter an Energy Blast with an RKA or Telekine-

sis, he doesn't have to use another Energy Blast). However, the GM may impose penalties on the Attack Roll if he feels the powers are significantly different (such as an RKA trying to interfere with an NND or Drain STUN).

It's not necessary for two powers to have the same Advantages for them to Interfere with one another. An ordinary, un-Advantaged, attack can Interfere with one that is an Area Of Effect, Auto-fire, NND, No Range Modifier, or what have you. However, the GM may impose penalties on the Attack Roll if he feels the Advantages on either power make it significantly different from the other.

SUSTAINED ATTACK

This new Optional Combat Maneuver allows a character (typically an energy projector) to temporarily convert an Instant attack (such as an ordinary Energy Blast, RKA, or Drain) into a Constant attack. The attack only does 75% of its standard damage (calculated as 75% of the Active Points in the power), but it costs its full END cost every Phase that it's used. (If the power uses Charges, it uses its ordinary number of Charges every Phase it's in use.) Unless the GM rules otherwise, characters cannot Push a power while it's used to perform a Sustained Attack.

A Sustained Attack imposes a -2 OCV penalty and -2 DCV penalty. The OCV penalty only applies when he makes the Attack Roll; the -2 DCV penalty remains in effect as long as he maintains the Sustained Attack.

Using Sustained Attack requires a Full Phase Action each Phase that it's maintained. Since that means the character cannot move, if his target moves beyond the Range of his power or breaks Line Of Sight by moving behind cover or the like, the Sustained Attack immediately stops.

A character has to declare that he's performing a Sustained Attack before he ever uses the attack. He can't make an ordinary, Instant, attack in one Phase and then declare in his next Phase that he wants to "convert" it into a Sustained Attack.

Example: *Helios has an Energy Blast 12d6 that he wants to use as a Sustained Attack. As a Sustained Attack it does only Energy Blast 9d6 damage (based on 45 Active Points, 75% of the 60 Active Points in the power). However, it still costs him 6 END per Phase to use. He suffers a -2 OCV penalty on his Attack Roll, and he's at -2 DCV as long as he keeps making the Sustained Attack. He has to spend a Full Phase making the attack, and a Full Phase every Phase thereafter to maintain it.*

OTHER COMBAT EFFECTS

Here are a few additional rules regarding energy projectors in combat.

BREAKING THINGS

For simplicity's sake, the *HERO System* rules give objects, Vehicles, and Bases a DEF that's the same for all attacks. For GMs desiring greater "realism," this may not be the best approach; after all, not all objects are equally impervious to sledgehammers and to fire! If you prefer to differentiate objects' defenses a little, convert DEF to Physical Defense and Energy Defense. For objects that buy their DEF (like Vehicles and Bases), PD and ED each cost 3 Character Points for every 2 points of defense, and the defense is automatically Resistant. For objects that derive their defenses (such as Foci and everyday items), assume they have the same PD and ED as their current DEF under the rules, unless the GM changes that.

CONTESTS OF POWER

A Contest Of Power can occur whenever two characters attack each other with some form of Ranged attack they can maintain over time (*i.e.*, attacks with Charges or physical weapons may not work). A Contest Of Power can only occur in a one-on-one duel, or at an appropriately dramatic moment; it's too complex and time-consuming for regular combat use.

Use the following steps to determine the outcome of a Contest Of Power:

1. One character ("the Attacker") launches a Ranged attack at another ("the Defender"). This attack can be an Energy Blast, a Ranged Killing Attack, or even such powers as Ego Attack or Telekinesis. The GM determines what Ranged attacks can be used, if necessary; typically they're attacks that directly cause damage in some way.
2. The Defender, who *must* have an Action available, decides if he wants to counter the attack with one of his own. The Defender can Abort to a Contest of Power only if he has a Phase in this Segment but his DEX has not yet occurred in the initiative order. The Defender cannot use any power with a longer *Extra Time* Limitation than the one the Attacker uses.
3. Unless the GM rules otherwise, a Defender can only counter an incoming attack if his attack has a related special effect. "Related" means the two attacks have *either* similar energy types/special effects (such as Fire/Heat and Light, Magic and nearly anything, or Magnetism and Electricity) *or* opposing energy types/special effects (a Light-based attack versus a Darkness-based one, or Fire/Heat versus Ice/Cold or Water). The attacks used do *not* have to be based on the same power (*i.e.*, a character can counter an Energy Blast with an RKA or Telekinesis, he doesn't have to use another Energy Blast). However, it usually isn't possible for a character to counter an Ego Attack without having mental powers of his own. The special effects of an attack should determine if and how it can be contested.

CONTEST OF POWER EXAMPLES

Blastron the Battler (DEX 26, SPD 6) is fighting his adversary Chiller (DEX 26, SPD 5). Chiller unleashes an Energy Blast 12d6 based on Ice/Cold energy. Blastron, not to be outdone, responds with an Energy Blast 14d6 based on Fire/Heat. Both succeed with Attack Rolls. The Contest Of Power has begun!

Since the two warriors are standing 10" apart, the impact point is 5" away from either character. At this point both characters roll their dice. Chiller rolls only 10 BODY, while Blastron rolls 15 BODY. Blastron wins, and the impact point moves 5" towards Chiller, hitting him.

Now, assume both Blastron and Chiller had 12d6 EBs instead. Starting on Phase 12, Chiller rolls 12 BODY, while Blastron rolls 14. The impact point moves 2" towards Chiller. On Segment 2, Blastron's Phase, the impact point moves 1" closer to Chiller, while on Chiller's Phase in Segment 3, it moves 1" towards Blastron. On Blastron's Phase in Segment 4, it moves 1" back towards Chiller, while on Chiller's Phase 5 it moves 1" back towards Blastron. Finally, on Blastron's Phase in Segment 6, it moves 1" towards Chiller, and on Segment 8 Chiller and Blastron roll again, since they both have a Phase. Blastron rolls 12 BODY, while Chiller gets only 9 BODY. The impact point moves 3" towards Chiller, and on Blastron's Segment 10 his blast hits him, at which point he decides he'd rather not be in any more examples.

In some cases the GM may decide that it's cinematic and fun to let two characters engage in a Contest Of Power even if they don't meet the above qualifications. In that case any two powers suffice, regardless of their special effects.

4. Once both characters have declared their attacks, they make their Attack Rolls (including all modifiers for Combat Skill Levels, Spreading, and the like). The Attacker has to roll to hit the Defender's DCV, while the Defender has to roll to hit the Attacker's current OCV. If they both miss, there are no further effects. If one hits and the other misses, determine damage as normal. If both hit, the Contest of Power has begun. Since they both performed an attack this Phase, neither character may take further actions.

5. Once the Contest begins the point of impact for the two attacks is midway between the two participants (*i.e.*, if two characters 18" apart enter into a Contest Of Power, the starting point for the contest is 9" from each character). Alternately, the GM can place the point of impact closer to the character who made his Attack Roll by the least; subtract how much he made his roll by from how much the other character made his roll by, and move the impact point 1" per point closer to the "lesser" character. (But even using this method, typically the impact point moves no more than halfway the distance to the character who made his roll by the least, regardless of the numbers.)

Characters involved in a Contest Of Power are at ½ DCV due to strain and concentration and cannot move, even if the Contest Of Power takes more than one Phase. If a third character attacks one (or both) of the participants in a Contest Of Power, he may disrupt the Contest. If he does damage to a participant, but does not Stun him, Knock him Out, or do Knockback to him, the Contest continues as normal. If he Stuns him or Knocks him Out, the other participant's attack in the Contest automatically succeeds and hits the Stunned/Knocked Out character. (It does not Coordinate with or otherwise add to the attack that disrupted the Contest.) If he does Knockback to a participant, the Contest ends without either character damaging his opponent.

If a character moves through the beams of energy or other effects of the Contest Of Power, he takes damage from both effects and the Contest ends.

6. To determine the outcome of a Contest Of Power, each character rolls his dice of damage and counts the BODY in the usual manner for the type of attack used. The character with the higher BODY wins this Phase. The winner subtracts the loser's BODY total from his own, and then moves the point of impact that many inches toward the loser's hex. (Alternately, the GM can have the characters use Knockback done instead of BODY rolled.) The GM can restrict the number of inches the impact point can move in a given Phase if he sees fit; this can draw out the Contest and make it a bit more tense in some situations. Various Advantages and Limitations can affect this die roll; see below.

6a. Effect of Advantages:

Advantages not listed have no special application in a Contest Of Power.

Area Of Effect, Explosion: An Area Of Effect or Explosion attack cannot be opposed in a Contest Of Power, unless the opposing attack also has either the *Area Of Effect* or *Explosion* Advantage. If a character uses an Area Of Effect/Explosion attack to contest a normal attack, determine the results normally, but add +1 BODY for every 1" of Radius/Cone/Line.

Autofire: An Autofire attack adds +1 BODY to the Contest result for every shot that hits.

Continuous: See Step 8 below.

Double Knockback: Double Knockback increases the number of DCs in an attack (and thus the number of dice rolled for damage) by 75% for purposes of a Contest Of Power.

Indirect: Generally, attacks with this Advantage cannot be opposed, or be used to oppose, in Contests Of Power, but the GM may allow it if the special effects and the situation are appropriate.

6b. Effect of Limitations:

Limitations not listed have no special application in a Contest Of Power.

Beam, No Knockback: Characters cannot use attacks with these Limitations in a Contest Of Power. If used, they automatically fail.

Reduced By Range: An attack with this Limitation subtracts damage dice based on the distance between the character and the point of impact before rolling for the result of a Contest Of Power.

7. If the point of impact moves into a character's hex, his attack is overwhelmed. His opponent's attack automatically hits him, with damage determined normally. If the impact point remains somewhere between the two characters, they are in a stalemate and the Contest continues on the next Phase.

If at any point the BODY total for one blast is twice or more that of the other, the attack with the higher BODY total instantly overwhelms the other and goes on to hit its intended target automatically.

8. If the initial Contest Of Power ends in a stalemate, then the Contest continues. Characters roll on any Segment in which they both have an Action Phase, at the DEX of the character who moves first in that Segment (including Lightning Reflexes). If only one character has a Phase during a Segment, he automatically moves the Contest point 1" towards his opponent without rolling. An attack with the *Continuous* Advantage moves the Contest point 1" towards an opponent every Segment the opponent does not have a Phase (this 1" is not cumulative with the 1" obtained in Phases only the character has.)

Characters must spend END to keep the Contest Of Power going, but each of them spends this END only on his *opponent's* Phases. Character can Push their attacks if they wish, and can spend STUN as END if needed. A character can end a

Contest Of Power voluntarily at anytime, either by accepting the attack or by executing a Dive For Cover on his Phase.

NOVA BLASTS

A “nova blast” is an especially powerful version of an energy blaster’s primary attack — an all-out effort that maximizes his power and destructiveness, but often at the expense of using up his power, tiring him out, weakening him, or even causing him bodily harm.

In *HERO System* terms, you can represent this sort of ability in several ways. The simplest is to use the Combat Maneuver *Haymaker*. However, this may not be suitable for all nova blasts — it only adds +4 DCs, and it imposes some significant restrictions on what the character can do.

To get around those restrictions, energy projectors can build the sort of ability they want and then buy it with Character Points. Typically they’re bought either as extra dice for a favored attack with Limitations like *Concentration*, *Extra Time*, *Increased Endurance Cost*, and/or *Side Effects*, or as an Aid. Some work in conjunction with *Haymaker*; others are independent. Here are several examples using Energy Blast:

Nova Blast I: Energy Blast +4d6 (20 Active Points); Only When Using *Haymaker* (-1). Total cost: 10 points.

Nova Blast II: Energy Blast +4d6 (20 Active Points); Increased Endurance Cost (x5 END; -2), Only When Using *Haymaker* (-1). Total cost: 5 points.

Nova Blast III: Energy Blast +10d6 (50 Active Points); Extra Time (Full Phase; -½), Increased Endurance Cost (x5 END; -2). Total cost: 14 points.

Nova Blast IV: Energy Blast +8d6 (40 Active Points); Extra Time (Full Phase; -½), Side Effect (Drain STUN 4d6, always occurs; -1). Total cost: 16 points.

Nova Blast V: Energy Blast +20d6 (100 Active Points); Extra Time (Full Phase; -½), Increased Endurance Cost (x3 END; -1), Side Effect (Drain STUN 5d6, always occurs; -1). Total cost: 29 points.

Nova Blasts: Aid Energy Blast 10d6, any one Energy Blast power at a time (+¼), Trigger (when character wants to create a nova blast, activating Trigger takes no time; +1) (225 Active Points); Costs Endurance (-½), Extra Time (Extra Phase; -¾), Increased Endurance Cost (x2 END; -½), Side Effect (Drain STUN 5d6, always occurs; -½), Cannot Be Used More Than Once Per Minute (-¼). Total cost: 64 points.

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