ASCENDANT

THE SUPERPOWERED ROLE-PLAYING GAME
OF INFINITE POSSIBILITIES

Alexander Macris

ASCENDANT

Ascendant is the superpowered role-playing game of infinite possibilities. In this 496-page standalone rulebook, you get:

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PRICE: $60.00
SKU: ASC1
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ASCENDANT™

CREDITS

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Mongolian Barbarian
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Ryan Kent
ManateeMan
Benton 'Lord Gadigan' Wilson
John J. Schneider
Dino Minutolo
TheRpgAcademy

Leavenworth Bombing: 412 Killed, 704 Injured

By Jonathan Burns and Alexander Martin

Dec 22, 2012, 8:04 p.m. ET

FT LEAVENWORTH — Authorities have confirmed that 412 people were killed and 704 others injured after a bomb exploded in the Munson Army Health Center at Ft. Leavenworth, Kansas, on Monday afternoon. The majority of the victims were patients and health care providers.

Brigadier General Gary D. Hawkins, head of the Army's Combined Arms Center on post, told reporters that the suspected bomber is in custody. "The perpetrator is a veteran of combat in Iraq who had mental health issues and was being treated at the base hospital," Hawkins said. "At this time there is no indication that the incident is related to organized terrorism." A full investigation is ongoing.

Often called "the intellectual center of the Army," Ft. Leavenworth is home to key training institutes such as the Combined Arms Center, the Foreign Military Studies Office, and the TRADOC Analysis Center, as well as the nation's only maximum-security military correctional facility, the United States Disciplinary Barracks.

Video appears to show army hospital hit by missile

JARED Gillespie
News reporter @JGillespie1

Tuesday 9 January 2013 02:19, UK
Why you can trust SPI News >

A chilling new video uploaded to Wiki Leaks appears to show a U.S. Hellfire missile hitting Munson Army Health Center, in Ft. Leavenworth, Kansas. The timestamp on the video indicates the strike took place at 4:14 EST on 21 December, 2012, raising questions of whether and how it is related to the bombing that caused over 1,100 casualties at Munson last month.

The video appears to have been shot on a mobile phone and has not been verified as authentic by U.S. authorities. Army representatives were quick to reject any suggestion that the video was authentic, decrying "conspiracy theorists" and comparing them to the 9/11 "truther" movement.

The AGM-114 Hellfire is an air-to-surface missile often used for precision drone strikes against targets in the War on Terror. It can be fired from the Predator drone, Apache helicopter, and several other air, sea, and ground platforms. It strikes at a speed of 1000mph and delivers 10 kg of high explosive.

s/LeavenworthIncident • Posted by woundedwarrior00 12 hours ago

What really happened at leavenworth

I was an MP at munson army health center when it happened. There was never any bomb, it was a missile fired by a chopper.

TRADOCs future soldier program was running drug trials on prisoners from the nearby us disciplinary barracks. USDB is filled with bad hombres with nothing to lose. If you volunteered, you got your sentence commuted... I was there to keep an eye on prisoners when they came in for the shots.

Prisoner that day was an SF vet with two tours, he had snapped and shot up a village back in Iraq and was looking at life in prison. Id have volunteered too if I were him. Well he gets the shot that day and he goes crazy. Its like he wasn't even human anymore. He starts ripping people apart with his bare hands. Nothing could stop him, bullets doing fuck all, he starts knocking down walls like they were curtains, that's when they drop the Hellfire

I dont expect you to believe what Im saying but this is a pic of my new legs courtesy of the VA hospital. I was one of the people who got ripped apart.

173 Comments   Share   Save   Hide   Report   92% Upvoted

LEAVENWORTH NEWS

MP Sergeant, injured in December bombing, found dead in home

By Shepherd Sherman
Posted Feb 9, 2013 at 12:01 PM

A disabled U.S. Army sergeant found dead in an apparent suicide was suffering from depression and post-traumatic stress disorder, a source close to him said.

Staff Sergeant Jose Ramirez, a former military police officer for 15th Military Police Brigade, was found hanged in his apartment in Leavenworth Friday night by Major Russell Kingsley, who had been treating Ramirez for mental illness.

According to Kingsley, he had visited Ramirez's residence out of concern because Ramirez had skipped his appointment that morning. "Ramirez developed severe PTSD following the loss of his legs in the December bombing. His death today should be counted as part of the toll of that terrible tragedy."

News Archive

Alleged robber slain in attempted mugging of blind, deaf woman
83   Los Angeles Courier | 2.7.2014

Prosecutors have declined to press charges against Helen Song, 17, a student at the California School for the Blind, in the death of Robert Washington, 31. Mr. Washington was on parole after being sentenced for armed robbery in 2012.

Korean prodigy becomes youngest MIT PhD in history
300+   The Wall Street Post | 5.11.2014

13-year old prodigy Sung Jun-Han, known online as "12Sigma," already has built an impressive resume, having become a Chess grandmaster at a record-breaking age 11 in 2012, and the youngest-ever winner of the Starcraft 2 World Championship in 2013. Now he's added another laurel, becoming the youngest person to ever earn a PhD from the Massachusetts Institute of Technology. Dr. Sung, who is reported to have an IQ of 255, is considering job offers from Samsung, Huawei, and Google.

Cops say missing deaf, blind "Helen Killer" "can't have gotten far"
300+   The Cloud | 6.16.2014

Police are investigating the mysterious disappearance of Helen Song, a 17-year old student at the California School for the Blind who can neither see, hear, nor speak. No evidence of foul play has surfaced, and authorities seem confident that the special-needs student will be found quickly. "She can't have gotten far," quipped police sergeant James Mackenzie. Ms. Song was in the news last February for accidentally killing a man attempting to rob her, an incident that led internet trolls to popularize the "Helen Killer" meme.

News Archive

Nebraska "Superhero" Lifts Car off 6-Year Old
72   Omaha World Herald | 3.26.2015

A Nebraska mother is praising local firefighter Bill Goddard as a "superhero" after he lifted a Chrysler sedan off her 6-year old daughter. Goddard, a resident of Freedom, Nebraska, was walking home from his son's baseball game when he witnessed a driver backing his car out of a driveaway and over the child. "There was no time to think. I just ran over there as fast as I could, grabbed the rear end of the car, and lifted up the backend to get it off the girl," he explained.

Physiologist Dr. Brian Edwards, a fitness research at the University of Omaha, cautioned against attempting to replicate Goddard's feat. "Hysterical strength can be temporarily possible due to a combination of adrenaline production and enhanced muscle recruitment," he said. "But it can often result in severe injury." So unless you want to risk broken bones or torn ligaments, don't try to lift up your neighbor's SUV. "Humans just aren't made to be superheroes," he added.

Manatee Saves Florida Man Caught in Crab Trap
300+   ROX 13 Tampa Bay | 8.10.2015

A manatee saved a drowning Florida man after he got tangled in the rope of a crab trap in Safe Harbor. Christopher Sheba had accidentally walked off the pier while playing Pokémon Go. "I was thrashing around with the rope wrapped around my neck this manatee surfaced and somehow nudged the rope off me," Sheba told ROX 13. "I swear it smiled at me as it swam away."

The Florida manatee is classified as threatened under the Endangered Species Act, and the Florida Fish and Wildlife Commission asks that people report any manatee found in distress.

Sung Jun-Han is Officially the World's Smartest Man
300+   CLOUD News | 9.16.2015

The Mega Society confirmed today that Korean polymath Dr. Sung Jun-Han is the world's most intelligent person. Known as "12Sigma" to his legion of online fans, Dr. Sung received a perfect score on the Langdon Adult Intelligence Test. His actual IQ is unverified but might be "over 400," according to "awe-struck" psychometricians.

Project Ascension Files

Today, August 8, 2020, WikiFree publishes a searchable archive of 2,150 unique verified files and emails associated with the classified DARP program Project Ascension.

PSYCHOENERGETIC PHENOMENON – PROJECT ASCENSION
PREPARED BY
DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
ENHANCED HUMAN PERFORMANCE INVESTIGATION GROUP

SUBJECT: PROGRESS UPDATE 1-15-2016
TO: RECEIPIENTS OF DST-1810S-202-78

A. Following the Leavenworth Incident, TRADOC's Future Soldier Program (FUSOP) was cancelled. DARPA commissioned a renewed Enhanced Human Performance Investigation as Project Ascension under ▮▮▮▮▮▮▮▮ to provide research and development in the area of psychoenergetics as a means to enhance human performance. This document provides a progress update for work performed by Project Ascension during Fiscal Year 2015. The aim of the ongoing program is to study the Leavenworth Incident and related occurrences to develop technology that can reliably replicate and repeat psychoenergetic phenomenon in order to ▮▮▮▮▮▮▮▮

B. Psychoenergetic phenomena are defined here as direct interactions between human consciousness and the environment, which, although the mechanism is unexplained, can be observed and recorded. These human capabilities fall into two main categories: (1) the acquisition of information by mental means alone, and (2) the ability to influence, by mental means and/or inexplicable physical means, physical or biological systems.

[SANITIZED // RDP96]

C. Some experiments utilizing ▮▮▮▮▮▮▮▮ have been conducted which indicate unknown physio-psychic processes can interact with quantum-level physical mechanisms (psychokinesis). Such mental processes can be applied towards ▮▮▮▮▮▮▮▮

D. It is possible some type of quantum-level interaction occurs at the subneural level in human brains. Such a process could impact, or be made to impact, on a "target" individual in the form or subconscious suggestions or with "mental imagery" that confuses rational thinking. ▮▮▮▮▮▮▮▮

E. Temporary and permanent physiological changes have been observed to occur following psychoenergetic activation, most notably in Patient 1 ("Manticore"). The means by which these changes occur has not been ascertained.

F. Development of modified or new models of physical reality, perhaps based on Heim Theory4 or the Von Neumann-Stapp Interpretation of Quantum Physics5 will be necessary to properly ground psychoenergetic phenomena before technological development of the ▮▮▮▮▮▮▮▮ can proceed.

G. There are indications the Russian, Chinese, and Indian government are pursuing applications-oriented research into human enhancement.

H. In Russia the work is classified as "Psychotronics" and primarily undertaken at the Laboratory of Bio-Physics at the State Institute of Medical and Biological Research. Russia had been the world leader in psychoenergetic phenomena but lost a two-decade advantage during the collapse of the Soviet Union. Nevertheless the incidents at ▮▮▮▮▮▮▮▮ can be taken as indicative of near-peer capability.

I. In China, where they refer to the program as "Quigong Somatic Science," they may be only 2-5 years behind the U.S. in the development of performance-enhanced soldiers.

J. The Indian government program exists as part of a public-private partnership with several religious organizations and is referred to as the Siddhi Protocol. We are currently exploring the prospects for a joint task force between Project Ascension and the Siddhi Protocol and have recruited a manager (Ramakananda) for this effort.

NOT APPROVED

Approved for Release : CIA-RDP96-00788R002200020001-5

Project Ascension Files

Today, August 8, 2020, WikiFree publishes a searchable archive of 2,150 unique verified files and emails associated with the classified DARP program Project Ascension.

```
From: t.coffey@mail.darpa.mil
To: r.anderson@mail.darpa.mil, k.ramakananda@mail.darpa.mil
Subject: Metaplast confirmed
Date: Tue, 22 Nov 2016 11:23 +0000 (GMT)
Cc: r.kingsley@us.army.mil, g.hawkins@us.army.mil, n.lindgren@natlab.alamos.gov
```

Rob

The lab tests have come back positive. I've attached the full file below. Each of the 82 Guantanamo test subjects is expressing some combination of the ASKC-6, KAH-R2, CYF11, and SKRA exons. The polygenic results show correlation ($P_{xy} = 0.7$) to the quantitative assessment of power (QAP) metric devised by Project Ascension.

Expression of the QAP-correlated genes activates the metaplasts we had first identified in the cell structure of subject #1, Manticore. These organelles seem to be able to extract energy from the ZP (vacuum energy) field and make it available for bio-energetic processes – you could analogize it to how chloroplasts in plant cells extract solar energy for the plant's use.

Obviously a lot of work remains to be done to understand the method by which the human organism can transform and utilize the Zero-Point Energy, in particular how it is used to cause and sustain the radical physiological changes we've seen in #1, #28 and #81.

What's more relevant in the short term is that subjects #1, #14, #46, and #81 had previously had whole-exome sequencings (#1 in the course of the FUSOP study and the others due to pre-existing genomic health conditions) and a cross-index finds that the QAP-correlated exons were NOT expressing at the time of those tests. This suggests that epigenetic processes can activate QAP-correlated gene expression. The connection between meditation and epigenetic expression (see attached) might explain why India has had such success with its Siddhi Protocol. Going forward we need to be looking for specific environmental factors that can cause these epigenetic changes. If we isolate causal factors for epigenetic change, we can predict whether the present rate of increase in the number of military-grade ascendants is likely to stabilize or accelerate.

Subject #1 remains in a medically-induced coma along with #4, #8-17, and #75-#79. Of the other subjects, #14, #46 and #63 are the only ones that are both cooperative and have made a military-grade ascension. #14 has shown remarkable ability despite her disabilities. There are almost certainly more out there that we haven't found, and measures need to be taken to identify and assetize them.

Im copying this to Gary, Russ, Kaya, and Neil for comments.

Cheers

Tige

VA, Medicare, Medicaid to Pay for Genetic Testing

By Jessica Albright and Omer Jolie

Jan 9, 2017, 3:04 p.m. ET

WASHINGTON, DC – In a step scientists are calling a "major leap forward in personalized medicine," the US Department of Health announced today that Medicare, Medicaid, and VA Hospitals nationwide would now cover the costs of standardized genomic testing for patients.

"With each advancement in genetic sequencing and testing, America's health care providers come one step closer to the promise of personalized medicine for every woman, man, and child in the country," said Dr. Neil Lindgren, the newly-appointed Director of Genomic Testing and overseer of the program. "Working with administrators across every government healthcare program and in public-private partnerships with genetic testing and data science companies we will assemble the results of these tests into the world's largest database of genomic information."

Funerary temple in Saqqara necropolis may be over 5,000 years old

By Kara Yang, ANN
Updated 9:05 AM ET, Friday February 17, 2017

Archaeologists working for Egypt's Ministry of Antiquities have unearthed a funerary temple near Cairo that may date back 5,000 years, making it the oldest burial site ever found in the vast Saqqara necropolis. Based on paintings that illustrate the temple's walls, the funerary temple is believed to have been dedicated to the scarab-faced god Khepri, a deity associated with creation and rebirth whose name means "to come into existence." The government has so far refused to release photographs of the newly-discovered burial site or its contents. The initial news release from the Ministry of Antiquities stated that the researchers had found a "sealed sarcophagus made of black granite," but this claim has been redacted from the Ministry website and recent press. A ministry official, speaking to ANN on condition of anonymity, called the situation "confusing and chaotic". "The discovery may upend the Egyptian timeline," he added. "Many of the site's grave goods are spectacularly advanced."

Capital City's independent source of local news and culture

Brothel Bloodbath! 23 Cartel Soldiers Slain by "Avenging Angel"

EDDIE EXSWISS | MAY 19, 2017 | 4:15 PM

An anonymous tip lead Capital PD detective Louis Hernandez to a downtown brothel on Saturday, where he made a grisly discovery: Almost two dozen members of El Cartel de Los Carteles had been brutally slain by an unknown assailant. The sole witness, 23-year old Michaela Vincente, claimed it was the work of an "avenging angel."

"This wasn't like any gangland violence we've seen before," Hernandez told reporters. "All of the cartel members were killed at close quarters by lacerations and puncture wounds." Among the dead, detectives found the remains of Sergio Enrique Zambada, the alleged leader of the local branch of El Cartel. Evidence found at the scene linked Mr. Zambada to the unsolved 2012 murder of Charles and Valentina Knight.

El Cartel de Los Carteles is a criminal organization founded in 2010. Originally made up of defectors from the ranks of Mexico's elite special forces, they have risen to become the paramount cartel in the underworld. They are believed to have over 10,000 soldiers, and in recent years have expanded from drug smuggling to kidnapping, extortion, gun running, and human trafficking. The U.N. estimates that human trafficking generates more than $32 billion annually for criminal enterprises.

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newsfeeder
READ TO KNOW

NTAS Alert Confirms Guantanamo Bay Prison Break-Out

By **Newsfeeder Editors** and Wire Service
Posted Jun 12, 2018 4:25 PM CST

(NEWSFEEDER) – A National Terrorism Advisory System Alert issued today by the US Department of Homeland Security warned that "more than 50" inmates had escaped Federal custody at the Guantanamo Bay Detention Camp. The inmates are considered "exceptionally dangerous" but DHS cautioned that there is no evidence any of the escaped terrorists has traveled to the mainland United States.

LTC Jack Jessup, commander of the Detention Camp, confirmed reports that the breakout had been a "mass casualty event," saying "The blanket of freedom that our service members provide always comes at a cost."

gossiper

JNP @JNP2040 - Jun 14, 2018
Major traffic jam on Centennial and Marietta! are they filming something at #ANNCenter? Or is this just #AtlanticTraffic

💬 9   🔁 3   🤍 8

TJ Shepherd @tyroneshep - Jun 14, 2018
Ima be late to work cuz some fucker in a monster costume caused a car accident #fuckthis

💬 17   🔁 70   🤍 90

molly holly @AtlantaMolly - Jun 14, 2018
Omg. Sitting in traffic and I just saw a car go flying through the 10th floor of #ANNCenter. Did anyone else see that???

💬 204   🔁 1.2K   🤍 407

JNP @JNP2040 - Jun 14, 2018
@AtlantaMolly I saw it to from down the block like something catapulted it into the air. Did a bomb go off? Where are the police?

💬 411   🔁 2.4K   🤍 445

molly holly @AtlantaMolly - Jun 14, 2018
THERE IS A MONSTER ATTACKING ANN CENTER

💬 3.5K   🔁 17.2K   🤍 14.3K

City of Atlanta @cityofatlanta - Jun 14, 2018
Motorists and pedestrians are requested to evacuate and avoid Centennial Park and ANN Center so that first responders can provide assistance to casualties

💬 4.9K   🔁 20.7K   🤍 411

Anne Tracey @TraceyAnn - Jun 14, 2018
I literally just saw a guy in a cape fly over me and my first thought is "superman don't like the #AtlantaTraffic either

💬 1.6K   🔁 11.2K   🤍 21.7K

TJ Shepherd @tyroneshep - Jun 14, 2018
now some crazy mofo in red white n blue is having a kung-fu fight in midair with the monster dude... and my camera broken thanks #samsung

💬 4.3K   🔁 25.5K   🤍 11.2K

Chelsea B @chelsseabebe - Jun 14, 2018
OMG I hope cape guy wins #battleofatlanta

💬 1.7K   🔁 22.6K   🤍 42.2K

UKBC LIVE TRANSCRIPT

Battle of Atlanta

🕐 June 14, 2018 - 21:48 GMT

CAROL ALLEN, UKBC ANCHOR: This just in. You are looking at obviously a very disturbing live shot there. That is the ANN Center, where we have verified reports that a motor vehicle crashed into the tenth floor of the building following an eighteen-car pileup at the adjoining intersection. There is apparently some sort of brawl or riot happening at the scene.

UKBC right now is just beginning to work on this story, obviously calling colleagues at ANN and trying to figure out exactly what happened. But clearly, something relatively devastating happening this morning there by Centennial Park.

That is, once again, a picture of ANN Center.

CHARLES BUTLER, UKBC ANCHOR: It's obviously something devastating that has happened. We are efforting more information on the subject as it becomes available to you.

ALLEN: Right now we've got Sean Murphy -- he is an ANN producer -- on the telephone. Sean, what can you tell us about what's going on?

MURPHY: Hello?

BUTLER: Yes, Sean, you are on the air right now. Go ahead. What you can tell us?

MURPHY: There is a - - a man with wings at the intersection of Marietta and Centennial Park. He is, he is - it looks like he is attacking people, he seems to be very strong.

ALLEN: A man with wings? What do you mean, like a costume?

MURPHY: No, not a costume. He – I'm not sure it's a man. It's man-like. He – oh my God.

BUTLER: We saw a streak in front of the tower just now, what are you seeing?

MURPHY: Something flew out of nowhere like a missile, like a white and blue missile. It's hit the -- this is unbelievable. It wasn't a missile. It was a man in a cape. I'm watching a man in a cape fighting a flying monster.

BUTLER: Does this look like a terrorist attack, Sean?

MURPHY: It looks like a f******g comic book Chuck.

Holy Cape, It's All Real!

PUBLISHED Friday 15 June 2018

"Battle of Atlanta" proves existence of extraordinary human abilities, say defense experts.

Comic Books Come to Life in Battle Over Atlanta

PUBLISHED Friday 15 June 2018

Witness describe a battle of "Biblical proportions," Damages Estimated at $2.1 Billion

A Nation Welcomes Its Newest Hero: American Eagle

PUBLISHED Friday 15 June 2018

Married father of two served in Iraq, works as a firefighter in Freedom, Nebraska. "I'm just an ordinary guy with an extraordinary gift from God."

8 Alleged Cartel Members Slain in Apparent Vigilante Assault

PUBLISHED Wednesday 27 June 2018

Police are on the lookout for an "armed and dangerous" vigilante responsible for the death of eight alleged members of El Cartel de Los Cateles.

DARPA Researcher-Turned-Guru Founds New "Church of Ascension"

PUBLISHED Thursday 7 July 2018

George interviews Kaya Ramakananda about her journey from defense researcher to spiritual leader and investigates her new-age claims that anyone can achieve superpowers.

America's Next Top…Superhero?

PUBLISHED Monday 6 August 2018

Fans of the hit reality show America's Next Top Model were stunned when contestant Brittney Sinclair manifested superhuman abilities to control light during the latest episode.

Real-Life Superheroes: Fact or Fiction

PUBLISHED Tuesday 14 August 2018

More than 15 self-proclaimed "real-life superheroes" have sprung up in American cities in the last sixty days. Once they'd have been dismissed as delusional, but in the aftermath of the Battle of Atlanta, anything seems possible. Inside Editiorial brings you the story behind the headlines.

Florida Man Dies After Setting Self on Fire to Gain Superpowers

PUBLISHED Friday 17 August 2018

"There's no evidence that superpowers can be acquired from stress," says the physician who attempted to save the man's life. But the spiritual gurus of the Church of Ascension disagree.

New York Comic Con Adds 4 Real-Life Superheroes to Guest List

PUBLISHED Thursday 30 August 2018

Annual conference expected to have record-breaking attendance as fans revel in the brave new world of real-life superhumans.

Humans of Mass Destruction Threaten Us All

PUBLISHED Monday 3 September 2018

If superhumans are real, we are all in danger. It's time for the government to step in.

Project Ascension Files

Today, August 8, 2020, WikiFree publishes a searchable archive of 2,150 unique verified files and emails associated with the classified DARP program Project Ascension.

Text of Project Ascension Roundtable of 9/7/18

COLONEL ANDERSON: Mr. President. Mr. Secretaries. General. You've seen the data my colleague Professor Croft has assembled. When we lost the subjects at Gitmo the possibility of containment became closed off to us.

SECRETARY HOUND: It was a major fuck-up letting Manta-Ray to wake up.

COLONEL ANDERSON: Manticore, sir. Yes, sir. I take full responsibility for that mistake. But unfortunately something like that happening was inevitable. Ascension incidents have been on the increase since the Leavenworth Incident and since Atlanta the rate seems to be accelerating. We know the Russians are testing their military personnel for psychoenergetic potential. The Chinese have been actively screening for metaplast carriers throughout the Han population. And ISIS and Boko Haram are running training camps designed to stress the body into an ascension. It won't be long until they're able to strike us with super-terrorists. These facts are undisputed. The question is what to do about it. We propose….

SECRETARY ESPERANTO: Let's be blunt. We're talking about the problem of humans of mass destruction.

COLONEL ANDERSON: Yes, sir. But there's, there's also humans of mass protection. It's like missile defense. There are ballistic missiles and there are, um, anti-ballistic missiles.

SECRETARY ESPERANTO: Anyone capable of protecting us would be capable of destroying us.

GENERAL HAWKINS: Quis custodiet ipsos custodes. Who Watches the Watchmen.

PRESIDENT FLUSH: Wasn't that a comic book?

[*nervous laughter*]

COLONEL ANDERSON: Yes, sir. Uh, that comic, was, it was on our recommended reading list for this policy briefing. Glad you enjoyed it, Mr. President.

SECRETARY ESPERANTO: Go on, Colonel Anderson.

COLONEL ANDERSON: Sir. The way I see it, every country on Earth is facing a stark choice. What do you do when some of your population gains the power of gods? There's really only two ways to maintain order. The first, it's not who we are, or should be. It's containment camps. Secret police. Martial law. It's the end of Western democracy. And I'm afraid a few more incidents like Leavenworth or Atlanta and the public will clamor for it.

SECRETARY ESPERANTO: Or?

COLONEL ANDERSON: Or we can fight fire with fire. Tap into our pop cultural mythology. Give people a reason to look up to the ascendants. Give Americans a reason to have hope. Give them… superheroes. If you look at slide 12 in the briefing being handed around you'll see—

SECRETARY ESPERANTO: You're proposing that the US government field… men in capes?

COLONEL ANDERSON: Men and women, sir. But yes, with capes. Or costumes at least. We have to, um, we have to play to the zeitgeist. The American people are conditioned to expect superhumans to behave in certain ways. If we put ascendants on the streets in battle dress or police uniforms, America is going to be terrified. A SWAT sniper who can kill you with his mind from a mile away? That's dystopian sci-fi, that's a horror movie. But if we shave that sniper's head and call him Professor X-Ray…. That's not terrifying. That's a Marvel movie.

GENERAL HAWKINS: To be clear, "Professor X-Ray" is just an example. The branding of the code-names is going to be carefully focus-grouped. Assets from 4TH PSYOP have been tasked with that.

SECRETARY HOUND: And where are we recruiting these "supers" from? Uniformed service members? CIA?

COLONEL ANDERSON: No, sir, we've been looking at a broader pool. Only about one in six hundred thousand Americans has

achieved a military-grade ascension so we couldn't limit ourselves to just servicemembers. And we lost some of our best recruits when Manticore – well, you've seen the Gitmo footage. We--

GENERAL HAWKINS: Fortunately Dr. Ferro's work in genomic testing and Ramakanda's efforts in the field have given us a large database to sample from. We have enough candidates identified to field our first squadron.

SECRETARY ESPERANTO: Is this proposed task force –

COLONEL ANDERSON: Squadron, sir. Star-Spangled –

SECRETARY ESPERANTO: Is this proposed "squadron" going to operate out of DOD? If so, then -

SECRETARY HOUND: It seems obvious this needs to be a DHS effort. We're literally talking about homeland--

SECRETARY ESPERANTO: DOD has been funding Project Ascension since Leavenworth. We're not going to-

SECRETARY HOUND: DOD is what CAUSED Leavenworth. Isn't it time -

COLONEL ANDERSON: If I may, Mr. Secretaries. It needs to be both. These operatives, the, um, superheroes, they will need a combination of military and police authority.

SECRETARY ESPERANTO: You're suggesting we repeal the Posse Comitatus Act? Because there's no branch of the Armed Forces that can operate in domestic law enforcement.

COLONEL ANDERSON: That's not… exactly… true sir. There IS a branch that has authority as both an armed force and law enforcement agency. It sits under the Department of Homeland Security in peacetime and the Department of Defense in wartime.

SECRETARY ESPERANTO: That's – Your plan is to assemble the, the most powerful people in America, in the world, and have them go work for the –

GENERAL HAWKINS: The Coast Guard, Mr. Secretary.

COLONEL ANDERSON: The ones with the little ships, sir.

SECRETARY ESPERANTO: I know what the… you… With respect, Mr. President –

[President Flush holds up an image of Aurora]

PRESIDENT FLUSH: I want this program to get all the funding. All the funding it needs. America needs to have the best superheroes. The best. I'm going to want to be closely involved, Gary. Closely involved.

GENERAL HAWKINS: Absolutely, Mr. President.

Coast Guard Granted Unprecedented $34B Budget

By Maria Antonio

Oct 12, 2018, 12:15 p.m. ET

WASHINGTON, DC – The US Coast Guard's budget will more than triple in 2019 following passage of a new bill that President Flush signed into law earlier this morning.

The often-overlooked Coast Guard had a budget of just $11.65 billion in 2018, a fraction of the Department of Defense's $574 billion dollar annual spend. With today's passage of the Homeland Emergency Response Oversight (HERO) bill, however, the Coast Guard's budget will ascend to a record-breaking $34 billion in Fiscal Year 2019.

The additional funds are earmarked for a new program intended to manage the rising incidences of violence, vigilantism, and civil unrest that have sent crime rates skyrocketing in major cities. The White House promised more details would be revealed soon.

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WORLD'S SMARTEST MAN: 'I am an Ascendant'

Garrett Spears
5 Nov 2018, 16:42 | Updated: 5 Nov 2018, 16:55

2 COMMENTS

Korean SUPERGENIUS joins fast-growing cult.

Fresh off his 5-0 victory over Google's AlphaGo, Dr. Sung Jun-Han stunned fans when he announced that he had joined the Church of Ascension. "Neither conventional science nor traditional religion has the answers I need. The Church does," the world-famous polymath said. "With their help I've realized that I am an ascendant, and I intend to explore my capabilities to their fullest." He later told reporters, "This isn't even my final form!"

"Ascendant" is a new word that refers to men and women gifted with extraordinary abilities. Coined by Church founder Neel Ramakananda, the term is growing in popularity on social media. While Ramakananda insists that ascendants have nothing to do with comic books and costumes, UrbanDictionary.com describes it as a synonym for "superhero."

Credit: Associated Media

Epoch Magazine Names American Eagle Person of the Year

By **Ralph Elmer** and **Melissa Alfredo,** ANN
Updated 4:25 PM ET, Tue December 11, 2018

"William Goddard has shown that one person can make a difference in our world," Epoch editor-in-chief Edward Felsenthal wrote. "And in so doing has become a role model for countless other gifted men and women around the globe who are stepping forward to use their abilities for humanitarian purposes."

This is the first time the magazine has honored an ascendant. The accolade goes to the person or persons who "most influenced the news and the world" in the past year.

Not everyone is pleased with the award. American Citizens Against Vigilantism (ACAV), a not-for-profit created in the wake of the Battle of Atlanta, criticized the decision, saying "Our nation's uniformed police, firefighters, paramedics, and doctors are its real heroes. We shouldn't idolize the self-proclaimed 'ascendants' who take the law into their own hands."

🏠 › **Military News**

Meet America's Newest Defenders: The Star-Spangled Squadron

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11 Jan 2019
Military.com | By Oriana Jeglinski

From a nation of 330 million, they stepped forward last night: The Star-Spangled Squadron. These men and women of great power, able and willing to undertake the great responsibility of protecting their homeland against dangers greater than the world has ever seen, are America's newest defenders.

President Richard Flush personally introduced the Star-Spangled Squadron yesterday evening at a press conference held in the Dolley Madison House on Lafayette Square in Washington, D.C. The same venue was used sixty years ago to introduce the world to the original seven astronauts who pioneered America's space program. Yesterday's event may prove even more epochal.

Speaking from a flag-draped podium, President Flush told the standing-room only crowd of government luminaries that "America has always been an exceptional nation. And this evening you are going to meet some exceptional Americans." The Squadron's members, arriving to thunderous acclaim, were then each introduced by their code names while wearing their colorful comic-book inspired uniforms.

Only the most powerful military-grade ascendants passed the stringent physical, psychological, and mental examinations and interviews required to join the Star-Spangled Squadron. The initial six members of the Squadron are William Goddard ("American Eagle"), Brittney Sinclair ("Aurora"), Harumi Maeda ("Dr. Quantum"), Jorge Campos ("Stronghold"), Angelyne Knight ("Stiletto"), and Jackson Reed ("Warp").

The Star-Spangled Squadron, officially designated the National Crisis Response Squadron (NCRS), is legally part of the Coast Guard's Deployable Operations Group, which also oversees the Coast Guard's Port Security Units, Tactical Law Enforcement Teams, Maritime Safety and Security Teams, Helicopter Interdiction Squadron, and the National Strike Force (NSF). NCRS was created and funded with the passage of 2018's Homeland Emergency Response Oversight bill. The Coast Guard is the only branch of the U.S. Armed Forces within the Department of Homeland Security. It operates as a law enforcement agency, member of the U.S. Intelligence Community, and first responder during natural disaster.

During his remarks, Flush recognized the newly appointed head of the Coast Guard's Deployable Operations Group, Rear Admiral Gary D. Hawkins, as well as the commander of the NCRS, Captain Robert Anderson. Hawkins and Anderson were unilaterally transferred from the U.S. Army to the U.S. Coast Guard in order to accept their appointments and ranks.

WATCH OUT, HUMANITY! The World Wildlife Federation has a new spokesmanatee

Garrett Spears
17 Feb 2019, 12:15 | Updated: 17 Feb 2019, 13:40

2 COMM

LEVITEE, the world's first NONHUMAN ASCENDANT, will raise funds for endangered species

Credit: Instagram

The psychokinetic manatee began his worldwide "goodwill tour" with a flyby through Manhattan.

VLADIMIR PUTIN · **Published** March 1, 2019

Putin unveils 'invincible' new hypersonic ascendant

By **Sasha Carter** and **Tyler Dennis** | **Rox News**

MOSCOW - Russia's armed forces have recruited a new ascendant capable of hypersonic flight and strategic deterrence, Vladimir Putin announced Thursday, an addition that could dramatically increase the country's military capabilities and heighten the already-tense relations between the worlds' superpowered-superpowers.

The Russian president made the bold claim during his state-of-the-nation speech, introducing the new ascendant under the codename Avangard and demonstrating recorded video of the superhuman, whom he dubbed "invincible," flying alongside a Russian Yu-74 missile.

Homeland Security Secretary Mark Hound told ROX News that Russia's claims were "unverified" and vowed that the United States would never allow a "gap in ascendant-related capabilities" to develop.

Credit: Associated Media

☰ 🔍 $\mathfrak{The\ Manhattan\ Times}$ https://mnti.ms/2VbjqGt

China Developing Super-Soldiers, Report Claims

By Maria Antonio

March 18, 2019, 9:14 a.m ET

WASHINGTON, DC – A classified report obtained by the Manhattan Times says that the Chinese People's Liberation Army has established a secret military program to develop a company of enhanced soldiers. According to the memo, written by Defense Intelligence Agency analysts, China's "Qigong Somatic Science" operates out of the PLA Academy of Military Science and has utilized recruits from Beijing Military Region Special Forces Unit Arrow as test subjects.

The new report, which has circulated within the intelligence community since January, claims that the PLA already has more ascendants than the United States military. "While we have allowed many ascendants to operate in private organizations due to concerns for liberty and privacy, China has conscripted the vast majority of its most powerful superhumans into government service," the report alleges.

Glitterati

BRITTNEY SINCLAIR EXCLUSIVE

SHE'S A STAR NOW!

Former Reality TV Contestant TELLS ALL About her New life as the Star-Spangled Squadron's AURORA

- Says 'I've always known I was Special'
- Brags about 'Louboutin super heels'
- Claims American Eagle has 'hottest dad bod on earth'

Nauru Government Overthrown in Apparent Ascendant-Led Coup

Mason Cortez

DENIGOMODU (Reuters) – A mixed force of conventional and ascendant mercenaries ousted President Baron Divavesi Waqa and overthrew the democratically-elected government of Nauru on Friday in the world's first ascendant-led coup.

Clashes erupted in Denigomodu early on Friday after the security forces of President Waqa tried to prevent rebels from landing on the island. At least 10 people were killed and 30 wounded in the fighting, according to hospital sources. The island's airport was reportedly closed. The whereabouts of President Waqa, as well as speaker of the parliament Marcus Stephen, remain unknown.

U.S. President Richard Flush and Australian Prime Minister Stephen Morris expressed "deep concern" about the evolving situation.

Nauru, formerly known as Pleasant Island, is an island country in Micronesia situated between Tuvalu, the Solomon Islands, Papua New Guinea, and the Marshal Islands. With a territory of only 8.1 square miles and a

Maximum Leader, suspected mastermind of the coup d'etat.

population of 10,670 residents, Nauru is the third-smallest country in the world behind Vatican City and Monaco. The country gained its independence in 1968.

Since 2001, it has received aid from the Australian Government in exchange for hosting the Narau Regional Processing Centre, an offshore Australian detention facility. Originally designed to house illegal immigrants, the Nauru Regional Processing Center began to house ascendant detainees in 2018. The number of ascendant detainees, and their current status, has not been confirmed.

Church of Ascension: The World's Fastest-Growing Religion

Janet Whitberg
05/07/19 5:00 PM

The concrete and glass Church of Ascension in midtown Atlanta is located just four blocks from the site of the now-legendary confrontation between American Eagle and the Manticore. The Church's proximity to the Battle of the Atlanta is no coincidence. Church founder Kaya Ramakananda is a second-generation Indian-American and self-proclaimed "ascendant" who teaches that there are extraordinary abilities waiting to be tapped in all of us.

"The abilities that present-day ascendants possess, the miracles you see on television, all of these powers were described more than 1,500 years ago in the Visuddhimagga. They were called Siddhis and they are supernormal abilities that can be attained through spiritual enlightenment," Ramakananda explained to me in a face-to-face meeting. "And I don't mean stuff like staying warm by meditating. I mean flying through the air, walking through walls, reducing your body to the size of atom, being anywhere at all will. What we call superpowers are what the ancients taught as Siddhis. All I have done is to combine those ancient teachings with the latest in Western technology so that they are available to everyone."

The Church of Ascension certainly does have the latest in Western tech. The facility has biofeedback machines, virtual trainers, and even a "StartAscending" App for Android (iPhone is coming later this year, I'm told). It makes sense, given Ramakananda's background. With a PhD from Stanford University in biophysics and a stint at DARPA in human performance research, she seems well-suited for a role as a transhumanist guru.

The idea that anyone can gain superpowers is an intriguing proposition, and one that has garnered Ramakananda over 40 million fans on social media and over 250,000 disciples – many of them celebrities like 12Sigma – all paying for weekly and sometimes daily spiritual lessons at 74 Churches of Ascension nationwide. But when I asked Ramakananda how many of the disciples have actually developed superpowers, she declined to give a number.

"Our disciples are in varying stages of spiritual enlightenment. Some are entering with considerable Karmic debt from past lives. It may take them years to develop a Siddhi. The most advanced disciples, like Dr. Sung, are beyond the need for vulgar displays."

"What about American Eagle? Is he spiritually enlightened? Or Aurora? She seems awfully shallow, no?" I asked. She chuckled. "Just like any other natural human ability, different people display differing abilities. When it comes to the Siddhis, Karma often plays a primary role. Some people are born with Siddhis because of deeds they performed in a past life. Others may unlock a Siddhi through the use of certain drugs, entheogens. Psychoactive drug use has been the path for many of the great shamanic traditions. Or sometimes stress can cause an altered state of perception."

Councilman

With Crime Rates Soaring, Texas Legislature Empowers Citizen's Arrests

By Ariana Marcia
@ariana_ungrande
Posted May 24, 2019 at 12:15 PM

Under a new law passed today, Texas citizens can not only make citizen's arrest, they can use deadly force when doing so. Citing a 264% year-over-year increase in violent crime rates, bill co-sponsor Senator Joaquin Hernandez Baker (R) said, "Our hardworking Texas Rangers, county sheriffs, and municipal police are working 24/7 to keep Texas safe and livable. But with crime up almost threefold this year, it's clearly not enough. Texans have always been proudly self-reliant. This law gives them the authority they need to uphold the peace of our great State." He added, "And if they want to do it wearing spandex jumpsuits, God bless 'em."

Educators, minority rights activists, and prison reformers have vehemently criticized the bill, calling it "unjust," "a violation of the rule of law," and "a return to lynching." Anti-ascendant groups fear the law will cause more lives to be lost to ascendant-related incidents, and the American Citizens Against Vigilantism, the American Civil Liberties Union, and the Southern Poverty Law Center have all pledged to bring lawsuits to prevent the bill's enforcement.

The new law provides that a private citizen can arrest another person "for a breach of the peace committed or attempted in his/her presence", "when the person arrested has committed a felony," or "when a felony has been in fact committed, and the arresting citizen has reasonable cause for believing the person arrested to have committed it." What makes the law particularly troubling to activists is its use-of-force clause, which permits an arresting citizen to use deadly force "when immediately necessary to make a lawful citizen's arrest," or "to prevent escape after a lawful arrest, provided that the citizen reasonably believes there is a substantial risk that the person to be arrested will kill or harm another if not arrested immediately". And if they're wrong, "a citizen does not incur civil or criminal liability for an invalid arrest unless he/she knows the arrest to be invalid."

A Gallup poll yesterday showed 94% of Texas residents outside of Austin "strongly" or "very strongly" support the bill. Only 38% of Austin residents support the bill.

The World's First Superpowered Private Police Company Launches in RTP

BY ZACHERY SEANE

JUNE 15, 2019 11:30 AM

Great Scott! Raleigh, NC has become the official headquarters of the world's first superpowered private police force. Dreadnaught Security Inc., founded by former FBI special agent Ian Donahue, is constructing a new 50-acre facility in Research Triangle Park. Donahue claims to have already signed sixteen "high value clients" in the state, to be serviced by a 24/7 on-call team of ascendant security operatives.

"North Carolina's unique Company Police Act makes it the perfect place to launch Dreadnaught," Donahue told reporters at a press conference in the Umstead today. "We are already in talks with several other state legislatures about exporting this model into their jurisdictions."

The North Carolina Department of Justice chapter 74E of the Company Police Act governs private police in North Carolina. Under the law, company cops can make arrests and write citations for violations of the

Credit: Associated Media

law the same as any municipal police officer. Private police only have jurisdiction on property that they own and control or have been contracted to protect by the owner, although an exception exists if the private police are in continuous pursuit for a crime that was committed in their jurisdiction or investigating a crime that occurred in their jurisdiction.

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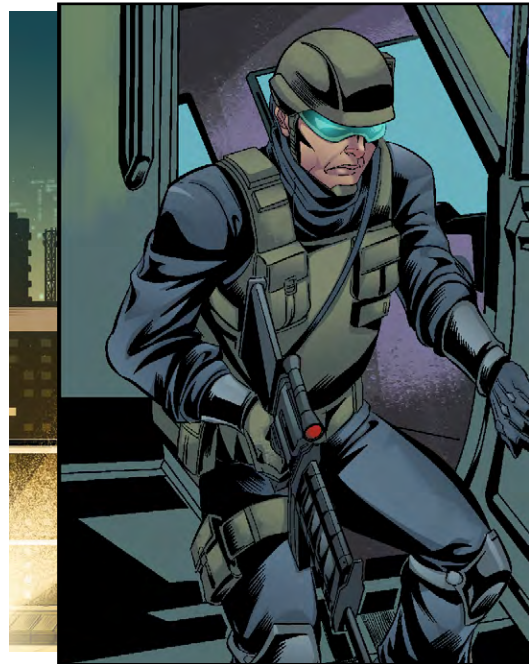
America's "Wild West" states rush to empower citizen arrests

185   ROX News | 8.5.2019

With crime rates reaching record highs, eleven states from America's historic "Wild West" have passed legislation granting private citizens broad authority to use force to make citizen's arrest as well as protection from liability when doing so. The new bills were passed with sweeping majorities in Arizona, Kansas, Idaho, Nebraska, Montana, New Mexico, Oklahoma, Utah, and Wyoming, and with a narrow vote in Colorado and Oregon.

California, New Jersey join 22 other states passing private police laws

208   ANN | 9.7.2019

With federal, state, and local police stressed to the breaking point, California and New Jersey are joining 22 other states that have turned to superpowered private police forces like Dreadnaught Security as the solution for soaring crime. The alternative, state lawmakers say, is "chaos."

Activists slam Supreme Court decision on controversial "Mind Reading" case

300+   Washington Journal | 10.24.2019

Angry protestors gathered outside the Supreme Court Building today bearing signs with slogans like "What Were You Thinking??" and "Read This, Fascists!" The ACLU-led demonstrators were protesting the justices' recent decision in *U.S. vs. Cabriolet*, where a sharply divided court ruled that information procured by mind-reading could be introduced as evidence in Court.

Meet the crimefighting superheroes cleaning up the streets, comic book style

300+   VICEROY | 11.5.2019

In cities across America, teams of super-powered crimefighters have come together to fight the rising tide of lawbreaking that has terrorized the country since the Battle of Atlanta. Some of them operate as vigilantes, taking advantageous of broadly worded "citizen's arrest" legislation. Others secure licenses to act as private police for communities and clients that can afford their fees. Almost all have followed the lead of the Star-Spangled Squadron in adopting comic-style codenames and costumes. These are their stories.

Levitee plush toys are the must-have gift this holiday season

300+   Pop Honey | 11.22.2019

Wondering what to get the kids for Christmas this year? Jellycat's "Levitee" plush toy is not only an adorably comfy stuffed friend, it's a charitable contribution. A portion of every sale goes towards helping the World Wildlife Federation protect endangered species around the world.

Sung Jun-Ho receives Chinese award for viral pneumonia vaccine

300+   UKBC Asia | 12.15.2019

Chinese President Xi personally awarded Dr. Sung Jun-Han with the People's Republic of China's Friendship Award for his work in developing a vaccine to treat coronaviral pneumonia. The Friendship Award is China's highest commendation for "foreign experts who have made outstanding contributions to the country's economic and social progress".

SPACEINFORMER

12Sigma to Lead Expedition to Dark Side of the Moon

By **Steve Foust** – January 10, 2020

MUMBAI – Representatives of the Indian Space Research Organization, the Korea Aerospace Research Institute, and the National Aeronautics and Space Administration were greeted with a standing ovation at press conference today when they revealed that Korean super-genius Dr. Sung Jun-Han would be leading a team of astronauts on a mission to land on the dark side of the Moon.

The hugely popular Dr. Sung, commonly known as 12Sigma, has previously called space exploration "an urgent necessity to protect the human species." At the press conference, he elaborated on the reason for turning his super-intelligence to space. "Existential risks challenge us at every turn: rogue ascendants, genocidal AIs, nuclear wars, environmental destruction, asteroid impacts, bioterrorism, supervolcanos, gamma ray bursts, false vacuums, solar superstorms, strangelets," he noted. "If we don't expand beyond this tiny globe, our extinction is a matter of mathematical certainty."

Dr. Sung will be accompanied by an elite team of American, Indian, and Korean astronauts, with one-half of the mission roster made up of experienced space explorers and the other half consisting of ascendants with a wide range of abilities.

Credit: Associated Media

The astronauts will travel to the dark side of the moon in the Sigma 12, a reusable spaceplane designed and built by Dr. Sung. Because of the Sigma 12's advanced psychoenergetic propulsion system, the round-trip journey is expected to take just 4 days, less than half the time of the storied Apollo XI lunar mission. The launch date is set for July 16, 2020.

NASA   MOON MISSION   SIGMA 12

Self-Proclaimed Maximum Leader Warns UN "I am a Sovereign Power"

Mason Cortez

NEW YORK CITY (Reuters) –His face and voice masked by battle armor, the megalomaniacal mastermind of April's overthrow of the Republic of Nauru appeared before the UN General Assembly to offer a stern warning not to interfere in the affairs of his newly established government.

"You come here as representatives of the sovereign powers you serve. But I am a sovereign power," the ruler of the island-nation said. "And unlike the warmongering great powers you represent, I seek only peace with humanity. I will make the island of Nauru a haven for the ascended men and women around the word that you fear, persecute, and exploit. I offer it as a home where they can actualize their abilities without interference from those who cannot understand them."

Maximum Leader's speech marked the first time an ascendant has spoken before the UN as the leader of a nation. U.S. President Richard Flush had ordered the Star-Spangled Squadron on call to protect the General Assembly if necessary, but Maximum Leader left peacefully despite the Assembly refusing to recognize the legitimacy of his government.

Air Force Whistleblower Condemns New Lunar Mission

By Sebastian Jaeger   March 14, 2020 | 10:55am | Updated

US Air Force whistleblower Karl Wolfe has sounded the alarm on Dr. Sung Jun-Han's lunar mission, calling it "extremely irresponsible," adding "They have no idea the danger they are going to encounter there."

Mr. Wolfe previously worked for the US Air Force Director of Intelligence at the Headquarters Tactical Air Command in Langley Field, Virginia, where he was one of only two technicians cleared to review high-tech military intelligence photographs.

In a 2016 interview, he claimed to have seen clearly visible structures on the surface of the dark side of the Moon. "They were structures that were definitely not created by natural means. These structures were created by intelligent beings." This is the first time Mr. Wolfe has spoken in public since then.

General John Raymond, Chief of Space Operations for the U.S. Space Force, declined to comment on the expedition citing "national security" concerns. However, Dr. Sung was quick to dismiss Wolfe's alarmism, posting "Human history is a story of progress towards a more humane and peaceful planet. Any alien life that is more technologically progressed than us would almost certainly be more socially progressed well. If and when we do encounter extraterrestrial life, we will greet each other in peace as fellow citizens of the galaxy." He then added, "Set phasers to kill."

Credit: Associated Media

EXODUS · **Published** April 8, 2020

DHS Labels Exodus World's Most Dangerous Terror Organization

By **Sasha Carter** and **Tyler Dennis** | **Rox News**

WASHINGTON, D.C. – The Department of Homeland Security has officially listed Exodus as the world's most dangerous terrorist organization.

Exodus is a loosely organized ideological movement that urges those gifted with superpowers to "exit humanity" in favor of a new ascendant identity. Exodus rose to prominence in the aftermath of Maximum Leader's speech before the UN when he called for ascendants worldwide to join him, and many members of Exodus now claim Nauru to be their "homeland." Authorities have blamed Exodus for more than two dozen acts of mass destruction as well as hundreds of assaults and homicides targeting institutions and individuals critical of ascendants.

American Citizens Against Vigilantism (ACAV) praised the decision. ACAV executive director David Dworkin told ROX News "Today's decision was a vital first step. Ascendant supremacists should have no place in our society. We renew our call for a nationwide registry of these humans of mass destruction, with close monitoring to ensure that anyone calling for or participating in acts of hate can be quickly apprehended."

WORLD NEWS   JULY 18, 2020 / 10:10 AM

Contact Lost with Sigma 12 Moon Mission

Mason Cortez

CAPE CANAVERAL (Reuters) – Two days after the world celebrated the launch of the Sigma 12 spaceplane on its journey to the dark side of the moon, NASA confirmed that contact had been lost with the mission.

"We have no information at this time as to what has caused this disruption in communication," NASA spokesperson Daniel Kim told reporters in a press conference this morning. "There was no evidence in the telemetry to indicate any technical issues, and communications were routine for the first 47 hours of the mission. Therefore we expect this to be a temporary condition."

Conspiracy theorists have been quick to pounce on the lack of details. Tech companies have pledged to work with NASA to prevent disinformation and fake news from spreading.

Washington Mauled as Star-Spangled Squadron Faces Exodus Terrorists in Monumental Battle

By **Ralph Elmer** and **Melissa Alfredo,** ANN
Updated 8:2A PM ET, Sun July 19, 2020

At least 1,500 people are dead and 4,500 injured in the aftermath of a pitched battle between the Star-Spangled Squadron and a number of ascendant individuals believed to be affiliated with Exodus. The fighting began around 4:15 PM, when several flying attackers assaulted the Washington, D.C. headquarters of American Citizens Against Vigilantism (ACAV).

"The ACAV building was on fire and there was smoke everywhere. But I could see people flying around through the smoke blasting any survivors that crawled out," said James Youngblood, a witness to the atrocity. "Then all of sudden the whole block lit up brighter than the sun. After that I couldn't see anything but white light for a while."

The focus of the fighting slowly shifted southward over the course of the 25-minute battle, with members of Star-Spangled Squadron clashing with Exodus terrorists in fights over the Eccles Building, Vietnam Veterans Memorial, and Lincoln Memorial before climaxing near the Washington Monument. Exodus forces retreated at 4:40 PM, but firefighting and rescue operations continued until late in the evening, with American Eagle, Aurora, and Stiletto assisting.

CPT Robert Anderson, speaking on behalf of Star-Spangled Squadron, confirmed that the three other members of the team were taken to George Washington University Hospital in critical condition following the battle. "The uniformed heroes that defend America's freedom paid a high price today," he said. "Thank you for your thoughts and prayers."

DC Mayor Muriel Bowser held an impromptu press conference in response to the battle. Speaking from the base of the broken Washington Monument, Mayor Bowser told reporters that "Washington has been mauled, and the damage is apocalyptic." The DC Comptrollers Office has estimated the cost of the physical damage at $40 billion.

ACAV executive director David Dworkin condemned the Star-Spangled Squadron, noting "the arrival of these so-called heroes transformed an act of arson into a pitched battle that brought devastation onto our city. How many more ordinary people have to die before all of these so-called 'ascendants' are locked up?"

Rescue Mission Finds Space Wreckage, But No Survivors

By **Steve Foust** – July 20, 2020

POINT NEMO – International search-and-rescue teams were combing the most remote point of the Pacific Ocean today, hoping to find survivors of the ill-fated Sigma 12 lunar expedition. Wreckage believed to be the remains of the mission's spaceplane crashed to Earth late last night in a fireball that was visible throughout the South Pacific region.

Representatives of the Indian Space Research Organization, the Korea Aerospace Research Institute, and the National Aeronautics and Space Administration spoke with Space News via videoconference, but little information was available. "We have had no communication with any member of the lunar mission since July 18, and the trajectory of the fireball that struck Point Nemo last night is compatible with it being the remains of the Sigma 12 spaceplane," said NASA spokesperson Daniel Kim. "We have to prepare ourselves for the possibility of the unthinkable," he added.

Point Nemo, the epicenter of the search-and-rescue efforts, is the most remote oceanic location on Earth, more than 2,688 kilometers from the nearest land. It is also relatively lifeless, as the South Pacific Gyre prevents nutrients from reaching the area. Because of its remoteness and lifelessness, Point Nemo has been used as the world's "spacecraft graveyard" for over three decades, and more than 300 spacecraft have been landed in its deep waters when their time in space ended.

The Sigma 12 spaceplane was not originally intended to land at Point Nemo, however. "It's possible that Dr. Sung or another crew member may have attempted to deliberately steer the craft to land at Point Nemo in order to minimize the risk of casualties or contagion," said Kim. He declined to elaborate.

NASA   MOON MISSION   SIGMA 12

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September 31, 2020

FBI Releases 2019 Crime Statistics

For the second consecutive year, the estimated number of violent crimes in the nation increased when compared with the previous year's statistics, according to FBI figures released today. In 2019, violent crime was up 264 percent from the 2018 number. Property crimes also increased 460 percent, marking the 2nd consecutive year the collective estimates for these offenses more than doubled. Prior to 2017, crime rates had been declining for 15 years. The nationwide average rate of crime is now higher than it was in the most crime-ridden neighborhoods in 2016.

The 2019 statistics show the estimated rate of violent crime was 2,802 offenses per 100,000 inhabitants, and the estimated rate of property crime was 12,607 offenses per 100,000 inhabitants. The 2019 report also details a new statistic, the estimated rate of ascendant-related crime, at 8,601 offenses per 100,000 inhabitants.

These and additional data are presented in the 2020 edition of the FBI's annual report Crime in the United States. This publication is a statistical compilation of offense, arrest, and police employee data reported by law enforcement agencies voluntarily participating in the FBI's Uniform Crime Reporting (UCR) Program.

AMERICA • DEMOCRACY

A Weary Nation Begins to Lose Hope

BY **JORDAN MAGISTER**   OCTOBER 14, 2020

In the days and weeks after the Battle of Atlanta, a fervor of excitement gripped the United States: Here, at last, was the proof that America was the exceptional nation, protected by a hero in red, white, and blue. It seemed like the rise of ascendants had returned the hope of progress and prosperity that had once characterized the American Dream.

This past summer, everything changed. Those heady days are gone now, replaced by fear, uncertainty, and ceaseless anxiety. The Star-Spangled Squadron stands reduced to half strength following its bruising struggle with Exodus. Who will protect us against the next super-terrorist attack? The world's most brilliant man, Dr. Sung Jun-Han, is missing and presumed dead, his body likely vaporized somewhere over the Pacific Ocean in the crash that followed his ill-fated lunar mission. What happened up there, on the dark side of the moon? The world's governments have been frighteningly quiet.

In the deafening silence, WikiFree has made its voice heard. The allegations in the Project Ascension files have left an already-shaken public unsure who it can trust. Is the Church of Ascension really a CIA-funded genetic testing effort? Is the U.S. government really culpable of engaging in illegal experiments at Leavenworth and covering up the aftermath? We don't know. But one need only call to mind the MK Ultra and Tuskegee Syphilis experiments to believe it possible.

Perhaps American Eagle would tell us the truth – but he, too, has vanished now, his white cape last seen fluttering over the skies of Manhattan before he soared into the stratosphere. Is he looking for the Sigma 12 expedition, or doing battle against unseen enemies in the vast reaches of space? Or has he fled in shame or disgust at the revelations of Project Ascension? Is he even still alive? Again, we don't know.

All we do know is that a rising tide of crime has drowned our cities in violence and despair, and it shows no sign of ending. One hundred years ago, in the aftermath of the Great War, Irish poet W. B. Yeats wrote of the desolation of post-war Europe and gave grim tidings that the worst was still come. His words seem eerily appropriate now, a century after they were written:

> Things fall apart; the centre cannot hold;
> Mere anarchy is loosed upon the world,
> The blood-dimmed tide is loosed, and everywhere
> The ceremony of innocence is drowned...
> The darkness drops again.

Will anyone pick up the torch of hope to light our way?

CHAPTER 1: INTRODUCTION

WELCOME TO ASCENDANT

The book you hold in your hands is the product of over two years of research and writing. Any game designer hopes that their work will be commercially successful. Nevertheless, in creating this game, we have eschewed many of the trends of contemporary design and most of the framework that most superhero RPGs rely on. This introduction is intended to offer some perspective on the choices made in this game so that you can decide if it's the right game for you. If you're already committed, you can skip to Chapter 2 and you won't miss any rules.

A PHYSICS-BASED SIMULATION

Comic book RPGs tend to be sub-divided into "descriptor-based" and "effect-based" games. "Bolt of Fire" is a descriptor, while "Ranged Attack that deals 50 points of damage to one target" is an effect. A descriptor-based game prioritizes the descriptor over the effects. An effect-based prioritizes the effects over the descriptor.

In a descriptor-based game such as Margaret Weis Production's **Cortex System**, a character might have a Flight power that can be used to achieve several **effects:** make an attack, dodge a blow, fly to a new city, and anything else that a character with Flight seems like they could do. The advantage of descriptor-based games is that they encourage the players to use their powers creatively. "I will pick up the car by flying around it at supersonic speeds until I create a tornado-like lift!" The disadvantage of descriptor-based games is that the various characters and powers in the game can end up all feeling the same mechanically. A clever player can usually find some means to justify any effect from any descriptor. The fluff trumps the rules.

In an effect-based game such as Hero Games' **Hero System**, a character would purchase each effect separately, and a character who wanted to be able to attack, defend, and fly around would need to purchase Killing Attack - Melee 6d6, +6 DEX, and Flight 10" separately even if all of them were supposed to represent different aspects of the character's ability to fly. The advantage of an effect-based game is that it enables players to exploit a wide variety of mechanical effects in the game, allowing each character to play differently. The disadvantage of an effect-based game is that the mechanical effects are disassociated from the game world. A character cannot use his powers in ways that make sense with how they are described, only in ways that accord with what effects were purchased. The rules trump the fluff.

Ascendant strives to be neither a descriptor-based nor effect-based game. It is, rather, a physics-based game. The game mechanics are intended to be the physics engine of the game world. Powers have both descriptors and effects. Some effects are precluded by the logic of the descriptor, and some descriptors inevitably entail certain effects. The mechanics are elaborate and detailed (as in an effect-based game) but they are also broad and universalized (as in a descriptor-based game). Players are expected and encouraged to use their powers in whatever manner makes sense within the physics of a comic book world, but not in ways that don't make sense.

It should be noted that while *Ascendant* is physics-based, the physics upon which it is based are comic book physics. Physical phenomena that are routinely ignored in comic books are therefore ignored. For instance, comic books tend to permit strong heroes to pick up heavier objects than weak heroes can, or to throw objects with more force than weak heroes can. In that sense, comic book worlds clearly reflect the physical formula that Force = Mass x Acceleration. Conversely, when strong heroes pick up huge objects like jetliners, comic books routinely ignore issues such as center of gravity, leverage, and surface pressure. A jetliner's fuselage doesn't crumple under the force of the hero's hands, even though it should. *Ascendant* models only what comic books model and doesn't worry about modeling what comic books don't model.

If a descriptor-based system aims to let players experience a comic book story; and an effect-based system aims to let players play a superhero game; our physics-based system aims to let players simulate a comic book world. To do so, we have created logarithmic chart-based universal mechanics, a style of design that has not been widely used in the last two decades. Our ultimate goal is for fluff and rules to work in association.

INSPIRATION FOR THE SYSTEM

If we have succeeded, it is because we stand on the shoulders of giants. Two particular giants deserve special acclaim: Jeff Grubb, the designer of TSR's 1984 RPG **Marvel Super Heroes**; and Greg Gorden, designer of Mayfair Game's 1985 RPG **DC Heroes**. Grubb's **Marvel Super Heroes RPG** (sometimes called the FASERIP system) was our inspiration for the color-coded Challenge Action Resolution Table, which enables any and all actions within the game to be resolved with a roll of 1d100. Meanwhile, Gorden's **DC Heroes RPG** (sometimes called the MEGS system) was our inspiration for the logarithmic mathematics that power our physics-based design. We have sought to synthesize what was best about these two games into one cohesive system that surpasses both in robustness, comprehensiveness, and verisimilitude. Whether we have, in fact, succeeded is for you to judge.

INTERPRETING THE RULES

The remainder of this book is given over to the rules of *Ascendant*. While we have attempted to present a comprehensive and flexible rulebook, all rules are susceptible to ambiguity and uncertainty. Such issues should be resolved by following three canons of interpretation.

Canon #1 - **Specific rules trump general rules.** The mechanics of *Ascendant* are initially presented as a series of general rules ("Core Mechanics") which are later expanded upon with increasing specificity. Whenever rules contradict each other, more specific rules trump more general rules. For instance, it is a general rule that Attacks are made with Attribute vs. Attribute Challenge Checks. A more specific rule states that Ranged Attacks are made as AGI vs. AGI Challenge Checks. An even more specific rule states that Telekinesis Ranged Attacks are made as INS vs. AGI Challenge Checks. And a yet more specific rule states that if the Telekinesis

power has the Agile modifier, the Telekinesis Ranged Attacks are made as AGI vs. AGI Challenge Checks. Thus a character who makes Ranged Attacks with Telekinesis attacks uses INS, not AGI, unless he has Agile Telekinesis, in which case he reverts to AGI!

Canon #2 - **Physics fills in the gaps.** This game is intended as a physics-based simulation. The rulebook provides mechanics for a vast number of physical interactions between characters, objects, powers, and skills. Nevertheless, not every interaction or combination of interactions has been precisely delineated. Anytime the rules are ambiguous or absent with regard to a particular interaction, the rules should be interpreted or expanded in whatever manner leads to the most plausible outcome for a world of comic book physics. For instance, imagine that a character with a fiery phoenix-like aura (Thermal Aura, in game terms) walks through a drought-struck California woodland. The rules do not specifically state that the character's Thermal Aura could start a forest fire, but obviously it could and the gamemaster would be right to rule accordingly. Once the ruling is made, the mechanics of the fire itself could be handled using the rules for Fighting Fires (p. 345).

Canon #3 - **Oral rulings create precedent.** From time to time, the rules will be absent or ambiguous and neither the first nor second canon will make it clear what interpretation should be adopted. When this occurs, the gamemaster should make a ruling according to their best judgment. Thereafter, their oral ruling forms a precedent that should guide future interpretations. In this way, the rules of the game can be gradually but coherently expanded over the course of play. For instance, imagine that a battle takes place in a nightclub with strobing, pulsing lights. The rules do not provide specific mechanics for how strobe lights affect Line of Sight, so the gamemaster has to decide. He rules that it's equivalent to claiming Line of Sight during twilight. Having established this ruling, the next time the player characters fight in that nightclub, the same ruling should apply. If the gamemaster were to suddenly rule that the same strobe lights in the same location now counted as full daylight, they'd be violating this canon.

DEFINED TERMS AND TERMINOLOGY

Ascendant has many new mechanics that are precisely and numerically defined. To help the reader while scanning text, game terms are presented with an initial capital letter when they are rated with a numerical value in game or when they are the names of specific attributes, powers, skills, perks, drawbacks, conditions, object types, or other specific mechanical categories. Non-specific and non-numerical game terms are not capitalized. Acronyms and abbreviations are presented in all capital letters, hence "GM" for gamemaster and "TOU" for Toughness.

Hence, the word "speed" has an initial capital in the sentence "Captain Zoom has a Speed of 5" but not in the sentence "Captain Zoom likes to speed". Likewise, in the sentence "the character has the Overwhelmed condition and cannot use his Air Control power for another 1 SP of Time," Overwhelmed is a specific condition, Air Control is a specific power with a numerical value, and Time is a unit of measure with a numerical value.

Note that "condition" is not capitalized in the previous example, but would be in the sentence "a character with this Condition is in some serious trouble", because in the first sentence "condition" is effectively an adjective while in the second "Condition" refers to a specific defined category of game mechanics. Similarly, the word "object" is not capitalized when it appears alone, but would be capitalized in the sentence "A shield might be an example of a Worn Object", because Worn Object refers to a specific mechanical category of objects.

Throughout the rulebook, we have generally used they/their/them as the third-person pronoun for the gamemaster and player, he/his/him as the third-person pronoun for individual players, characters, and/or creatures of unspecific gender, and it/it/its as the third-person pronoun for individual objects and/or targets. This method avoided the ambiguity that can arise from combining singular and plural forms ("if a target is rammed by a character, they suffer Ramming damage") and made common interactions easier to parse, such as those between characters and objects ("he tried to stop it but it rammed him") and those between characters and targets ("he attacked it for 48 Damage").

CHAPTER 2: CORE MECHANICS

CORE MECHANIC #1: ROLE-PLAYING GAMING

Ascendant is a traditional role-playing game. One of the participants takes on the role of **gamemaster (GM)**. The other participants take on the role of **players**. Each player controls a **player character (PC)** or **hero**, who exists within a shared imaginary universe called the **game world**. The PC is the player's avatar within the game world. The GM controls all other creatures in the game world, known as **non**-**player characters (NPCs)**. In addition to PCs and NPCs, non-living **objects** are often important to gameplay. The term **character** encompasses PCs, NPCs, and objects, while **creature** encompasses PCs and NPCs but not objects. All characters are rated with **Attributes**, which are numerical scores that govern the characters' capabilities in the game world.

In addition to controlling various characters, the GM is responsible for creating scenarios for the players, called **Missions**; refereeing the game and enforcing the rules; issuing rulings on grey areas not covered by the game mechanics; and narrating the flow of information about the world to the players.

Like other traditional role-playing games, *Ascendant* is intended to be played on a recurring basis over a long period of time. Each individual single session of the game is called an **Issue**. An Issue usually lasts between three and five hours. GMs typically try to schedule one to four Issues per month for their players, although that's entirely up to the participants.

Each Issue is divided up into one or more **Scenes** that take place at a particular location in the game world. The Scene is the basic building block of play. Scenes which primarily involve investigating locations and interacting with NPCs are called **Exposition Scenes**. Scenes which are primarily about fighting antagonists or confronting environmental challenges are called **Action Scenes**. Action Scenes are further divided into a sequence of **Pages and Panels** (see p. 363).

Each Scene typically lasts for thirty minutes to an hour of real-world time (the time in game can vary tremendously). There are thus anywhere from three to ten Scenes in a typical Issue, with five to seven Scenes being average.

A collection of one or more Issues forms an **Arc**, which typically involves discovering and confronting a set of antagonists and either solving a crime, averting a crisis, or completing a mission of some sort. A typical Arc lasts from four to six Issues. A collection of one or more Arcs forms a **Series**, or campaign. A typical Series covers from four to six Arcs, or about twenty to thirty Issues. Since most groups play about every other week, a Series corresponds to a year of play.

CORE MECHANIC #2: SUPERMETRIC POINTS

Many quantities in *Ascendant* are measured in **Supermetric Points**, or **SPs** for short. Examples of quantities that can be measured in SPs include Distance, Speed, Time, Weight, Density, Volume, Area, Money, Information, and Fame, as well as all **Primary Attributes** and some **Secondary Attributes** of characters.

For all quantities measured in SPs, zero is used as the base value against which that quantity's measurements are calculated. The base value for 0 SP for each of the measurements mentioned above is shown on the table to the right.

Each additional one SP of a quantity has a value equal to double the amount of the previous SP. For example, since 0 SPs of distance is equal to 5 feet, 1 SP is 10 feet, 2 SP is 20 feet, 3 SP is 40 feet, and so on. If a pistol had a range of 5 SPs it would be able to fire at targets at a distance of 160 feet.

The SP system enables all game mechanics to interact cleanly and clearly. For example, a character who has 9 SPs of Superspeed (about 500 MPH) can run 9 SPs of distance (about 1/2 mile) every 0 SPs of time (3.5 seconds). A character who has 9 SPs of Might can pick up an object that weighs 9 SPs (about 6 tons).

The *Supermetric Values* table lists the exact values for the first 25 SPs of each of the most commonly used quantities in the game. The *Supermetrics Benchmark* tables list rounded player-friendly values for the first 25 SPs of the same quantities, along with real-world examples possessing the appropriate value for each. The *Supermetrics Benchmark* examples also offer the on-the-

SPs	Quantity Measured	Base Value
0	Distance	5 feet
0	Speed	1 mph
0	Time	3.5 seconds
0	Weight	25 lbs
0	Density	0.2 lbs per cubic foot
0	Volume	125 cubic feet
0	Area	25 square feet
0	Money	1¢
0	Information	1.5 words
0	Fame	25 fans

SPs	Quantity Measured	Measured Value
5	Distance	160 feet
5	Speed	32mph
5	Time	112 seconds (about 2 minutes)
5	Weight	800 lbs
5	Density	12.8 lbs per cubic foot
5	Volume	2000 cubic feet
5	Area	400 square feet
5	Money	32¢
5	Information	50 words
5	Fame	800 fans

go Gamemaster a set of quick benchmarks they can use to estimate SP values. For instance, imagine American Eagle wants to pick up a gas-guzzling Hummer 2. The Gamemaster consults the *Supermetric Benchmark* table and sees weight benchmarks listed for sedan automobile (7 SPs), full-size SUV (8 SPs), and medium truck (9 SPs). The Gamemaster concludes the Hummer 2 probably weighs 8 SPs. Since American Eagle has a Might of 12 SPs, he can easily lift the Hummer and carry it to the nearest scrapyard.

As it's a bit more user-friendly, we recommend using the Supermetric Benchmarks table as the primary reference in play. The players and GM only need to consult the precise numbers on the Supermetric Values table for edge cases.

Most real-world measurements will fall in between the exact values shown on the tables. When a real-world measurement does not exactly match one of the exact values shown on the table, just use the closest value. Consider that 0 SPs of distance is 5 feet, 1 SP is 10 feet, and 2 SP is 20 feet. So how many SPs long is a 12-foot coupe? It's 1 SP, because 12 feet is closer to 10 feet than to 20 feet. If a particular measurement is precisely midway between two numbers, round to the even value. For instance, if a sedan is 15 feet long, it is 2 SPs long. 15 feet is exactly midway between 10 feet (1 SP) and 20 feet (2 SPs), so it is rounded to 2 SPs because 2 is even and 1 is odd.

Gameplay in **Ascendant** requires the players and Gamemaster to be able to convert real-world quantities into SPs, and SPs into real-world quantities.

SUPERMETRIC VALUES TABLE (PART 1)

SPs	Distance	Speed	Time	Weight	Density
0	5 ft	1mph	3.5 s	25 lbs	0.2 lbs/cf
1	10 ft	2 mph	7 s	50 lbs	0.4 lbs/cf
2	20 ft	4 mph	14 s	100 lbs	0.8 lbs/cf
3	40 ft	8 mph	28 s	200 lbs	1.6 lbs/cf
4	80 ft	16 mph	56 s	400 lbs	3.2 lbs/cf
5	160 ft	32 mph	1.87 min	800 lbs	6.4 lbs/cf
6	320 ft	64 mph	3.73 min	1600 lbs	12.8 lbs/cf
7	640 ft	128 mph	7.46 min	1 ton, 1200 lbs	25.6 lbs/cf
8	1280 ft	256 mph	14.93 min	3 tons, 400 lbs	51.2 lbs/cf
9	2560 ft	512 mph	29.86 min	6 tons, 800 lbs	102.4 lbs/cf
10	5120 ft	1,024 mph	59.73 min	12 tons, 1600 lbs	204.8 lbs/cf
11	1 mile, 4960 ft	2,048mph	1.99 hours	25 tons, 1200 lbs	409.6 lbs/cf
12	3 miles, 4640 ft	4,096 mph	3.98 hours	51 tons, 400 lbs	819.2 lbs/cf
13	7 miles, 4000 ft	8,192 mph	7.96 hours	102 tons, 800 lbs	1638.4 lbs/cf
14	15 miles, 2720 ft	16,384 mph	15.93 hours	204 tons, 1600 lbs	3278.8 lbs/cf
15	31 miles, 160 ft	32,768 mph	1.32 days	409 tons, 1200 lbs	6,553.6 lbs/cf
16	62 miles, 320 ft	65,536 mph	2.65 days	819 tons, 400 lbs	13,107 lbs/cf
17	124 miles, 640 ft	131,072 mph	5.31 days	1638 tons, 800 lbs	26,214 lbs/cf
18	248 miles, 1280 ft	262,144 mph	10.62 days	3276 tons, 1600 lbs	52,429 lbs/cf
19	496 miles, 2560 ft	524,288 mph	21.24 days	6553 tons, 1200 lbs	104,858 lbs/cf
20	992 miles, 5120 ft	1,048,576 mph	42.47 days	13107 tons, 400 lbs	209,715 lbs/cf
21	1985 miles, 4960 ft	2,097,152 mph	84.95 days	26214 tons, 800 lbs	419,430 lbs/cf
22	3971 miles, 4640 ft	4,194,304 mph	169.90 days	52428 tons, 1600 lbs	838,861 lbs/cf
23	7943 miles, 4000 ft	8,388,608 mph	339.82 days	104857 tons, 1200 lbs	1,677,722 lbs/cf
24	15887 miles, 2720 ft	16,777,216 mph	1.86 years	209715 tons, 400 lbs	3,335,443 lbs/cf
25	31775 miles, 160 ft	33,554,432 mph	3.72 years	419430 tons, 800 lbs	6,670,886 lbs/cf

Here are some additional examples:

★ How long is a marathon (26 miles)? 15 SPs; 26 miles is closer to 32 miles (15 SPs) than to 16 miles (14 SPs).
★ How much does a 200 lb running back weigh? 3 SPs.
★ How long is one day? 14 SPs; 24 hours is halfway between 16 hours (14 SPs) and 32 hours (15 SPs) and 14 is even.
★ If Stronghold has a Might of 12 SPs, how much weight can he lift? About 50 tons.
★ If a tank's main gun has a range of 11 SPs, how far can it shoot? About 2 miles.

Note that because SPs use logarithmic math, they cannot be added together like ordinary quantities. For instance, 5 SPs of weight is 800 lbs and 8 SPs of weight is 6,400 lbs. But 5 SPs plus 8 SPs is not 13 SPs. 13 SPs of weight is 204,800 lbs! In order to add together two quantities measured in SPs, take the larger of the two SP values and add one to find the proper result. 7 SPs plus 8 SPs is 9 SPs. However, if one value is 2 SPs or more less than the larger value, ignore the smaller value. 5 SPs plus 8 SPs is still 8 SPs.

Alternatively, convert the SPs into real-world quantities, add up the real-world quantities, and convert them back to SPs. For example, if a pair of 1,000 lbs horses (each 6 SPs of weight) were put on the back of a 7,400 lbs trailer (8 SPs of weight), the total of 9,400 lbs would convert to 9 SPs of weight.

SUPERMETRIC VALUES TABLE (PART 2)

SPs	Volume	Area	Money	Information	Fame
0	125 cf	25 sf	1¢	1.5 words	25 fans
1	250 cf	50 sf	2¢	3 words	50 fans
2	500 cf	100 sf	4¢	6 words	100 fans
3	1000 cf	200 sf	8¢	12 words	200 fans
4	2000 cf	400 sf	16¢	24 words	400 fans
5	4000 cf	800 sf	32¢	48 words	800 fans
6	8000 cf	1600 sf	64¢	96 words	1,600 fans
7	16,000 cf	3200 sf	$1.28	192 words	3,200 fans
8	32,000 cf	6400 sf	$2.56	384 words	6,400 fans
9	64,000 cf	12,800 sf	$5.12	768 words	12,800 fans
10	128,000 cf	25,600 sf	$10.24	1,536 words	25,600 fans
11	256,000 cf	51,200 sf	$20.48	3,072 words	51,200 fans
12	512,000 cf	102,400 sf	$40.96	6,144 words	102,400 fans
13	1,024,000 cf	204,800 sf	$81.92	12,288 words	204,800 fans
14	2,048,000 cf	409,600 sf	$163.84	24,576 words	409,600 fans
15	4,096,000 cf	819,200 sf	$327.68	49,152 words	819,200 fans
16	8,192,000 cf	1,638,400 sf	$655.36	98,304 words	1,638,400 fans
17	16,384,000 cf	3,276,800 sf	$1,310.72	196,608 words	3,276,800 fans
18	32,768,000 cf	6,553,600 sf	$2,621.44	393,216 words	6,553,600 fans
19	65,536,000 cf	13,107,200 sf	$5,242.88	786,432 words	13,107,200 fans
20	131,072,000 cf	26,214,400 sf	$10,485.76	1,572,864 words	26,214,400 fans
21	262,144,000 cf	52,428,800 sf	$20,971.52	3,145,728 words	52,428,800 fans
22	524,288,000 cf	104,857,600 sf	$41,943.04	6,291,456 words	104,857,600 fans
23	1,048,576,000 cf	209,715,200 sf	$83,886.08	12,582,912 words	209,715,200 fans
24	2,097,152,000 cf	419,430,400 sf	$167,772.16	25,165,824 words	419,430,400 fans
25	4,194,304,000 cf	838,860,800 sf	$335,544.32	50,331,648 words	838,860,800 fans

SUPERMETRIC BENCHMARK TABLES (PART 1)

SPs	Distance	Benchmark	Speed	Benchmark	Time	Benchmark
0	5 feet	Human height	1mph	Turtle walking	3.5 sec	1 Page
1	10 feet	Horse, compact car length	2 mph	Human crawling	7 sec	2 Pages
2	20 feet	Full-size car length	4 mph	Human walking	14 sec	4 Pages
3	40 feet	City bus length	8 mph	Human jogging	30 sec	0.5 minutes
4	80 feet	Blue whale length	16 mph	Human running	60 sec	1 minute
5	160 feet	Titanosaur length	30 mph	Human sprinting	120 sec	2 minutes
6	320 feet	Football field length	60 mph	Antelope sprinting	4 minutes	Typical toilet break
7	640 feet	NYC avenue block length	125 mph	Golden eagle diving	8 minutes	Typical YouTube video
8	¼ mile	Empire State Building height	250 mph	Bugatti Veyron speed	15 minutes	Typical coffee break
9	½ mile	Burj Khalifa height	500 mph	Boeing 747 speed	30 minutes	Typical TV comedy
10	1 mile	Cargo train length	1,000 mph	BAC Concorde speed	1 hour	Typical TV drama
11	2 miles	Manhattan Island width	2,000mph	MiG-25 Foxbat speed	2 hours	Typical movie
12	4 miles	Las Vegas Strip length	4,000 mph	X-15 rocket jet speed	4 hours	Typical RPG session
13	8 miles	Minneapolis to St. Paul trip	8,000 mph	Mach 12	8 hours	Typical work day
14	15 miles	Durham to Raleigh trip	16,000 mph	Mach 24	16 hours	Crunch work day
15	30 miles	Dallas to Fort Worth trip	32,000 mph	Apollo rocket speed	32 hours	Day and half
16	60 miles	English Channel length	65,000 mph	Earth orbit speed	2.5 days	Long weekend
17	125 miles	Philadelphia to Long Island trip	130,000 mph	Space probe speed	5 days	Typical work week
18	250 miles	Grand Canyon length	260,000 mph	Lightning bolt speed	10 days	Typical cruise
19	500 miles	Pittsburgh to Chicago trip	525,000 mph	Slow comet orbit speed	3 weeks	Month
20	1,000 miles	Boston to Atlanta trip	1,050,000 mph	Fast comet orbit speed	6 weeks	Month-and-half
21	2,000 miles	Historic Oregon Trail length	2,100,000 mph	.003 speed of light	12 weeks	Fiscal quarter
22	4,000 miles	Nile River length	4,200,000 mph	.0075 speed of light	24 weeks	Typical TV season
23	8,000 miles	Anchorage to Buenos Aires trip	8,400,000 mph	.015 speed of light	1 year	Novel writing time
24	16,000 miles	2/3 circumference of Earth	16,800,000 mph	.03 speed of light	2 years	Congressional term
25	32,000 miles	1 1/3 circumference of Earth	33,500,000 mph	.05 speed of light	4 years	GRRM release schedule

SUPERMETRIC BENCHMARK TABLES (PART 2)

SPs	Weight	Benchmark	Density	Benchmark	Volume	Benchmark
0	25 lbs	Small dog	0.2 lbs/cf	Carbon Dioxide	125 cf	Sedan interior
1	50 lbs	Loaded backpack	0.4 lbs/cf	Methane gas	250 cf	Fire engine tank
2	100 lbs	Manhole cover	0.8 lbs/cf	Goose down	500 cf	Full-size van interior
3	200 lbs	Human	1.6 lbs/cf	Tobacco flakes	1000 cf	Small bedroom
4	400 lbs	Light motorcycle	3.2 lbs/cf	Popcorn, sawdust	2000 cf	Rooftop water tower
5	800 lbs	Utility pole	6.4 lbs/cf	Hay, shredded paper	4000 cf	Backyard pool
6	1,600 lbs	Horse weight	12.8 lbs/cf	Charcoal, snow	8000 cf	One-room apartment
7	1.5 tons	Sedan weight	25 lbs/cf	Wood, lithium	16,000 cf	Giant ash tree
8	3 tons	Full-size SUV	50 lbs/cf	Ethanol, ice, water	32,000 cf	Giant sequoia tree
9	6 tons	Medium truck	100 lbs/cf	Concrete, lava, brick	64,000 cf	Olympic pool
10	12 tons	LAV-25	200 lbs/cf	Aluminum, granite	125,000 cf	Freest. water tower
11	25 tons	Stonehenge obelisk	400 lbs/cf	Copper, iron, steel	250,000 cf	Bel-Air mansion
12	50 tons	NYC subway car	800 lbs/cf	Lead, mercury	500,000 cf	Independ.-class frigate
13	100 tons	Blue whale	1600.4 lbs/cf	Gold, platinum	1,000,000 cf	Ticonder.-class cruiser
14	200 tons	2,000-sf house	3200 lbs/cf	Ultra-dense alloys	2,000,000 cf	Ohio-class submarine
15	400 tons	Jetliner	6500 lbs/cf	Sun's core	4,000,000 cf	Iowa-class battleship
16	800 tons	Trilithon blocks	13,000 lbs/cf	-	8,000,000 cf	Nimitz-class carrier
17	1,600 tons	Giant sequoia	26,000 lbs/cf	-	16,000,000 cf	Manhattan city block
18	3,200 tons	Saturn V rocket	52,000 lbs/cf	-	33,000,000 cf	Empire State Building
19	6,500 tons	Independence-class frigate	105,000 lbs/cf	-	65,000,000 cf	Target Warehouse
20	13,000 tons	Ticonderoga-class cruiser	210,000 lbs/cf	-	130,000,000 cf	Louisiana Superdome
21	25,000 tons	Ohio-class submarine	420,000 lbs/cf	-	260,000,000 cf	Brandenburg Aerium
22	50,000 tons	Iowa-class battleship	840,000 lbs/cf	-	525,000,000 cf	Boeing Everett Factory
23	100,000 tons	Nimitz-class carrier	1,680,000 lbs/cf	-	1,000,000,000 cf	Suburb square mile
24	200,000 tons	Freedom-class cruiseliner	3,335,000 lbs/cf	-	2,100,000,000 cf	Manhattan neighbor.
25	400,000 tons	Empire State Building	6,670,000 lbs/cf	-	4,200,000,000 cf	San Miguel Island

SUPERMETRIC BENCHMARK TABLES (PART 3)

SPs	Area	Benchmark	Money	Benchmark	Information	Benchmark	Fame
0	25 sf	Toilet stall	1¢	Penny	1.5 words	Short Coolidge speech	25
1	50 sf	King-size bed	2¢	2 Pennies	3 words	Long Coolidge speech	50
2	100 sf	Small bedroom	4¢	Nickel	6 words	Laconic aphorism	100
3	200 sf	Master bedroom	8¢	Dime	12 words	Typical Instagram post	200
4	400 sf	Small studio apt.	16¢	3 Nickels	25 words	Typical tweet	400
5	800 sf	One-bedroom apt.	32¢	Quarter	50 words	Typical paragraph	800
6	1,600 sf	Three-bedroom house	64¢	Soda pop	100 words	Typical social update	1,600
7	3,200 sf	Five-bedroom house	$1.25	iPad app	200 words	Typical blog post	3,200
8	6,400 sf	Mansion, Basketball court	$2.50	Movie rental	400 words	Typical page of text	6,400
9	12,800 sf	U.S. bullion vault at Ft. Knox	$5	Soy latte	800 words	Typical op-ed piece	12,500
10	25,000 sf	Bel-Air mansion	$10	Movie ticket	1,600 words	U.S. Declaration of Ind.	25,000
11	50,000 sf	Football field, Gates residence	$20	Hardback novel	3,200 words	Typical academic paper	50,000
12	100,000 sf	Manhattan city block	$40	RPG rulebook	6,400 words	U.S. Constitution	100,000
13	200,000 sf	Kennedy Center	$80	Boardgame	12,800 words	Typical short story	200,000
14	400,000 sf	Lincoln Memorial Pool	$160	Utility bill	25,000 words	Typical novella	400,000
15	800,000 sf	Buckingham Palace	$320	Game console	50,000 words	Typical novel, 350kb	800,000
16	1,600,000 sf	The Pentagon, 35 acres	$640	43" HDTV	100,000 words	The New Testament	1,600,000
17	3,200,000 sf	Grand Central Station	$1,280	Dell laptop	200,000 words	Crime & Punishment	3,250,000
18	6,400,000 sf	Disneyland	$2,500	Gaming PC	400,000 words	The Fountainhead	6,500,000
19	12,800,000 sf	Rural 300-acre farm	$5,000	77" Plasma TV	800,000 words	King James Bible	13,000,000
20	25,000,000 sf	Monaco or 1 sq. mile	$10,000	Motorcycle	1,600,000 words	Mahābhārata	25,000,000
21	50,000,000 sf	Central Park + adjacent blocks	$20,000	Automobile	3,200,000 words	Complete D20 Rules	50,000,000
22	100,000,000 sf	Malheur Nat. Park giant fungus	$40,000	Full-size SUV	6,400,000 words	U.S tax code	100,000,000
23	200,000,000 sf	Nauru Island (8 sq. miles)	$80,000	Luxury car	12,800,000 words	1 minute of Twitter	200,000,000
24	400,000,000 sf	San Miguel Island (15 sq. miles)	$160,000	Sports car	25,000,000 words	Encyclopedia Americana	400,000,000
25	800,000,000 sf	St. Thomas Island (32 sq. miles)	$320,000	Super car	50,000,000 words	Encyclopedia Britannica	800,000,000

NEGATIVE SUPERMETRIC BENCHMARK TABLES

Supermetric values can also extend into negative scores. When an SP value is less than zero, each negative point has one-half the size of the prior point. For instance, a Range of -1 SP is 2.5 feet, while a Weight of -2 SP is about 6 lbs. The Negative Supermetric Benchmark table shows a range of negative values in some common quantities. All of the rules above apply.

SPs	Distance	Benchmark	Weight	Benchmark	Time	Benchmark
0	5 feet	Human height	25 lbs	Small dog	3.5 sec	1 Page
-1	2.5 feet	Human footstep	12 lbs	Domestic cat	1.75 sec	1 Panel of a Page
-2	1.25 feet	Bowling pin height	6 lbs	Standard red brick	0.9 sec	1 heartbeat or moment
-3	8 inches	Stripper heel height	3 lbs	Human brain	0.5 sec	500 milliseconds
-4	4 inches	House mouse length	24 ounces	Basketball	0.25 sec	250 milliseconds
-5	2 inches	Golf tee height	12 ounces	Football	0.125 sec	12 milliseconds
-6	1 inch	Human thumb width	6 ounces	Baseball, hockey puck	0.06 sec	60 milliseconds

DIVIDING AND ROUNDING SUPERMETRICS

Anytime the rules call for a Supermetric value to be divided by another value, round the fractions to the nearest whole SP value. Round fractions of 0.5 to the nearest even SP value.

> 4.1 rounds down to 4 SP, while 5.7 rounds up to 6 SP. 4.5 rounds down to 4 SP, because 4 is the nearest even SP value to 4.5. 7.5 rounds up to 8, because 8 is the nearest even SP value to 7.5.

When rounding involves ratios such as "gain 2 SPs of X per 3 SPs of Y", then a 1 SP increase in Y yields no increase to X; a 2 SP increase in Y yields a 1 SP increase to X; and a 3 SP increase in Y yields a 2 SP increase in X. These ratios appear whenever surface area and volume interact, such as the power Growth, where MIG increases by 2 SP per 3 SP increase in Weight.

CORE MECHANIC #3: PRIMARY ATTRIBUTES

Most characters (including all PCs and NPCs) have six inherent characteristics called **Primary Attributes**. These are Might (MIG), Agility (AGI), Valor (VAL), Resolve (RES), Insight (INS), and Charisma (CHA):

★ *Might* reflects a character's physical power and toughness. It determines the amount of weight the character can lift, the damage he can deal with a punch, and the injuries he can sustain before collapsing.

★ *Agility* represents a character's hand-eye coordination, balance, and flexibility. It determines the character's accuracy when firing ranged weapons, his ability to dodge attacks, and similar feats.

★ *Valor* measures a character's courage, combat training, "killer" instincts, and reaction time. It determines the character's skill at striking and avoiding blows in hand-to-hand combat.

★ *Resolve* represents a character's concentration, diligence, and willpower. It determines the amount of mental stress the character can endure, as well as the amount of focus he can bring to bear when facing extraordinary challenges.

★ *Insight* reflects a character's intellectual acuity and perception. It determines the time required for a character to find clues at forensic sites, the chances of the character detecting a hidden threat, and the ability of a character to invent gadgets.

★ *Charisma* reflects a character's appearance, bearing, personal magnetism, and verbal fluidity. It determines the time required for a character to interview a witness or interrogate a suspect and the chance of influencing another character with persuasion or coercion.

Each of these Primary Attributes is measured in SPs. Like all SPs, each additional one SP has a value equal to double the amount of the previous SP. That means that a character with an AGI of 8 is about twice as agile as a character with an AGI of 7, and so on. Ordinary humans, such as innocent bystanders, have ratings of 3 SPs in every Primary Attribute. Heroes, villains, and other important characters are almost always stronger, tougher, faster, and better than ordinary humans in every way, with some having scores as high as 15 SPs in some Primary Attributes.

CORE MECHANIC #4: SECONDARY ATTRIBUTES

In addition to their Primary Attributes, most characters in **Ascendant** have an additional set of characteristics, known as their **Secondary Attributes**. Like Primary Attributes, Secondary Attributes are measured in SPs. Sometimes a character's Secondary Attributes may temporarily or permanently change because of the character's activities in play. A character's Powers or Skills may also affect Secondary Attributes or create new ones. These effects are detailed in the description of the Power.

For characters without any Powers, there are ten Secondary **Attributes:** Height, Weight, Running Speed, Jumping Speed, Carrying Capacity, Initiative, Income, Reputation, Passive Spotting Range, and Passive Listening Range.

★ *Height* measures a character's vertical length. A character's Height is 0 SPs (anywhere from 4' to 7'6" tall). Some Powers can radically change a characters' Height.

★ *Weight* measures a character's body mass. A character's Weight is equal to the lesser of his MIG or 3 SPs. Some Perks can change Weight by a small amount. Some Powers like Growth can radically change a character's Weight.

★ *Running Speed* is a measure of a character's running pace. A character can run a distance in SPs equal to his Running Speed in 0 SPs of Time. A character's Running Speed is equal to (AGI + 3) – Weight, to a maximum of 5. Some Powers, such as Superspeed or Time Control, can increase a character's Speed, while other Powers can add new types of Speed.

★ *Jumping Speed* is a measure of the distance a character can leap in a single bound (0 SPs of Time). A character's Jumping Speed is equal to his MIG minus his Weight. Unlike Running Speed, Jumping Speed is not capped. Very strong characters (MIG 9+) can jump faster than they can run. That's because a strong hero's leg muscles are so powerful that they propel him into the air with each stride.

★ *Carrying Capacity* is how much weight (in SPs) a character can carry before being slowed down. A character's Carrying Capacity is equal to his MIG – 3. A character can deadlift his Carrying Capacity + 3, i.e. his full MIG.

★ *Initiative* indicates a character's reaction time under conditions of stress due to reflexes, training, and situational awareness. A character's Initiative is equal to the character's VAL. Some Powers can radically change a character's Initiative.

★ *Income* measures the rate at which the character is able to secure monetary resources. An ordinary person has an Income of 0 SPs, enough to earn about $10 per hour. A character's Income is initially equal to 0 SPs but can be increased by selecting the Wealthy Perk (p. 196).

★ *Reputation* represents the extent to which the character is celebrated and known for his deeds. A character with a high Reputation has many friends, followers, and fans. A character's Reputation is equal to his CHA but can be increased by selecting the Famous Perk (p. 187). An ordinary person has a Reputation of 3 SPs, meaning he is known and liked by around 200 people in total.

★ *Passive Spotting Range* measures the distance at which a character can see a target with a Height of 0 SPs in the absence of cover or obscuring conditions. In the absence of Powers, Passive Spotting Range is 8 SPs.

★ *Passive Listening Range* measures the distance at which a character can hear a sound with a Loudness of 0 SP during conditions of average ambient noise. In the absence of Powers, Passive Listening Range is 0 Sps.

Let's imagine a new hero has arrived at Capital City named Crucible. Assume Crucible's Primary Attributes are MIG 8, AGI 5, VAL 9, RES 7, INS 6, CHA 7. His Height is 0. His Weight is 3 (the lesser of his MIG of 8 and 3). His Running Speed is 5 (his AGI of 5 +3 – his Weight of 3). His Jumping Speed is also 5 (his MIG of 8 – his Weight of 3). His Initiative is 9 (his VAL). His Income is 0. His Reputation is 7 (his CHA). His Passive Spotting Range is 8 SPs and his Passive Listening Range is 0 SPs.

The Supermetrics Benchmark table shows what the SPs of Weight, Speed, Income, and Reputation convert to in real-world numbers. For example, with a Reputation of 7, Crucible has about 3,200 fans and followers— enough for a fan club but not enough to be recognized instantly by average people. The Interacting with the World chapter has additional information.

CORE MECHANIC #5: VARIABLE ATTRIBUTES

Most characters have two **Variable** Attributes: *Health* and *Determination*. These Attributes are called variable because during the course of play they may increase or decrease with the character's activities. Since the value of a Variable Attribute can change frequently, the rules distinguish between **Maximum** and **Current** values.

Health determines the injuries a character can sustain before collapsing. When a character gets punched, kicked, stabbed, shot, blasted, or otherwise physically harmed, the amount of Damage he takes (in points) reduces his Current Health. Should a character's Current Health be reduced to 0 or less, the character is knocked out and can eventually be killed. Current Health increases with time spent resting until the value returns to its Maximum. To determine a character's Health, consult the Variable Attributes table and use the row matching his MIG score. Note that Health is *not* measured in SPs – it is just a number, like a distance in feet or a time in seconds, not a logarithmic measurement.

Determination measures the amount of mental focus a character can exert before becoming psychically wrecked. When a character gets mentally or emotionally attacked, the amount of Damage he takes (in points) reduces his Current Determination. Like Health, Current Determination recovers over time back towards its Maximum. To determine a character's Determination, consult the Variable Attributes table and use the row matching his RES score. Like Health, Determination is just a number, not a logarithmic measurement in SPs.

Let's return to our new hero, Crucible. Since Crucible has a MIG of 8, his Health is 160. With a RES of 6, his Determination is 80.

SPs	Variable Attribute
1	15
2	20
3	30
4	40
5	60
6	80
7	120
8	160
9	240
10	320
11	480
12	640
13	960
14	1,280
15	1,920

CORE MECHANIC #6: POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers and *Skills* are a type of Attribute that some, but not all, characters possess. A **Power** is an Attribute that requires superhuman gifts while a **Skill** is an Attribute that requires special training. Each Power and Skill has unique effects in game, all detailed in the Powers & Skills Chapter (p. 71). What's important is that Powers and Skills are measured in SPs on the same scale as the Primary Attributes. As always, each additional one SP has a value equal to double the amount of the previous SP.

Perks and **Drawbacks** are special characteristics that create exceptions to how the rules work. Perks grant a character an advantage in some manner, while Drawbacks impose a disadvantage. Each Perk and Drawback has unique effects, all detailed in the Perks and Drawbacks chapter (p. 184).

CORE MECHANIC #7: OBJECTS

Objects are inanimate things in the game that are treated like characters because they possess one or more Attributes. **Inventions** are a special class of object. **Devices** are somewhat object-like but are not objects for game purposes.

All of the everyday things in the real world are just objects: manhole covers, park benches, light poles, and so on. Real-world armor, weapons, vehicles, and equipment of the sort available to everyday citizens, police, and military personnel are also objects. Characters acquire objects by purchasing them using their character's Income or by stealing, finding, or borrowing them.

Inventions are a special kind of object. Inventions are one-of-a-kind items created by a character with the Invention Power (see p. 168) or acquired with the Singular Invention Perk (see p. 195). Inventions cannot be found just laying around, nor can they be purchased using Income. Instead, each Invention must be built and paid for out of the inventor's Development Budget.

Devices are pieces of equipment that are "part of who a character is". **Ascendant** treats Devices as part of the character who owns them, and not as objects with separate Attributes.

An object's Attributes might include Primary Attributes, Secondary Attributes, Variable Attributes, Powers, Skills, Perks, or Drawbacks, as well as special Attributes that are unique to the object. The Attributes of an object are measured in the same way as the Attribute would be if possessed by a character, and except where otherwise noted, anything that is true of a character is true of an object with the same Attributes, and vice versa.

All objects have at least four **Attributes:** Toughness, Durability, Weight, and Height. **Toughness (TOU)** is like Might, except that it is purely passive. An object with a high TOU is as hard, durable, and unyielding as a character with the same MIG, but does not have the strength and lifting power. If an object has some form of strength and lifting ability, it typically has SPs of Super-Strength to represent its lifting or carrying capacity. Durability is like Health, except that it measures mechanical rather than biological resilience. An object reduced to 0 Current Durability becomes Broken and stops functioning. Objects whose Durability is damaged do not naturally recover and must be repaired. An object whose Current Durability is reduced to a negative value equal to or greater in magnitude to its Maximum Durability is destroyed and cannot be repaired.

A sniper rifle might possess the Attributes of Durability (measuring how damage it can sustain before breaking), Toughness (used to calculate its Durability), Weight (measuring how much it weighs), and Penetrating Blast (measuring its range and stopping power). Its Toughness, Weight, and Projectile Weapons Power would be measured in SPs, while its Durability would simply be a number, because that Attribute isn't rated in SPs. A sniper rifle would not possess the Attributes of Charisma (being an inanimate object) or Speed (rifles tend not to move around much except when brandished by a sniper).

CORE MECHANIC #8: ACTIONS

An **Action** is an undertaking by a character within the game world. Actions include anything and everything from walking down a corridor to investigating a forensic site to punching a villain. Actions can be categorized along three axes: By long how they take to do, by whether they have a chance to fail, and by whether they involve moving significant distances.

INSTANT VS. EXTENDED ACTIONS

Instant Actions are those which take 0 SPs of time or less (e.g. just a few seconds) to perform. Instant Actions do not have to involve actual combat, but that's when they most often occur. Shooting a gun is an example of an Instant Action.

Extended Actions are those which take 1 SP of time or more to perform. Cleaning a gun is an example of an Extended Action.

AUTOMATIC VS. CHALLENGE ACTIONS

Automatic Actions are Actions that are so trivial that any ordinary person can automatically accomplish them. Opening an ordinary door, pressing a button, or talking on the phone are all Automatic Actions.

Challenge Actions are Actions that are difficult enough that success is not assured. An Action might be challenging because of active opposition from another character (as in combat), intellectual complexity (as in a forensic investigation), or environmental conditions (as in flying through a sandstorm). The outcome of Challenge Actions is determined with dice rolls.

The rules will generally indicate which actions are Challenge Actions. If a character undertakes a specific Action not detailed in the rules, the GM must decide whether it is a Challenge Action or not. Sometimes a Challenge Action may be so trivial for a particular character that they can treat it as an Automatic Action (see p. 54).

MOVEMENT VS. STATIONARY ACTIONS

Movement Actions are Actions that involve moving from one location to another, while **Stationary Actions** are Actions that do not involve moving from one location to another.

CATEGORIZING ACTIONS

These six categories of Action are inclusive and overlapping. For instance, flying in clear skies from Paris to Mumbai is an Extended Automatic Movement Action. Flying through a sudden burst of anti-aircraft fire is an Instant Challenge Movement Action.

To keep descriptions of Actions concise, some of the categories are assumed by default. Every Action is assumed to be Instant unless specifically designated as Extended; every Action is assumed to be Stationary unless specifically designed as Movement; and every Movement Action is assumed to be Automatic unless specifically designated as Challenge.

The following examples will make clear which types of in-game activities are which types of Actions. The categories in [brackets] would be left out in the ordinary format of the rules:

★ Pulling out of your car garage is an [Instant] [Automatic] Movement Action.
★ Driving home from work is an Extended [Automatic] Movement Action.
★ Opening a door is an [Instant] Automatic [Stationary] Action.
★ Cleaning your bedroom is an Extended Automatic [Stationary] Action.
★ Shooting at a villain with a pistol is an [Instant] Challenge [Stationary] Action.
★ Investigating a forensic site is an Extended Challenge [Stationary] Action.
★ Flying through a sudden burst of anti-aircraft fire is an [Instant] Challenge Movement Action.
★ Flying through hurricane-force winds for an hour is an Extended Challenge Movement Action.

Most Actions in the game are straightforward Automatic Actions, Movement Actions, Challenge Actions, or Extended Automatic Actions.

CORE MECHANIC #9: CHALLENGE CHECKS

Challenge Checks are dice rolls used to resolve the outcome of uncertain events in the game. Every Challenge Action involves a Challenge Check, but sometimes a Challenge Check might be called for even if a character doesn't take a Challenge Action. For instance, a character might be required to make a Challenge Check if it is the target of another character's Action or caught in a trap that he has triggered. (Gamers familiar with D20 mechanics may find it helpful to think of Challenge Checks as inclusive of attack rolls, skill checks, *and* saving throws.)

ACTING VALUE AND DIFFICULTY VALUE

Every Challenge Check involves a pair of opposing Supermetric values, the **Acting Value (AV)** and the **Difficulty Value (DV)**. The AV will almost always be an Attribute of the character making the Challenge Check, possibly with some modifiers. The DV will usually be the Attribute of a character resisting or opposing the Challenge. Sometimes, however, the Difficulty Value of a Challenge Check may be a static number. Typically a static number is used for Challenges undertaken against the environment. When the rules call for a Challenge Check, the following format is generally used: "Make an [Attribute and Modifiers to use for the AV] vs [Attribute and Modifiers or Number to use for the DV] Challenge Check."

A Melee Attack requires the attacking character to make a VAL vs VAL Challenge Check. That means that the character should make a Challenge Check using his VAL as the Acting Value and his opponent's VAL as the Difficulty Value.

Jumping over a low wall requires a character to make an AGI vs 5 Challenge Check. That means the character should make a Challenge Check using his AGI as the Acting Value and 5 as the Difficulty Value.

Some Challenge Checks may permit a character to use the higher of two Attributes as the AV or DV of the check or require them to use the lower of two Attributes. If the higher of two Attributes can be used, the two Attributes separated with a "/". For instance, "make a VAL/MIG vs MIG Challenge Check" means that the character should make a Challenge Check using the higher of his VAL or MIG Attribute as the AV and his opponent's MIG as the DV. If the lower of the two Attributes must be used, the two are separated with a "</>". Thus "make a VAL</>MIG vs MIG Challenge Check" means the character must use the lower of VAL or MIG.

CHALLENGE ACTION RESOLUTION TABLE (CHART)

Once the AV and DV have been determined, the DV is subtracted from the AV to yield the **Resolution Value (RV)**. Next, consult the **Challenge Action Resolution Table (CHART)**. The CHART is divided into seven columns and thirteen rows (-6 to 6). Find the row matching the character's RV in one of the two RV Columns on the left-hand side of the table. If the character is making an Attack or certain other interactive actions, it is making an **Attack Check** and uses the RV column labeled RV (Attack). If the character is attempting any other type of Challenge, it uses the RV column labeled RV (Other). The player or GM controlling the character then rolls 1d100 and finds the column matching the number they rolled. The color of that column is the **Color Result** of the Challenge Check.

COLOR RESULTS

There are five possible **Color Results**:

★ *White* indicates that the Challenge Check has ended in failure. The character missed his attack, crashed his car, missed all the clues, or otherwise did not succeed in the Challenge.
★ *Green* means that the Challenge Check resulted in minor success. The character grazed his target, narrowly avoided crashing, spotted a minor clue, and so on. In combat, a Green result deals base damage to the target.
★ *Yellow* designates that the Challenge Check resulted in major success. The character solidly struck his target, maintained control of his vehicle, spotted an important clue, etc. In combat, a Yellow result deals double (x2) damage to the target.

RV (Attack)	RV (Other)	Red	Orange	Yellow	Green	White
-6	-3	-	01	02-03	04-07	08-100
-5	(-2.5)	-	01-02	03-06	07-09	10-100
-4	-2	-	01-03	04-07	08-12	13-100
-3	(-1.5)	-	01-04	05-09	10-19	20-100
-2	-1	-	01-06	07-13	14-25	26-100
-1	(-0.5)	-	01-07	08-19	20-35	36-100
0	0	01	02-11	12-26	27-50	51-100
1	(0.5)	01-02	03-13	14-33	34-67	68-100
2	1	01-03	04-20	21-50	51-98	99-100
3	(1.5)	01-09	10-37	38-79	80-99	100
4	2	01-23	24-55	56-98	99	100
5	(2.5)	01-47	48-95	96-98	99	100
6	3	01-96	97	98	99	100

★ *Orange* indicates that the Challenge Check resulted in critical success. The character powerfully struck his target, confidently and easily controlled his car, spotted several important clues, and so on. In combat, an Orange result deals quadruple (x4) damage to the target.

★ *Red* means that the Challenge Check resulted in triumph. The character struck his target as hard as he possibly could, perfectly controlled his vehicle, spotted every clue he could have spotted, etc. In combat, a Red result deals octuple (x8) damage to the target.

Not every Color Result is available at every RV. Note that the maximum RV is capped at 6 for Attacks and 3 for other Challenges, and that the minimum RV is capped at -6 for Attacks and -3 for other Challenges. See Color Threshold and Automatic Success, below.

Let's walk through an example of a Challenge Check. Suppose that Alice is playing Stiletto and wants to strike Stronghold for throwing her cigarettes in the toilet. Striking is a Melee Attack (a type of Challenge Action) that uses Stiletto's VAL as the Acting Value and Stronghold's VAL as the Difficulty Value. In order to determine whether Stiletto's Melee Attack succeeds, Alice follows the Challenge Check procedure below:

1. The AV is equal to Stiletto's VAL of 14 SPs. The DV is Stronghold's VAL of 11 SPs. Alice calculates the Resolution Value for her Challenge Check by subtracting 11 from 14 to yield 3. The RV of her Challenge Check is 3.

2. Alice consults the CHART and finds the row marked "3" in the RV (Attack) Column on the left-hand side of the CHART.

3. Alice rolls 1d100. Let's suppose she rolls 39.

4. Alice now finds the column on the CHART where a roll of 39 falls for row "3". The color at that point is Yellow. Stiletto has achieved a major success on her Challenge Check

Depending on the particular Challenge Check, the results may require additional game mechanics to fully resolve. These sub-mechanics are detailed in the Powers & Skills, Actions, and Combat chapters for each specific Challenge Check.

COLOR THRESHOLD

Some Challenge Checks may be of such particular difficulty that a Green result is not enough to succeed. Instead, the Challenge Check may require at least a Yellow, Orange, or even Red Color Result to succeed. In this case the color is noted after the DV. For instance, if the rules say "make an AGI vs. 12 Yellow Challenge Check", that means that the character should make a Challenge Check using his AGI as the AV and 12 as the DV, with only Color Results of Yellow, Orange, or Red succeeding. The minimum Color Result required is said to be the Challenge's **Threshold**. By default, actions have a Green threshold.

Designer's Note: The key to understanding the CHART is to remember that each additional one SP of a quantity has a value equal to double the amount of the previous SP. Therefore each 1 SP change in RV should double or half the expected outcome of using an Attribute or Power. If you multiply the value of the color results (x1 for Green, x2 for Yellow, x4 for Orange, and x8 for Red) by the percentage likelihood of each color result for each RV, then the expected values on the RV (Other) column from RVs of -3 to 3 are 0.12, 0.24, 0.5, 1, 2, 4, and 7.75. The value roughly doubles with each point of RV, just as it should.

On the other hand, the expected values on the RV (Attack) column from RVs of -6 to 6 are 0.12, 0.19, 0.25, 0.36, 0.5, 0.68, 1, 1.34, 2, 2.88, 3.99, 4, 5.75, and 7.75. The expected value roughly doubles with each 2 points of RV, e.g. it increases by a factor of 1.41 per point. The reason here is that combat is a back-and-forth affair. A character with an AGI of 8 fighting an opponent with an AGI of 7 should have twice the chance to hit his opponent as his opponent has to hit him. AGI 8 vs. AGI 7 yields an RV of 1, for an expected value of 1.34 and AGI 7 vs. AGI 8 yields an RV of -1, for an expected value of 0.68. 1.34 divided by 0.68 is 1.97 – so the broadened -6 to +6 scale gives the appropriate result. Using the -3 to +3 scale would yield 2:0.5, or a 4:1 advantage by the higher AGI character.

For similar reasons, the damage dealt by Attacks, and the Health of characters, also increases by a factor of 1.41 per SP. This means that for any given set of values (VAL and MIG, say), an increase by 1 SP in either Attribute increases damage over time by a factor of 1.41 – increasing VAL by 1 SP increases the chance to hit by a factor of 1.41, while increasing MIG by 1 SP increases damage dealt by a factor of 1.4. Now, this may lead the astute reader to wonder why the weightlifting ability from MIG increases by a factor of 2 per SP while the damage dealt by MIG increases by a factor of 1.41 per SP. It seems an incongruity. The answer is that MIG is scaled to energy (e.g. the transformation of kinetic energy into potential energy), while Damage in **_Ascendant_** is scaled to the square root of energy. The square root of a factor of 2 is 1.41, which is to say, the same rate of increase seen in the CHART.

When Challenge Checks have RVs lower than the lowest value on the CHART, increase the Color Threshold for the check. If the Check's RV is 1 SP lower, increase the Color Threshold of the Challenge Check by one step. If the Check's RV is 2 or more SP lower, increase the Color Threshold by two steps. (In other words, when you can no longer shift up on the RV rows of the CHART, shift left on Color Threshold instead.)

Stronghold is making an Attack with an RV of -7. Normally an Attack has a Green threshold, but since the RV is 1 point lower than the lowest value on the CHART (-6), the threshold is Yellow. Stronghold will miss on a Green result.

AUTOMATIC SUCCESS

A character attempting an Attack always automatically succeeds with a Red result if the RV of the Challenge Check is +7 or higher. Occasionally other types of Attacks may automatically succeed in other circumstances. For instance, a Clamber (p. 394) always succeeds if the target is a static object.

A character attempting any other Challenge can choose to automatically succeed anytime the RV of the Challenge Check is at least 0. If the Challenge Check has an RV of 0 or better, the character can choose to automatically succeed with a Green color result. If the Check has an RV of 1 or better, the character can choose to automatically succeed with a Yellow color result. If the Check has an RV of 2 or better, the character can choose to automatically succeed with an Orange color result. If the Check has an RV of 3 or better, the character can choose to automatically succeed with a Red color result.

If a character chooses to automatically succeed on a Challenge Check, the player can deem the Action the character took in association with that Challenge Check (if any) to be an Automatic Action instead of a Challenge Action. Except where otherwise noted, this latter rule does _not_ apply to Attack Checks. Attacks count as Challenge Actions, even if the RV is +7 or higher, unless specifically noted otherwise.
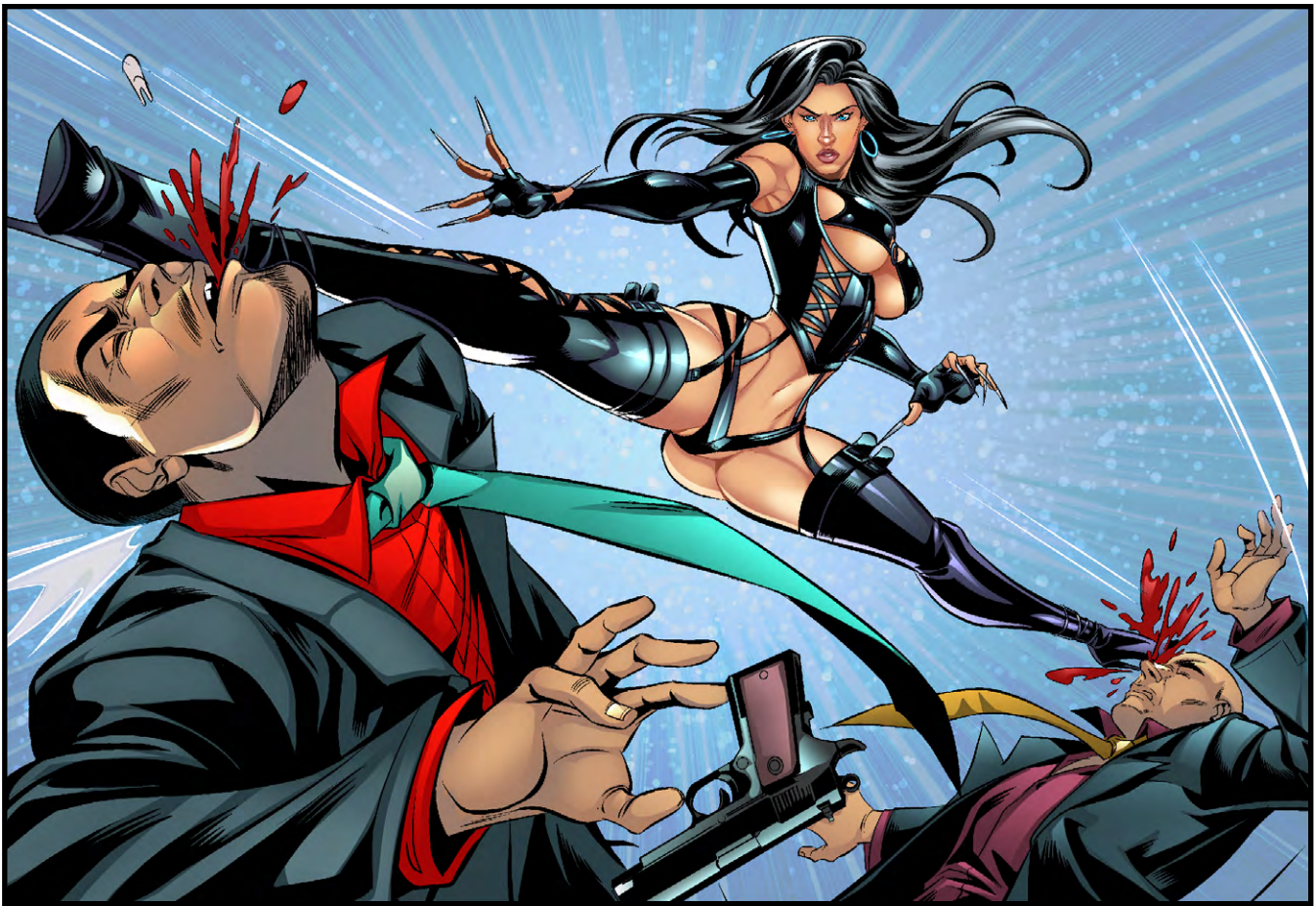
CORE MECHANIC #10: COMBAT

When heroes meet villains on the streets, it typically results in **combat**. Using the following rules, you can resolve any and every type of combat, whether it's a brawl between bruisers, a telekinetic ping-pong of flying cars, or a mental duel between psychics.

PAGES AND PANELS

In **Ascendant**, combat and similar moments of intense frenetic activity are resolved in a series of sequential segments called **Pages** (named for the pages of a comic book). Each Page lasts 0 SPs of time, or approximately 3.5 seconds. During each Page of combat, each participating character gets one **Panel**, a turn during which he has an opportunity to take Actions. Thus a Page consists of several Panels (one per character in the combat) and an entire fight or chase scene might consist of several Pages.

When it is a character's Panel in the Page, he can perform up to three Actions. However, only one of the three Actions can be a Challenge Action (the other two must be Automatic Actions) and only one of the three can be a Movement Action (the other two must be Stationary Actions). If a character takes a Challenge Movement Action, his other two Actions would both have to be Stationary Automatic Actions. None of the Actions can be Extended Actions - since time is being resolved in Pages that are 0 SPs of Time, only Instant Actions (those that take 0 SPs of Time) can be taken during a character's Panel.

ATTACKS, DAMAGE, AND DAMAGE TYPE

Attacks are made with Challenge Actions and resolved with Attack Checks on the CHART. An Attack Check is a Challenge Check using the RV (Attack) column of the CHART. In most cases, a successful Attack deals **Damage**. Damage, like Health, is a number, not a Supermetric. Damage is derived from the SPs of the **Effect Value (EV)** of the Attack. (Some Attacks may trigger certain special effects in lieu of or addition to Damage; these are discussed later on.)

The EV is determined by the method used to Attack. For instance, for a punch the EV is usually MIG. For a blast with a superpower, the EV is usually the Power used to make the Attack. Damage is then modified by the Color Result of the Attack. The Color Result may be modified if the target **Rolls with the Attack** (described below).

Each EV has a Base Damage associated with it. If the Color Result of the Attack Check was Green, the Attack deals its Base Damage to the target. A Yellow result deals double the Attack's Base Damage to the target. An Orange result deals quadruple the Attack's Base Damage and a Red result deals octuple its Base Damage to the target.

Most Attacks reduce the target's Current Health by the Damage dealt, but some reduce the target's Current Determination by the Damage dealt. **Damage Type** is a descriptor that summarizes the particular means by which harm is caused in the target. There are 14 different Damage Types in **Ascendant**, covering everything from punches to quantum sorcery. Damage is noted in the rules using the format "## [Damage Type] [Attribute Damaged] Damage," e.g. "The character takes 64 Thermal Health Damage."

PROTECTION

Some characters may have **Protection** from a Power such as Armor, Forcefield, or Shield. Protection may be universal (all Damage), or it may be limited to one or more Types of Damage. When Protection applies, it reduces the total Damage dealt by an Attack by an amount determined by the SPs of Power granting it, to a minimum of 0. The Protection by SP table shows the amount of Protection that each SP score of a Power provides.

ROLLING WITH THE ATTACK

Targets struck by some Attack Methods can reduce the amount of Damage they suffer by **Rolling with the Attack**. A character who is being punched might literally be rolling with the punch, moving his body backward to avoid taking the full brunt of the impact. Other examples of Rolling with the Attack include diving away from an explosion, performing a stop-drop-roll to put out a flame, and so on. The effect of Rolling with an Attack is to reduce the Color Result by either one, two, or three colors (target's choice). An Attack's Color Result cannot be reduced by more than three colors, nor can it be reduced to less than Green. Each reduction of the Color Result costs 1 Hero Point (p. 57). In addition, the more the target reduces the Color Result, the worse the **Condition** it ends up in from Rolling with the Attack.

EFFECTS OF DAMAGE

A character whose Current Health is reduced to 0 or less is **Unconscious** until his Health is increased above 0. A character whose Current Health is reduced to a negative value equal to or greater in magnitude to his Maximum Health is **Slain**. A character whose Current Determination is reduced to 0 is **Overwhelmed** until his Determination is increased above 0. Current Determination cannot be reduced below 0.

An object whose Current Durability is reduced to 0 or less is **Wrecked** until its Durability is increased above 0. An object whose Current Durability is reduced to a negative value equal to or greater in magnitude to its Maximum Durability is **Destroyed**.

CONDITIONS

Bad stuff happens to heroes: They get knocked through walls, stunned, disoriented, mind controlled, or otherwise suffer a disadvantageous effect called a **Condition**. For easy reference during play, the effects of the various Conditions are described wherever they appear in the rules. In addition, Appendix B has a consolidated list with complete descriptions of all Conditions in the game.

CORE MECHANIC #11: HERO POINTS

When the going gets super-tough, the super-tough get going. In the world of **Ascendant**, characters can sometimes succeed at the impossible. Some might credit it to fate, karma, or luck; others to sheer grit and iron will. Whatever the case, heroes and villains can and do transcend their ordinary limits. The ability of a character to perform beyond their bounds is measured with **Hero Points**. The number of Hero Points a character possesses depends on how powerful the character is; most NPCs in a game world do not have any Hero Points, while a world-shattering colossus will have many. This is discussed in further detail in Character Creation (see p. 70).

SPENDING HERO POINTS

Hero Points have a wide variety of uses, ranging from improving the odds of success of an action, decreasing the odds of an opponent's success, reducing damage, performing special actions, or rapidly recovering from injuries.

ADJUSTING RESOLUTION VALUE

A character performing a Challenge Check can spend one or more Hero Points to increase his RV by the amount spent. If a character is resisting or opposing the Challenge, that character can spend one or more Hero Points to decrease the RV by the amount spent. Thereafter, the character immediately resolves the Challenge on the CHART - the opposing characters cannot continue to bid against each other. The maximum number of Hero Points a character can spend when modifying the RV is equal to one-third his RES attribute. Some Perks and Drawbacks may modify this value.

Suppose Stiletto (VAL of 14 SPs, RES of 10 SPs, 28 Hero Points) is punching Stronghold (VAL of 11 SPs, RES of 9 SPs, 28 Hero Points). Stiletto's RV is (14 – 11) = 3. She decides to spend 3 of her 28 Hero Points to raise her RV to 6. (She cannot spend more than 3 Hero Points because of her RES of 10; 10 divided by 3 is 3.33, which rounds to 3). Stronghold decides to spend 3 of his 28 Hero Points to reduce the RV from +6 to +3. He would like to reduce the RV to -1 or less, but with RES of 9 SPs, he cannot spend more than 3. Therefore Stiletto resolves her Challenge Check on the 3 column of the CHART.

DESPERATE DAMAGE REDUCTION

A character who has just been dealt Damage sufficient to slay him can expend Hero Points to reduce the Damage. See Desperate Damage Reduction on p. 371.

PERFORMING ACTIONS

Some Actions require an expenditure of Hero Points to undertake them at all. For instance, a character can recharge his Forcefield with an Automatic Action but it requires an expenditure of Hero Points. The most common circumstance in which Hero Points are required to undertake an Action is when performing a **Power Stunt**. Power Stunts are explained on p. 265.

REMOVING CONDITIONS

At the start of a character's Panel in Combat, a character can spend Hero Points in order to remove certain Conditions. The number of points required will vary depending on the Condition. Not all Conditions can be ended with Hero Points. The Hero Point cost to remove each Condition is noted in the Condition's description in Appendix B (p. 482).

The Staggered condition reduces the number of activities a character can undertake during a combat. A character can spend 2 Hero Points in order to remove the Staggered condition.

RECOVERING FROM DAMAGE

A character can spend one or more Hero Points to decrease the Time required to recover points of Health or Determination lost to Damage. See Recovery from Damage on p. 373.

ROLLING WITH ATTACKS

A target struck by an Attack can expend Hero Points to Roll with the Attack, reducing the Color Result of (and hence Damage dealt by) the Attack. See Rolling with the Attack on p. 370.

RECOVERING HERO POINTS

Once spent, Hero Points are unavailable until recovered. Some or all of a character's spent Hero Points can be recovered at the end of each Issue by defeating antagonists, overcoming environmental challenges, and accomplishing missions. Recovering Hero Points is detailed on p. 440.
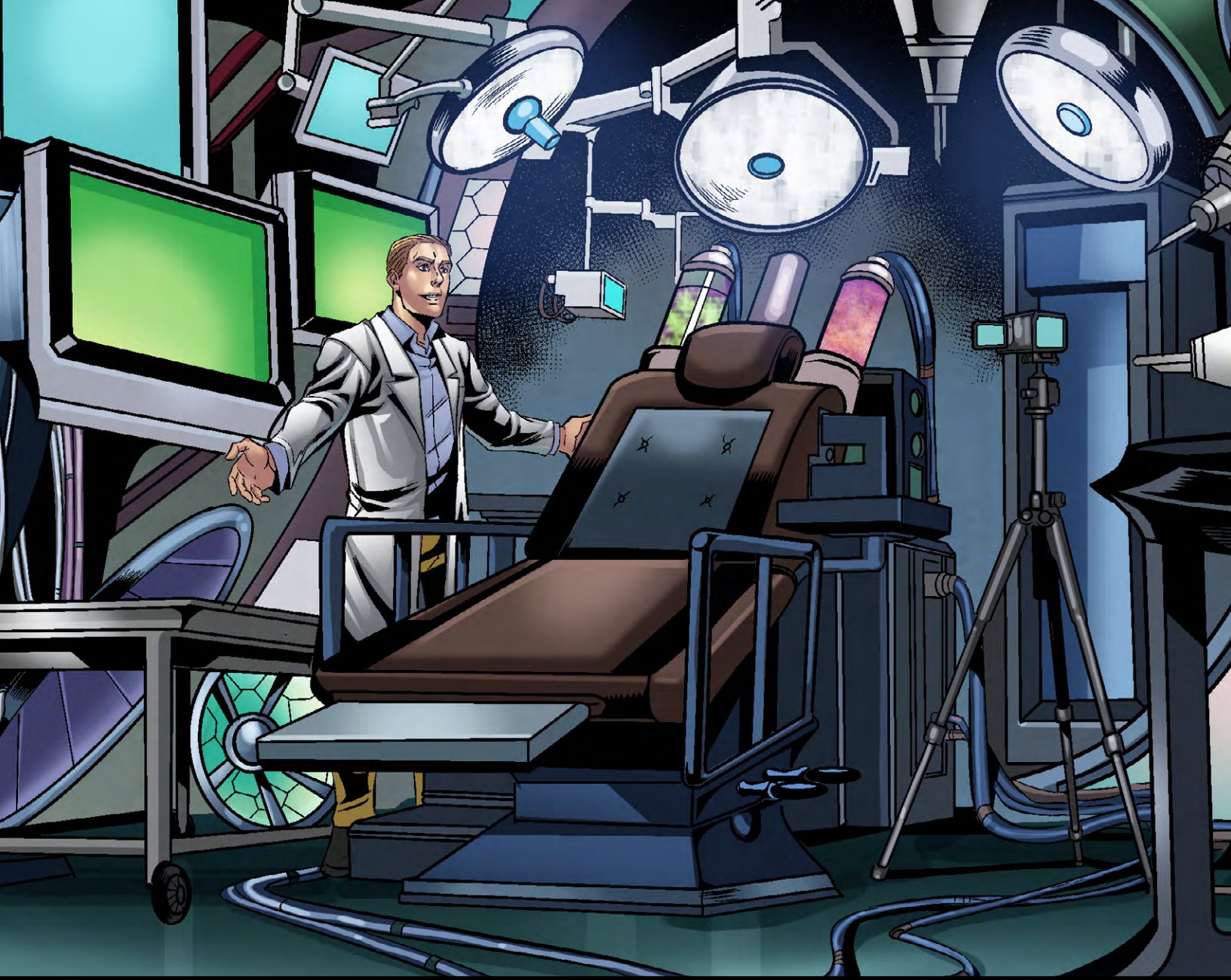
CHAPTER 3: CHARACTER CREATION

This chapter provides rules to create your own heroes and villains in the world of *Ascendant*. Players and GMs can create characters with any desired combination of Attributes, Powers, Skills, Perks, and Drawbacks using these rules.

CONCEPT AND ORIGIN

The first step in creating a character is to think about the character's concept and origin. Is he a bruiser? Fast and deadly? Perhaps he has the power to bend wills or to control the elements. When developing a character concept, be sure to check in with the GM to make sure the concept is in line with his campaign plans. If the player wants to create a globe-trotting powerhouse and the GM wants to run a street-level campaign, that's something that needs to get worked out before character creation!

Likewise, each player should chat with the other players to make sure that their character concepts don't overlap. While *Ascendant* is not a class-and-level game, there are still implicit niches within any group of players, such as the blaster, bruiser, energy controller, etc. The game is usually more fun when each player's character has their own unique role to play.

The next step is to consider the origin of the character's unusual powers and abilities. In the official campaign setting for *Ascendant*, superpowers arise from the genetic expression of metaplasts in an organism that enable the superhuman (often called an **ascendant**) to exploit zero-point energy in the same way chloroplasts enable a plant to exploit solar energy. Some people are born with their metaplastic genes already active, while others find their metaplasts appear after exposure to biochemical agents, stress, special training, extraterrestrial or interdimensional forces, or other events. Usually the character's emergent powers fulfill some powerful subconscious desire or need.

However, the game does not require you to use the official setting, and characters in *Ascendant* are not mechanically restricted to any particular origin. Subject only to the GM's campaign, characters might have powers because they belong to an unusual strain of humans such as mutants; they might have gained powers from genetic engineering or radiation exposure; they might be magicians or faeries, gods or aliens that possess abilities beyond those of ordinary humans; they might rely on devices with technological or magical capabilities that empower or enhance them; or any combination of the above.

Designer's Note: In theory, a superhero's device is vulnerable to getting lost, breaking down, being damaged, running out of fuel, and so on. In theory, a device could be used by another character. In theory, a device could be mass produced and used to equip the US Army. Yet in the universe of comic books these things rarely happen. The comic narrative usually forecloses any possibility of use by others or mass production ("the armor is tied to your DNA and uses alien material that cannot be replicated on Earth"). And while devices sometimes do get lost, damaged, or stolen, these occurrences are just plot devices – exploitations of a comic book weakness. For this reason, *Ascendant* treats device-based heroes just like other types of heroes – their devices are simply part of "who they are" as characters. Consider, for instance, that a battlesuit hero who is caught out of his battlesuit suffers reduced Attributes and loses his Powers. An alien ubermensch who is exposed to de-powering radiation from fragments of his homeworld also suffers reduced Attributes and loses his Powers. In both cases, the characters have reduced effectiveness when in their states of vulnerability. In game terms, both characters would pay CP for their Attributes and Powers and simply have the Vulnerable State Drawback (see p. 206).

A character can rationalize his character's Attributes, Powers, and Skills as deriving from training, genetics, magic, or devices as desired. Any particular side effects or vulnerabilities related to their origin can be modeled using Power Modifiers (see p. 73), Power Flaws (p. 73), and Drawbacks (see p. 197). There are no special rules for any particular origin, except those a GM might impose for his particular setting.

Imagine Mike has made a character with 12 SPs of Electrical Blast, 12 SPs of Invulnerability, and 12 SPs of Flight. Mike could decide to build his character as:

★ Firefly, a scientist partly transformed into a lightning bug by an experiment gone wrong. His Powers would be rationalized as the capacity to emit blasts of lightning, the protection of a chitinous carapace, and the ability to fly on insect wings. To support this origin, the character would be given the Winged modifier to his Flight power along with a Disturbing Appearance Drawback to reflect his horrific half-man half-insect form.

★ Avatar, an archeologist who, by praying to Mt. Olympus, can temporarily gain the likeness and power of the thunder-god Zeus, able to hurl lightning bolts, soar through the heavens, and ignore mortal weapons. To support this origin, the character would be given a Vulnerable State: Caught out of Costume Drawback.

★ Concord, a brilliant engineer who developed a suit of battle armor that grants him jet-like speed, tank-like protection, and lightning-like blasts. To support this origin, the character would be given a Vulnerable State: Deprived of Device Drawback, reflecting the character's powerlessness if he loses his power armor.

★ Traveller, an astronaut from the distant future flung back in time to present-day Earth. The Traveller is equipped with a shock-rifle, spacesuit, and jetpack that grant him his Powers. To support this origin, the character would be given three different Vulnerable State: Deprived of Device Drawbacks, one for each of his three Devices.

★ Avengelyne, a fallen angel trying to redeem herself, capable of hurling holy lightning, flying on feathered wings, and nigh-invulnerable to normal weapons. To support this origin, the character would be given a Winged modifier to her Flight, the Code of Honor and Duty Drawbacks (reflecting her angelic morality and redemptive mission) and an Adverse Response: Holy Water Drawback to reflect her fallen state.

By combining various Powers with different choices of Power Modifiers, Power Flaws, Perks, and Drawbacks, you enjoy infinite possibilities for character creation.

CHARACTER POWER

In **Ascendant**, characters can range in power from ordinary human beings, to street-level vigilantes, to veritable gods. Character power is rated with three mechanisms: Character Points, Power Limit, and Challenge Rating.

Character Points (CP) are used to construct characters. An average human has 180 CP. A trained soldier has 240 CP. An exceptionally impressive, formidable and renowned human in the real world has 400 CP. A few humans have more than 400 CP on the basis of great wealth, fame, or other Perks. Otherwise, only ascendants have in excess of 400 CP. Every 80 CP represents an approximate doubling of the character's competency across all capabilities.

Power Limit constrains the character in how they allocate their CP. Ordinary humans with 200 CP have a Power Limit of 9. Power Limit increases by 1 per 40 CP.

Challenge Rating shows how powerful a character is relative to a trained soldier with 240 CP. A character with 640 CP and Power Limit 20 has a Challenge Rating of 30, meaning he's as powerful as an entire platoon of 30 soldiers. A character with 960 CP has a Challenge Rating of 500. He's as powerful as an entire battalion of 500 soldiers, or 16 ascendants with a Challenge Rating 30 each. Challenge Rating doubles with every 80 CP.

Characters with Challenge Rating 30+ are said to be "military-grade" ascendants because they are as personally as powerful as a platoon of infantry or a main battle tank.

The Character Power table below shows the range of CP available to characters in the game, along with the associated Power Limits and Challenge Ratings, along with the estimated worldwide number of characters of that power in the official Ascendant setting.

CHARACTER POINTS

Characters are constructed with Character Points (CP). The GM can allocate a fixed amount of CP to each player character, or have the player determine their character's CP randomly.

ASSIGNED CP

The GM can assign each player character any desired CP score. For campaigns with gritty heroes, we recommend allocating 481 to 600 CP to each player character. For superpowered vigilantes operating at the metropolitan level, we recommend 601 to 720 CP. For powerful heroes of national repute, we recommend 721-880 CP. For globe-trotting titans, we recommend 881-1000 CP.

RANDOM CP DETERMINATION

The GM can have each player determine their character's CP randomly. Each player rolls 2d6x10 and adds that total to a base amount set by the GM. For campaigns with gritty heroes, the base amount is 480 CP. For superpowered vigilantes, the base amount is 580 CP. For powerful heroes, the base amount is 720 CP. For god-like titans, the base amount is 880 CP (or more).

For truly random characters that can range in power from street-level to god-like, start each player with 400 + (10d10 x 8) CP. While comic books do sometimes feature characters of exceptionally disproportionate power, in RPGs it can lead to resentment or frustration, so use this method with caution.

> Let's imagine Chad and Steve are creating player characters for a Dreadnaught team. Each player character has 580 CP to start. Chad rolls 2d6 and gets a 10, so his character has 680 CP. Steve rolls 2d6 and gets a 3, so his character has 610 CP. Chad's character has Power Limit 21 and Challenge Rating 40, while Steve's character has Power Limit 20 and Challenge Rating 30. Both are military-grade ascendants.

BUILDING A CHARACTER

Characters are built by spending CP to acquire SPs in a character's desired Primary Attributes, Powers, and Skills and to acquire ranks in Perks. Additional CP can be acquired by taking one or more ranks in various Drawbacks. Secondary Attributes and Variable Attributes are not purchased directly with CP but are instead determined based on Primary Attributes and then modified with Powers, Skills, and Perks. Any unspent CP are reserved for later use.

PRIMARY ATTRIBUTES

When spending CP, the best place to start is with the character's Primary Attributes: Might (MIG), Agility (AGI), Valor (VAL), Resolve (RES), Insight (INS), and Charisma (CHA). Each SP of a Primary Attribute costs 10 CP. For instance, a VAL score of 10 SPs costs 100 CP. Every character must have at least 1 SP in each Primary Attribute. Ordinary humans are capped at 5 SPs in MIG, AGI, and VAL. (See Appendix C for optional rules for ordinary humans).

CP	Power Limit	Challenge Rating	Worldwide Number*
160 or less	8 or less	0.5	1.5 billion
161 - 200	9	0.75	5.6 billion
201 – 240	10	1	425 million
241 - 280	11	1.5	115 million
281 - 320	12	2	32 million
321 - 360	13	3	9 million
361 - 400	14	4	2.5 million
401 - 440	15	6	375,000
441 - 480	16	8	167,000
481 - 520	17	10	75,000
521 - 560	18	15	33,000
561 - 600	19	20	15,000
601 - 640	20	30	6,700
641 - 680	21	40	3,000
681 - 720	22	60	1,350
721 - 760	23	85	600
761 – 800	24	120	265
801 - 840	25	170	120
841 – 880	26	250	55
881 - 920	27	350	24
921 – 960	28	500	11
961 - 1000	29	700	5
1001 - 1040	30	1000	2
1041 - 1080	31	1400	1
1081 - 1120	32	2000	40% Likelihood to Exist
1121 - 1160	33	2800	20% Likelihood to Exist
1161 – 1200	34	4000	10% Likelihood to Exist
1201 - 1240	35	5600	4% Likelihood to Exist
1241 - 1280	36	8000	Unknown

*Excluding NPCs who only merit 400+ CPs because of wealth and/or fame

Let's track Steve through the character creation process. Steve has 610 CP to work with. He envisions his character Airborne as an ex-Ranger with great physical power, a courageous heart, and a disciplined attitude. Steve wants Airborne to be strong enough to pick up and throw a car a good distance, so he purchases 11 SPs of MIG. He imagines Airborne as more dexterous than any ordinary person but not possessed of an unearthly grace, so he purchases 7 SPs of AGI. Steve sees Airborne as having a ton of combat training, so he purchases 9 SPs of VAL. Airborne is a determined and focused soldier, so Steve assigns him 9 SPs of RES. He purchases only 5 SPs of INS, making Airborne a smart, situationally aware hero, but not superhumanly so. Finally Steve purchases 7 SPs of CHA. Airborne is a paragon of confidence and human excellence. Steve has spent a total of (110 + 70 + 90 + 90 + 50 + 70) 480 CP on Airborne's Primary Attributes.

SECONDARY AND VARIABLE ATTRIBUTES

The second step is for the player to determine their character's Secondary and Variable Attributes. There is no CP cost associated with Secondary and Variable Attributes. The Secondary Attribute table shows how to derive each Secondary and Variable Attribute:

SPs	Variable Attribute	SPs	Variable Attribute	Attribute	Score
1	15	13	960	Height	0
2	20	14	1280	Weight	Lesser of MIG or 3
3	30	15	1920	Running Speed	Lesser of 5 or (AGI + 3) - Weight
4	40	16	2560	Jumping Speed	MIG – Weight
5	60	17	3840	Carrying Capacity	MIG - 3
6	80	18	5120	Initiative	Equal to VAL
7	120	19	7680	Income	0
8	160	20	10240	Reputation	Equal to CHA
9	240	21	15360	Passive Spotting	8
10	320	22	20480	Passive Listening	0
11	480	23	30720	Health	Cross-reference MIG on Variable Attribute table
12	640	24	40960	Determination	Cross-reference RES on Variable Attribute table

Steve now calculates Airborne's Secondary and Variable Attributes. His Height is 0. Airborne's Weight is the lesser of his MIG (11 SPs) or 3 SPs, so it's 3 SPs. Airborne's Running Speed is 5 SPs, which is less than his AGI +3 – Weight. His Jumping Speed is (11 – 3) 8 SPs, so he moves faster leaping in great bounds than running. His Carrying Capacity is his MIG – 3, or 8 SPs. His Initiative is equal to his VAL, so it's 9 SPs. Airborne's Income is 0 SPs. His Reputation is equal to his CHA of 7 SPs. His Passive Spotting Range is 8 SPs, while his Passive Listening Range is 0 SPs.

To find Airborne's Health, Steve cross-references Airborne's MIG of 11 SPs with the appropriate row and column on the Variable Attribute table. He notes that Airborne has 480 Health. He does the same with RES and notes that Airborne has 240 Determination.

POWERS AND SKILLS

The next step is for the player to purchase any desired Powers and Skills for their character. Ascendants can purchase Powers and Skills of any SP score, subject to their Power Limit (p. 65). Ordinary humans are capped at 9 SPs in Skills. Ordinary humans can purchase only the following Powers and to no higher than 5 SPs: Combat Sense, Iron Will, Super-Fortitude, Super-Intelligence, Super-Perception, Super-Stamina, and Super-Strength. (See Appendix C for optional rules for ordinary humans).

Every Power and Skill has two costs, a Base Cost and a Variable Cost. The Base Cost is the number of CP required to purchase the Power or Skill at its Base Score in SPs (usually 0 SPs, though some Powers may

grant a higher Base Score). The Variable Cost is the number of CP required to purchase additional SPs in the Power or Skill above the Base Score. The Powers & Skills chapter lists all of the Powers and Skills available in *Ascendant* along with the Base Costs, Variable Costs, and Descriptions. Once the player selects their character's Powers and Skills, he should update his Secondary and Variable Attributes where directed to do so.

Steve flips through the Powers & Skills chapter to select some appropriate choices for his character. He decides that Airborne has the ability to jump into the air and glide great distances, making him a paratrooper who doesn't need a plane or chute. Jumping has a Base Cost of 0 CP, a Base Score of Jumping Speed, and a Variable Cost of 3 CP. Steve wants Airborne to be able to jump several miles (11 SP). Since his Jumping Speed is 8, he needs to purchase 3 SP for a cost of (3 x 3) = 9 CP. Steve then buys Airborne 11 SPs of Gliding. The base cost of Gliding is equal to Airborne's Weight x 2 + 4, or 10 CP, while the Variable Cost is 2 CP. Therefore he spends [10 + (11 x 2)] = 32 CP. (Jumping and Gliding is a poor man's flight: If Airborne had wanted 11 SPs of Flight, it would have cost him 59 CP!)

Since Steve sees Airborne as a tough fighter who can take a lot of punishment, he purchases some protection for Airborne in the form of Physical Invulnerability. Physical Invulnerability has a Base Cost of 20 and a Variable Cost of 2. Steve buys 11 SPs of the Power at a cost of [20 + (11 x 2)] = 42 CP.

He decides to purchase two Skills, Avocation (sports fan) and Aerial Combat. Avocation (sports fan) has a Base Cost of 0 CP, a Base Score of INS, and a Variable Cost of 1 CP. He purchases 1 SP (added to the Base Score of 5 to reach 6 SPs) at a cost of 1 CP. Meanwhile, Aerial Combat has a Base Cost of 0 CP, a Base Score of AGI, and a Variable Cost of 3 CP. He purchases 2 SPs of Aerial Combat (added to the Base Score of 7 to reach 9 SPs), for a cost of 6 CP.

Steve has now spent 9 + 32 + 42 + 6 + 1 = 90 CP on Powers and Skills, and a total of 570 CP of the 610 CP he has to work with.

PERKS AND DRAWBACKS

Now the player adds any desired Perks and Drawbacks for their character. All Perks have a Base Cost depending on the Perk while Drawbacks have a Base Refund (i.e. they reduce CP). Some Perks and Drawbacks can be purchased multiple times, in which case the Base Cost is paid each time. A player can purchase as many Perks as desired. A character can have as many Drawbacks as desired, but receives a maximum CP Refund from Drawbacks equal to 20% of his CP. Once the player selects their character's Perks and Drawbacks, they should update the character's Secondary and Variable Attributes where directed to do so. The Perks & Drawbacks chapter lists all of the Perks and Drawbacks available in *Ascendant* along with their Base Costs/Refunds and Descriptions.

Steve has 40 CP left to work with. He skims through the Perks & Drawbacks chapter to select some appropriate choices for Airborne. He invests 20 CP into Protector, so that he can protect weaker characters with his high MIG. He invests 10 CP into Wealthy, raising his Income from 0 to 6 SPs. He invests 5 CP into Tireless, so that he doesn't have to worry about fatigue slowing him down during adventures. He invests 5 CP into Combat Maneuvers to select the Super-Fast Melee Attack maneuver. He decides not to select any Drawbacks. He's now spent all of his CP.

EQUIPMENT

All characters begin play with a costume or uniform, as well as with access to a furnished residence and personal belongings commensurate with their Income.

With an Income of 6 SPs, Airborne has the lifestyle of a successful doctor or professional athlete, with an income of about $1.2 million dollars per year. He is assumed to live in a large suburban home or expensive urban condo and to have the various accoutrements of his lifestyle, including designer clothes, a home theater system, a cutting-edge smartphone, etc.

Characters can also begin play with a variety of useful real-world equipment such as weapons, armor, walkie-talkies, vehicles. Such pieces of equipment are classified as objects in game terms. The player can equip their character with any ordinary objects that have a Monetary Cost (in SP) of equal to or less than their character's Income + 17. See the Object Catalog (p. 229).

If a player wants their character to be equipped with real-world items that aren't on the object Catalog, the player and the GM can create such items using the rules for building objects and then calculate the appropriate Monetary Cost for them (see p. 228).

> Since Airborne's Income is 6 SPs, he can begin play with useful objects costing 23 SPs or less. He decides that Airborne owns a customized Jeep Wrangler (Monetary Cost 22 SPs or $50,000), a pair of US Army night-vision goggles (20 SPs or $10,000), and a bandolier of flashbang grenades (15 SPs or $400 each).

POWER LIMIT

After a character is built, he must be reviewed to check to see if he is within his Power Limit. As noted earlier, a character's Power Limit is determined by his number of CP (as shown on the adjoining Power Limit by CP table) and serves as the ceiling on his Attributes. The Power Limit by CP table shows Power Limits based on the number of CP allocated for character construction. For instance, in a campaign where each player gets 540 CP to build their character, the Power Limit would be 18.

However, not all Attributes are affected by Power Limit. Only *Restricted* Attributes are of concern. The following Attributes are considered Restricted: Any Primary Attribute, any Variable Attribute, any Skill (other than Avocation or Data Processing), any Control Power, any Offensive Power, any Defensive Power (other than Pressure Protection), any Mental Power (other than Memory), any Movement Power (other than Spaceflight), or any of the following other **Powers:** Blindsight (unless Degradable), Growth, Hyper-Density, Inaudibility, Invisibility, Lightning Reflexes, Skinchanging, Super-Fortitude, Super-Intelligence, Super-Perception, Super-Speed, Super-Strength, and Super-Stamina. (If the GM invents new Powers, he should add them to the Restricted list if he deems it appropriate.)

Ascendant offers two choices of Power Limit Rules, Basic and Advanced. The Basic Power Limit rules should be used if the players and GM are more invested in creating thematic character instead of optimized characters and just want broad guidelines. The Advanced Power Limit rules should be used if the players and GM want to create optimized characters while maintaining a balanced framework.

BASIC POWER LIMIT RULES

When the Basic Power Limit Rules are used:

★ **Absolute Limit:** No Restricted Attribute can exceed one-half the Power Limit + 1.
★ **Combinations Limit:** No two Restricted Attributes can together exceed the Power Limit.
★ **Other Factors:** Reduce Absolute Limit by 1 and Combination Limit by 2 if the character has any Extra Attacks, Linked Powers, Minions, Sidekicks, or Duplication.

> Airborne has a Power Level of 20. His Restricted Attributes must all be 11 or less, and the sum of any two Restricted Attributes must be 20 or less. He doesn't have any Other Factors to consider. His Restricted Attributes are Might (11), Agility (7), Valor (9), Resolve (9), Insight (5), Charisma (7), Jumping (11), Gliding (11), Invulnerability (11) and Aerial Combat (9). None of his attributes exceed 11; however, several of his Restricted Attributes add up to 22, which is above his Combinations Limit of 20. Therefore Airborne is in violation of his Power Limit.

CP	Power Limit
40 or less	5
41 - 80	6
81 - 120	7
121 - 160	8
161 - 200	9
201 - 240	10
241 - 280	11
281 - 320	12
321 - 360	13
361 - 400	14
401 - 440	15
441 - 480	16
481 - 520	17
521 - 560	18
561 - 600	19
601 - 640	20
641 - 680	21
681 - 720	22
721 - 760	23
761 - 800	24
801 - 840	25
841 - 880	26
881 - 920	27
921 - 960	28
961 - 1000	29
1001 - 1040	30
1041 - 1080	31
1081 - 1120	32
1121 - 1160	33
1161 - 1200	34
1201 - 1240	35
1241+	36

ADVANCED POWER LIMIT RULES

When the Advanced Power Limit Rules are used:

★ **Absolute Limit:** No Restricted Attribute can exceed one-half the Power Limit + 3.
★ **Compatible Combinations Limit:** No two *Compatible* Restricted Attributes can together exceed the Power Limit.
★ **Other Factors:** Other factors can modify a character's Limits. These are described below.

The trick to the Advanced Power Limit rules is deciding if two Restricted Attributes are compatible. Two Attributes are compatible if they can be used together to perform or oppose a Challenge Check as either the AV, DV, EV, Protection, or Variable Attribute. For instance, AGI and Blast are compatible, but AGI and Strike are not. VAL and MIG are compatible, but VAL and RES are not. Always use the character in his most optimized configuration of Powers when assessing Power Limit.

The following list covers the eleven compatible Attribute Limit combinations that commonly arise. It is not intended to be exclusive of unforeseen combinations. Typically a balanced character will be at the Power Limit in at least one or two of the eleven categories, which represents his "niche" in the game.

Anytime a particularly unique character build might unlock combinations of Attributes in usual ways not covered below, the general rule capping such combinations always applies: Can the two Attributes be used together? If so, their sum cannot exceed the Power Limit.

★ *Ranged Attack Limit:* The sum of the character's AGI (or applicable AGI substitute) and his MIG (or applicable MIG substitute) or any Power that grants a Ranged Attack. If the character has a MIG of 5 or less and no Ranged Power, assume he uses a submachinegun with an EV of 6.
★ *Ranged Defense Limit:* The sum of the character's DV against Ranged Attacks and his MIG (or applicable MIG substitute).
★ *Melee Attack Limit:* The sum of the character's VAL (or applicable VAL substitute) and his MIG (or applicable MIG substitute) or any Power or Skill that grants a Melee Attack.
★ *Melee Defense Limit:* The sum of the character's DV against Melee Attacks and his MIG (or applicable MIG substitute).
★ *Mental Attack Limit:* The sum of the character's INS (or applicable INS substitute) and his RES (or applicable RES substitute) or any Power or Skill that grants a Mental Attack.
★ *Mental Defense Limit:* The sum of the character's DV against Mental Attacks and his RES (or applicable RES substitute).
★ *Emotional Attack Limit:* The sum of the character's CHA (or applicable CHA substitute) and his RES (or applicable RES substitute) or any Power or Skill that grants an Emotional Attack.
★ *Emotional Defense Limit:* The sum of the character's DV against Emotional Attacks and his RES (or applicable RES substitute).
★ *Physical Protection Limit:* The sum of the character's best DV against Melee/Ranged Attacks and any Power that provides Protection from Health Damage.
★ *Mental Protection Limit:* The sum of the character's best DV against Mental/Emotional Attacks and any Power that provides Protection from Determination Damage.
★ *Ramming Limit:* The sum of the character's AGI (or applicable AGI substitute) and his Speed. Since Rams deal Damage to the attacker and target, neither Ferocious nor Stalwart modifies the Ramming Limit.

Let's check Airborne's Power Limit under the Advanced Rules. All of his Restricted Attributes must be 13 or less, while the sum of any two Compatible Restricted Attributes must be 20 or less. Let's work through the checklist to see if Airborne is within the Power Limit.

His Restricted Attributes are MIG (11), AGI (7), VAL (9), RES (9), INS (5), CHA (7), Invulnerability (11), Jumping (11), Gliding (11), and Aerial Combat (9). All of these are under 13, so he's fine.

Airborne has no Powers that permit Physical Ranged Attacks. The sum of Airborne's AGI of 7 and his MIG of 11 is 18. He is well below the Ranged Attack Limit. His Aerial Combat skill increases his DV against Ranged Attacks to 9. The sum of his DV of 9 and his MIG of 11 is 20. Airborne is at the Ranged Defense Limit.

He has no Powers or Skills that permit Physical Melee Attacks. The sum of his VAL of 9 and his MIG of 11 is 20. Airborne is at the Melee Attack Limit. He has no Powers or Skills that increase his DV against Melee Attacks. The sum of his VAL of 9 and his MIG of 11 is 20. He is at the Melee Defense Limit.

Airborne has no Powers or Skills that permit Mental Attacks. The sum of his INS of 5 and RES of 9 is only 14. He is far below the Mental Attack Limit. He has no Powers or Skills that increase his DV against Mental Attacks. The sum of his RES of 9 and RES of 9 is only 18. He is below the Mental Defense Limit.

He has no Powers or Skills that permit Emotional Attacks. The sum of his CHA of 7 and RES of 9 is 16, so he is below his Power Limit there too. His Emotional Defense of 18 is also below his Power Limit.

Airborne has one Power that provides Protection against Physical Attacks, Physical Invulnerability. The sum of his highest DV against Melee/Ranged Attacks + his SPs of Invulnerability is 20. He is at his Physical Protection Limit.

He has no Powers or Skills that provide Protection against Mental or Emotional Attacks, and his RES is only 9. Airborne is far below the Mental Protection Power Limit.

Airborne has Aerial Combat 9 and a Speed of 11. He is at the Ramming Limit.

That's all he has to worry about! Under the Advanced Power Limit Rules, Airborne is within his Power Limit. None of his highest Restricted Attributes form compatible combinations with each other.

OTHER FACTORS FOR ADVANCED POWER LIMIT CALCULATIONS

Some Powers and Perks can affect the calculation of the character's Power Limit when using the Advanced Rules.

Additional Characters: A characters built with Duplication, Minions, Sidekick, and/or Singular Invention must add a modifier to the sum of some or all of his Power Limit combinations when checking to see if he has exceeded his personal Power Limit. The modifier is based on the total number of CP spent on Duplication, Minions, Sidekick, and/or Singular Invention, as shown on the table below. The character's Power Limit is not actually changed, so values calculated on Power Limit such as Wealth or Hero Points are not affected. A Singular Invention always imposes a minimum +1 to all combinations, even if just 1 CP is spent.

CP Spent	Power Limit Modifier
1-20	+1 to either Attack, Defense, or Protection combinations
21-40	+1 to all combinations
41 - 80	+2 to all combinations
81 - 120	+3 to all combinations
121 - 160	+4 to all combinations
161 - 200	+5 to all combinations
201 - 240	+6 to all combinations
Additional +40	Additional +1 to all combinations

The Dark Lord Morhaun has 1,040 CP, giving him a Power Limit of 30. Sick with the lust for power and domination, he invests 80 CP into Minions, 80 CP into Sidekick, and 80 CP into Singular Invention. His 80 CP investment in Minions gives him 500 orcs with Challenge Rating of 1 each. His 80 CP investment in Sidekick gives him a 960 CP henchman, which builds as a flying dragon named Acedreign. His 80 CP into Singular Invention gives him a 960 CP Invention, which he stats as an iron crown with Illumination and other Powers. Because Morhaun has invested 240 CP into these Perks, however, he must add a +6 modifier when calculating whether his own Attributes, Powers, and Skills have exceeded his own Power Limit. Thus, for his

Melee Attack, Physical Protection, and other Limits, he is effectively at a Power Limit of 24 instead of 30. When Morhaun's half-brother Manuel confronts him in personal combat, he finds himself much more personally powerful than Morhaun, who has squandered his power limit in evil servants, dispersing himself into the very fabric of his NPCs.

Additional Limb/Extra Attack: For each 40 CP invested in the Extra Attack Perk or for each Additional Limb, the character must add 2 to the sum of his highest Attack Limit(s) when checking to see if he has exceeded his Power Limit.

Imagine that Steve had invested 40 CP into the Extra Attack Perk for Airborne. He'd have to add 2 to the sum of his highest Attack Limit. His highest Attack Limit is his Melee Attack Limit. Adding 2 to the total of his VAL and MIG would have put him at a Melee Attack Limit of 22, which would exceed his Power Limit.

Designer's Note: The Extra Attack rule guarantees that characters who can attack more often cannot hit as hard or as accurately. Similarly, the Additional Characters rule counters the imbalance that would arise if a character could recursively acquire Sidekicks and other support troops with more CP than he invests and then Team Attack alongside for great bonuses. It also permits you to create characters like the aforementioned dark lord, or billionaire bat-based crimefighters who have as many CP as their invulnerable alien buddy but have a diverse array of gadgets and allies instead of a super-strong punch.

Ferocious/Stalwart: A character with the Ferocious Perk increases his Power Limit by 1 for Melee Attack, Ranged Attack, Emotional Attack, and Mental Attack combinations, but reduces his Power Limit by 1 for Melee Defense, Ranged Defense, Emotional Defense, Mental Defense, Physical Protection, and Mental Protection combinations. The opposite is true for a character with the Stalwart Perk.

Growth/Hyper-Density/Shrinking/Skinchange/ Superspeed: A character using one of these Powers can exceed his Absolute Limit while doing so but still cannot exceed his Compatible Combination Limit.

Jotun is a villain with Power Limit 24, VAL 8, MIG 12, and Growth 6. When enlarged, his MIG is increased to [12 + (6 x 2/3)] 16. This puts his MIG above his Absolute Limit of (24/2 + 3) 15 but he is permitted because he is using Growth. He is still within his Melee Attack Limit of 24, because his VAL of 8 plus his MIG of 16 sum to 24.

Healing/Regeneration/Resilience: If a character has a combined total of 13 or more SPs of Healing, Regeneration, or Metabolic Time Control, he has a Regeneration Power Limit. The sum of his Healing, Regeneration, Metabolic Time Control, and any Power that provides Protection from Health Damage cannot exceed his Power Limit. If a character has 13 or more SPs of Resilience, he has a Resilience Power Limit. The sum of his Resilience and any Power that provides Protection from Determination Damage cannot exceed his Power Limit.

Manticore has a Power Limit of 30. He has 15 SPs of Regeneration, so he has a Regeneration Power Limit. The sum of his Regeneration and his Invulnerability cannot exceed 30.

Linked Powers: If a character has two Offensive or Mental Powers linked together so that both can hit with one Challenge Action, use the highest SP of the linked Powers +2 when checking to see if he has exceeded his Absolute Limit or Compatible Combinations Limit. Add an additional +2 per extra Linked Offensive Power.

The villain known as Nihilist has 10 SPs of Annihilating Blast linked to 9 SPs of Annihilating Concussive Targeted Explosion. For purposes of Power Limit, he is treated as having 12 SPs of Blast.

Powers as Acting Value and/or Effect Value: Sometimes the SPs of a Power are used as both the AV (to hit) and EV (damage), or it bypasses the need for an EV altogether. In that case, the Attack Limit will be based on the SPs of Power x 2. Such Powers include Emotion Adjustment, Illusion, Mind Domination, Mind Drain, Mind Reading, Aura, Bang, Cone, Explosion, Flash, Fog, Glue, Hazard, Life Drain, Paralysis, Power Dampening, Power Drain, Snare, Sound Cloud, and Quake, but not Targeted versions thereof.

If Airborne had purchased 11 SPs of Explosion, he would violate his Ranged Attack Limit of 20 by 2 points, because Explosion uses its SPs as both the AV and EV. He would need to limit himself to 10 SPs of Explosion. Airborne could purchase 13 SPs of Targeted Explosion, however, because then he'd use his AGI of 7 SPs as the AV, and the total would be 7 + 13 = 20.

Protection by Damage Type: If a character has very different levels of Protection against different Damage Types, his Physical Protection Limit needs to be double-checked. Calculate the character's Physical Protection Limit using the greater of these two values: (a) the average of the character's Protection against all five of the common Damage Types and (b) the average of the character's Protection against all Damage Types. The common Damage Types are Bludgeoning, Concussive, Lacerating, Penetrating, and Thermal.

Airborne purchased 11 SPs of Physical Invulnerability, which protects against Bludgeoning, Concussive, Lacerating, and Penetrating. His average Protection against the common Damage Types is therefore (11 + 11 + 11 + 11 + 0) 44/5 = 8.8, which rounds to 9. He actually is under his Power Limit and could buy another SP of Physical Invulnerability if he had CP available.

What if Airborne had 12 SPs of Bludgeoning Lacerating, and Penetrating Protection; 6 SPs of Concussive, Corrosive, Cryogenic, Electrical, Ionizing, Thermal, and Toxic Protection; and no SPs of Annihilating and Cosmic Protection? In that case, his Protection against common Damage Types would be (12 + 12 + 12 + 6 + 6) / 5 = 9.6, rounded to 10. His Protection against all Damage Types would be (12 + 12 + 12 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 0 + 0) / 12 = 6.5, rounded to 6. 10 is greater than 6, so a value of 10 SPs would be used to calculate his Physical Protection Limit.

Stacked Protection: If a character has multiple layers of Protection (such as Forcefield over Shield over Invulnerability), use the SPs of the best Protection +1 when checking to see if he has exceeded his Compatible Combination Limit or Absolute Limit. Add an additional +1 per extra layer of Protection. 4 SPs of Invisibility or more counts as a layer of Protection. Force Control counts as a layer of Protection. A Singular Invention that grants one or more layer of Protection to the character counts towards stacked protection.

Vanishing Act is a character with a Power Limit of 20, 10 SPs of VAL, 8 SPs of AGI, 8 SPs of Invulnerability, and 8 SPs of Invisibility. Because he has 8 SPs of Invisibility, he is considered to have two layers of Protection, so he must treat his Invulnerability as 8 + 2 = 10 SPs for purposes of calculating his Physical Protection Power Limit. He is therefore at his limit of 10 + 8 + 2 = 20.

Designer's Note: Comic book heroes tend to have strengths and weaknesses, and *Ascendant* models that. Given the number of CP available, it's virtually impossible for a character to be at his Power Limit in every area. An optimized offense is easy: the character can and should be at his Power Limit with at least one attack combination, which represents his particular niche on the battlefield. An optimized defense is more difficult because there are 4 different types of attack and 14 types of damage to protect against with a possible 28 different combinations of DV and Damage Type. A character might be vulnerable, resilient, or nigh-invulnerable against each possible different attack combination (e.g. against Emotional Attacks dealing Neural damage, or Melee attacks dealing Lacerating damage). If a character is at neither his Defense or Protection limit for a particular combination, the character is going to be quite vulnerable against that attack. If the character is maxed out in one Power Limit but not the other, or is at 66-75% of the Power Limit in both Defense and Protection, he is going to be resilient to it. If he reaches both limits, he's nigh-invulnerable against that type of attack. Few characters will be invulnerable to every attack combination, but optimized characters will be nigh-invulnerable in a few areas and resilient to many of them.

HERO POINTS

Ordinary humans (characters with Power Limits of 12 or less) do not have Hero Points – they simply lack the capacity to do the impossible feats that Hero Points make possible. Characters with Power Limits greater than 12 have Hero Points equal to 2 x (Power Limit – 12). They will get additional Hero Points if they selected the Heroic Perk.

Airborne has a Power Limit of 20. Therefore, he has [2 x (20 – 12)] = 16 Hero Points. Aurora, with a Power Limit of 28, has [2 x (28 – 12)] = 32 Hero Points.

CHAPTER 4: POWERS & SKILLS

Powers and *Skills* are a type of Attribute that some, but not all, characters possess. A **Power** is an Attribute that requires extraordinary talents while a **Skill** is an Attribute that requires special training.

Each Power and Skill has unique effects in game described below. Based on its effects, every Power and Skill has two costs, a Base Cost and a Variable Cost. The Base Cost is the number of CP required to purchase the Power or Skill at its Base Score in SPs (usually 0 SPs, though some Powers may grant a higher Base Score). The Variable Cost is the number of CP required to purchase additional SPs in the Power or Skill above the Base Score. Ascendants can have Powers and Skills of any SP score, subject to the limits of Power Limit (p. 65). Ordinary humans are capped at 9 SPs in Skills. Ordinary humans can purchase only the following Powers to no higher than 5 SPs: Combat Sense, Iron Will, Super-Fortitude, Super-Intelligence, Super-Perception, Super-Stamina, and Super-Strength.

All Powers and Skills are measured in SPs on the same scale as the Primary Attributes. As always, each additional one SP has a value equal to double the amount of the previous SP. In addition, some Powers and Skills have additional Attributes associated with them, including Determination, Durability, Damage, and Protection, which are not rated in SPs. The *Universal Skills & Powers Attribute (USPA)* table shows the particular values associated with each SP score for each type of Attribute. When a Power or Skill has both

an SP score and a numerical value associated with it, the numerical value should be written down in parentheses after the SP score. For instance, "Forcefield 10 (Protection 64, Durability 320)" indicates that a character possesses a Forcefield with 10 SPs that protects against up to 64 Damage per attack to a cumulative total of 320 points.

Power SPs	Determination/Health/Durability	Damage/Protection
1	15	3
2	20	4
3	30	6
4	40	8
5	60	12
6	80	16
7	120	24
8	160	32
9	240	48
10	320	64
11	480	96
12	640	128
13	960	192
14	1,280	256
15	1,920	384
16	2,560	512
17	3,840	768
18	5,120	1,024
19	7,680	1,536
20	10,240	2,048
21	15,360	3,072
22	20,480	4,096
23	30,720	6,144
24	40,960	8,192

POWER RANGE

All Powers have a **Range**.

★ A Range of **Self** indicates that the Power or Skill can only be used on the character possessing the Power or Skill.
★ A Range of **Touch** means that the Power or Skill can be used on any target the character touches. Touching a friendly character or static object is an Automatic Action but touching a hostile target in Combat is a Melee Attack.
★ A Range of **Standard** means that the Power or Skill can function at a distance equal to the character's SPs of the Power or Skill. In most cases, affecting the target at Range will usually requires a Ranged Attack of some sort.
★ A Range of +**#**, where # can be any number, means that the Power or Skill functions at a distance equal to the character's SPs in it, plus the number.

Unless otherwise noted, a Power with a Touch, Standard, or +# range can be used to affect multiple targets with a Multi-Attack combat maneuver. If a Power has multiple effects, it may have a different Range for each effect. Some Modifiers may change a Power's range.

POWER DURATION

Duration is the length of Time that the effect(s) of a Power operate(s).

★ **Instant** effects last for the length of an Instant Action. The consequences of the Power can be lingering or permanent, however. For instance, if Thermal Blast sets a building on fire, the fire might burn for several SPs of Time.
★ **Concentration** effects last for the length of a Page. A concentration effect ends if the character does not expend another Action of the appropriate type on the following Page to maintain it, or if he becomes Unconscious, Overwhelmed, or Wrecked.
★ **Sustained** effects start when activated with an Automatic Action and thereafter continue until deactivated. A sustained effect can be voluntarily deactivated if the character expends another Automatic Action or involuntarily deactivated if the character

becomes Unconscious or Overwhelmed. Some sustained effects are also involuntarily deactivated after a particular length of Time. This will be noted in the Power's description. (If an object has a sustained effect, the effect deactivates if the object becomes Wrecked.)

★ **Permanent** effects are always activated regardless of the character's state of consciousness or focus.

Some Powers may have a **Special** duration described in the Power. If a Power has multiple effects, it may have a different Duration for each effect. Some Modifiers may change a Power's duration.

POWER MODIFIERS

Some Powers have **Modifiers**. Modifiers change the way a Power works, and in exchange adjust the Power's Base Cost and Variable Cost to account for the change. Modifiers are selected when the Power is chosen during character Creation. Base Cost can never be reduced to less than 0 and Variable Cost can never be reduced to less than ½ CP per SP by Modifiers.

> Let's imagine that Eduardo is creating the character of Warp, a powerful teleporter. Teleportation has a Base Cost of 50 and a Variable Cost of 10. Eduardo wants Warp to be able to teleport as an Automatic Action (Blinking Teleport, +25 Base Cost, +4 Variable Cost). He wants to use his powers to avoid any attacks (Hyperkinetic Teleportation, +8 Variable Cost) and to be able to teleport others without necessarily traveling himself (Third-Party Teleportation, +2 Variable Cost). Eduardo would record the Power as Blinking Hyperkinetic Third-Party Teleportation, and it would have a Base Cost of 75 and a Variable Cost of 18.

Some Modifiers are available to all Powers within a particular category. Other Modifiers are available on a Power-by-Power basis. Although some Modifiers appear repeatedly, the Modifiers can have different cost adjustments for different Powers.

> The Self-Range Modifier is available to both Explosion and Fog Powers. It reduces the Variable Cost of Explosion by 4, but it only reduces the Variable Cost of Fog by 2. A Self-Range Fog is considerably more useful than a Self-Range Explosion, so the cost varies.

POWER FLAWS

Some Powers have **Flaws**. Flaws make a Power less useful. They are similar to Modifiers but rather than be specific to particular Powers, they are general and can be applied to any Power. A character may purchase multiple Power Flaws for the same Power, the same Power Flaw for multiple Powers, or any other desired combinations.

Many Power Flaws trigger when a Power is "used." When applied to Instant or Concentration Duration Powers, a "use" occurs each time an Action is taken with the Power. When applied to Sustained or Permanent Duration Powers, a "use" occurs each time the Power is used as or modifies AV, DV, EV, Protection, or other Attributes during a Page, or after every 3 SPs of Time (30 seconds) of any non-combat use. When applied to Movement Powers (other than Teleport), a "use" occurs with each Movement Action during a Page in an Action Scene, and after every 3 SPs of Time (30 seconds) traveling as an Extended Automatic Action.

> Blast is used each time a character makes a Ranged Attack using SPs of Blast as the EV. Forcefield is used each time the Forcefield applies SPs of Protection against an Attack. Combat Sense is used each time the SPs of Power are applied as the DV of an Attack. Flight is used each time a character uses the Power to make a Movement Action on a Page during an Action Scene and with each 3 SPs of Time spent flying otherwise. (We assume that, just as fighter jets burn more fuel during dogfights, heroes are more taxed in combat.)

A Power Flaw provides a Discount on the CP Cost of the Power it is applied to. The Discount for a Power Flaw can never exceed the CP Cost of the Power. Any time you apply two or more Power Flaws to the same Power, calculate the Discount for each Power Flaw in sequence starting with the largest Discount and working downward. At each step, the Discount should be applied against the discounted Cost of the Power after applying the prior Discount(s).

> Assume Steve gives Airborne two Power Flaws on his 32 CP Gliding Power: The Damaging Power Flaw (Discount of 11 CP) and the Limited Fuel Power Flaw (Discount of 17% of the Power's Base Cost, currently 5 CP). Starting with the larger Discount, Airborne takes his 11 CP discount from Damaging. He then calculates the value of Limited Fuel against the discounted Cost of 32 - 11 = 21 CP. 17% of 21 CP is 3.57 CP, rounding to 4 CP. Therefore Airborne's total Discount for his Power Flaws on Gliding is 11 + 4 = 15 CP.
>
> That's not enough, so Steve decides to also take two Power Flaws for Invulnerability: A Miscellaneous Limited Access Power Flaw (only active when Airborne is Gliding or Jumping), which has a 10% Discount; and a Miscellaneous Limited Access Power Flaw (not active when Airborne is unconscious), which has a 15% Discount. Airborne's Physical Invulnerability is worth 42. Steve first applies the 15% Discount, which reduces the cost by 6 CP to 36 CP. Then he applies the 10% Discount, which reduces the cost by 4 CP to 32 CP.

Some possible Power Flaws are noted below. The GM may devise other Power Flaws as desired. However, all other rules notwithstanding, a Power Flaw that does not actually reduce a Power's usefulness is not worth any CP. Since the fiendishness of character creators knows no bounds, this rule gives the GM the final decision as to whether a particular Power Flaw is worth any CP. Common examples of "Power Flaws that do not actually reduce Powers' usefulness" include but are not limited to:

★ Draining Power Flaws when the character has sufficient Resilience to recover the Determination faster than it's lost.
★ Damaging Power Flaws when the character has sufficient Regeneration to recover the Damage faster than it's lost.
★ Single Use Power Flaws on Powers that would kill the character if he used them.

Draining: The Power exhausts the character's will when he uses it. Each time the character uses the Power, he suffers Psychic Determination Damage, ignoring any Protection. The Psychic Damage's EV can be any value from 1 to the SPs of Power. The character can reduce the EV on a 1 SP for 1 SP basis by using the Power at a lower SP score. The Discount for this Power is equal to the Drain EV multiplied by a Variable Cost. The Variable Cost is the lesser of ½ the Power's Variable Cost or 4 CP per SP.

> Airborne has 11 SPs of Gliding (Variable Cost of 2 CP per SP). Let's assume that Airborne's Gliding requires an inexorable will to overcome gravity and assign it the Draining Power Flaw at 4 SPs. Therefore, each time he uses Gliding at 11 SPs, Airborne suffers Psychic Damage to his Determination from an EV of 4 SPs (8 points). If Airborne flies at just 9 SPs, the EV is reduced to 2 SPs and he takes just 4 Psychic Determination Damage. His Discount is equal to the EV (4) times ½ the Variable Cost of Gliding (2), or 2 CP.

Damaging: The Power damages the character's body when he uses it. Each time the character uses the Power, he suffers Neural Health Damage, ignoring any Protection. (At the GM's discretion, the character can suffer another Damage Type.) The Neural Damage's EV can be any value from 1 to the SPs of Power. The character can reduce the EV on a 1 SP for 1 SP basis by using the Power at a lower SP score. The Discount for this Power is equal to the Damage EV multiplied by a Variable Cost. The Variable Cost is the lesser of ½ the Power's Variable Cost or 8 CP per SP.

> Imagine that Maximum Leader's Cosmic Control (Variable Cost of 22 CP per SP) had the Damaging Power Flaw at 8 SPs. In that case he'd take 32 Health Damage each time he used the Power at full strength. His Discount is equal to the EV (8) times a Variable Cost. The Variable Cost is lesser of (22/2) or 8, so 8 is used. His Discount is 8 x 8 = 64 CP.

Limited Uses: The character's Power can only be used a certain number of times before it must be "reloaded." This Power Flaw can simulate ammunition, energy capacitors, or even spell charges. The Discount for this Power Flaw is calculated by multiplying the total CP cost of the Power by a Discount Modifier determined by the number of times the character can use the Power. Reloading is assumed to be an Extended Automatic Action that requires 3 SPs of Time (30 seconds) during which the character cannot take any other Actions. Reloading can represent meditating to regain chi, reloading a missile launcher, changing a machinegun barrel, etc. If Reloading takes extra time, increase the Discount Modifier by 5% per extra SP of Time.

No. of Uses	Modifier
1	33%
2	25%
3	20%
4	15%
5	10%

Fuel Time	Modifier (Common)	Modifier (Uncommon)
3 (30 sec)	55%	65%
4 (1 min)	50%	60%
5 (2 min)	45%	56%
6 (4 min)	40%	50%
7 (8 min)	33%	47%
8 (15 min)	25%	45%
9 (30 min)	17%	40%
10 (1 hour)	12%	33%
11 (2 hours)	8%	25%
12 (4 hours)	6%	17%
13 (8 hours)	4%	10%
14 (16 hours)	2%	5%

Recharge Time	Modifier
1 use per day (14 SP)	80%
1 use per 8 hours (13 SP)	78%
1 use per 4 hours (12 SP)	76%
1 use per 2 hours (11 SP)	74%
1 use per hour (10 SP)	72%
1 use per 30 minutes (9 SP)	70%
1 use per 15 minutes (8 SP)	68%
1 use per 8 minutes (7 SP)	65%
1 use per 4 minutes (6 SP)	60%
1 use per 2 minutes (5 SP)	50%
1 use per minute (4 SP)	45%
1 use per 8 pages (3 SP)	40%
1 use per 6 pages (2 SP)	35%
1 use per 5 Pages (2 SP)	30%
1 use per 4 Pages (2 SP)	25%
1 use per 3 Pages (2 SP)	20%
1 use per 2 Pages (1 SP)	15%

Limited Fuel: The Power requires fuel. When the fuel is exhausted, the Power becomes unavailable until the character refuels. Unless the GM determines otherwise for a particular case, the Limited Fuel Power Flaw can only be applied to Movement Powers (other than Teleport), to Sustained Powers that cannot be used to make Attacks, and to Powers primarily used for Extended Actions.

The Discount for this Power Flaw is calculated by multiplying the total CP cost of the Power by a Discount Modifier determined by the type of Fuel and the length of Time (in SPs) that the character can use the Power before having to refuel.

The character can select a Fuel Time of between 3 SP (30 seconds) to 14 SP (16 hours) for his Power Flaw. While they are often important in real life, Fuel Times of more than 16 hours have such a negligible effect on gameplay that they offer no additional CP Refund. Note that Fuel Time isn't impacted by use during Pages of Action Scenes.

The character must designate the type of fuel required. Common fuels such as batteries, diesel, and petrol are cheap and widely available. Rare fuels such as antimatter or uranium require that the character have some sort of Authority, Criminal Connections, or other means of getting the fuel. (For avoidance of doubt, the ordinary human requirement to eat food, drink water, and get sleep is not a Power Flaw.)

By default, refueling is an Extended Automatic Action that requires 8 SPs of Time (15 minutes), during which the character can take no other Actions. (If an object has a Power with this Power Flaw, then this is the time for the crew or wearer to refuel the object.) If refueling takes more than 8 SPs of Time, shift up one row on the Fuel Time table per SP (increasing the Refund). If refueling takes less than 8 SPs of Time, shift down one row (reducing the Refund).

Unavailability	Modifier
85%	33%
66%	25%
50%	20%
33%	15%
15%	10%

Imagine that Airborne's Gliding is fueled by absorbing solar radiation while meditating outdoors, which counts as Common Fuel. If he has to fuel just once every 14 SPs of Gliding Time, the Refund Modifier is 2% so his Total Refund is 32 x 2% = 0.64 CP, rounded to 1 CP.

On the other hand, if he has to "power up" before every 30 minutes of Gliding, then his Total Refund is 32 x 17% = 5.4 rounding to 5 CP. Note that Airborne could refuel his Gliding and then not use the Power – like gas in a tank – so he'll almost always be fully fueled before a fight.

What if Airborne has to fuel every 16 hours (14 SPs of Time) spent flying, but refueling requires 8 hours (12 SP)? In that case, that would be a 4 SP shift in Refueling Time, from 8 SPs to 12 SPs. That would mean that the Refund Modifier would change from 2% to 12%, and he'd get a Refund of 32 x 12% = 3.84 CP, rounded to 4 CP.

Single Use: The character's Power can only be used once in the Series. The Discount is 85% of the total CP cost of the Power. While characters rarely take this Power Flaw, it is common for objects such as grenades and bombs.

Recharge Time: The character's Power has to cool down, power up, or otherwise re-charge in between each use. The Discount for this Power Flaw is calculated by multiplying the total CP cost of the Power by a Discount Modifier determined by the Recharge Time and the Duration of the Power. Unlike Limited Fuel and Limited Use, the character does not have to undertake an Extended Action; he just needs to let the timer elapse. This Power Flaw can only be applied to Instant and Concentration Powers, and each Action taken counts as a use.

Miscellaneous Limited Access: The Power has some flaw that makes it unavailable for use part of the time. The player and GM should collaborate to define the cause and circumstances that render the Power unavailable. The Discount for this Power Flaw is calculated by multiplying the total CP cost of the Power by a Refund Modifier determined by the estimated percentage of time that the Power won't be available when it could be. As per the general rule above, limiting access to a Power during times when no one would or could plausibly use the Power isn't worth any CP.

Steve asks if he can take a Miscellaneous Limited Access Power Flaw for Jumping such that it cannot be used while Airborne is Unconscious. Since Airborne is Unconscious for one third of every day while he sleeps, Steve reckons this is worth a 15% Discount. The GM flatly denies this, as Jumping obviously won't be useful when Airborne is unconscious.

Steve could take a Miscellaneous Limited Access Power Flaw for Invulnerability such that it can only be used when Airborne is Gliding or Jumping. The GM and player agree that Airborne is usually using these Powers during important Scenes, so this is only worth a 10% Discount.

Miscellaneous Limited Scope: The Power has some flaw that limits its scope, such that it cannot be used in all the ways it normally could. The player and GM should collaborate to define the specific scope to which the Power is limited. The Discount for this Power Flaw is calculated by multiplying the total CP cost of the Power by a Refund Modifier determined by the approximate limit in the Power's scope of use (using the same table as above). As always, limiting the scope of a Power in ways that only would or could plausibly affect irrelevancies isn't worth any CP.

Designer's Note: Evaluating the appropriate Discount for Power Flaws of your own devising is an art, not a science. Don't be afraid to make an estimate and then revise it later in play. It's better to have fun with a fresh idea and change it later if the balance didn't work out than to never try new things. You'll be in good company: Nothing is more common in comic books than for the writers to change a character's attributes, powers, or weaknesses on various pretexts when the original concept proved unworkable or uninteresting.

Julianne is crafting her character Aurora. She asks if Aurora can take a Miscellaneous Limited Scope Power Flaw for Light Control such that her Light Control cannot be used to effect undead creatures. The GM knows there's not any undead in his Series, so this Power Flaw wouldn't be worth any CP.

LINKED POWERS

Some or all of a character's Powers may be **Linked** to one or more other Powers. In order to be Linked, the Powers must share the same Range and Duration. If the Powers require Actions to activate, they must all be of the same type of Actions. If more than one of the Powers triggers a Challenge Check, all of those Powers must either use the same Attribute as the AV or all must use their own SPs as the AV. If any of the Linked Powers can be used to Multi-Attack, all of them must be able to Multi-Attack. Powers that would cancel each other out or be physically contradictory cannot be Linked. A Power cannot be Linked with itself. The GM is the ultimate arbiter of which Powers can be Linked.

The advantage to Linking Powers is that all Linked Powers can be activated simultaneously with one Action of the appropriate type. If activated with a Challenge Check, just one roll on the CHART is made to determine the effect of all of the Linked Powers, with one allocation of Hero Points modifying the RV for all Linked Powers. A single Power Aptitude Skill can be used for all Linked Powers.

The disadvantage to Linking Powers is that the Linked Powers cannot be activated individually, and if the character is drained of or otherwise loses access to one Power, the same effect applies to whatever Powers it is Linked to.

Linking Powers does not normally cost or grant any CP. However, at the GM's discretion, a character may have some or all of his Powers be **Variable Linked**. A character can use Variable Linked Powers separately or activate them with the same Action. If Powers are Variable Linked, then each Power's Total Cost (Base Cost + Variable Cost) is increased by 50%.

> Incorporeality and Invisibility can be Linked. Both Powers have Self Range and Sustained Duration and both Powers require an Automatic Action to activate. Other similar Power Links include Aura and Forcefield; and Mind Field and Mind Screen. However, Growth and Shrinking cannot be Linked because the two Powers are physically contradictory.
>
> Blast and Explosion cannot be Linked. Both Powers have Standard Range and Instant Duration and both Powers require a Challenge Action to activate. However, Blast uses AGI as its AV, while Explosion uses the SPs of Power as its AV. Targeted Explosion and No Multi-Attack Blast could be Linked, however, because Targeted Explosion uses AGI as its AV. The character fires exploding shells that detonate inside their target.
>
> Teleportation and Explosion cannot be Linked. Both Powers have Instant Duration. But Teleportation uses a Movement Action and Explosion uses a Challenge Action. Teleportation has a +6 Range while Explosion has a Standard Range. However, Self-Only Explosion and Self-Only Slow Standard Range Teleportation could be linked, as both Powers would now require a Challenge Action to use and both would be Standard Range Powers that only affect the character. The character causes an explosion as he teleports away.
>
> Strike and Paralysis cannot be Linked. Both Powers have Instant Duration, but Strike has Touch Range while Paralysis has Standard Range. Both Powers require a Challenge Action to activate, but Strike uses VAL as its AV while Paralysis uses the SPs of Power as its AV. However, Strike and Touch Range Paralysis could be Linked, because Touch Range Paralysis has Touch Range and uses VAL as its AV. The character has curare-laced claws that paralyze whoever he strikes.

STACKING ATTRIBUTES, POWERS, AND SKILLS

Some Powers and Skills can substitute for Attributes in certain circumstances, and many (but not all) of those Powers and Skills use the Attribute they replace as the Base Score.

> Super-Strength can be substituted for MIG for all purposes excepting Health and Recovery. Super-Strength's Base Score is MIG. Strike can be substituted for MIG for purposes of Damage. Its Base Score is also MIG. Deflection can be substituted for VAL or AGI as the DV of various Attacks, but its Base Score is 0.

If a character has several Powers and Skills that each uses the same Attribute as its Base Score and each substitutes for the Attribute for the same purpose(s), he can "stack" the scores. The Attribute becomes the Base Score of the most expensive Power or Skill; the most expensive Power or Skill becomes the Base Score of the next most expensive Power and Skill; and so on. Stacking is not permitted with Powers or Skills that have different Base Scores or can't be used for the same purposes.

> A character could stack MIG, Super-Strength, and Strike. Super-Strength has a Variable Cost of 6 while Strike has a Variable Cost of 4. He buys 6 SPs of MIG for 60 CP. His Base Score for Super-Strength is now 6. He buys 4 SPs of Super-Strength, for a cost of 24 CP, giving him Super-Strength 10. He then buys 2 SPS of Strike, for a cost of 8 CP, giving him Strike 12. His total CP cost is 92 CP. Had he purchased 12 SPs of MIG, he'd have had to pay 120 CP, so he's gotten a big CP savings.
>
> However, the cost is that he is more specialized. He can deal damage like a character with 12 SPs of MIG, but he lifts and carries stuff as if he had 10 SPs of MIG, and he only absorbs Damage and Recovers like a character with 6 SPs of MIG.
>
> Note that a character could not stack AGI, Deflection, and Parkour, even though all three improve DV, because Deflection has a Base Score of 0.

POWER DESCRIPTIONS

CONTROL POWERS

Control Powers grant the character the ability to manipulate matter and energy in their environment. In addition to providing certain effects available only through Control Powers, most Control Powers also allow the character to emulate other Powers. In addition, Control Powers are very useful for Power Stunts (see p. 265), which can emulate an even wider range of effects.

Effect-Based SP: When purchasing Control Powers, a character may occasionally wish to have one or some of the effects emulated by the Power assigned a greater SP value than the other effects. An emulated effect's SP can be increased separately from the rest of the Control Power at the Variable Cost of the emulated effect. The additional SPs and CP cost are cumulative with whatever is purchased for the Power overall. Only the base SP is applied when using the Control Power for Power Stunts. If the character wishes to make Power Stunts off the emulated effect's SP in particular, he must do so as if it were a Power of its type, not a Control Power.

> Zephyr has 9 SPs of Air Control, with a Base Cost of 50 and Variable Cost of 9 x 16 = 144 yielding a total Cost of 194. Zephyr decides he would like for his Concussive Blast to be at 12 SPs. Concussive Blast has a Variable Cost of 5, so this costs him 5 x 3 = 15 CP more, for a total of 209 CP. He can now move 9 SPs of air, fire a Gust of 9 SPs, and protect himself with Deflection at 9 SPs, but he can unleash a Concussive Blast at 12 SPs. If he wants to do a Power Stunt with Air Control, he uses Air Control's Base Cost, Variable Cost, and 9 SPs as the base. If he wants to do a Power Stunt with 12 SPs of Concussive Blast, he loses the special advantages of Control Powers for that Power Stunt.

Insight and Agility: Except as noted in the Power description, all of the Control Powers rely on the character's INS instead of his AGI as the AV for the Power when making Ranged Attacks. Any Control Power may have the Agile modifier if desired, so that the character uses his AGI instead of his INS.

Agile Modifier: The character controls his Power with his hand-eye coordination rather than with pure mentation. He uses his AGI instead of his INS as the AV for the Power. Record the power as Agile [Power Name]. There is no change in Base or Variable Cost.

AIR CONTROL

Base Cost: 50 **Variable Cost:** 16 **Base Score:** 0
Range: Standard/By Emulated Power **Duration:** By Effect

The character can control the movement of volumes of air with Volume up to his SPs of Air Control. He can use the Power to:

★ Aim a scathing wind gust at a target as a Challenge Action, emulating Continuous Concussive Blast at Air Control's value in SPs.
★ Aim a forceful wind gust at a target as a Challenge Action, emulating Continuous Gust at Air Control's value in SPs.
★ Move a volume of air with SPs of Volume up to the character's SPs of Air Control a distance equal to the character's SPs of Air Control minus the SPs of air Volume moved. Moving air requires an Automatic Action each Panel. All of the air moved must start and end within Range and LOS.
★ Propel himself through the air as a Movement Action, emulating Flight at the character's SPs of Air Control minus his Weight.
★ Protect himself or another target within Range with circling winds that repel or deflect bullets, blades, and other attacks, emulating Deflection at Air Control's value in SPs. Deflection is a Concentration effect requiring an Automatic Action to maintain each Panel.

BODY CONTROL

Base Cost: 60 **Variable Cost:** 15 **Base Score:** 0
Range: Self **Duration:** Permanent/Sustained

The character can manipulate his body as if it were infinitely malleable plastic. Because the character's body form is so plastic, he is very hard to grapple. As a permanent effect, he can use his SPs of Power as the DV of any Wrestling Attacks made against him and as the AV of any Escape attempt. In addition, the character can deform around any impact. As a permanent effect, he gains SPs of Physical Invulnerability equal to his SPs of Body Control.

He can dynamically re-shape his body into a variety of shapes, becoming temporarily flexible to do so and then re-hardening when in the preferred configuration. As an Automatic Action, he can use Body Control on any of the following Sustained effects:

★ Increase or decrease his Height by his SPs of Body Control by e.g. becoming long and slender or becoming short and wide, and/or increase his Volume by his SPs of Power by forming himself into a hollow shape.
★ Reshape a limb into a melee weapon. He can emulate SPs of Strike equal to his SPs of Body Control. He can choose Bludgeoning, Lacerating, or Penetrating damage. Alternatively, he can emulate SPs of Snare by forming his limb into a lasso or tentacle.
★ Adjust his center of gravity in order to become immovable. He emulates SPs of Immovability equal to his SPs of Body Control.
★ Transform into an ooze in order to move through cracks or crawl up walls. He can emulate SPs of Burrowing and/or Wall-Crawling equal to his SPs of Body Control.
★ Shape his body into an aerofoil. He can emulate SPs of Gliding equal to his SPs of Body Control.

The character can have up to two limbs transformed into weapons at any time, plus one per Additional Limb (p. 158). He cannot have limbs transformed while transformed into an ooze or aerofoil. He cannot lower his center of gravity and increase his Height simultaneously. He cannot be an aerofoil and be an ooze simultaneously. The character can return part or all of his body to his normal form with another Automatic Action. If the character becomes Unconscious or Overwhelmed, all Sustained effects expire.

Body Control does not rely on either AGI or INS and therefore cannot have the Agile modifier applied.

COSMIC CONTROL

Base Cost: 100 **Variable Cost:** 22 **Base Score:** 0
Range: Standard/By Emulated Power **Duration:** By Effect

The character is able to manipulate the fabric of reality. He can use Cosmic Control to:

★ Attune to disturbances in reality's matrix, emulating Concentration Cosmic Awareness at Cosmic Control's value in SPs.
★ Blast a target with cosmic energy as a Challenge Action, emulating Cosmic Blast at Cosmic Control's value in SPs.
★ Propel himself through the air as a Movement Action, emulating Hovering Flight at Cosmic Control's value in SPs.
★ Protect himself with a shield of cosmic energy, emulating Concentration Forcefield at Cosmic Control's value in SPs. Concentration Forcefield is a Concentration effect requiring an Automatic Action to maintain each Panel.
★ Protect himself with a distortion field that deflects bullets, blades, blasts, and so on, emulating Deflection at Cosmic Control's value in SPs. Deflection is a Concentration effect requiring an Automatic Action to maintain each Panel.

★ Travel instantaneously by means of portals through other dimensions, emulating Opaque Portal at Cosmic Control's value in SPs. Portal is a Concentration effect requiring an Automatic Action to maintain each Panel.

By virtue of its broad rationale, Cosmic Control can be used to plausibly Power Stunt most other Powers. Characters who focus on Cosmic Control benefit greatly from the Heroic and Multitask Perks.

DARKNESS CONTROL

Base Cost: 100   **Variable Cost:** 20   **Base Score:** 0
Range: Standard/By Emulated Power   **Duration:** By Effect

The character is able to manipulate darkness, entropy, and shadow. He can use Darkness Control to:

★ Blast a target with entropic energy as a Challenge Action, emulating Annihilating Blast at Darkness Control's value in SPs.
★ Cause attacks made against him to miss or disappear into shadows, emulating Deflection at Darkness Control's value in SPs. Deflection is a Concentration effect requiring an Automatic Action to maintain each Panel.
★ Create a field of pure darkness at a nearby point within Range and LOS as a Challenge Action, emulating Variable-Intensity Darkening Fog at Darkness Control's value in SPs. Moving the Fog requires a Challenge Action, while sustaining it or dismissing it requires an Automatic Action. Otherwise, the Fog begins to dissipate, losing 1 SP at the end of each Page.
★ Disappear and reappear with an area of darkness as a Movement Action, emulating Short Range Criteria-Limited Teleportation at Darkness Control's value in SP. The origin and destination points must be within at least 3 SPs of Obscurity due to lack of light (including Darkening Fog) or 5 SPs of Obscurity due to foggy weather. Other causes of Obscurity do not count. The Teleportation has a Range equal to Darkness Control's value in SPs.
★ See in darkness, emulating Dark Vision at Darkness Control's value in SP.

In order for a character to make a Power Stunt or emulate Blast or Deflection, there must be some darkness available. Dim light or a shadow providing at least 1 SP of Obscurity provides enough darkness to work from. If enough darkness isn't present, the character can use a Challenge Action to create some first.

EARTH CONTROL

Base Cost: 40   **Variable Cost:** 18   **Base Score:** 0
Range: Standard/By Emulated Power   **Duration:** By Effect

The character can control the movement of masses of earth with Weight up to his SPs of Earth Control. He can use Earth Control to:

Substance	Density	Digging Resistance
Loose dirt, sand	8	0
Packed dirt, clay	8	4
Gravel or rocky soil	9	5
Bedrock (sandstone)	9	9
Bedrock (limestone)	9	10
Bedrock (granite)	10	10

★ Burrow through subterranean terrain, emulating the Burrowing power. He can move a Distance equal to his SPs of Earth Control minus the subterranean terrain's SPs of Digging Resistance each Panel.
★ Move masses of earth with SPs of Weight up to the character's SPs of Earth Control a distance equal to the character's SPs of Earth Control minus the SPs of Weight moved. Moving earth requires an Automatic Action each Panel. All of the earth moved must start and end within Range and LOS.
★ Pick up, push, pull, drag, stop, or throw a chunk of earth, dirt, clay, or rock within Range and LOS. The character uses his SPs of Earth Control in lieu of his MIG for such Actions. If he hurls the chunk of earth at a target, treat it as an INS vs. AGI Hurling Ranged Attack. Like other Hurling Ranged Attacks, it can be Indirect and can target an area of effect if a big object is hurled (see p. 381).
★ Propel himself on a wave of earth as a Movement Action, emulating All-Terrain Running at the character's SPs of Earth Control minus his Weight.
★ Trigger a tremor in the earth at any point within Range and LOS as a Challenge Action, emulating Targeted Variable Radius Quake at Earth Control's value in SPs.

★ Transform earth around a point within Range and LOS into sticky mud or quagmire as a Challenge Action, emulating Instant Variable Intensity Ground Hazard at Earth Control's value in SPs.

To determine the Volume of earth being moved with this Power, subtract the Density in SPs from the Weight in SPs. The Substance Density and Digging Resistance table provides a range of SPs for various types of earth.

ELECTRICAL CONTROL

Base Cost: 85 **Variable Cost:** 16 **Base Score:** 0
Range: Standard/By Emulated Power **Duration:** By Effect

This Power grants the character the ability to manipulate electrical energy. He can use Electrical Control to:

★ Discharge currents of electrical energy, emulating Electrical Blast at the character's SPs of Electrical Control.
★ Electromagnetically deflect incoming attacks, emulating Deflection at the character's SPs of Electrical Control. Deflection is a Concentration effect requiring an Automatic Action to maintain each Panel.
★ Extinguish an electrical current within Range and LOS with a Magnitude equal to or less than the SPs of Electrical Control as an Automatic Action; or Extinguish a current of greater Magnitude as an Extended Action requiring Time equal to the current's Magnitude minus the character's SPs of Electrical Control.
★ Modify the Magnitude of an existing electrical current in Range and LOS as an Extended Automatic Action. The Time required to increase a current's Magnitude is equal to the Time required to extinguish it. The Time required to decrease a current's Magnitude by 1 SP is equal to the Time required to extinguish it -1. In If the Time required is less than 0, then the character can actually increase the current's Magnitude by SPs equal to the negative SPs of Time with an Automatic Action.
★ Incorporeally travel at the speed of light along electromagnetic currents, emulating Self-Only Teleport at the character's SPs of Electrical Control. The character cannot teleport to locations that are insulated or remote from electrical current.
★ Shock a target into paralysis with a taser-like touch, emulating Touch-Range Physical Paralysis at the character's SPs of Electrical Control.

Source	Electrical Magnitude
Household outlet	1
Electric vehicle battery	2
Subway third rail	3
High-voltage power line	10
Lightning	13 - 20

The Electrical Magnitude table shows the SPs of Magnitude for some common electrical sources. Characters contacting an electrical current suffer damage each Page as if from a Special Electrical Aura at the current's SPs of Magnitude. If a current is modified, the current will return to its prior Magnitude when the character stops using his Electrical Control unless it has been repaired, grounded, or deactivated in the meantime.

FIRE CONTROL

Base Cost: 85 **Variable Cost:** 20 **Base Score:** 0
Range: Standard/By Emulated Power **Duration:** By Effect

This Power grants the character pyrokinetic control over flame. He can use Fire Control to:

★ Create fire at a point within Range and LOS as a Challenge Action by exciting the oxygen in the atmosphere. The newly-created fire can have a Magnitude of up to the character's SPs of Fire Control. The Magnitude of a fire is equal to the sum of its Volume and Intensity (see Fires, p. 345) and the character can trade-off between Intensity and Volume as desired. It can take the form of a ceiling-high cloud (Length and Width equal to the Volume SPs/2, Height of 0 SPs), a sphere (Radius equal to the Volume SPs/3), or other simple shapes. Characters who begin their Panel in the fire, or enter it on their Panel, are damaged as if by a Special Thermal Aura. Characters who exit the fire receive the Burning condition with an SEV equal to the fire's Intensity -1. The fire continues as

Designer's Note: Fire Control's ability to create fire is modeled with the Transparent Variable Intensity Special Thermal Fog power (Base Cost 75, Variable Cost 14). While the mechanics are functionally the same, we have presented it in terms of Magnitude and Intensity so that it can be more easily used with the rules for fires and firefighting.

long as the character expends an Automatic Action each Panel to maintain it. Once he stops maintaining it, the fire begins to dissipate, losing 1 SP at the end of each Page. The character can instantly dissipate the fire as an Automatic Action.

★ Extinguish a fire within Range and LOS with a Magnitude equal to or less than the SPs of Fire Control as an Automatic Action; or Extinguish a fire of greater Magnitude as an Extended Action requiring Time equal to the fire's Magnitude minus the character's SPs of Fire Control.

★ Ignite an explosion at a point within Range and LOS as a Challenge Action, emulating Targeted Variable Intensity Concussive Thermal Explosion at Fire Control's value in SPs. The Explosion's Radius can be varied from a minimum of 0 SPs to a maximum of the SPs of Fire Control. The Explosion's EV throughout the Radius is equal to the SPs of Fire Control minus the SPs of the chosen Radius.

★ Modify the Magnitude of an existing fire in Range and LOS as an Extended Automatic Action. The Time required to increase a fire's Magnitude by 1 SP is equal to the Time required to extinguish it. The Time required to decrease a fire's Magnitude by 1 SP is equal to the Time required to extinguish it -1. In either case, the character can choose whether to change Intensity or Volume. (If, when increasing the Magnitude of a Fire, the Time required is less than 0, then the character can actually increase the fire's Magnitude by SPs equal to the negative SPs of Time with an Automatic Action.) See p. 345 for more details.

★ Move an existing fire with SPs of Magnitude up to the character's SPs of Fire Control a distance equal to the character's SPs of Fire Control minus the Magnitude moved. Moving fire requires an Automatic Action each Panel. All of the fire moved must start and end within Range and LOS.

★ Scorch a target with a surge of flame as a Challenge Action, emulating Continuous Thermal Blast at Fire Control's value in SPs. The character must have an existing source of fire to work from within Range with a Magnitude at least equal to the SP of Continuous Blast it applies. The area of effect of the Continuous Blast is traced from the fire to the target.

> Burning Man spots a tiny spark in some kindling. The spark is a fire with a Volume of -10 SPs and an Intensity of -3 SPs, for a Magnitude of -13 SPs. Burning Man has 12 SPs of Fire Control. He wants to modify the Magnitude of the existing fire. The Time required to modify the Magnitude of an existing fire is equal to the fire's current Magnitude minus the character's Fire Control. Therefore Burning Men needs (-13) – 12 = -25 SPs of Time. Since that is less than 0 SPs of Time, Burning Man can actually increase the fire's Magnitude by 25 SPs with an Automatic Action. Burning Man can thus increase the spark to a roaring blaze with a Magnitude of (-13) + 25 = 12 SPs. Note that this is the same Magnitude he can create from thin air.

Nonexciting Modifier: The Fire Control is not powerful enough to excite atoms, so it cannot be used to create fire. Reduce the Base Cost by 50 and the Variable Cost by 6 and record the Power as Nonexciting Fire Control.

FORCE CONTROL

Base Cost: 100   **Variable Cost:** 20   **Base Score:** 0
Range: Standard   **Duration:** Sustained

This Power gives a character the ability to manipulate fields of force into temporary objects called **constructs**. Force Control has one Variable Attribute, Durability, determined by the character's SPs of Force Control on the USPA table; and one Variable Attribute, Recharge Rate, determined by the character's SPs of Force Control on the Recovery Rate table (p. 373).

As an Automatic Action, the character can create any constructs desired out of fields of force. Constructs can be created that have any or all of the following Attributes and **Powers:** Interior Capacity, Exterior Capacity, Additional Limb, Air Supply, Aura, Blast, Burrowing, Deflection, Flight, Forcefield, Pressure Protection, Shield, Snare, Strike, Stretching, Super-Strength, and Swimming. (Other Powers, or variant modifiers of these Powers, can be accessed using Power Stunts.)

As a Challenge Action, the character can create a construct around an enemy character. A successful INS vs. AGI/Minimum Ranged DV Attack is required. If the construct has an Interior Capacity of 1 SP or more, it has an Area and Volume, so it will scatter if it misses, see p. 380.

All of a character's constructs can collectively have total SPs of Powers equal to the character's SPs of Force Control. SPs can be divided as desired. The constructs can be crewed, worn, or static, but not autonomous. Constructs always look like cartoonish glowing polygons of energy and cannot pass for actual objects.

Constructs function as objects in combat, with one exception: Any Damage to any Construct is applied to the Force Control's Durability (e.g. all constructs share a common pool of Durability points). If a particular construct is used to protect the character with a Forcefield, that effect's Durability is replaced with the Force Control's Durability instead. All constructs disappear if the Power's Durability is reduced to 0 or if the character becomes Unconscious or Overwhelmed. Otherwise, they can be sustained indefinitely. A character can dissolve and recreate constructs as an Automatic Action.

A character increases his Current Durability of Force Control by his **Recharge Rate** every 13 SPs of Time (8 hours). Force Control cannot recharge to more than its Maximum Durability. At the end of his Panel, a character can spend 1 or more Hero Points to reduce the Time required to recharge by 1 SP per Hero Point. If the Time is reduced to 0, the character increases his Force Control's Current Durability by his Recharge Rate immediately. Simply deactivating and reactivating Force Control does not recharge it.

Note that a character cannot directly give himself Powers with Force Control, he can merely create constructs with those Powers. If a construct disappears due to Damage, or if the character is disarmed or dislodged from a construct, he loses access to its Powers just as if he were using an object. He may end up prone or falling (p. 288) if a construct disappears at an awkward moment.

> Dr. Quantum has 14 SPs of Force Control (resulting in a Durability of 1280 for her constructs). When she is attacked by Maximum Leader, she uses an Automatic Action to create a suit of glowing armor (worn object with 14 SPs of Forcefield). Over the course of the fight, the Forcefield blocks 1024 points of Damage, reducing her Force Control Durability to 256. She uses an Automatic Action to transform the armor into a jetpack (worn object with 14 SPs of Flight) and makes a quick getaway to West LA. Maximum Leader takes a shot at the jetpack as she flies off, hitting it for 192 points of Damage. Her Force Control Durability is reduced to 64. When she lands, Dr. Quantum decides to take a drive to chill out. She transforms the jetpack into a party bus (crewed object with 7 SPs of Interior Capacity and 7 SPs of Running) that she can use to cruise around town with her friends. Sadly, her party bus gets rear-ended at the intersection of Sunset and Vine by a gawking teenager. The impact deals 96 points of Bludgeoning Damage to the party bus. It pops like a soap bubble, disappearing, and Dr. Quantum and her pals all fall onto the pavement. Ouch!

Force Control can be placed into a Power Pool with Forcefield or its variants (e.g. Impermeable Shapeable Forcefield, Projectable Forcefield, etc.), enabling the character to optimally direct his energies between self-protection and other uses without needing to use Power Stunts. If placed in a Pool with Forcefield, the two Powers share a common Durability such that Damage to the Forcefield's Durability damages the Force Control's Durability and vice versa. See p. 175 for rules on Power Pools.

Invisible Modifier: The constructs are invisible to the naked eye (8 SPs of Invisibility). Increase the Base Cost by 50 CP and record the Power as Invisible Force Control. The character can increase the SPs of Invisibility for a particular construct by applying some of his SPs of Force Control (e.g. making the construct less powerful to be stealthier).

Realistic Modifier: The constructs resemble real objects instead of glowing blobs of force (5 SPs of Replication). Increase the Base Cost by 15 CP and record the Power as Realistic Force Control. The character can increase the SPs of Replication for a particular construct by applying some of his SPs of Force Control (e.g. making the construct less powerful to seem more realistic).

GRAVITY CONTROL

Base Cost: 50 **Variable Cost:** 20 **Base Score:** 0
Range: Standard/By Emulated Power **Duration:** By Effect

The character is able to manipulate gravity, bending spacetime through will alone. He can use Gravity Control to:

★ Emit a graviton blast at a target within Range and LOS as a Challenge Action, emulating Concussive Blast at Gravity Control's value in SPs.

★ Fling an object within Range and LOS at a target in LOS as an INS vs. AGI Hurling Ranged Attack. The Distance and the Speed the object can be thrown is equal to the character's SPs of Gravity Control minus the object's Weight in SPs. The Damage dealt if the object hits will be based on the Throwing Speed and object Weight (and thus the character's SPs of Gravity Control). Like other Hurling Ranged Attacks, it can be Indirect and can target an area of effect if a big object is hurled (see p. 381).

★ Make a Ranged Wrestling Attack against a target within Range and LOS using the character's INS as the AV and his SPs of Gravity Control in lieu of his MIG for all other purposes. If the target ends up Held or Pinned, and the greater of its Weight or MIG are less than the character's SPs of Gravity Control, the target can thereafter be flung and moved like an object.

★ Pick up, push, pull, drag, or stop the movement of an object within Range and LOS. The character uses his SPs of Gravity Control in lieu of his MIG for such Actions.

★ Propel himself, and/or friendly character or characters, or helplessly grappled enemy character(s), through the air as a Movement Action as if emulating Flight. The affected character or characters can be moved a distance equal to the character's SPs of Gravity Control minus the Weight moved. The affected characters must begin and end within Range and LOS.

★ Protect himself or another target within Range and LOS with a countergravity field that repels or deflects bullets, blades, blasts, and so on, emulating Deflection at Gravity Control's value in SPs. Deflection is a Concentration effect requiring an Automatic Action to maintain each Panel.

★ Reverse the gravitational field on a target within Range and LOS as a Challenge Action, emulating Gust at Gravity Control's value in SPs, to a maximum of the target's Weight + 7 SPs. The target is knocked back away from the surface of the planet rather than away from the character using the Power. The reversal of the gravity field is brief, so the target begins falling at the end of the character's Challenge Action.

★ Strengthen the gravitational field exerted by a surface as a Challenge Action, emulating Targeted Concentration Invisible Variable-Intensity Glue at Gravity Control's value in SPs. The strengthened gravitational field (represented by Glue) can cover an Area from a minimum of 0 SPs to a maximum of the SPs of Gravity Control. The Effect Value of Gravity Control throughout the Area is equal to the SPs of Gravity Control minus the SPs of Area. This is a Concentration effect requiring an Automatic Action to maintain each Panel.

LIGHT CONTROL

Base Cost: 95 **Variable Cost:** 15 **Base Score:** 0
Range: Standard/By Emulated Power **Duration:** By Effect

This Power grants the ability to manipulate particles and waves of light in the visual spectrum. Using Light Control, the character can:

★ Blast a pulse of focused light at a target within Range and LOS as a Challenge Action, emulating Thermal Blast at Light Control's value in SPs.

★ Create bright ambient light at any point within Range and LOS as an Automatic Action, emulating Sustained Natural Illumination at Light Control's value in SPs. Activating and deactivating the Illumination requires an Automatic Action. Sustaining it does not require an Action.

★ Direct a concentrated spotlight into the eyes of a target within Range and LOS as a Challenge Action, emulating Targeted Spotlight Flash at Light Control's value in SPs.

★ Harness photonic momentum to travel through the air, emulating Flight at the character's SPs of Light Control minus his Weight.

★ Radiate like a star of dazzling brightness, emulating Self-Range Self-Immune Flash at Light Control's value in SPs.

Any sustained effects expire if the character becomes Unconscious or Overwhelmed.

Bending Modifier: The Light Control can bend light around the character or a target in LOS and Range, emulating Invisibility at the Power's value in SP as an Automatic Action. The character must concentrate to maintain the Invisibility, expending an Automatic Action each Panel of its duration. Increase the Power's Base Cost by 30 and Variable Cost by 3. Record the Power as Bending Light Control.

External Modifier: The Light Control cannot control the bio-photons he and other living things radiate, forcing him to rely on external sources of light. The character cannot create light. His SPs of Light Control are reduced by any SPs of Obscurity from low light. Reduce the Power's Base Cost by 45 and Variable Cost by 2. Record the Power as External Light Control.

Holographic Modifier: The Light Control can weave light to create images and mirages as an Automatic Action, emulating Sight-only illusion at the Power's value in SPs. Increase the Power's Base Cost by 65 and Variable Cost by 5. Record the Power as Holographic Light Control.

Unfocused Modifier: The Light Control is unfocused and cannot be used to create lasers (Thermal Blast) or focused light (Spotlight Flash). Reduce the Power's Base Cost by 10 and Variable Cost by 4. Record the Power as Unfocused Light Control.

If the character stacks both Bending and Holographic Modifiers, increase the Base Cost by 75 and Variable Cost by 6. Since both Illusion and Invisibility use up the character's Automatic Actions, it's of less utility to have both so purchasing both together costs less.

ICE CONTROL

Base Cost: 55   **Variable Cost:** 17   **Base Score:** 0
Range: Standard/By Emulated Power   **Duration:** By Effect

The character with this Power is able to instantly freeze water into ice and melt ice into water and can move and shape it through his will. By using Ice Control, the character can:

★ Create ice by freezing atmospheric water vapor as a Challenge Action. The Weight of ice the character can instantly create is equal to the SPs of Ice Control – 8. The ice can be created anywhere within Range and LOS, but creating ice directly around or above a character requires a Targeted Ranged Area of Effect Attack on the target; if the Attack misses, the area of effect scatters before being resolved. If created in the air, the ice can fall in a solid chunk or in droplets of hail, as desired. The ice melts naturally once created.

★ Coat the ground around a point within Range and LOS with a layer of slippery ice as a Challenge Action, emulating Instant Variable Intensity Ground Hazard at Ice Control's value in SPs.

★ Encase his body in a layer of hardened ice as an Automatic Action. This grants the character Invulnerability at Ice Control's value in SPs. The Armor offers Protection versus the Bludgeoning, Concussive, Cryogenic, Lacerating, Penetrating, and Thermal Damage Types. The character's body remains encased until he expends another Automatic Action to melt it away. (It doesn't melt when he becomes Unconscious or Overwhelmed.)

★ Encase his fists in ice as an Automatic Action. Thereafter his Melee Attacks deal Bludgeoning Cryogenic Damage at Ice Control's value in SPs. The character's fists remain encased until he expends another Automatic Action to free them. (It doesn't melt when he becomes Unconscious or Overwhelmed.) The character cannot use his hands for fine manipulation such as operating a vehicle or picking a lock while encased in ice.

★ Freeze water within Range into ice as an Automatic Action. The Weight of water the character can freeze into ice is equal to the SPs of Ice Control. Once frozen, the ice melts naturally.

★ Move masses of ice with SPs of Weight up to the character's SPs of Ice Control a distance equal to the character's SPs of Ice Control minus the SPs of Weight moved. Moving ice requires an Automatic Action each Panel. All of the ice moved must start and end within Range and LOS.

★ Surf on a dynamic plane of ice across land or water as a Movement Action, emulating Running, Swimming, or Swinglining at the character's SPs of Ice Control minus his Weight.

To determine the Volume of ice being created or moved with this Power, subtract 8 from the ice's Weight in SPs (i.e., ice has a Density of 8 SPs). Ice has a Toughness and Durability equal to 2/3 its Weight. Ice takes additional Damage from fire (5 SPs of Thermal Susceptibility).

Non-Atmospheric Modifier: The Ice Control cannot freeze water vapor in the atmosphere, forcing the character to rely on external sources of ice and water. Reduce the Power's Base Cost by 10 and Variable Cost by 1. Record the Power as Non-Atmospheric Ice Control.

PLANT CONTROL

Base Cost: 75   **Variable Cost:** 20   **Base Score:** 0
Range: Self/By Emulated Power   **Duration:** By Effect

The character with this Power is able to control and command plants. By using Plant Control, he can:

★ Cause ordinary plants in the area to grow into a dense thicket that offers camouflage and concealment. The effect can be centered on any point within Range and LOS. The thicket adds SPs of Obscurity equal to the SPs of Plant Control. The Obscurity affects everything within a Length and Width equal to the Power SPs/2 and a Height of 0 SPs. The thicket requires a Challenge Action to create and remains as long as the character expends an Automatic Action each Panel to maintain it. Once he stops maintaining it, the new growths created to form the thicket begin to die, with leaves falling to earth, vines withering, and so on. The thicket dies at a rate of 1 SP of Obscurity per Page.

★ Cause an ordinary or enlarged tree to slam a target within 1 SP with one of its branches as a Challenge Action. The tree makes a Melee Attack using the character's SPs of Plant Control as the AV. If it hits, the tree deals Bludgeoning Damage using its Toughness as the EV. Any given tree can only attack once per Panel. (This effect cannot be used to make characters with the Plant Perk attack with the controller's SPs of Plant Control as AV.)

★ Control one or more target characters with the Plant Perk (plant-like creatures), emulating Plant-only Mind Domination at the SPs of Plant Control.

★ Enlarge an ordinary tree within Range and LOS as a Challenge Action. For each SP of Plant Control, the tree's Weight and Volume is increased by 1 SP. For each 3 SP, its Height is increased by 1 SP and its Toughness is increased by 2 SP. The effect lasts for SPs of Time equal to the character's SPs of Plant Control. Only one tree can be enlarged at a time.

★ Entangle targets in an area with twisting, writhing vegetation as a Challenge Action, emulating Instant Variable Intensity Ground Hazard at the character's SPs of Plant Control.

Tree Species	Height	Weight	Toughness	Protection
Red Maple	4	9	6	3
Old-Field Pine	4	10	6	3
White Oak	4	11	7	3
Douglas Fir	5	15	10	3
Giant Sequoia	5	19	12	3
Coast Redwood	6	19	12	3

In order for a character to make a Power Stunt or emulate Hazard with Plant Control, there must be foliage available. At least 1 SP of Cover or 2 SPs of Obscurity from bushes, trees, and tall grasses provides enough flora to work from. If enough flora isn't present, the character can use a Challenge Action to grow some first.

The Tree Size table shows the Height, Weight, Toughness, and Protection of various trees. Values can vary by +/-1 SP in each Attribute. Trees have Protection against all Damage Types except Annihilating, Cosmic, Electrical, and Ionizing.

PROBABILITY CONTROL

Base Cost: 50   **Variable Cost:** 8   **Base Score:** 0
Range: Special   **Duration:** Special

The character can control the probability of events. This Power might reflect quantum mechanical manipulation of the wave function, control over the "butterfly effect," divine intervention, or just good-old-fashioned luck. A character with Probability Control can:

★ Re-roll a Challenge Check and keep the new result.
★ Force an NPC to re-roll a Challenge Check if its outcome will directly affect the character.

★ Accidentally discover a Clue at a Forensic Site or cause a Witness to accidentally reveal a Clue without need for a Challenge Check. The character will discover a Green (minor) clue unless all Green clues have already been discovered, in which case he will discover a Yellow clue, and so on. See p. 317 for more information on Clues.

★ Accidentally roll with an attack, reducing the attack's result by one Color without becoming Dazed (see p. 370).

★ Randomly happen upon a minor and miscellaneous item or object that is helpful to resolve a Challenge Check with DV 7 or less that wouldn't otherwise require superhuman abilities to resolve. For instance, if tied up the character might use the Power to spot a pen knife just within reach. If attempting to steal a car, he might use the Power to find the car keys hidden under the floor mat. But he could not use the Power to find the passcode to a DV 15 security system.

Each time the character uses Probability Control, the character's SPs of Probability Control are reduced by 1. If Probability Control is reduced to 0 SPs, the character temporarily loses the ability to control probability – he's "out of luck." The character recovers 1 SP of the Power every 2 hours (11 SPs of Time) that pass without using his Power.

Stochastic has 10 SPs of Probability Control. He is being held in a government facility and finds himself strapped to a medical examiner's table about to be vivisected to determine how he can control probability. Stochastic uses his Power and, fortunately, the medical examiner accidentally left a scalpel within reach with which he cuts himself free. He now has 9 SPs of Probability Control. Stochastic then fights his way out of the facility, accidentally avoiding several deadly blows, reducing himself to 3 SPs of Probability Control in the process.

Through Power Stunts, Probability Control can bring about other strange coincidences. For instance, a target might get randomly struck by lightning as a Power Stunt to emulate Electrical Blast. A Power Stunt does not count as a use that reduces the SPs of Power, but the Power Stunt must be based on the character's current SPs of Probability Control. See Power Stunts (p. 265) for more details.

RADIATION CONTROL

Base Cost: 100   **Variable Cost:** 20   **Base Score:** 0
Range: Standard/By Emulated Power   **Duration:** By Effect

This Power grants the ability to manipulate high-energy electromagnetic radiation such as x-rays and gamma rays. Using Radiation Control, the character can:

★ Contaminate a point within Range and LOS with radiation as a Challenge Action. Doing so creates a radioactive site with a Magnitude of up to the character's SPs of Radiation Control. The Magnitude of a radioactive site is equal to the sum of its Radiation Level and its Volume, and the character can trade-off between Radiation Level and Volume as desired. The radioactive site cannot have a Volume of fewer than 0 SPs (125 cubic feet). The Radiation Level remains as long as the character expends an Automatic Action each Panel to maintain it. Once he stops maintaining it, the Radiation Level begins to decay, losing 1 SP at the end of each Page. The character can instantly reduce the Radiation Level as an Automatic Action.

★ Decontaminate a radioactive site within Range and LOS with a Magnitude equal to or less than the SPs of Radiation Control as an Automatic Action; or Decontaminate a radioactive site of greater Magnitude as an Extended Action requiring Time equal to the site's Magnitude minus the character's SPs of Radiation Control.

★ Detonate a gamma ray burst at a point within Range and LOS as a Challenge Action, emulating Targeted Ionizing Explosion at Radiation Control's value in SPs.

★ Generate x-rays and transform them into visible light as an Automatic Action, emulating Blockable X-Ray Vision at Radiation Control's value in SPs. Radiation Control treats X-Ray Vision as a Concentration effect requiring an Automatic Action to maintain each Panel.

★ Modify the Magnitude of an existing radioactive site in Range and LOS as an Extended Automatic Action. The Time required to increase a site's Magnitude by 1 SP is equal to the Time required to decontaminate it. The Time required to decrease a site's Magnitude by 1 SP is equal to the Time required to decontaminate it -1. In either case, the character can choose whether to change Radiation Level or Volume. (If, when increasing the Magnitude of a radioactive site, the Time required is less than 0, then the character can actually increase the site's Magnitude by SPs equal to the negative SPs of Time with an Automatic Action.) See p. 350 for more details.

★ Send a pulse of ionizing radiation at a target in Range and LOS as a Challenge Action, emulating Ionizing Blast at Radiation Control's value in SPs. The Attack Check uses the character's INS as the AV.

SOUND CONTROL

Base Cost: 95   **Variable Cost:** 20   **Base Score:** 0
Range: Standard/By Emulated Power   **Duration:** By Effect

This Power grants the ability to control acoustic waves in order to amplify, create, or suppress sounds. Using Sound Control, the character can:

★ Create any desired noise at a point within Range and LOS as an Automatic Action, emulating Mimic Noise at Sound Control's value in SPs. Mimic Noise is a Concentration effect requiring an Automatic Action to maintain each Panel.

★ Create a field of white noise at a point within Range and LOS as a Challenge Action, emulating Variable Intensity Sound Cloud at Sound Control's value in SPs. Once created, the Cloud can be maintained with an Automatic Action each Panel.

★ Dampen sound within a zone within Range and LOS as a Challenge Action, emulating Variable Intensity Dampening Sound Cloud at Sound Control's value in SPs. Once created, the Cloud can be maintained with an Automatic Action each Panel.

★ Detonate a high-decibel sound at a point within Range and LOS as a Challenge Action, emulating Bang at Sound Control's value in SPs.

★ Fire a blast of high-frequency sound at a target within Range and LOS as a Challenge Action, emulating Concussive Blast at Sound Control's value in SPs.

★ Suppress the voice and vocalization of a character within Range and LOS as a Challenge Action, emulating Face-Only Paralysis at Sound Control's value in SPs.

Differentiating Modifier: The character can fine-tune sounds as they enter his ears to make them better suited to his preferred audio range, emulating his choice of All-Frequency Hearing, Extended Hearing, and Filtered Hearing as if those Powers were in a Power Pool of Sound Control's value in SPs. Increase the Base Cost by 10 and the Variable Cost by 2. Record the Power as Differentiating Sound Control.

Explosive Modifier: The character can unleash a sonic explosion, emulating a Linked Targeted Bang and Targeted Concussive Explosion at Sound Control's value in SPs. Increase the Base Cost by 15 and the Variable Cost by 4. Record the Power as Explosive Sound Control.

TECHNOLOGY CONTROL

Base Cost: 125   **Variable Cost:** 12   **Base Score:** 0
Range: Standard   **Duration:** Special

The character has the ability to control technological objects with his mind. For purposes of this Power, technological objects include any objects with INS; any objects with Internal Crew, Mental Powers, Skills, or any of the following Enhancement **Powers:** All-Frequency Hearing, Blindsight, Dark Vision, Extended Hearing, Filtered Hearing, Illusion, Memory, Radio Communication, Scrying, Super-Intelligence, Super-Perception, Ultra-Sensitive Hearing, Ultra-Sensitive Vision, X-Ray Vision. Purely mechanical or static objects cannot be controlled by this Power. The GM determines if any particular object qualifies as technological.

F4U5T is an ascendant hacker with 11 SPs of Technology Control. He could use his Power to remotely control a computer (because it has Structured Data Processing Skill), a Honda Civic (because it has Internal Crew), or a radio (because it has Radio Communications Power). However, he could not control an AK-47, a horse-drawn carriage, or a screwdriver.

As a Challenge Action, the character can attempt to remotely control a technological object in Range on whom he has Line of Sight. Make an Attack Check to determine the result. Use the character's Technology Control as the AV. Use the object's SPs of INS/Crew Requirement + the Security of the object as the DV. Security is the Inventor's INS for Inventions; for other objects see the list of default or average Security scores.

If the result is White, the attempt failed. If the result is Green or better, the target comes under the character's control. The color result scored against the object should be recorded for later reference, as the better the color result, the more completely the object is under the control of the character.

F4U5T wants to prank Airborne by making him believe his precious American-made Jeep Wrangler is unreliable. He decides to take over Airborne's Wrangler and arbitrarily turn on the "check engine light" and "low tire pressure" warnings just to drive him crazy. A Jeep Wrangler is a mass-produced consumer good with 3 SPs of Security. It has an Interior Crew Requirement of 0 SPs. The DV to seize control of Airborne's Jeep is just 3 – a trivial task for F4U5T.

Later, F4U5T is faced with the greater challenge of seizing control of the U.S.S. Nimitz from the clutches of a rogue crew. The USS Nimitz is a Crewed Object that has an Internal Crew Requirement of 11 SPs; 3184 sailors are required to operate it. It also counts as military equipment, so it has 7 SPs of Security. F4U5T faces a daunting DV of 18.

When attempting to control particularly complex objects, a character can make an Extended Challenge Action, spending 1 or more SPs of Time "hacking" the object. The character can add the SPs of Time spent to his AV.

With an RV of -7, F4U5T has little chance of taking control of the Nimitz immediately. He takes an Extended Challenge Action instead, investing 15 minutes (8 SPs of Time) into the attempt. Now his AV is 11 + 8 = 19 and his RV is 19 – 18 = +1.

When the character takes control of an Autonomous object, he can re-program the autonomous object to operate according to his orders or he can remotely operate it as if it were Crewed. When the character takes control of a Crewed object, he remotely operates it instead of the crew. When remotely operating an object, the character acts on his own Panel, making use of the object's Attributes through his own Actions. The controlling character has access to whatever sensor data, information, or two-way communication from the object that its Crew would ordinarily have. The controlling character can voluntarily relinquish control at any time. If the controlling character becomes Unconscious or Overwhelmed, he must relinquish control unless he has the Deep modifier.

The Crew of the object does not normally discover that it has lost control until the Technology Controller takes his first Action with the object. Normally this takes place within a Page or two, but in the case of Deep Technology Control (see below), this can be much later. Once the Crew has discovered that it has lost control, it can attempt to break the Technology Control on its Panel as a Challenge Action.

To do so, it must succeed on an INS vs. Technology Control Attack Check with a color result that is equal to or better than the color result the controlling character scored against their object. If circumstances permit, the Crew can use an Extended Challenge Action and add the SPs of Time spent to their AV to take back control.

If the Technology Controlling character uses an Extended Challenge Action to take control of the object, the Crew will detect the attempt after SPs of Time equal to the character's SPs of Technology Control –

Type of Object	Security DV
Mass-produced consumer good	3
Enterprise/Industrial equipment	5
Military equipment	7
Classified or cutting-edge technology	9
Invention	Inventor's INS

the object's Security. This can grant them extra Time to take back control or hunt down the hacker.

An object can only be controlled by one character at a time. If a character with Technology Control attempts to take control of a target that is already controlled by another, the DV for his Challenge Check is the higher of the target's DV or the current controller's Technology Control, and he must succeed with a color result that is equal to or better than the color result received by the current controller.

If an object is Wrecked, any Technology Control over it is automatically relinquished. Wrecking and then repairing an object can sometimes be the only way to remove it from the control of a powerful Technology Controller.

A character with Technology Control can attempt to dominate the will of Robotic characters, emulating Robot-only Mind Domination at his SPs of Power. If he has the Deep Modifier, he can emulate Robot-only Manchurian Mind Domination.

Insightful Modifier: The character's Technology Control relies in part on his intellect and rationality. His SPs of Technology Control cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Technology Control.

Deep Modifier: The character can give an object long-term orders or conditional orders that can be triggered by later events. Increase the Base Cost by 20 and the Variable Cost by 4 and record the power as Deep Technology Control.

Network Modifier: If the character uses his Technology Control to remotely operate an object with Radio Communication, he can use the object's Radio Communication to extend the Range of his Power to other objects it is in communication with. If the character himself has (or is an object with) Radio Communication, he can use that Power's Range to control objects he can communicate with. Increase the Base Cost by 20 and the Variable Cost by 4 and record the power as Network Technology Control.

> By taking control of a satellite relay, F4U5T could use the relay's Radio Communication to provide Range to take control of a GPS satellite that the relay communicates with. With the GPS satellite under his control, he could then use the satellite's Radio Communication as his Range to take control of a guided missile that uses GPS guidance.

Single Target Modifier: The character can only Technology Control one target at a time. If the character Technology Controls a new target, the character's control over the prior target is immediately relinquished. Reduce the Base Cost by 10 and the Variable Cost by 1.

TIME CONTROL

Base Cost: 50 **Variable Cost:** 25 **Base Score:** 0
Range: Self **Duration:** Sustained

The character can slow down the rate at which time passes for himself, making himself appear to be able to move and respond at superhuman speeds. For each 0 SPs of Time, the character can subjectively experience SPs of Time equal to his SPs of Time Control. Activating and deactivating Time Control requires an Automatic Action. Maintaining Time Control does not require an Action, but if the character becomes Overwhelmed or Unconscious it immediately deactivates. When the Power is active, the following effects apply:

★ The character can add his SPs of Time Control to his AGI and VAL for any Melee, Ranged, Ramming, or Wrestling Attacks by or against him.
★ The character can add his SPs of Time Control to his Time spent performing solitary Extended Actions, such as traveling long distances (see p. 280), stopping a moving object (p. 274), processing information (p. 304), investigating a forensic site (p. 318), or developing an invention (p. 168). (He cannot add Time Control to Time spent on activities that require mental interactions with other characters, such as befriending witnesses or earning income.)
★ The character can add his SPs of Time Control to the Distance he travels when taking an Instant Movement Action. His actual Speed is not increased for any purposes such as Ramming Attacks or avoiding Hazards.
★ The character can add his SPs of Time Control to his Initiative.
★ The character using Time Control cannot communicate with other characters (e.g. other characters seem to be speaking at a rate too slow to monitor and the character using Time Control is speaking at a frequency too fast for them to follow.)

Singularity has 5 SPs of Time Control. She has a Running Speed of 5 SPs. Her nightclub, the Event Horizon, is 20 miles away (14 SPs of Distance), so running there takes her (14 – 5) 9 SPs of Time, about half an hour. Unfortunately, it's 9:59 PM and she needs to be there at 10:00PM to play a DJ set. Singularity activates Time Control and takes an Extended Movement Action, spending 4 SPs of Time (60 seconds). Because she has 5 SPs of Time Control, she can add those 5 SPs to the Time spent and move a distance of 14 SPs (5 SPs of Speed + 4 SP of Time + 5 SPs of Time Control). She gets to the club and starts DJing just in time! Note that Time Control did not increase Singularity's Speed as perceived by the DJ herself. To her it felt like she just ran at a Speed of 5 SPs for 9 SPs of Time.

Metabolic Modifier: The character's body and mind can recover while he slows or stops time. The character reduces the SPs of Time between his Recovery Checks by his SPs of Power, emulating Resilience and Regeneration. Increase the Variable Cost by 12. Record the Power as Metabolic Time Control.

WATER CONTROL

Base Cost: 80 **Variable Cost:** 16 **Base Score:** 0
Range: Standard/By Emulated Power **Duration:** By Effect

This Power enables the character to control the physical properties of water. The character can:

★ Condense water from the atmosphere as a Challenge Action. The water can be created anywhere within Range and LOS, but creating water directly around or above a character requires a Targeted Ranged Area of Effect Attack on the target; if the Attack misses, the area of effect scatters before being resolved. The Weight of Water the character can condense (i.e. create out of thin air) is equal to the SPs of Water Control – 8. The water can be created anywhere within Range of the Power. If created in the air, the water will fall in the form of rain. If created on the ground it will form a puddle. Characters take no damage from water being created around them (unless they have some special susceptibility); they just get wet.
★ Create a bubble of air within the water around him, emulating Air Supply at Water Control's value in SPs. Activating and deactivating the effect requires an Automatic Action. Sustaining it does not require an Action. The effect is deactivated if the character becomes Unconscious or Overwhelmed.
★ Dehydrate a character within Range and LOS as a Challenge Action, emulating Toxic Life Drain at Water Control's value in SP.
★ Drain water from the lungs of a drowned character as a Challenge Action. Treat this as a resuscitation (p. 292) but substitute the SPs of Water Control in lieu of INS.
★ Move masses of water with SPs of Weight up to the character's SPs of Water Control a distance equal to the character's SPs of Water Control minus the SPs of Weight moved. Moving water requires an Automatic Action each Panel. All of the water moved must start and end within Range and LOS.
★ Propel himself through the water as a Movement Action, emulating Swimming at the character's SPs of Water Control minus his Weight. The character can move atop or under the water, as desired. (If desired, a character can move water over land with an Automatic Action and move himself in the water with a Movement Action, enabling him to "swim" across dry land.)
★ Slam a target with a surging wave of water as a Challenge Action, emulating Continuous Gust at Water Control's value in SPs. The character must have an existing source of Water to work from within Range with a Weight at least equal to the SP of Continuous Gust he applies. The area of effect of the Continuous Gust is traced from the water source to the target, and the knockback occurs away from the water source.

To determine the Volume of water being created or moved with this Power, subtract 8 from the water's Weight in SPs (i.e., water has a Density of 8 SPs). Apart from being moved by the character's mind, the water acts like an ordinary fluid, not a solid. Other characters can pass through the water at their Swimming speed and attacks can be made through it.

Inorganic Modifier: The character's Water Control cannot be used to dehydrate or otherwise affect the water within living creatures. Reduce the Base Cost by 5 and the Variable Cost by 5 and record the Power as Inorganic Water Control.

Standing Modifier: The character's Water Control cannot be used to condense water from the atmosphere. He can only control existing bodies of water. Reduce the Base Cost by 5 and the Variable Cost by 3 and record the Power as Standing Water Control.

Temperature and Humidity (Optional): For purposes of determining the Weight of water that can be condensed from air, the rules assume a temperature of 65 F and a humidity of 50%. Add 1 SP of Weight if the weather is hotter than 80 F and 2 if hotter than 100 F; subtract 1 if its colder than 50 F and subtract 2 if colder than 30 F. Add +1 SP of Weight if the relative humidity is greater than 70% and 2 if greater than 90%; subtract 1 SP if the relative humidity is less than 30% and subtract 2 if less than 10%. For instance, on a cold dry day of 10 F with 20% relative humidity, a character could extract his SPs of Water Control – 11.

WEATHER CONTROL

Base Cost: 95   **Variable Cost:** 20   **Base Score:** 0
Range: Standard/By Emulated Power   **Duration:** By Effect

Weather Control enables the character to manipulate the meteorological conditions nearby. The character can:

★ Aim a forceful wind gust at a target in Range and LOS as a Challenge Action, emulating Continuous Gust at Weather Control's value in SPs. The Attack Check uses the character's INS as the AV.
★ Call lightning down from the sky, emulating Indirect Electrical Blast at the character's SPs of Weather Control. The target of the Blast must be in Range and LOS. Targets with Total Cover against the sky (such as those inside interior rooms in buildings) cannot be targeted.
★ Condense water from the atmosphere as a Challenge Action. The water can be created anywhere within Range and LOS, but creating water directly around or above a character requires a Targeted Ranged Area of Effect Attack on the target; if the Attack misses, the area of effect scatters before being resolved. The Weight of Water the character can condense (i.e. create out of thin air) is equal to the SPs of Weather Control – 8. The water can be created anywhere within Range of the Power. If created in the air, the water will fall in the form of hail if the temperature is below freezing or rain otherwise. Characters take no damage from water being created around them (unless they have some special susceptibility); they just get wet.
★ Freeze atmospheric water vapor into snow or sleet as a Challenge Action. The Weight of snow or sleet the character can create is equal to the SPs of Weather Control – 8. The snow can be created anywhere within Range of the Power. If created in the air, the droplets will fall in the form of snow if the temperature is below freezing or sleet otherwise. The snow or sleet melts naturally once created.
★ Raise or lower the temperature of the air as an Automatic Action. The character can change the temperature of a Volume of 0 SPs (125 cubic feet) of air by his SPs of Weather Control. He can change the temperature of a larger Volume of air by his SPs of Weather Control minus the Volume affected. (1 SP of temperature change is 1 F, 2 SP is 2 F, 3 SP is 4 F, etc.) The temperature will gradually revert to its normal level unless the character maintains the effect each Panel with an Automatic Action.
★ Summon an obscuring cloud of fog centered on any point within Range and LOS as a Challenge Action, emulating Fog at the character's SPs of Weather Control.

To determine the Volume of water being created with this Power, subtract 8 from the water's Weight in SPs (i.e., water has a Density of 8 SPs). For snow, subtract 5 from its Weight in SPs. 0 SPs of Volume is enough to cover 6 SPs (1,500 sf) of Area with -6 SP (1") of rain or snow.

> It's December 25th and the Meteorologist wants a White Christmas with at least 6" (-3 SP) of snow. With 10 SPs of Weather Control, he can create a Volume of (10 – 5) 5 SPs of snow. Since he wants -3 SP in Depth, he can cover an Area of 5 – (-3) = 8 SP, or about 6,400 square feet. That's enough to cover a basketball court, and more than sufficient for his house and lot. Ho, ho, ho!

When affecting temperature, Weather Control cannot raise or lower the temperature to outside the record high and low for the location affected.

> Miami has a record low of 30 F and record high of 98 F. It's currently a chilly 65 F. The Meteorologist wants to go to South Beach to catch some rays, so he wants to raise the temperature to 85 F, a 5 SP change in temperature. He has 10 SPs of Weather Control, so he can affect a Volume of 10 – 5 = 5 SPs, or 4000 cf. That's enough for a pleasant 20-foot x 20-foot x 10-foot bubble of warm air around himself while he sips Pina Colada on the sands. If he wanted, he could have raised the temperature another SP, to 98 F, but he couldn't raise it more than that because that's higher than the record high for Miami.

DEFENSIVE POWERS

Defensive Powers afford Protection from Damage or Special Effects or allow a character to recover from Damage more quickly.

Stacking Protection: If a character has several Powers that afford Protection, the Protection is applied separately in "layers" against Attacks, first applying Protection from Forcefield, then from Shield, then from Armor, then from Invulnerability and Resistance (which stack together for the same Damage Types). The SPs of Powers are not stacked unless a specific Power specifies otherwise.

> A battlesuit with 10 SPs of Armor would offer 64 points of Protection. A battlesuit with 3 SPs of Forcefield and 7 SPs of Armor would offer 6 points of Protection from the Forcefield and 24 points of Protection from the Armor. Damage dealt would first be absorbed by the Forcefield (and reduce the Forcefield's Durability) and then absorbed by the Armor (and reduce the Armor's Durability).

ABSORPTION FIELD

Base Cost: 50+   **Variable Cost:** 10   **Base Score:** None
Range: Special   **Duration:** Special

The character is able to absorb energy (Damage) directed at him and then use it on various **Absorption-Fueled Powers**. The Absorption Field can absorb Damage from the following Damage Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic. (It cannot absorb Neural or Psychic Damage.) The Absorption Field has two Variable Attributes, Protection and Capacitance, determined by the character's SPs of Absorption Field on the USPA table. (Capacitance uses the same column as Health/Durability.)

Absorption Field can be activated and deactivated with an Automatic Action. A deactivated Absorption Field has no effect. An activated Absorption Field starts with a Current Capacitance of 0. Each time a character with an activated Absorption Field is dealt Damage by one of the Damage Types the Absorption Field functions against, it absorbs a number of points of Damage equal to its Protection. (An activated Absorption Field also reduces the effect of Special Effects by Damage Types it protects against. See Special Effects, p. 374.) Damage that is not Absorbed passes through to the character.

As any Damage is absorbed by the Absorption Field, the Field's Current Capacitance is increased by the amount of Damage it just absorbed. Once the Absorption Field has a Current Capacitance of 1 or more points, the character can begin to use the energy for his purposes. As an Automatic Action, he can convert points of Current Capacitance into SPs of a various Absorption-Fueled Powers on the Damage/Protection column of the USPA table. He can then use the Absorption-Fueled Power by spending the appropriate Movement or Challenge Action. The Absorption-Fueled Powers are defined when the Absorption Field is selected and are chosen from the list below.

Absorption-Fueled Powers: Each Absorption-Fueled Power increases the Base Cost of Absorption Field.

★ Blast (one Damage Type). The character can transform absorbed energy into a Blast for one Attack. The Blast's Damage Type is whatever type of Damage was most recently absorbed. Increase the Base Cost by 5.

★ Flight. The character can Fly for one Movement Action. Increase the Base Cost by 15.

★ Heal. The character can increase his Current Health by the amount of Current Capacitance he converts. Increase the Base Cost by 50.

★ Self-Range Self-Immune Explosion. The character can detonate the energy into an explosion around himself for one Attack. The Explosion's Damage Type is whatever type of Damage was most recently absorbed. Increase the Base Cost by 25.

★ Super-Strength. The character can increase his strength and power for one Panel. Increase the Base Cost by 15.

★ Telekinesis. The character can exert himself telekinetically for one Panel. Increase the Base Cost by 30.

An Absorption Field cannot stack with a Forcefield or Shield. If a character is ever protected by both simultaneously, whichever Power has more SPs continues to function, but it does at a reduced level. Reduce the SPs of the greater Power by the SPs of the weaker Power. (Yes, clever opponents can use this to Power Stunt to project Forcefields onto a target's Absorption Field…)

A character's Absorption Field is automatically deactivated if the character becomes Unconscious or Overwhelmed. If the Absorption Field's Current Capacitance is ever increased to greater than its Maximum Capacitance, the character becomes Overwhelmed and the Absorption Field deactivates. If it is ever increased to greater than its Maximum Capacitance by an Attack scoring a Red result, then the character becomes Overwhelmed, the Absorption Field deactivates and all of its accumulated energy immediately detonates, converting all Capacitance into SPs of Self-Range Explosion of the Damage Type of whatever effect triggered the detonation.

Concentration Modifier: The Power has a duration of Concentration instead of Sustained. Character must expend an Automatic Action every Panel to maintain his Absorption Field or it deactivates. Reduce the Forcefield's Base Cost by 10. If the character must expend a Challenge Action every Panel to maintain it, reduce its Base Cost by 40. Record the Power as Concentration Forcefield or Challenge Concentration Forcefield.

Flawed Modifier: Some Absorption Fields may not be able to absorb against some Damage Types. Decrease the Base Cost by 5 and the Variable Cost by 0.5 for each missing Damage Type. Any missing Types should be recorded as (Flawed vs. [Type]) after the Power SPs. Modifiers cannot reduce this Power's Base Cost to less than 5 or its Variable Cost to less than 0.5.

AIR FILTRATION

Base Cost: 5   **Variable Cost:** $\frac{1}{2}$ **Base Score:** 0
Range: Self   **Duration:** Permanent

The character gains protection against Damage dealt by Inhalation Auras, Toxic Fogs, and other respiratory effects. Air Filtration has one Variable Attribute, Protection, determined by the character's SPs of Air Filtration on the USPA table. Air Filtration also increases the character's DV against Nauseating Auras and Nauseating Fogs and reduces the effect of Special Effects (p. 374) by Inhalation Auras and Toxic Fogs it protects against. Because of this power's specialized nature, a character can exceed his Power Limit on DV when using Air Filtration to defend against Nauseating Auras and Nauseating Fogs. If a character with Air Filtration is exposed to airborne or droplet transmission of disease, his SPs of Air Filtration add to his DV against Infectivity.

BOMBPROOFING

Base Cost: Special   **Variable Cost:** 2   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character has been built to withstand the effects of bombs and other high explosives. He can use his SPs of Bombproofing as his DV against Attacks made using the Explosion or Quake Power. Because of this power's specialized nature, a character can exceed his Power Limit on DV when using Bombproofing to defend against Explosions or Quakes. The Base Cost of Bombproofing is the Weight of the character. This Power is usually assigned to static objects with 0 SPs of AGI and Speed, but tank-like characters sometimes select it, too.

COMBAT SENSE

Base Cost: 0   **Variable Cost:** Special   **Base Score:** Special
Range: Self   **Duration:** Permanent

The character possesses a preternatural awareness in combat. He can use his SPs of Combat Sense against any Melee, Ranged, Ramming, or Wrestling Attacks in lieu of his VAL or AGI. He can also use his SPs of Combat Sense as the DV against Bang, Explosion, Flash, Gust, and Snare.

The Base Score of Combat Sense is equal to the lesser of the character's VAL or AGI (or substitute). The Variable Cost of Combat Sense is 5 until the character's SPs of Combat Sense equal the greater of the character's VAL or AGI (or substitute). Thereafter, it is 10.

Close Quarters Modifier: The character's Combat Sense only works against Melee, Ramming, or Wrestling attacks. The Base Score is equal to the character's VAL and the Variable Cost is 5. Record the Power as Close Quarters Combat Sense.

Long Range Modifier: The character's Combat Sense only works against Ranged attacks as well as Bang, Explosion, Flash, Gust, and Snare. The Base Score is equal to the character's AGI and the Variable Cost is 5. Record the Power as Long Range Combat Sense.

Intuitive Modifier: The character's Combat Sense somehow functions even if the character is completely unaware of the attack. He can use his SPs of Combat Sense as his DV even when Totally Surprised. Increase the Base Cost by 25 and record the Power as Intuitive Combat Sense.

DEFLECTION

Base Cost: 0   **Variable Cost:** 6   **Base Score:** 0
Range: Self   **Duration:** Concentration

The character with this Power can create a field that deflects matter and energy away from himself. The character can deflect Attacks that possesses any of the following Damage Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic. (Deflection cannot protect against Neural or Psychic Damage.) The character may use his SPs of Deflection as the DV against any such Melee, Ramming, Ranged, or Wrestling Attack in lieu of his VAL or AGI. He can also use his SPs of Deflection as the DV against Bang, Explosion, Flash, Gust, and Snare.

Deflection can be activated with an Automatic Action. (This might represent activating a field, entering a stance, and so on.) Sustaining it requires an Automatic Action each Panel. Deflection is automatically deactivated if the character becomes Unconscious or Overwhelmed.

Biochemical Modifier: The Deflection only deflects Attacks that deal Corrosive and Toxic Damage. It cannot be used as the DV against Bang, Flash, Gust, or Snare. Reduce the Variable Cost by 5. Record the Power as Biochemical Deflection. This might represent an air filter or fan.

Energy Modifier: The Deflection only deflects Attacks that deal Annihilating, Cosmic, Cryogenic, Electrical, Ionizing, and Thermal Damage. It cannot be used as the DV against Gust or Snare. Reduce the Variable Cost by 2. Record the Power as Energy Deflection.

Physical Modifier: The Deflection only deflects Attacks that deal Bludgeoning, Concussive, Lacerating, and Penetrating Damage. It cannot be used as DV against Bang or Flash. Reduce the Variable Cost by 3. Record the Power as Physical Deflection. This might represent a martial artist who can block bullets in mid-flight, etc.

Protective Modifier: Each time the character is dealt Damage by any of the Damage Types the Deflection functions against, it blocks a number of points of Damage based on the SPs of Deflection as if it were a Forcefield (e.g. before Invulnerability or Resistance). Increase the Base Cost by 5 CP per Damage Type (if any). Increase the Variable Cost by 0.5 per Damage Type the Deflection functions against.

Projectable Modifier: The character can protect a target within Range and LOS instead of himself. Each character protected costs an Automatic Action each Panel. Increase the Range to Standard. Increase the Base Cost by 10 and the Variable Cost by 1. Record the Power as Projectable Deflection.

Projectable Multi-Target Modifier: The character can protect several targets (including himself) within Range and LOS. Apply the Multi-Attack penalties to the Power's SP based on the number of targets. It costs one Automatic Action each Panel to protect this group of targets. Increase the Range to Standard. Increase the Base Cost by 15 and Variable Cost by 2 and record the power as Projectable Multi-Target Deflection.

FORCEFIELD

Base Cost: 50   **Variable Cost:** 5   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character is protected by some form of energy shield, repulsive force, or other field which blocks or reduces Damage from the following Damage Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic. (Forcefield cannot protect against Neural or Psychic Damage.) Forcefield Power has two Variable Attributes, Protection and Durability, determined by the character's SPs of Forcefield on the USPA table; and one Variable Attribute, Recharge Rate, determined by the character's SPs of Forcefield on the Recovery Rate table.

A Forcefield can be activated and deactivated with an Automatic Action. A deactivated Forcefield has no effect. An activated Forcefield provides Protection. Each time a character with an activated Forcefield is dealt Damage by one of the Damage Types the Forcefield functions against, the Forcefield blocks a number of points of Damage equal to its Protection. As any Damage is blocked by the Forcefield, the Forcefield's Current Durability is reduced by the amount of Damage it just blocked. If the Forcefield's

Current Durability is reduced to 0, it is deactivated automatically. It cannot be reactivated until the Forcefield is recharged. A character's Forcefield is automatically deactivated if the character becomes Unconscious or Overwhelmed.

A character increases his Forcefield's Current Durability by his **Recharge Rate** every 13 SPs of Time (8 hours). A Forcefield cannot recharge to more than its Maximum Durability. At the end of his Panel, a character can spend 1 or more Hero Points to reduce the Time required to recharge by 1 SP per Hero Point. If the Time is reduced to 0, the character increases his Forcefield's Current Durability by his Recharge Rate immediately. Simply deactivating and reactivating a Forcefield does not recharge it.

An activated and charged Forcefield also reduces the effect of Special Effects by Damage Types it protects against. See Special Effects, p. 374.

Concentration Modifier: The Power has a duration of Concentration instead of Sustained. Character must expend an Automatic Action every Panel to maintain his Forcefield or it deactivates. Reduce the Forcefield's Base Cost by 10. If the character must expand a Challenge Action every Panel to maintain it, reduce its Base Cost by 40. Record the Power as Concentration Forcefield or Challenge Concentration Forcefield.

Flawed Modifier: Some Forcefields may not afford Protection against some Damage Types. Decrease the Base Cost by 5 and the Variable Cost by 0.5 for each missing Damage Type. Any missing Types should be recorded as (Flawed vs. [Type]) after the Power SPs. Modifiers cannot reduce this Power's Base Cost to less than 5 or its Variable Cost to less than 0.5.

Impermeable Modifier: A Forcefield may be Impermeable. A character cannot make any type of Physical Attack while an Impermeable Forcefield is active, nor take any Automatic Action that involves interacting with an object. However, an Impermeable Forcefield blocks all Damage of the relevant Types, regardless of Protection, until its Current Durability is reduced to 0. If a character inside an Impermeable Forcefield is the target of a Melee, Ramming, Ranged, or Wrestling Attack, the character can use his own DV or can use the SPs of the Forcefield as his DV. If the Forcefield itself is the target of such an attack, the Forcefield uses its own SPs as the DV. Increase the Forcefield's Base Cost by 10 and Variable Cost by 1. Record the Power as Impermeable Forcefield. If the Forcefield can be either Impermeable or standard, increase Base Cost by 20 and Variable Cost by 2 and record it as Variable-Impermeable Forcefield. The character must declare which mode the Forcefield is in when he activates the Power.

Projectable Modifier: The Forcefield can be projected at Standard range from the character. The Forcefield can protect one character within Range (or more, if it is Spherical). Projecting a Forcefield onto an enemy character is a Challenge Action requiring a successful Ranged Attack on the target. (A Spherical or Shaped Forcefield that covers an Area or Volume will scatter if it misses, see p. 380). Otherwise, projecting a Forcefield is an Automatic Action. Increase the Variable Cost by 1. Record the Power as Projectable Forcefield.

Spherical Modifier: When activated, the Forcefield protects everything within a Volume of space from 0 SPs up to the full SPs of Power. Unless Projectable, the Spherical Forcefield is centered around the character at a distance equal to the SPs of volume divided by three. If the Spherical Forcefield is Impermeable, then characters inside the Forcefield can Attack and interact with objects inside the Forcefield, but not outside it. If the Forcefield is not Impermeable, then all characters and objects within the Forcefield are protected. Increase the Base Cost by 20 and the Variable Cost by 2. Record the Power as Spherical Forcefield.

Shaped Modifier: When activated, the Forcefield can be projected at Standard range from the character. It can be formed into a flat 2D object with an Area from 0 SPs up to the full SPs of Forcefield. Alternatively it can be formed into a 3D object enclosing a Volume from 0 SPs up to the full SPS of Forcefield. If the Shaped Forcefield is Impermeable, then it blocks all Damage of the relevant Types that would pass through it in either direction until its Current Durability is reduced to 0. If the Shaped Forcefield is not Impermeable, then it provides Protection against Damage of the relevant Types that pass through it from a single direction. Increase the Base Cost by 40 and the Variable Cost by 4. Record the Power as Shaped Forcefield. (Note that this modifier includes Projectable, above.)

> Defender has Challenge Concentration Impermeable Spherical Forcefield 10. The Forcefield has a Base Cost of 50, reduced by 40 (Concentration), increased by 10 (Impermeable) and 20 (Spherical), for 40 total CP. It has a Variable Cost of 5, increased by 1 (Impermeable) and 2 (Spherical), for a Variable Cost of 8. This Power costs 120 CP.

HEALING

Base Cost: 100   **Variable Cost:** 10   **Base Score:** 0
Range: Touch   **Duration:** Concentration

This Power allows a character to induce healing in a target he touches, causing the target to increase his Current Health by his Health Recovery Rate. Healing a target is an Extended Automatic Action. The Time required is 15 SPs minus the character's SPs of Healing and the target's SPs of Regeneration (if any). If the Time is reduced to 0 or less, it occurs immediately, on the healing character's Panel. The character or the target may expend 1 or more Hero Points to decrease the Time required by the collective total of Hero Points spent, as per Heroic Recovery (p. 373).

> Mother Immaculate has 10 SPs of Healing. It takes her 15 – 10 = 5 SPs of Time (about 5 minutes) to heal Airborne after he's been injured. If Mother Immaculate or Airborne spent 3 Hero Points, she could heal Airborne in 2 SPs of Time (15 seconds or 4 Pages). If either or both spent collectively 5 Hero Points, Airborne would heal immediately. Similarly, if Airborne had 5 or more SPs of Regeneration, the Time required would be 15 – (10 + 5) = 0 SPs of Time, and Airborne's Health would increase by his Health Recovery Rate immediately.

The character can also use Healing to heal a Serious Injury as an Extended Automatic Action. The Time required is 21 SPs – the character's SPs of Healing and the target's SPs of Regeneration (if any). The character or the target may expend 1 or more Hero Points to decrease the Time required by the collective total of Hero Points spent.

> If Airborne had a Serious Injury, it would take Mother Immaculate 19 – 10 = 9 SPs of Time (about half an hour) to heal it.

The character can cure diseases as an Extended Automatic Action. The Time required is the disease's Convalescence Period minus the character's SPs of Healing and the target's SPs of Regeneration (if any). As above, the character and target may expend Hero Points to reduce the Time further. While the target is actively being healed, he is relieved of the disease's Symptoms and Time under the healing character's care does not count towards Morbidity Period.

> Airborne comes down with Eglebia, a deadly viral illness. It has a Convalescence Period of 18 SPs. It will take Mother Immaculate 18 – 10 = 8 SPs of Time (about 15 minutes) to heal Airborne. During this quarter-hour, Airborne doesn't suffer from Eglebia's symptoms and if he were about to die from the disease, he does not.

As an Automatic Action, the character can use Healing to reduce the SEV of a target's Bleeding or Poisoned Special Effect by the SPs of Healing.

> Airborne has been shot by a 120mm cannon. He has the Bleeding condition with a SEV of 12 SPs. By touching Airborne and spending an Automatic Action, Mother Immaculate can reduce the SEV of the Bleeding condition down to 12 – 10 = 2 SPs. On his Panel, Airborne will lose 4 Current Health instead of 128 Current Health to blood loss.

Disease Modifier: The character cannot cure Diseases. Reduce the Base Cost by 30 and the Variable Cost by 3. Record the Power as Non-Disease Healing.

Damage Modifier: The character cannot heal Health Damage. Reduce the Base Cost by 40 and the Variable Cost by 4. Record the Power as Non-Damage Healing.

Injury Modifier: The character cannot treat Serious Injuries. Reduce the Base Cost by 30 and the Variable Cost by 3. Record the Power as Non-Injury Healing.

Horizontal Transference Modifier: The character cannot actually heal, only transfer Damage, Serious Injury or Disease from the target to himself or another willing recipient he touches while Healing. When the target is healed, the recipient is assigned the Damage, Disease, or Serious Injury. If a Disease is transferred, the recipient of the transfer is in the same condition as the original target. The transfer bypasses any Protection. Reduce the Base Cost by half and the Variable Cost by half. Record the Power as Horizontal Transference Healing.

HYPER-IMMUNE SYSTEM

Base Cost: 0/25   **Variable Cost:** 10   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character's immune system has improved resistance to infectious disease. The character's SPs of Hyper-Immune System are added to the DV of any Infectivity and Pathogenicity Challenge Checks. If his SPs of Power equal or exceed the disease's Pathogenicity, he can ignore the effects caused by Symptomatic or Morbid conditions. Convalescence Period is reduced by the difference of Power – Pathogenicity.

The Base Cost of Hyper-Immune System is 0 for characters but 25 CP for pharmaceutical objects. Modifiers cannot reduce the Base Cost to less than 0.

Broad-Spectrum Modifier: The Power only applies to a specific category of disease – bacterial, fungal, parasitic, prion, or viral. Reduce the Base Cost by 15 and the Variable Cost by 6. Record the Power as Broad-Spectrum Hyper-Immune System (disease category).

Disease-Specific Modifier: The Power only applies to a specific disease. Reduce the Base Cost by 20 and the Variable Cost by 8. Record the Power as (Disease)-Specific Hyper-Immune System.

Limited Modifier: The Power does not function against Complex diseases. Reduce the Base Cost by 5.

Alleviative Modifier: The Power does not increase the DV against Infectivity and Pathogenicity. After applying all other Modifiers, reduce the Base Cost and Variable Cost by half. Record it as Alleviative Hyper-Immune System.

Preventative Modifier: The Power only increases the DV against Infectivity and Pathogenicity. It does not make it possible to ignore Virulence or reduce Convalescence Period. Applying all other Modifiers, reduce the Base Cost and Variable Cost by half. Record the Power as Preventative Hyper-Immune System.

IMMORTALITY

Base Cost: 10   **Variable Cost:** 2   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character ages slowly and is difficult to kill by any means. He reduces the rate at which he ages each year by his SPs of Immortality. He can only be slain by an Attack if the Attack's EV is greater than his SPs of Immortality. Otherwise his Current Health is reduced but he does not die.

The ascendant Revenant has 18 SPs of Immortality. Each year (23 SPs of Time), he only ages 23 – 18 = 5 SPs of Time, or about 2 minutes. No matter how many times Revenant is hit by a 120mm cannon (12 SPs of Blast), he cannot be slain, though he might end up with a Current Health of such absurdly low value such that it will take him years to recover. On the other hand, a thermobaric bomb with 20 SPs of Explosion could slay him, because the SPs of Explosion exceed his SPs of Immortality.

INVULNERABILITY

Base Cost: 60   **Variable Cost:** 6   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character is protected from damage by thick skin, subdermal plating, scales, tough hide, and or other defense which blocks or reduces Damage from the following Damage Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic. (It does not protect against Neural or Psychic Damage.) Invulnerability has one Variable Attribute, Protection, determined by the character's SPs of Invulnerability on the USPA table. Each time a character with Invulnerability is dealt Damage by one of the Damage Types the Power functions against, it blocks a number of points of Damage equal to its Protection. Invulnerability also reduces the effect of Special Effects by Damage Types it protects against. See Special Effects, p. 374. SPs of Invulnerability and Resistance can be stacked.

Biochemical Modifier: The Invulnerability only affords Protection against Corrosive and Toxic Damage. Reduce the Base Cost to 10 and the Variable Cost to 1. Record the Power as Biochemical Invulnerability.

Energy Modifier: The Invulnerability only affords Protection against Annihilating, Cosmic, Cryogenic, Electrical, Ionizing, and Thermal Damage. Reduce the Base Cost to 30 and the Variable Cost to 3. Record the Power as Energy Invulnerability.

Physical Modifier: The Invulnerability affords Protection against Bludgeoning, Concussive, Lacerating, and Penetrating Damage. Reduce the Base Cost to 20 and the Variable Cost to 2. Record the Power as Physical Invulnerability.

Flawed Modifier: Some Invulnerability may not afford Protection against some Damage Types. Decrease the Base Cost by 5 and the Variable Cost by 0.5 for each missing Damage Type. Any missing Types should be recorded as (Flawed vs. [Type]) after the Power SPs. Note that Invulnerability to just one Damage Type is simply the Resistance Power, below.

Sustained Modifier: The character's Invulnerability has a Duration of Sustained. The character must activate or deactivate the Power with an Automatic Action. If he becomes Unconscious or Overwhelmed, his Invulnerability deactivates. Reduce the Base Cost by 10.

IRON WILL

Base Cost: 0   **Variable Cost:** 6   **Base Score:** RES
Range: Self   **Duration:** Permanent

The character has some combination of self-assuredness, inner drive, or sheer stubbornness that makes it hard for others to change his mind or weaken his mental tenacity. He can use his SPs of Iron Will in lieu of his RES as the DV against any Mental Attacks, Emotional Attacks, social interactions, or other Challenge Checks, and as his AV to break free of Emotion Adjustment, Mind Domination, and Paralysis.

PRESSURE PROTECTION

Base Cost: 0   **Variable Cost:** 1   **Base Score:** MIG + 1
Range: Self   **Duration:** Permanent

The character is protected from the high pressure of the deep ocean and the low pressure of high altitude. In water, he can safely descend to a Depth in SPs equal to his SPs of Pressure Protection. In air and space, he can safely ascend to the top of the troposphere (10km) with 6 SPs of Pressure Protection, to the top of the stratosphere (50km) with 10 SPs of Pressure Protection, to the top of the thermosphere (130km) with 15 SPs of Pressure Protection, and to the exosphere (outer space) with 20 SPs of Pressure Protection.

Note that this Power does not protect the character from the cold of the deep ocean (which would be Cryogenic Resistance), nor from the cold or radiation of deep space (which would be Cryogenic Ionizing Resistance), nor does it grant the character an oxygen supply or ability to breathe underwater (which would be Air Supply and Underwater Adaptation).

High/Low Modifier: The character is only protected from high pressure or low pressure, but not both. Reduce the Variable Cost to 1/2.

REGENERATION

Base Cost: 0/25   **Variable Cost:** 8   **Base Score:** 0
Range: Self   **Duration:** Permanent

This Power allows a character to accelerate his natural recuperative powers. The character's SPs of Regeneration are added to the SPs of Time spent Recovering for Health. The character also recovers from the Bleeding and Poisoned Special Effects with increased rapidity (p. 376). However, he is more vulnerable to radiation (p. 350) and diseases progress more rapidly (p. 336).

The Base Cost of Regeneration is 0 for most characters, but 25 CP for Robotic characters, Undead characters, and objects. These latter characters recover Durability rather than Health.

Flawed Modifier: The character cannot regenerate Health lost to a particular Damage Type (Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic Damage). Record the Power as Regeneration (Flawed vs. [Type]). Reduce the Base Cost by 2 and the Variable Cost by 0.5.

> **Designer's Note:** 5 SPs of Regeneration lets you reduce your Recovery Time from 15 SPs (a day) to 10 SPs (an hour). It's a great choice for characters who need to be ready to fight every day, even if they don't have instantaneous regeneration every panel.

RESILIENCE

Base Cost: 0   **Variable Cost:** 4   **Base Score:** 0
Range: Self   **Duration:** Permanent

This Power allows a character to quickly regain focus despite stress and fatigue. The character's SPs of Resilience are added to the SPs of time spent Recovering for Determination. The character also recovers from Disrupted and Disoriented Special Effects with increased rapidity (see p. 376).

RESISTANCE

Base Cost: 5   **Variable Cost:** $\frac{1}{2}$ **Base Score:** 0
Range: Self   **Duration:** Permanent

The character enjoys protection against one of the following Damage Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic Damage. The Resistance endures continuously without attrition. Resistance Power has just one Variable Attribute, Protection, determined by the character's SPs of Protection on the USPA table. Each time a character with Resistance is dealt Damage by one of the Damage Types the Power functions against, it blocks a number of points of Damage equal to its Protection. The Damage Type should be written down before the Power name and

SPs. Common examples include Cryogenic Resistance, Electrical Resistance, Thermal Resistance, and Toxic Resistance. Round costs to the nearest even value. Resistance also reduces the effect of Special Effects by Damage Types it protects against. See Special Effects, p. 374. SPs of Invulnerability and Resistance can be stacked.

Resistance Types Modifier: Some Resistances may afford Protection against two or more Damage Types. For instance, radiation shielding might be represented as Electrical Ionizing Resistance. Increase the Base Cost by 5 and the Variable Cost by 0.5 for each additional Type after the first. A character can buy Resistance multiple times with different SP values versus different Damage Types if desired. Note that Resistance against all 12 Damage Types is simply Invulnerability, above.

SHIELD

Base Cost: 50   **Variable Cost:** 5   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character is protected by a physical shield which blocks or reduces Damage from the following Damage Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic. (Shield cannot protect against Neural or Psychic Damage.) Shield Power always has one Variable Attribute, Protection, determined by the character's SPs of Shield on the USPA table. Many shields are also destructible Devices, and therefore also have Toughness and Durability, but e.g. a turtle-like character could have an organic Shield.

A Shield can be equipped (activated) and unequipped (deactivated) with an Automatic Action. An equipped Shield provides Protection provided the character is not Partially Surprised or Totally Surprised by the Attack. An unequipped Shield has no effect. A character's Shield is automatically unequipped if the character becomes Disoriented, Held, Paralyzed, Unconscious, or Overwhelmed.

Each time a character with an equipped Shield is dealt Damage by an Attack and Damage Type the Shield functions against, the Shield blocks a number of points of Damage equal to its Protection. An equipped Shield also reduces the effect of Special Effects by Damage Types it protects against. (See Special Effects, p. 374.) (If the Shield is a Device, be sure to see p. 209 – p. 210 for details on how it can be Disarmed, Damaged, and Sundered.)

Boomerang Modifier: The Shield can be thrown so that it protects a target within Standard range for one Page. It then returns to the character. Increase the Variable Cost by 1. Record the Power as Boomerang Shield.

Flawed Modifier: Some Shields may not afford Protection against some Damage Types. Decrease the Base Cost by 5 and the Variable Cost by 0.5 for each missing Damage Type. Any missing Types should be recorded as (Flawed vs. [Type]) after the Power SPs. Modifiers cannot reduce this Power's Base Cost to less than 5 or its Variable Cost to less than 0.5.

ENHANCEMENT POWERS

Enhancement Powers augment a character's physical and sensory capabilities. Many Enhancement Powers function as substitutes for Attributes. For instance, Super-Strength can substitute for MIG for all purposes except DV and Health.

AIR SUPPLY

Base Cost: 5   **Variable Cost:** 1   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character has a secure supply of oxygen. While Air Supply is activated, he can breathe from his internal supply regardless of the environment. While doing so, he is immune to Damage from Inhalation Auras and Toxic Fogs and cannot be infected by diseases using Airborne or Droplet modes of transmission. Unlike other Sustained Powers, Air Supply does not involuntarily deactivate if the character becomes Unconscious or Overwhelmed. Instead, it automatically deactivates after a length of time in SPs equal to the character's SPs of this Power. Thereafter the character must replenish his Air Supply in a safe environment for an equal amount of time.

ALL-FREQUENCY HEARING

Base Cost: 5   **Variable Cost:** 1/2   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character can hear ultra-low and ultra-high frequency sounds outside the range of normal human hearing. He can detect Acoustic Transmitting Blindsight as if it were a sound with a Loudness equal to the lesser of his SPs of All-Frequency Hearing or the SPs of Acoustic Transmitting Blindsight.

BIOCHEMICAL ANALYSIS

Base Cost: 40   **Variable Cost:** 8   **Base Score:** 0
Range: Touch   **Duration:** Permanent

The character can assess the biochemical properties of a sample of an inorganic compound or organic compound such as blood, urine, saliva, tissue. Analyzing a sample for biochemical signatures is an Extended Challenge Action. If the character has access to testing equipment, including a set of syringes, swabs, slides, droppers, petri dishes with culture, and test tubes (represented by the Multitool Perk), he can collect a sample for analysis later as an Instant Action, enabling him to do the analysis at his lab, headquarters, etc. Otherwise, he must remain at the source of the sample while using Biochemical Analysis.

The AV equals the character's SPs of Biochemical Analysis plus the Time spent analyzing the material. The DV is based on what analysis the character is performing on the sample. For analysis of known compounds, diseases, organisms, or pharmaceuticals, the DV is shown on the Biochemical Analysis table. For analysis of unknown compounds, diseases, organisms, or pharmaceuticals, the DV is based on Attributes of the subject: For an unknown disease, the DV equals the disease's Pathogenicity + Incubation Period + 10; for an unknown compound, organism, or pharmaceutical, the DV equals twice the pharmaceutical's highest Attribute or 25, whichever is greater.

A compound, disease, pharmaceutical, or organism is considered "known" if the character has analyzed it before using his own Power, or if it is known to contemporary science and the character has access to the following Powers and Skills: Memory (37 SPs), Microscopic Vision (10 SPs), Radio Communication (5 SPs), and Structured Data Processing (32 SPs). While objects like a laptop are usually used to gain access to these Powers and Skills, a super-genius with Microscopic Vision and incredible Memory could in theory sequence DNA from memory, etc.

A sample is considered to be affected by a disease if its donor was infected and symptomatic. If he was infected but not symptomatic (either because he has already recovered or because the disease is still incubating) increase the DV by +2. A sample is considered to be affected by a pharmaceutical if it was taken during the Duration of the pharmaceutical. If it was taken after the Duration expired, but within 15 SPs (32 hours), increase the DV by +1; if within 19 SPs (three weeks) by +2.

When analyzing a known disease, organism, or a pharmaceutical, a Green result or better identifies all of its Attribute scores and other known information about it. When analyzing any type of unknown sample, the color result determines what's learned.

★ *Compound:* On a Green or better result, the character has identified the compound's physical characteristics, including its Density, Toughness, Toughness Modifier, and Nonconductivity (if any). On Yellow or better result, the character also learns its SPs of Resistance to any Damage Types. On an Orange result, he learns whether it has other Attributes (including Skills and Powers) and possibly special information the GM deems relevant, such as radiocarbon dating, trace elements, etc. On a Red result, he has learned all of the compound's Attributes and any very difficult-to-ascertain information the GM deems relevant ("this compound can only have been forged in the gravity well of a black hole").

★ *Disease:* On a Green or better result, the character has identified the disease's Transmission Method and Symptoms Caused. On a Yellow or better result, he has also learned the disease's Infectivity and Incubation Period. On an Orange or better result, he has identified the disease's Type and isolated the specific microbe responsible. On a Red result, he has learned the disease's Pathogenicity, Virulence, Morbidity Period, and Convalescence Period.

★ *Organism:* On a Green result, the character has identified whether or not the organism is a carbon-based organism with cellular reproduction using DNA/RNA. On a Yellow result, he has identified what biological clade the organism most closely resembles (if terrestrial) or its basis and reproduction (if extraterrestrial). On an Orange result, the character has identified the list of Attributes the organism possesses and any special information the GM deems relevant, such as age, lifespan, reproductive strategy, etc. On a Red result, the character learns the organism's Attribute values and any information the GM deems especially difficult to discover, such as Adverse Reactions, Damage Susceptibilities, or Vulnerable States.

Analysis Performed	DV	Result
Pregnancy Test	15	Reveals if sample's donor is pregnant
Single-Target Immunoassay	17	Reveals if sample's donor affected by one known infectious disease
Single-Target Toxicology Screening	17	Reveals if sample's donor affected by one known pharmaceutical
Single-Target Chemical Analysis	18	Reveals if sample contains one particular chemical compound
Cardiac Biomarker Test	18	Reveals if sample's donor has heart disease
Complete Blood Count	18	Reveals if sample's donor has anemia, cancer, infection, or inflammation
Basic Metabolic Panel	18	Reveals if sample's donor has acute diabetic, liver, or kidney disease
Comprehensive Metabolic Panel	19	Reveals if sample's donor has chronic diabetic, liver, or kidney disease
Multiplex Immunoassay	20	Reveals if sample's donor affected by any known infectious disease
Multiplex Toxicology Screening	20	Reveals if sample's donor affected by any known pharmaceutical
Multiplex Chemical Analysis	21	Reveals if sample contains any known chemical compounds
DNA Profiling (Known Organism)	22	Sequences DNA sufficient to identify sample donor (no other info)
Genomic Sequencing (Unknown Organism)	Special	Identifies attributes of an unknown disease or organism
Molecular Composition Analysis	Special	Identifies attributes of an unknown pharmaceutical or compound

★ *Pharmaceutical:* On a Green result, the character has identified the pharmaceutical's primary effect (based on CP cost). On a Yellow result, he also learns the SP score of the primary effect (if any) and its Duration. On an Orange result, the character also learns what other effects the pharmaceutical has as well as any special information the GM deems relevant. On a Red result, the character learns all of the pharmaceutical's Attribute scores and effects, plus any information the GM deems especially difficult to discover.

Methodical Modifier: The character's Biochemical Analysis requires substantial intelligence and knowledge to use. His SPs of Biochemical Analysis cannot exceed his SPs of INS/Medicine/Science (biology). If an object has the Power with this Modifier, the object's SPs of Biochemical Analysis are capped by the user's SPs of INS/Medicine/Science (biology). Reduce the Variable Cost by 2 and record the Power as Methodical Biochemical Analysis.

Organic Modifier: The character cannot analyze inorganic compounds, just organic tissue. Reduce the Base Cost by 10 and the Variable Cost by 2 and record it as Organic Biochemical Analysis. This modifier does not stack with Specific.

Specific Modifier: The character can only perform a single type of analysis, chosen when the Power is selected. Reduce the Base Cost by 20 and the Variable Cost by 4. Record the Power as Specific Biochemical Analysis and put the chosen type of analysis in parenthesis

A forensic investigator has a laboratory with 10 SPs of Specific Biochemical Analysis (DNA profiling) and 8 SPs of Biochemical Analysis. If the investigator finds a blood sample at a crime scene, she can perform DNA profiling and take an Automatic Green result in (22 – 10) 12 SPs of Time, or about 4 hours. If she finds an unknown chemical at a crime scene, she can perform a molecular composition analysis as an Extended Challenge Action. To get the maximum +1 RV, she will need to spend (25 +1 – 8) 18 SPs of Time, or about 10 days. Fatigue will apply to these tasks, possibly extending them by 1 or 2 SP (see p. 265).

BLINDSIGHT

Base Cost: 25   **Variable Cost:** 12   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character with Blindsight is able to use non-visual wave forms to survey his surroundings, enabling him to "see" even when he cannot. The character should record the type of wave the Blindsight relies: Acoustic (for echolocation or sonar), Electroreceptive (for eel or fish-like electroreception), Radio (for radar), or Psychic (for mystical awareness).

The character may use his SPs of Blindsight in lieu of his Passive Spotting Range when calculating whether a target is in his Maximum Effective Range of LOS. If so, the character has a Visual Clarity of 0 SPs against the target and can claim LOS. (Vision Clarity of 1 SP or greater is not possible with Blindsight at any Range.) When using Blindsight, the character's Maximum Effective Range of LOS and Minimum Ranged DV is not affected by Cover, Obscurity, Invisibility (except where otherwise noted), Stealth, or Telescopic Vision (but see Targeting modifier, below). See p. 297 for details on Spotting and p. 377 for details on Range, LOS, and Minimum Ranged DV.

> A character can spot a target at a Maximum Effective Range equal to Passive Spotting Range + Target Height – Cover - Obscurity. A bat has a Passive Spotting Range of 8 SPs and a Blindsight of 7 SPs. A moth has a Height of -4 SPs. The bat and moth encounter each other on a moonless night (Obscurity of 5 SPs). Using its Passive Spotting Range, the bat could spot the moth at a Range of 8 + (-4) – 5 = -1 SP, or about 2 feet. Using Blindsight in lieu of its Passive Spotting Range, the bat can detect the moth at a Distance of 7 + (-4) = 3 SPs or about 40 feet.

Degradable Modifier: The Blindsight can be degraded by objects, terrain, and foliage. As a result, Obscurity from camouflaging terrain and Cover both still affect Spotting Range, LOS, and Minimum Ranged DV. Stealth can be used to take advantage of camouflaging terrain and Cover. Reduce the Variable Cost by 50% and record the power as Degradable [Signal Type] Blindsight.

Life Modifier: The Blindsight only detects aura, chi, vital energy, or Star Trek-like "life forms," meaning it can only be used to perceive characters (living creatures), not inanimate objects. Reduce the Variable Cost by 2. Record the power as Life-only Blindsight. Creatures detected with Life-only Psychic Blindsight will be identifiable by "feel" to the character with the Power if he is already familiar with them ("a presence I've not felt since…") but otherwise they are indistinguishable blobs of life-energy (remember, Visual Clarity for Blindsight is limited to 0).

Material Modifier: The Blindsight only detects a particular material. If the material is so common as to be ambient in everything (e.g. carbon), then the Power can spot everything and there is no reduction in Variable Cost. If the material is common enough that the Power can be used to spot all characters (living creatures) and most objects (e.g. iron), reduce the Variable Cost by 1. If the material can be used to spot some characters and objects but not all (e.g. gold), reduce the Variable Cost by 2. If the material is so rare that the Power is essentially just a detection of a particular material (e.g. carbon monoxide), reduce the Variable Cost by 4. Record the Power as [material] Blindsight.

Submarine Modifier: The Blindsight cannot detect targets in the air or land. If Acoustic, it can detect Acoustic Submarine Transmitting Blindsight as if it were an object with a Height equal to the SPs of the Transmitting Blindsight. Reduce the Variable Cost by 4. Record the Power as Submarine Blindsight.

Targeting Modifier: The Blindsight is highly effective at identifying and tracking targets in combat. For purposes of Minimum DV, the Effective Range to targets spotted with Blindsight is reduced by 1 SP per 3 SPs of Blindsight. Increase the Variable Cost by 1 and record the Power as Targeting Blindsight.

Terrestrial Modifier: The Blindsight cannot detect targets in the air or water. If Acoustic, it can detect Acoustic Terrestrial Transmitting Blindsight as if it were an object with a Height equal to the SPs of the Transmitting Blindsight. Reduce the Variable Cost by 2. Record the Power as Terrestrial Blindsight.

Transmitting Modifier: Rather than receive waves passively, the Blindsight actively emits waves that can be detected by characters with appropriate Powers (including Blindsight of the same wave type). When activated, Blindsight can be "spotted" by appropriate Powers as if were an object with a Height equal to the SPs of the Transmitting Blindsight. Transmitting Blindsight is a Sustained effect that is activated and deactivated as an Automatic Action and immediately expires if the character becomes Unconscious or Overwhelmed. Reduce the Base Cost by 10 and the Variable Cost by 2. Record the Power as [Signal Type] Transmitting Blindsight.

Designer's Note: Conventional radar is Degradable Radio Transmitting Blindsight, while ground-penetrating radar is Radio Transmitting Blindsight without the Degradable modifier. Passive sonar is Acoustic Submarine Blindsight, while active sonar is Acoustic Submarine Transmitting Blindsight. Bat echolocation is Acoustic Transmitting Blindsight.

COSMIC AWARENESS

Base Cost: 40   **Variable Cost:** 4   **Base Score:** 0
Range: Standard   **Duration:** Permanent

This Power enables the character to detect the zero-point field disturbances associated with ascension. When a disturbance in the field occurs, the character gains Cosmic Clarity equal to his SPs of Cosmic Awareness + Cosmic Loudness – Range to the disturbance. The adjoining table shows Cosmic Loudness for various disturbances. The character learns more or less detail about the cosmic disturbance based on his SPs of Cosmic Clarity.

Disturbance	Cosmic Loudness
Ascendant arises or dies	Ascendant's Power Level / 2
Annihilating or Comic Damage dealt	EV of Damage
Cosmic Control used	SPs of Cosmic Control
Control Power, Portal, or Teleport used	SPs of Power/2
Other Power used	0

★ 0 SP: The character has a vague sense that something has happened ("I felt a disturbance in the field") but couldn't say where it came from or exactly what it was.

★ 1 SP: The character is certain there has been a disturbance in the zero-point field. He can identify the approximate nature of the event ("an ascendant has used some sort of notable power!") and has a very rough idea of the direction to its source.

★ 2 SP: The character detected the disturbance with notable clarity. He can identify the nature of the event and the approximate direction to the event's source but not the distance. ("I sensed someone teleporting to the north of us.")

★ 3 SP: The character can detect the disturbance with great clarity. He can identify the exact direction and approximate distance to the disturbance's source. ("I sensed someone teleporting about a mile to the north of us!")

★ 4 SP: The character detected the disturbance with perfect clarity. He can identify the exact nature of the disturbance (including SP value), and the exact direction and approximate distance to the sound's source. ("That was a 10 SP teleportation at exactly 5 degrees north of us about a mile away!")

Cosmic Awareness does not allow a character to claim LOS on a target, even at 4+ SPs of Cosmic Clarity. However, it can be used to learn the approximate location of enemies for purposes of Indirect Area of Effect Attacks or avoiding becoming Totally Surprised, just as a good sense of hearing, touch, and scent can.

Concentration Modifier: The character's Cosmic Awareness requires an Automatic Action to activate and maintain each Page. Reduce the Base Cost by 10 and record the Power as Concentration Cosmic Awareness.

DARK VISION

Base Cost: 5   **Variable Cost:** 2   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character can see in the dark by amplifying ambient light. When spotting targets, he can ignore SPs of Obscurity due to low light equal to his SPs of Dark Vision. He cannot ignore Cover, Invisibility, Stealth, or Obscurity from weather or camouflaging terrain. See p. 297 for details on Spotting.

Thermal Modifier: Rather than rely on amplifying visual light, the character's Dark Vision relies on the heat emitted by objects and characters. He can easily detect things hidden from normal sight. The character can ignore SPs of Invisibility and Stealth equal to his SPs of Dark Vision. However, Thermal Dark Vision treats the Intensity of a fire as SPs of Obscurity. Increase the Base Cost by 20 and the Variable Cost by 4 and record the Power as Thermal Dark Vision.

Infrared Modifier: The character's Dark Vision actively emits infrared illumination rather than rely on ambient light. When activated, the transmitting character loses any Obscurity from low light against characters who use Infrared or Thermal Dark Vision. Infrared Dark Vision is a Sustained effect that is activated and deactivated as an Automatic Action and immediately expires if the character becomes Unconscious or Overwhelmed. Reduce the Variable Cost by 1. Record the Power as Infrared Dark Vision.

Different types of Dark Vision do not stack – they use mutually-exclusive methods of illumination. Only the highest SP score applies.

EXTENDED HEARING

Base Cost: 5 **Variable Cost:** 1 **Base Score:** 0
Range: Self **Duration:** Permanent

The character enjoys superior audio acuity at long distance. The character can subtract his SPs of Extended Hearing from the Actual Range to a target when calculating Effective Range (p. 300) for Listening, to a minimum of -8 SPs of Effective Range.

FILTERED HEARING

Base Cost: 5 **Variable Cost:** 1 **Base Score:** 0
Range: Self **Duration:** Permanent

The character is able to acoustically or mentally "tune out" ambient noise. The character can subtract his SPs of Filtered Hearing from the Ambient Loudness when Listening, to a minimum of 0 SPs of Ambient Loudness. Reducing Ambient Loudness has the effect of making other sounds easier to hear (see p. 301). He can add his SPs of Filtered Hearing to his DV when targeted by Bang (p. 137) or Sound Cloud (p. 155). He can use his SPs of Filtered Hearing as Protection against a Damaging or Disturbing Sound Cloud.

LIGHTNING REFLEXES

Base Cost: 0 **Variable Cost:** 2 **Base Score:** 0
Range: Self **Duration:** Permanent

The character has superhuman reaction times. He can add his SPs of Lightning Reflexes to his Initiative.

MICROSCOPIC VISION

Base Cost: 5 **Variable Cost:** 2 **Base Score:** 0
Range: Self **Duration:** Permanent

The character can see tiny objects and creatures otherwise invisible to the unaided eye. The character can add his SPs of Microscopic Vision to the target's Height when calculating Vision Clarity (p. 297), increasing it to a maximum of 0 SPs of Height. The Microscopic Vision table shows the SPs of Height (or length/diameter) of various tiny objects and the minimum SPs of Microscopic Vision required to perceive them. At the GM's discretion, the character might use Microscopic Vision to be able to find certain Clues or investigate Forensic Sites which would otherwise be impossible.

FOV-Limited Modifier: When the character uses his Microscopic Vision, his field of view is restricted to just 30° (making him much easier to ambush). He cannot claim LOS on targets with a Height of 0 or more. The duration of the Power becomes Sustained; activating and deactivating the Power requires an Automatic Action and the effect immediately expires if the character becomes Unconscious or Overwhelmed. Reduce the Variable Cost by 1. Record the Power as FOV-Limited Microscopic Vision.

Height SP	Power SP	Benchmark
-15	1	50-micron optical fiber
-16	2	Dust mite excrement
-17	3	Coarse air particle, fiber of silk
-18	4	Red blood cell
-19	5	Layer of ink, fiber of spidersilk
-20	6	Anthrax spore, E. Coli bacteria
-21	7	Mitochondrion
-22	8	Smallpox virus
-23	9	Mycoplasma bacteria
-24	10	HIV virus
-25	11	Rhinovirus
-26	12	Enterovirus
-27	13	Fiber of nanowire
-29	15	Strand of DNA
-31	17	Carbon nanotube
-32	18	Water molecule
-35	21	Hydrogen atom

POLARIZED VISION

Base Cost: 5   **Variable Cost:** 1   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character's vision is protected from the dazzling effects of bright light. The character can add his SPs of Polarized Vision to his DV when targeted by Flash (p. 142). Because of this power's specialized nature, a character can exceed his Power Limit on DV when using Polarized Vision to defend against Flash.

RADIO COMMUNICATION

Base Cost: 10   **Variable Cost:** 2   **Base Score:** 0
Range: Standard   **Duration:** Sustained

The character with this Power is a living radio, able to broadcast and receive radio waves including low frequency (RFID and AM radio), medium frequency (AM radio and avalanche beacons), high frequency (CB radio, shortwave radio, and over-the-horizon aviation radio), very high frequency (FM radio, aviation radio, marine mobile communications, and weather radio), ultrahigh frequency (BlueTooth, mobile phone, and two-way FRS and GMRS radio), and superhigh frequency (satellite radio, wireless LAN). He can receive signals whose source is within Range of his Power, and broadcast radio signals to the same Range. Activating and deactivating Radio Communication is an Automatic Action. The character chooses what frequency of radio wave to tune into when he activates the Power but can change it later with another Automatic Action. Radio Communication is automatically deactivated if the character becomes Unconscious or Overwhelmed.

If a character has this Power, incoming signals are always audible as if through a high-fidelity noise-cancelling headset and broadcasts are always audible as if using a high-fidelity microphone, regardless of Ambient Loudness or other factors. If an object has this Power, incoming signals are played at a Loudness of between -7 and 9 SPs; the object does not need to have the Noise Power unless a volume of more than 115 decibels is desired.

Mental Modifier: The character mentally hears the broadcasts in his mind and can transmit his thoughts without needing to speak. Increase the Base Cost by 5 and the Variable Cost by 1. Record the Power as Mental Radio Communication. Note that this is not true Telepathy (mind to mind communication), because the other party must have access to a radio (unless he also has Radio Communication).

Narrow Band Modifier: The character can only communicate in a limited spectrum. Choose LF/MF, MF/HF, MF/VHF, HF/VHF, VHF/UFH, or UFH/SFH, or specify a custom band. Decrease the Variable Cost by 1. Record the spectrum band before the Power's name.

One-Way Modifier: The character can receive signals, but not broadcast them. Decrease the Base Cost by 5. Record the Power as One-Way Radio Communication.

Sensitive Modifier: The character can detect sources of Radio Transmitting Blindsight within Range of his Power as if it were an object with a Height equal to its SPs. He can pinpoint the exact direction and distance to the source of the sound with a Challenge Check. The AV of the Challenge Check is his SPs of Radio Communication. The DV of the Challenge Check is the Range to the source of the Radio Transmitting Blindsight minus the SPs of Radio Transmitting Blindsight. Increase the Base Cost by 5 and record the Power as Sensitive Radio Communication.

SUPER-FORTITUDE

Base Cost: 0   **Variable Cost:** 4   **Base Score:** RES
Range: Self   **Duration:** Permanent

The character with this Power possesses extraordinary mental resilience. He calculates his Determination and Determination Recovery based on his SPs of Super-Fortitude rather than his SPs of RES.

SUPER-INTELLIGENCE

Base Cost: 0 **Variable Cost:** 8 **Base Score:** INS
Range: Self **Duration:** Permanent

This Power grants a character intellectual gifts far beyond those of normal human beings. The character can use his Super-Intelligence in lieu of his INS for all purposes except observing (p. 303).

SUPER-PERCEPTION

Base Cost: 0 **Variable Cost:** 4 **Base Score:** INS
Range: Self **Duration:** Permanent

This Power grants a character preternaturally heightened awareness of his surroundings. He can notice small movements, low decibels of sound, faint odors, and other sensory inputs that are routinely overlooked by those less mindful than himself. The character can use his Super-Perception in lieu of his INS for purposes of investigating forensic sites (p. 318) and observing (p. 303).

Designer's Note: It's intended that both Super-Intelligence and Super-Perception can be used for investigating forensic sites; a super-intelligent character is making deductions from what he notices, while a super-perceptive character is noticing what others do not. If a character has both Powers...he should have just bought INS instead, because he's paying for Investigation twice (8 + 4 = 12).

SUPER-STRENGTH

Base Cost: 0 **Variable Cost:** 6 **Base Score:** MIG
Range: Self **Duration:** Permanent

This Power grants a character extraordinary muscular power. The character can use his Super-Strength in lieu of his MIG for purposes of Jumping Speed and for lifting, throwing, carrying, pushing, pulling, and stopping objects and characters. He can use his Super-Strength in lieu of his MIG for all purposes related to Wrestling, as the basis for the Speed of Objects he hurls, as his AV and DV for Glue, and as his EV for Melee Attacks. Super-Strength does not increase Health.

Non-Combat Modifier: The character is strong but lacks the explosive strength that would make it useful in combat. He cannot use his Super-Strength as the basis for the Speed of hurled Objects, as his EV, or as his AV or DV for Wrestling Attacks. Reduce the Variable Cost to 2 and record the Power as Non-Combat Super-Strength.

SUPER-STAMINA

Base Cost: 0   **Variable Cost:** 4   **Base Score:** MIG
Range: Self   **Duration:** Permanent

The character with this Power possesses extraordinary physical toughness. He calculates his Health and Health Recovery based on his SPs of Super-Stamina rather than his SPs of MIG. He can use his SPs of Super-Stamina as his DV against Life Drain.

TELESCOPIC VISION

Base Cost: 5   **Variable Cost:** 2   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character enjoys superior visual acuity at long distance. The character can subtract his SPs of Telescopic Vision from the Actual Range to a target when calculating Effective Range (p. 297) for Spotting, to a minimum of -3 SPs of Effective Range.

> A bald eagle with 8 SPs of Passive Spotting Range and 4 SPs of Telescopic Vision can spot a rabbit (Height of -2 SPs) in the pasture from a mile in the air (Range of 10 SPs). The eagle's Vision Clarity against the rabbit is 8 + (-2) − (10 − 4) = 0 SPs.

FOV-Limited Modifier: When the character uses his Telescopic Vision, his field of view at close range is restricted to 30°, making it easier to sneak up on him and harder to see nearby targets. If the Effective Range to a target is reduced to -3 SPs, the character cannot claim LOS to it. The duration of the Power becomes Sustained; activating and deactivating it requires an Automatic Action, and the effect immediately expires if the character becomes Unconscious or Overwhelmed. Record the Power as FOV-Limited Telescopic Vision. Reduce the Variable Cost by 1.

ULTRA-SENSITIVE HEARING

Base Cost: Special   **Variable Cost:** 2   **Base Score:** 0
Range: Self   **Duration:** Permanent

This Power greatly magnifies the decibels of sound that the character can hear. The character adds the SPs of Ultra-Sensitive Hearing to his Passive Listening Range for all purposes (see p. 300). Ultra-Sensitive Hearing makes a character more vulnerable to Bang (p. 137) and Sound Cloud (p. 155).

> Dr. Echo has 11 SPs of Ultra-Sensitive Hearing. He can hear a pin dropping (-8 SPs of Loudness) at a Range of 5 feet (0 SPs) with the same Hearing Clarity that a normal person can hear a rowdy street fight (3 SPs of Loudness) at the same distance.

This Power has a Base Cost of 0 for characters and 2 for Objects. By default, objects do not have a Passive Listening Range. This Power can be assigned to objects such as audio recorders to give them the ability to hear targets. An object that purchases this Power for its Base Cost gains 0 SPs of Passive Listening Range, with additional CP expenditure making greater Passive Listening Range possible.

ULTRA-SENSITIVE SCENT

Base Cost: 20   **Variable Cost:** 4   **Base Score:** 0
Range: Self   **Duration:** Permanent

This Power grants a superhuman sense of smell. The character can passively detect an odor at a Range in SPs from the odorant equal to his Ultra-Sensitive Scent plus the Weight of the odorant plus the odor's Pungency − 10. If the odorant is right under his nose, treat the Range as -10 SPs. If the odorant has 1 SP or more of Cover or Obscurity from weather, reduce the Range an equal number of SPs. If the odorant is buried underground, treat it as having Cover of 3 + the Distance underground in SPs. Once the character has detected an odor, he can track the odor back to the odorant.

A police officer (or other ordinary person) has 0 SPs of Ultra-Sensitive Scent. He can detect a decaying cadaver (10 SPs of Pungency) weighing 150 lbs (Weight of 3 SPs) at a Range of 0 + 3 + 10 − 10 = 3 SPs, or about 40 feet. A K9 cadaver-sniffing dog has 10 SPs of Ultra-Sensitive Scent, so it can detect the same cadaver at a Range of 10 + 3 + 10 − 10 = 13 SPs, or about 8 miles. If the cadaver were buried 5 feet underground (0 SPs of Distance), the sniffer dog would need to be at a Range of 10 SPs, or about a mile. If it were also raining (3 SPs of Obscurity), the sniffer dog would need to be at a Range of 7 SPs, or about 200 yards.

A K9 drug-sniffing dog (Ultra-Sensitive Scent of 10 SPs) can detect a gram (Weight of -13 SPs) of heroin (Pungency of 3 SPs) right under its nose (Range of -10 SPs), because 10 + (-13) + 3 − 10 = -10. It could detect a kilogram (Weight of -3 SPs) of marijuana (Pungency of 8 SPs) at a range of 10 + (-3) + 8 − 10 = 5 SPs, or 50 yards.

As a Challenge Action, the character can actively sniff to determine if a particular odor is nearby. His AV is his SPs of Ultra-Sensitive Scent, while his DV is Range to the odorant + Cover + Obscurity + 10 − the odorant's Weight − the odor's Pungency. On a Green or better result, he detects the odor and can track it to the odorant.

A decaying cadaver (Weight of 3 SPs, Pungency of 10 SPs) is buried 5 feet underground (Cover of 3 SPs). It's raining (Obscurity of 3 SPs). The sniffer dog (Ultra-Sensitive Scent of 10 SPs) is 400 yards (Range of 8 SPs) from the cadaver and takes a Challenge Action to sniff for the odor. The sniffer dog's AV is 10. His DV is 8 + 3 + 3 + 10 − 3 − 10 = 11. His RV is 10-11 = -1 for the Check.

Pungency	Benchmark	Weight	Benchmark
0	Plastic, rubber	-18	Drop of water
1	Almond	-14	Human sweat (minute's worth)
3	Heroin, vanilla	-13	1 gram of drugs
4	Cocaine, human body	-10	Tablespoon of water
5	Clove, lemon, spearmint	-8	Human sweat (hour's worth)
7	Burnt match, wine scent	-6	cup of water, t-shirt, or urine sample
8	Pot, chem-tagged explosive	-5	Human stool, human hand, mouse
9	Banana, feces	-4	Human sweat (day's worth)
10	Decaying cadaver, vomit	-3	Human brain, kilogram of drugs
11	Garlic, rotten eggs	-2	Drug packets on a cartel mule; blood spatter
12	Skunk musk, stink bomb	-1	Severed human arm, head, or leg
15	Natural gas additive	0	Dry human skeleton

The character can passively detect whether an odorant was previously present at his location. The maximum Time that can have elapsed since the odorant was present is his SPs of Ultra-Sensitive Scent plus the Weight of the odorant plus the odor's Pungency. If the odorant was removed on foot, the character can follow the traces of the odor to the odorant's current location or until the location where it was moved into a departed vehicle or airproof container. If there was inclement weather during the Time, subtract SPs of Obscurity based on the worst weather from the Time.

As a Challenge Action, the character can actively sniff to determine whether a particular odorant is or was present where he is sniffing. His AV is his SPs of Ultra-Sensitive Scent, while his DV is the Time elapsed since the odorant was present + Obscurity − the odorant's Weight − the odor's Pungency.

Two weeks ago (18 SPs of Time), a man was murdered in an alleyway. The man's body was carried down the alley into a waiting sedan, where it was packed in the trunk before the car was driven away. Since then it has rained heavily (3 SPs of Obscurity). A police officer has a K9 sniffer dog (10 SPs of Ultra-Sensitive Scent) sniffing around the scene of the crime. Assume the dead body had a Weight of 3 SPs and a Pungency of 9 SPs. The maximum Time the dog could detect the dead body's odor would be 10 + 3 + 9 − 3 = 19 SPs. The dog is able to pick up the scent and can track it down the alleyway to where it was carried off in the sedan.

The character can use a Challenge Action to actively sniff a target character to determine the target's Attitude or general emotional state. Resolve the attempt as an Ultra-Sensitive Scent vs. CHA/RES Attack Check. If the interaction occurs at a distance, add the Range in SPs to the DV. On a Red result, the target's hormones, pheromones, and sweat reveal his Attitude and emotions. ("He smells of fear.")

Hellhound is an ascendant with 11 SPs of Ultra-Sensitive Scent. He sees a man (RES of 4 SPs) running down the street about 50 feet (3 SPs) away. He decides to actively sniff to determine the running man's Attitude and emotions. His AV is 11. His DV is 4 (the target's RES) + 3 (the Range), or 7. His RV is therefore +4. That's high enough to qualify for an automatic Red result. Hellhound smells the man's anger and hatred.

The character can also actively sniff a target character to determine if it is suffering from any chronic illnesses with characteristic odors, such as cancer, diabetes, or heart disease. Resolve the attempt as an Ultra-Sensitive Scent vs. 9 Challenge Check. On a Green result, the character knows if the target is unwell. On a Yellow or better result, the character knows the general cause of the target's sickness (cancer, diabetes, or heart disease).

When fighting crime, some Clues at some Forensic Sites might be found using the character's Ultra-Sensitive Scent in lieu of his INS. In combat, a character with Ultra-Sensitive Scent is difficult to ambush. He can smell other characters at a Range equal to his SPs of Power – 6. He cannot be Totally Surprised by an opponent he can smell but he can be Partially Surprised if he can smell the opponent but not see him.

The Ultra-Sensitive Scent tables below have the Pungency of various substances and the Weight of some odorants often found at Forensic Sites.

Predatory Modifier: If a character can both smell and hear a target, and LOS is not blocked by Total Cover, he can attack the target as if he had LOS against it. Increase the Base Cost by 20 and the Variable Cost by 4. Record the Power as Predatory Ultra-Sensitive Scent.

Height SP	Power SP	Benchmark
-12	1	Dust mite
-13	2	Printer paper edge
-14	3	Strand of hair
-15	4	50-micron optical fiber
-16	5	Dust mite excrement
-17	6	Coarse air particle, fiber of silk
-18	7	Red blood cell
-19	8	Layer of ink, fiber of spidersilk
-20	9	Anthrax spore, E. Coli bacteria
-21	10	Mitochondrion
-22	11	Smallpox virus
-23	12	Mycoplasma bacteria
-24	13	HIV virus
-25	14	Rhinovirus
-26	15	Enterovirus
-27	16	Fiber of nanowire
-29	18	Strand of DNA
-31	20	Carbon nanotube
-32	21	Water molecule
-35	24	Hydrogen atom

ULTRA-SENSITIVE TOUCH

Base Cost: 10   **Variable Cost:** 2   **Base Score:** 0
Range: Self   **Duration:** Permanent

This Power grants a superhuman sense of touch. Such preternatural sensitivity has various subtle benefits. The character can "see" the form, material, and shape of objects or characters, gaining by touch the equivalent of Visual Clarity equal to his SPs of Ultra-Sensitive Touch + 8 + the object's Height (to a maximum Height of -3 SPs). He can "hear" sounds from the impact of their sound waves on his fingers, gaining by touch the equivalent of Hearing Clarity equal to his SPs of Ultra-Sensitive Touch + Sound Loudness – Sound Absorption - Ambient Loudness -2.

Hellhound has normal human vision (Passive Spotting Range of 8 SPs) but extraordinary touch (Ultra-Sensitive Touch of 10 SPs). If he looks at a grain of sand (Height of -12 SPs) at the optimum possible distance (-3 SPs of Effective Range), his Visual Clarity is 8 + (-12) - (-3) = -1 SP; he can't even really see a single grain clearly. If he touches the grain of sand, his touch equivalent Visual Clarity is 10 + 8 + (-12) or 6 SPs. He could feel a serial number etched on the sand grain. If Hellhound touches a person talking (Loudness of 0 SPs) on a busy street (Ambient Loudness of 3 SPs), he can gain the equivalent of Hearing Clarity 10 + 0 – 0 – 3 – 2 = 5 SPs. He'd be able to follow the conversation as easily as if it were a crystal-clear phone call.

A character with this Power can process information by touch if he understands the language or method by which it is coded. The character's Processing Speed equals his SPs of Ultra-Sensitive Touch + 12 + the SPs of Thickness of the source, up to a maximum Processing Speed equal to his SPs of INS. Some Clues may only be accessible to characters with this or similar Powers.

Braille uses dots raised 0.5mm (-12 SPs of Height). By default, an ordinary adult (0 SPs of this Power) who becomes literate in Braille can read about 30 words per minute. Since 30 words is 4 SPs of Information and one minute is 4 SPs of Time, the average person can process information from -12 SPs of Height via touch at a processing speed of $4 - 4 = 0$ SPs. Characters with 1 or more SPs of Ultra-Sensitive Touch can acquire information from even more subtle sources with increasing speed.

Helen Killer, an ascendant assassin with 10 SPs of Ultra-Sensitive Touch, can read a printed document at 240 words per minute by feeling the raised ridges of the ink.

ULTRA-SENSITIVE VISION

Base Cost: Special   **Variable Cost:** 3   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character has superhuman visual acuity. He can add his SPs of Ultra-Sensitive Vision to his Passive Spotting Range for all purposes (see p. 297). Ultra-Sensitive Vision makes a character more vulnerable to Flash (p. 142).

This Power has a Base Cost of 0 for characters and 3 for Objects. By default, objects do not have a Passive Spotting Range. This Power can be assigned to objects such as image-guided drones or missiles to give them the ability to spot targets. An object that purchases this Power for its Base Cost gains 0 SPs of Passive Spotting Range, with additional CP expenditure making greater Passive Spotting Range possible.

UNDERWATER ADAPTATION

Base Cost: 10   **Variable Cost:** 1   **Base Score:** MIG + 1
Range: Self   **Duration:** Permanent

The character is adapted to survival in the ocean. He can breathe underwater and survive pressure up to a depth equal to his SPs of Underwater Adaptation. For instance, if he has 10 SPs of Underwater Adaptation, he can safely submerge to depths of 1 mile (10 SPs). His maximum Swimming speed is his SPs of MIG-3</>Underwater Adaptation (or his SPs of Swimming, if purchased separately.)

UNDERWATER VISION

Base Cost: 0   **Variable Cost:** ½   **Base Score:** 0
Range: Self   **Duration:** Permanent

The character is able to see clearly underwater. His maximum Visual Acuity underwater is increased by 1 SP per SP of Underwater Vision, up to his normal maximum Visual Acuity.

X-RAY VISION

Base Cost: 20   **Variable Cost:** 3   **Base Score:** 0
Range: Self   **Duration:** Sustained

This Power grants the ability to see through common materials as if they were transparent. The target's Cover still counts for purposes of Minimum Ranged DV unless the character fires through the Cover. The character can ignore SPs of Obscurity up to his SPs of X-Ray Vision from camouflaging terrain, but not darkness or weather.

The character's X-Ray Vision can see through a specific character up to a Thickness equal to the SPs of X-Ray Vision minus the character's SPs of Density. Since living things are mostly composed of water, most creatures have a Density of 8 SPs. The Density of objects can vary widely, as shown on the adjoining table. If a character can see through an object, the object does not provide

Cover for purposes of calculating Vision Clarity and Maximum Effective Range of LOS (p. 297) against the character.

Activating and deactivating X-Ray Vision requires an Automatic Action. If the character becomes Unconscious or Overwhelmed, the effect ends.

Density SPs	Benchmark
0	Carbon Dioxide
1	Methane gas
2	Goose down
3	Tobacco flakes
4	Popcorn, sawdust
5	Hay, shredded paper
6	Charcoal, snow
7	Wood, lithium
8	Ethanol, ice, water
9	Concrete, lava, brick
10	Aluminum, granite
11	Copper, iron, steel
12	Lead, mercury
13	Gold, platinum, osmium
14	Ultra-dense alloys
15	Sun's core

The Radiologist has 8 SPs of X-Ray Vision. Wood has a Density of 7 SPs, so he can see through 8 – 7 = 1 SP or 10 feet of wood. Human flesh has a Density of 8 SPs, so he can see through 8 – 8 = 0 SPs or 5 feet of flesh. Concrete has a Density of 9 SPs, so the Radiologist can see through -1 SP of concrete, about 30". Lead has a Density of 12 SPs, so the Radiologist can see through only -4 SPs of lead – just a few inches.

Blockable Modifier: The character's X-Ray Vision is blocked completely by substances with a Density greater than the SPs of Power. Reduce the Base Cost by 5 and the Variable Cost by 1 and record the power as Blockable X-Ray Vision.

If the Radiologist had 8 SPs of Blockable X-Ray Vision, he could see through 1 SP of wood or 0 SPs of human flesh but he could not see through concrete or lead at all.

Concentration Modifier: The Power has a duration of Concentration instead of Sustained. Character must expend an Automatic Action every Panel to maintain his X-Ray Vision or it deactivates. Reduce the Base Cost by 10 and record the Power as Concentration X-Ray Vision.

Permanent Modifier: The character's X-Ray Vision is always on. This has advantages in combat but has consequences in everyday life that range from perverted to disturbing depending on the SPs of X-Ray Vision. (Permanent X-Ray Vision could be linked with a Permanent Ionizing Aura to simulate a character who gives radiation poisoning to characters around him.) Do not change the Base Cost and Variable Cost. Record the Power as Permanent X-Ray Vision.

MENTAL POWERS

Mental Powers are those drawn from the "psychic" spectrum and range from empathic abilities to telekinesis.

Charismatic and Insightful: Some Mental Powers allow a character to purchase the Charismatic or Insightful modifier, which cap the SPs of Power by one of the character's Primary Attributes. A Power may never have both modifiers; the two are exclusive of each other.

Mind, Memory, and Information: Memory, Memory Manipulation, Mind Reading, and Telepathy enable characters to discover, manipulate, record, and transfer Information mind-to-mind and can interact in interesting ways. The human mind has a total storage capacity of 2.5 petabytes, or 48 SPs of Information. Hence, erasing all the memories of a person's lifetime is the equivalent to deleting 48 SPs of Information. Every few seconds of consciousness (one Page or 0 SPs of Time), the human mind receives and processes about 20 megabytes (21 SP of Information). Hence, erasing 0 SPs of Time from memory is the equivalent to erasing 21 SPs of Information, and sending a few seconds worth of sensory data means transferring 21 SPs of Information.

EMPATHY

Base Cost: 10 **Variable Cost:** 2 **Base Score:** 0
Range: Standard **Duration:** Instant

As a Challenge Action, the character can attempt to read the emotions of a target in Range on whom he has Line of Sight. The character must make an Empathy vs. RES Emotion Attack against the target. The better the color result, the more information the character receives. On a Green result, he learns the target's current emotional state. On a Yellow result, he learns the target's current emotional state as well as any chronic or habitual emotional states he experiences (e.g. depression, overconfidence, envy). On an Orange result, he learns the target's current and chronic emotional state as well as the reason for his current emotional state. On a Red result, he learns the target's current and chronic emotional state as well as the reason for them.

Empathy can be used when crimefighting to ascertain the Attitude of a Witness. A Green result or better reveals the target's current Attitude, while an Orange result or better reveals what would change the target's Attitude. The latter information offers a +2 bonus to the AV of any attempts to befriend the Witness.

Sometimes a target may be captured, restrained, and subjected to long-term mental probing. When this occurs, the character can add the SPs of Time spent probing the target's emotions to the AV of his Empathy Attack Check.

Charismatic Modifier: The character's Empathy relies in part on his personal magnetism and force of personality. His SPs of Empathy cannot exceed his SPs of CHA. Decrease the Variable Cost by 1 and record the power as Charismatic Empathy.

Insightful Modifier: The character's Empathy relies in part on his intellect and rationality. His SPs of Empathy cannot exceed his SPs of INS. Decrease the Variable Cost by 1 and record the power as Insightful Empathy.

EMOTION BLAST

Base Cost: 15 **Variable Cost:** 5 **Base Score:** 0
Range: Standard **Duration:** Instant

The character can use this Power to make a CHA vs. RES Emotional Attack on a target in Range on whom he has Line of Sight. The Attack uses the character's SPs of Emotion Blast as the EV to deal Psychic Damage to the target's Current Determination. The target can Roll with the Attack to reduce the Damage if desired. (The character is emotionally in turmoil rather than outwardly rolling back, of course.) The Base Damage of the Emotion Blast should be written down in parentheses after the SP score.

Eye Contact Modifier: The target of the Emotion Blast must have Line of Sight on the character using the Power with a Visual Acuity of at least 3 SPs. Reduce the Variable Cost by 1 and record the power as Eye-Contact Emotion Blast.

Murderous Modifier: Some fear can be so terrifying as to wreak physical harm on the victim. Emotion Blast with the Murderous modifier deals Neural Damage once the target's Determination is reduced to 0. Raise the Variable Cost by 2 and record the Power as Murderous Emotion Blast.

Verbal Modifier: The character can only Emotion Blast targets within Earshot of him. Reduce the Variable Cost by 1 and record the power as Verbal Emotion Blast. This Power is sometimes called "Harsh Language," and has proven of limited use against xenomorphs.

EMOTION ADJUSTMENT

Base Cost: 75 **Variable Cost:** 9 **Base Score:** 0
Range: Standard **Duration:** Concentration

As a Challenge Action, the character can attempt to adjust the emotional state of a target in Range on whom he has Line of Sight. Make an Attack Check using the character's SPs of Emotion Adjustment as the AV and the target's RES as the DV. If the result is White, the attempt failed. If the result is Green or better, the character should immediately state the emotion he is imposing on the target character and the intensity at which that emotion is experienced. The color result scored determines the maximum intensity of the emotion that can be imposed: mild (Green), moderate (Yellow), extreme (Orange), and wild (Red).

The following emotions can be stimulated with this Power: agreeable, angry, calm, depressed, fearful, and lustful. (The GM can create rules for other emotions as desired.) Some emotions can be imposed in general (just "angry") or with a specific focus ("angry at Aurora"). The target gains the Emotional condition, and the current emotion, intensity, and focus should be noted for the condition, e.g. Emotional (Mildly Angry at Aurora). The effects of the Emotional condition depend on the emotion, intensity, and focus imposed, as shown below. Note that a Mildly, Moderately, or Extremely Emotional target stays in control of his Hero Point expenditure. A Wildly Emotional target, however, can only spend Hero Points in a limited manner.

Agreeable: Agreeable characters are more likely to go along with requests from the focus of their agreeableness. If the agreeableness is generalized, the agreeable character will direct his agreeableness at whoever is currently talking to him.

★ Mildly agreeable characters agree to any routine requests from the focus that are not unusual or dangerous. If their Attitude was Avoidant or Hostile towards the focus of their agreeableness, they become Indifferent. If it was Indifferent, they become Friendly to the source.

★ Moderately agreeable characters will agree to unusual or dangerous requests from the focus. They automatically shift to a Friendly Attitude towards the source of their agreeableness.

★ Extremely agreeable characters will agree to unusual, dangerous requests from the focus. They automatically shift to a Friendly Attitude towards the source of their agreeableness.

★ Wildly agreeable characters will agree to literally any request by the focus (and are effectively under a form of Verbal Mind Domination). They may only spend Hero Points to defend themselves, break free of the effect, and/or Roll with Attacks.

Angry: Angry characters lash out at the source of their anger. If the anger is general and without focus, the character will direct his anger at anything and everything nearby – a door, a wall, a friend, etc.

★ Mildly angry characters display their anger at the focus through body language and tone.

★ Moderately angry characters verbally berate the focus of their anger. If an NPC is the focus of the anger, the NPC's Attitude towards the angry character shifts one step towards Hostile (see p. 310).

★ Extremely angry characters attack the focus of their anger but stop short of deadly force. If an NPC is the focus of the anger, the NPC's Attitude towards the angry character shifts two steps towards Hostile.

★ Wildly angry characters attack the focus of their anger with intent to maim, murder, and destroy. If an NPC is the focus of the anger, the NPC's Attitude towards the angry character shifts three steps towards Hostile. A person might kill his best friend when Wildly Angry. They must spend the maximum possible number of Hero Points when attacking the focus of their anger. They may spend Hero Points to defend themselves, break free of the effect, and/or Roll with Attacks.

Calm: Calm characters are tranquil and serene. Calmness is always general and without focus. The calm emotion can be used to reduce the intensity of an angry, fearful, or lustful emotional state by its own intensity and/or to protect allies from similar effects.

★ Mildly calm characters have relaxed body language and posture.

★ Moderately calm characters are unruffled even in situations of distress. The DV of any attempt to use Emotion Blast or Emotion Adjustment on the wildly calm character is raised by 1.

★ Extremely calm characters have zen-like tranquility. The DV of any attempt to use Emotion Blast or Emotion Adjustment on the wildly calm character is raised by 2.

★ Wildly calm characters have such low affect as to seem robotic and inhuman. The DV of any attempt to use Emotion Blast or Emotion Adjustment on the wildly calm character is raised by 3. They may spend Hero Points normally.

Depressed: Depressed characters are morose and lethargic. Depression is always general and without focus.

★ Mildly depressed characters suffer a -1 penalty to their AV when taking any Challenge Actions.

★ Moderately depressed characters suffer a -1 penalty to their AV when taking any Challenge Actions and cannot use Hero Points on the Actions' Checks.

★ Extremely depressed characters cannot take any Challenge Actions at all – why bother, when they know their efforts will fail?

★ Wildly depressed characters cannot take any Actions whatsoever; they are reduced to brooding on personal setbacks and listening to The Cure on Spotify. They may only spend Hero Points to defend themselves, break free of the effect, and/or Roll with Attacks.

Fearful: Fearful characters are gripped by uncertainty and anxiety towards the focus of the fear. If the fear is generalized, the effects apply to any opponents of a higher Challenge Rating than the fearful character, and to any Challenge Checks that are potentially dangerous to the fearful character.

★ Mildly fearful characters suffer a -1 penalty to their AV on Attacks directed against the focus of their fear.
★ Moderately fearful characters cannot make attacks or take Challenge Actions directed against the focus of their fear.
★ Extremely fearful characters cannot make Attacks or Challenge Actions at all if the focus of their fear is present. They cannot take Movement Actions that would bring them closer to the focus of their fear.
★ Wildly fearful characters must flee from the focus of their fear as quickly as possible. If unable to flee, they cannot take any Action except to move to Cover and/or Hide. They may only spend Hero Points to defend themselves, break free of the effect, and/or Roll with Attacks.

Lustful: Lustful characters are overcome by sexual desire. Lust must always have a focus. The focus does not have to be something the target would normally desire.

★ Mildly lustful characters will gaze at the source of their lust to make their interest known. They become too distracted to attempt to Observe Hiding or Sneaking opponents.
★ Moderately lustful characters will continuously catcall at or flirt with the source of their lust.
★ Extremely lustful characters will continuously attempt to physically fondle, hug, kiss, and be affectionate with the focus of their lust, but can be deterred each Panel by forceful rejection.
★ Wildly lustful characters will stop at nothing to consummate their lust. If the focus of their lust resists, they will attack the focus as if wildly angry. They must spend the maximum possible number of Hero Points when persuading, intimidating, or attacking the focus of their lust. They may spend Hero Points to defend themselves, break free of the effect, and/or Roll with Attacks.

At the end of his Panel, an Emotional target can attempt to break free of the Emotion Adjustment. Making the attempt does not require an Action. To break free, the target must succeed on a RES vs. Emotion Adjustment Attack Check with a color result that is equal to or better than the color result the adjusting character scored against him. When attempting to break free, the Emotional target can always spend Hero Points to increase the AV, but the adjusting character can only spend Hero Points to increase the DV if the target is in Range and LOS.

The adjusting character must expend an Automatic Action each Panel to maintain Emotion Adjustment or its effect begins to dissipate. One Automatic Action suffices to maintain the effect against all Emotional targets that are in Range and LOS. Emotion Adjustment cannot be maintained against targets that are not in Range and LOS of the adjusting character. Once Emotion Adjustment begins to dissipate, the intensity of that target's emotion, and the color result required to break free, is thereafter reduced by one step at the end of each of the target's Panels, ending when reduced from Mild. If the adjusting character becomes Unconscious or Overwhelmed, Emotion Adjustment ends immediately, freeing all targets from their current Emotional condition.

With the Automatic Action he uses to maintain the Power, the adjusting character can also change the focus, reduce the intensity, or end the condition, of any or all of the Emotional targets. However, he cannot increase the intensity or change the emotion imposed without expending a Challenge Action and succeeding on a new Attack Check.

A target can only have one emotion imposed on him at a time. If the character attempts to take control of a target that is already experiencing an imposed emotion, the DV for his Attack Check is the higher of the target's RES or the imposing opponent's Emotion Adjustment, and he must succeed with a color result that is equal to or better than the color result received by the current Emotion Adjustment effect.

Charismatic Modifier: The character's Emotion Adjustment relies in part on his personal magnetism and force of personality. His SPs of Emotion Adjustment cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Emotion Adjustment.

Insightful Modifier: The character's Emotion Adjustment relies in part on his intellect and rationality. His SPs of Emotion Adjustment cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Emotion Adjustment.

Eye Contact Modifier: The target of the Emotion Adjustment must have Line of Sight on the character using the Power with a Visual Acuity of at least 3 SPs. Reduce the Variable Cost by 2 and record the power as Eye-Contact Emotion Adjustment.

Pheromone Modifier: To use Emotion Adjustment, the character releases an odor that causes a hormonal influence on all targets who smell the odor. A targets can generally smell the odor at a Range in SPs equal to the SPs of Power – 7. A target with Ultra-Sensitive Scent adds his SPs of Power to the Range at which he can detect the odor and is thus more vulnerable to this Power. A target with Air Filtration subtracts his SPs of Power from the Range at which he can detect the odor and adds his SPs of Power to his DV against it. A target with Air Supply or who does not breathe is not affected by the Power at all. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the power as Pheromonal Emotion Adjustment.

> **Designer's Note:** Technically the character creates an odor with a Pungency equal to the SPs of Emotion Adjustment and a Weight of 3 SPs. Using the formula for Ultra-Sensitive Scent (p. 110), a target can detect the odor at a Range equal to his SPs of Ultra-Sensitive Scent + the odor's Pungency + the odorant's Weight – 10, which works out to SPs of Power – 7 in most cases.

Specific Emotion Modifier: The character can only impose one specific emotion. Reduce the Base Cost by 10 and the Variable Cost by 2. Record the power as Emotion Adjustment (specific emotion).

Single Target Modifier: The character can only Emotion Adjustment one target at a time. If the character Emotion Adjustments a new target, the character's Emotion Adjustment over the prior target is immediately relinquished. Reduce the Base Cost by 10 and the Variable Cost by 1. Record the Power as Single Target Emotion Adjustment.

Touch Range Modifier: The Challenge Action to Emotion Adjustment a target is actually a Melee Attack. Reduce the Power's Range to 0 SPs. The character must make a VAL vs. VAL Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Emotion Adjustment (as above). Reduce the Base Cost by 15 and the Variable Cost by 4 and record the power as Touch-Range Emotion Adjustment.

Verbal Modifier: The character can only Emotion Adjustment targets within Earshot of him. Reduce the Variable Cost by 2 and record the power as Verbal Emotion Adjustment.

ILLUSION

Base Cost: 75   **Variable Cost:** 10   **Base Score:** 0
Range: Standard   **Duration:** Special

As an Automatic Action, the character with this Power can create sensory illusions within Range and Line of Sight. The illusion can fool the visual, auditory, and olfactory senses but cannot fool taste or touch. Illusions can be static or dynamic. Static illusions are either entirely inert or function according to a pre-programmed loop (like a flickering candle or voice recording). Dynamic illusions can change in real time according to the character's will.

Static illusions are Sustained effects and do not require any Actions to maintain. Dynamic illusions are Concentration effects. The character must expend an Automatic Action each Panel to maintain each dynamic illusion. If he fails to do so, the illusion expires. Both static and dynamic illusions expire if the character becomes Unconscious or Overwhelmed. Unlike most sustained effects, however, static illusions can be maintained if the character becomes Unconscious from voluntary slumber.

The SPs of Illusion determine the maximum Volume that the Illusion can visually occupy, the maximum Loudness of illusory sounds, and the maximum Pungency of illusory scents. The SPs of Illusion also determine the maximum duration that Illusion can be maintained. When the duration expires, the illusion vanishes. The character with the Power can, of course, create an identical illusion just as the old one expires. The character can end any or all Illusions he is sustaining as an Automatic Action.

There is no limit to the number of static illusions the character with this Power can maintain except those of duration and action. Since dynamic illusions require an Automatic Action each Panel, a character cannot normally maintain more than three dynamic illusions.

The Illusion Power can be used to create Obscurity or Ambient Loudness. The SPs of Obscurity or Ambient Loudness that can be created are equal to the SPs of Illusion minus the SPs of Volume to be obscured.

The Illusion power can be used to create one or more illusionary characters. The created character acts on its creator's Panel; the creator must expend Actions of the appropriate type for any Action he wants his illusionary creation to take. In combat, the illusionary character's Attributes, Powers, and Skills are equal to the lesser of the real character's SPs or the character's SPs of Illusion. However, any damage an illusionary character deals after Protection is applied against the target's Determination rather than his Health. Any Damage dealt to an illusionary character instantly destroys it. Illusionary sounds never cause Deafness, even if their Loudness exceeds 12 SPs.

Stiletto is targeted by an illusionary WWI stormtrooper with an illusionary flamethrower (7 SPs of Thermal Blast). The illusionary stormtrooper receives a Green result, dealing 24 points of illusionary Thermal Damage. Stiletto is wearing a leather catsuit that gives her 8 points of Thermal Protection, so she suffers (24 – 8) = 16 points of Thermal Damage. The Damage is applied to her Determination instead of her Health, however, because it's all in her head.

A character confronted by possible illusions can attempt to disbelieve the illusions as a Challenge Action. Make an Attack Check using the disbelieving character's SPs of INS as the AV and the SPs of Illusion as the DV. On a Green or better result, the character is intellectually aware the illusion is not real, although his physical senses are still fooled – e.g. he still sees the sights, hears the sounds, and smells the scents created by the Power. On a Yellow result, the character can also ignore his choice of illusory sounds, sights, or smells. On an Orange result, the character can ignore illusory sights and either sounds or smells. On a Red result, the character can entirely ignore the illusion as if it didn't exist. A character who is aware that an illusion is not real cannot be damaged by it.

Charismatic Modifier: The character's Illusion relies in part on his personal magnetism and force of personality. His SPs of Illusion cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Illusion.

Insightful Modifier: The character's Illusion relies in part on his intellect and rationality. His SPs of Illusion cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Illusion.

Scent-Only Modifier: The character's Illusions only affect scent. It cannot be used to create illusory characters. Since nobody knows where scents come from anyway, scent illusions aren't easier to disbelieve. Reduce the Base Cost by 50 and the Variable Cost by 6 and record the Power as Scent-Only Illusion.

Sight-Only Modifier: The character's Illusions only affect sight. A character attempting to disbelieve the illusion can automatically take a Green result if sound or scent should be present and are not. Reduce the Base Cost by 20 and the Variable Cost by 2 and record the Power as Sight-Only Illusion.

Sound-Only Modifier: The character's Illusions only affect sound. It cannot be used to create illusory characters. A character attempting to disbelieve the illusion can automatically take a Green result if sight or scent should be present and are not. Reduce the Base Cost by 40 and the Variable Cost by 5 and record the Power as Sound-Only Illusion.

Terrifying Modifier: Some illusions can be so horrific as to wreak physical harm on the victim. An illusionary character, object, or Power created with Terrifying Illusion deals Neural Damage to the target's Health once the target's Determination is reduced to 0. Raise the Variable Cost by 2 and record the Power as Terrifying Illusion.

MEMORY

Base Cost: 20   **Variable Cost:** 2   **Base Score:** 0/INS - 11
Range: Self   **Duration:** Permanent

The character has a photographic memory for everything he sees and hears. He can memorize and recall SPs of Information equal to his SPs of Memory in 0 SPs of Time (1 Page). He can transmit Information stored with this Power to another character by using Telepathy. If the Information is digitizable he can transmit it using Radio Communication to characters capable of receiving it.

A character's Base Score in Memory is usually 0, but if his INS/Super-Intelligence is 12 or more, his Base Score is his INS/Super-Intelligence – 11.

Designer's Note: Since the human mind can store 48 SPs of Information, a character with 48 SPs of Memory has total recall of everything he has ever experienced at all times! Since the human mind can absorb 21 SPs of Information every few seconds, a character with 21 SPs of Memory can completely memorize everything about a brief moment in time (0 SPs) – every sight, sound, smell, taste, touch, etc.

Audio Modifier: The character can only store audio information such as conversations or music. Reduce the Base Cost by 15 and the Variable Cost by 1.5. Record the Power as Audio Memory. This Power is used to model cassette recorders.

Static Visual Modifier: The character can only store static visual information such as images. Reduce the Base Cost by 10 and the Variable Cost by 1. Record the Power as Static Visual Memory. This Power is used to model cameras.

Dynamic Visual Modifier: The character can only store dynamic visual information such as videos (without sound). Reduce the Base Cost by 10 and the Variable Cost by 0.5. Record the Power as Dynamic Visual Memory. This Power is used to model video cameras.

MEMORY MANIPULATION

Base Cost: 35   **Variable Cost:** 8   **Base Score:** 0
Range: Standard   **Duration:** Permanent

As a Challenge Action, the character can attempt to manipulate the memories of a target in Range on whom he has LOS. Resolve the attempt as an Attack Check. Use the character's Memory Manipulation as the AV. Use the target's RES as the DV, with the following modifications applied based on the nature of the memory manipulated.

★ *Retrograde Amnesia:* If the character wants to erase the target's memory of a prior sequence of time, add the Duration of the memory sequence in SPs to the DV. For instance, erasing a target's memory of having lunch with his wife for an hour (10 SPs of Time) would increase the DV by 10. Erasing the last year of a man's life (23 SPs of Time) would increase the DV by 23.

★ *Retrograde Confabulation:* If the character wants to erase and replace the target's memory of a prior sequence of time, add the sequence's Duration +1 to the DV. Replacing a target's memory of having lunch with his wife for an hour with a memory of having sex with a prostitute for an hour would increase the DV by 10 +1 = 11.

★ *Anterograde Amnesia:* If the character wants to make the target unable to remember events in the near future, add the Duration of the period of anterograde amnesia to the DV. For instance, making a county records clerk unable to remember the next hour would increase the DV by 10. The target will act normally during his anterograde amnesia, he just won't remember it later. (To combine retrograde and anterograde amnesia, just sum up the total Time in SPs.)

A White result means the target's memory was not affected. On a Green result, the true memories were repressed below conscious awareness. On a Yellow result, the true memories were deeply suppressed into the subconscious. On an Orange result, the true memories were disassociated and inaccessible even to the subconscious. On a Red result, the true memories were nearly obliterated.

If the target is captured, restrained, and subjected to long-term mental probing, the character can attempt to modify the target's memory as an Extended Challenge Action. Add the SPs of Time spent probing the target's mind to the Acting Value. Given sufficient time and a willing or compelled target, the character could give the target an entirely new set of memories for his entire life.

Selective application of Memory Manipulation can overcome many of the penalties that characters face when interacting with NPCs, such as penalties for repeatedly questioning witnesses, penalties for previously intimidating the target, and so on. Aggressive use of Memory Manipulation can entirely change a target's Attitude towards a character or NPC. In both cases, the amount of memory manipulation required will vary based on Time and context.

> Airborne (9 SPs of RES) has been captured by BFF (11 SPs of Memory Manipulation). BFF wants to replace Airborne's memories of leaving the Army to become a superhero in the last year (23 SPs of Time) with a false memory sequence of leaving the Army to become an accountant . This is Retrograde Confabulation with a DV of 9 + 23 + 1 = 33. BFF spends 24 weeks (22 SPs of Time) and achieves an AV of 33, for an RV of 0. He rolls a 21 and scores a Yellow result. Airborne's true memories are deeply suppressed and new memories of being implanted in their place.

In lieu of altering specific memories, the character can attempt to discombobulate a target by randomly erasing recent memories. Make a Memory Manipulation vs. RES Mental Attack. The color result of the Attack Check determines the effect. A Green or Yellow result leaves the target Dazed, an Orange result leaves the target Staggered, and a Red result leaves the target Overwhelmed. The target can spend 1, 2, or 3 Hero Points at the start of his Panel to end the condition; otherwise it expires at the end of his Panel.

A character can attempt to discombobulate or trigger amnesia in multiple targets as a Multi-Attack but cannot confabulate memories in a Multi-Attack.

Memory Manipulation can only affect a target's episodic memory, never his procedural memory ("how to" knowledge or rote learning) or semantic memory ("textbook" knowledge or informed learning). The target still has all his Powers and Skills even if he doesn't remember that he has them.

Airborne has had his memory of serving in the US Army erased and replaced with a career as an accountant. When he randomly gets invited to an office paintball tournament, he is surprised to find out that he is a crack shot and skilled tactician. Airborne's episodic memory of being a soldier is gone, but the Skills he gained are still there. He just doesn't know where or how he learned them.

A target of Memory Manipulation can sometimes deduce that his memory has been manipulated. When presented with evidence such as unexpected skills, inexplicable photographs, etc. that his memory has been manipulated, the target should roll an Attack Check using his INS as the AV and his own RES as the DV. (The target uses his own RES because people who are self-confident and strong willed are far less likely to doubt the validity of their memories – it requires a measure of self-doubt.) If the target's Attack Check succeeds with a color result equal to or better than the color result of his Memory Manipulation, then he becomes consciously aware that his memories are false. He does not, however, regain the memories.

Airborne's discovery of his combat prowess gives him an opportunity to deduce that his memory has been manipulated. He makes an Attack Check using his INS of 5 SPs vs his RES of 9 SPs, for an RV of -4. The roll of 63 is a White result. "I'm just naturally awesome!" he confidently concludes.

Memory Manipulation can mask or fool even a skilled mind reader. If a target of Memory Manipulation is subjected to Mind Reading, the mind reader only realizes the target's memory has been manipulated if his color result equals or exceeds the color result of the Memory Manipulation.

On a whim, Airborne goes to see the Great Mesmeric, a mind reader and fortune teller who happens to have actual powers. The Great Mesmeric attempts to read Airborne's mind using his 10 SPs of Mind Reading against the hero's 9 SPs of RES, for a +1 RV. The roll of 11 is an Orange result. Since that equals or exceeds the Yellow result BFF received when he manipulated Airborne's memory, the Great Mesmeric discovers his client has been victimized!

If a target is known to have been the victim of Memory Manipulation, a mind reader can attempt to recover the target's authentic memories with a Mind Reading vs. Memory Manipulation Attack Check. If the target has the benefit of reminders of his past memory (such as being taken to his childhood home or seeing photos of children he has forgotten), increase the AV by 1. The mind reader must achieve a color result equaling or exceeding the color result of the Memory Manipulation to recover the target's authentic memories.

The Great Mesmeric decides to try to recover Airborne's authentic memories. This requires an Attack Check using Mesmeric's 10 SPs of Mind Reading against BFF's 11 SPs of Memory Manipulation. Rolling on the CHART with a -1 RV, the Great Mesmeric gets an incredibly lucky 08, a Yellow result! Airborne's true memories flood back into his mind.

A friendly character with this Power can, of course, replace a target's false or erased memories with more accurate memories, but these will not be the target's "true" memories, merely a facsimile thereof.

Charismatic Modifier: The character's Memory Manipulation relies in part on his personal magnetism and force of personality. His SPs of Memory Manipulation cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Memory Manipulation.

Insightful Modifier: The character's Memory Manipulation relies in part on his intellect and rationality. His SPs of Memory Manipulation cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Memory Manipulation.

Eye Contact Modifier: The target of the Memory Manipulation must have Line of Sight on the character using the Power with a Visual Acuity of at least 3 SPs. The Power cannot be used on an Unconscious target. Reduce the Variable Cost by 2 and record the power as Eye-Contact Memory Manipulation.

Telepathic Modifier: The character must have a telepathic link with the target of his Memory Manipulation. The target does not otherwise need to be in Range or LOS. Do not adjust the Base Cost or Variable Cost. Record the power as Telepathic Memory Manipulation.

Touch Range Modifier: The Challenge Action to manipulate a target's memories is actually a Melee Attack. Reduce the Power's Range to 0 SPs. The character must make a VAL vs. VAL Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Memory Manipulation (as above). Reduce the Base Cost by 15 and the Variable Cost by 2 and record the power as Touch-Range Memory Manipulation.

Designer's Note: Since the human mind processes 21 SP of Information every few seconds, erasing 0 SPs of Time from memory is the equivalent to erasing 21 SPs of Information. Since the human mind has a storage capacity of 48 SPs of Information, the DV to erase an entire mind is (48 − 21) = 27 SPs.

MIND BLAST

Base Cost: 15   **Variable Cost:** 7   **Base Score:** 0
Range: Standard   **Duration:** Instant

The character can use this Power to make an INS vs. RES Mental Attack on a target in Range on whom he has Line of Sight. The Attack deals either Psychic or Neural Damage using the character's SPs of Mind Blast as the EV. If the target's Current Determination is 1 or more, the Mind Blast deals Psychic Determination Damage to the target. If the target's Current Determination is 0, the Mind Blast deals Neural Health Damage to the target. The target can Roll with the Attack to reduce the Damage if desired in either case. (The character is internally reeling with confusion rather than outwardly rolling back, of course.) The Base Damage of the Mind Blast should be written down in parentheses after the SP score.

Eye Contact Modifier: The target of the Mind Blast must have Line of Sight on the character using the Power with a Visual Acuity of at least 3 SPs. Reduce the Variable Cost by 1 and record the power as Eye-Contact Mind Blast.

Psychic Modifier: The Mind Blast only deals Psychic Determination Damage and does not deal Neural Health Damage once the target's Determination is reduced to 0. Reduce the Variable Cost by 2 and record the Power as Psychic Mind Blast.

Neural Modifier: The Mind Blast deals Neural Health Damage exclusively, regardless of the target's Determination. Increase the Base Cost by 60. Record the Power as Neural Mind Blast.

MIND DOMINATION

Base Cost: 125   **Variable Cost:** 12   **Base Score:** 0
Range: Standard   **Duration:** Special

As a Challenge Action, the character can attempt to dominate the will of a target character (or target characters) in Range on whom he has Line of Sight. Make an Attack Check using the character's Mind Domination as the AV and the target's RES as the DV. If the result is White, the attempt failed. If the result is Green or better, the target comes under the character's control, gaining the Dominated condition. The color result scored against the target should be recorded for later reference, as the better the color result, the more completely the target is under the control of the character.

Dominated targets are automatons with no will of their own. In order for Dominated targets to take any Actions during their Panels, the dominating character must expend an Automatic Action during his own Panel to mentally issue orders to the targets. One Automatic Action suffices to give orders to any and all Dominated targets. Only Dominated characters within Range can be issued orders.

A dominated target can and will still defend himself, even if not issued orders. A Dominated target with Hero Points can use them to defend himself and/or Roll with Attacks that damage. The decision to spend Hero Points is up to the player or GM who ordinarily controls the Dominated target, not the dominating character. Dominated targets cannot be ordered to spend Hero Points, nor be prevented from doing so, by the dominating character.

The dominating character does not receive any sensor data, information, or two-way communication from the Dominated targets but will be aware if a particular target is dead or has escaped his control. The dominating character can voluntarily relinquish control at any time. If the dominating character becomes Unconscious or Overwhelmed, he must relinquish control unless he has the Manchurian modifier.

At the end of his Panel, a Dominated target can attempt to break the Mind Domination. Making the attempt does not require an Action. To break the Mind Domination, the target must succeed on a RES vs. Mind Domination Attack Check with a color result that is equal to or better than the color result the controlling character scored against him. Treat the dominating character's color result as one color worse for purposes of Attack Check color result required if the target was ordered to directly harm himself or loved ones or if the target is no longer in Range of the dominating character. When attempting to break free, the Dominated target can always spend Hero Points to increase the AV. The dominating character can only spend Hero Points to increase the DV if the target is in Range and LOS.

A target can only be Dominated by one character at a time. If a character with Mind Domination attempts to take control of a target that is already controlled by another, the DV for his Attack Check is the higher of the target's RES or the current dominator's Mind Domination, and he must succeed with a color result that is equal to or better than the color result received by the current dominator. If the current dominator is not in Range of the target, reduce the color result required by one color.

Charismatic Modifier: The character's Mind Domination relies in part on his personal magnetism and force of personality. His SPs of Mind Domination cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Mind Domination.

Insightful Modifier: The character's Mind Domination relies in part on his intellect and rationality. His SPs of Mind Domination cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Mind Domination.

Eye Contact Modifier: The target of the Mind Domination must have Line of Sight on the character using the Power with a Visual Acuity of at least 3 SPs. Reduce the Variable Cost by 2 and record the power as Eye-Contact Mind Domination.

Manchurian Modifier: The character's Mind Domination is subtle and leaves its victims with the free will to act as they would normally except insofar as they are ordered to do otherwise. Manchurian Mind Domination allows the character to give long-term orders or conditional orders that can be triggered by later events. The dominating character does not need to expend Automatic Actions on his targets; they will follow his instructions on their own accord, unaware they are being Dominated and confabulating false memories or bizarre justifications to explain their behavior. (If the dominating character has Memory Manipulation, he can use the Power to specify the false memories that justify the behavior!) They can only attempt to break free of the Mind Domination at the end of a Panel where they have actively carrying out instructions they wouldn't normally do, or if a friend or loved one spent an Automatic Action on their most recent Panel to try to convince them to do so. Increase the Base Cost by 20 and the Variable Cost by 4 and record the power as Manchurian Mind Domination.

Category-Only Modifier: The character can only Dominate a particular category of creatures other than human beings. If the category is common (such as animal characters), reduce the Base Cost by 75 and the Variable Cost by 6. If the category is uncommon (such as plant or undead characters), reduce the Base Cost by 100 and the Variable Cost by 8. Record the Power as [Category]-Only Mind Domination.

Single Target Modifier: The character can only Dominate one target at a time. If the character uses the Power on a new target, the character's Mind Domination of the prior target is immediately relinquished. Reduce the Base Cost by 10 and the Variable Cost by 1.

Single Target Possessive Modifier: The character can only Dominate one target a time. When he does so, he becomes Unconscious. If the character uses the Power on a new target, the character's Mind Domination of the prior target is immediately relinquished. When the character stops using the Power on any target, he is no longer Unconscious. Reduce the Base Cost by 25 and the Variable Cost by 3.

Touch Range Modifier: The Challenge Action to Dominate a target is actually a Melee Attack. Reduce the Power's Range to 0 SPs. The character must make a VAL vs. VAL Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Mind Domination (as above). Reduce the Base Cost by 15 and the Variable Cost by 5 and record the power as Touch-Range Mind Domination.

Verbal Modifier: The character does not have the ability to telepathically transmit orders to targets of his Mind Domination and must rely on words and gestures. He can only use Mind Domination on targets within Earshot of him. Reduce the Variable Cost by 2 and record the power as Verbal Mind Domination.

MIND DRAIN

Base Cost: 25   **Variable Cost:** 6   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can attempt to drain the mind of a target in Range on whom he has Line of Sight. Make an Attack Check using the character's SPs of Mind Drain as the AV and the SPs of the target's RES as the DV. On a White result, the Mind Drain fails. On a Green result, the target loses 1 SP from its Mental Attributes. On a Yellow result, the target loses 2 SP from its Mental Attributes. On an Orange result, the target loses SPs from its Mental Attributes equal to one-half the SPs of Mind Drain or 3 SPs, whichever is greater. On a Red result, the target loses SPs from its Mental Attributes equal to the SPs of Mind Drain or 4 SPs, whichever is greater.

The target chooses which Mental Attribute(s) to reduce. If RES is reduced, the character's Maximum Determination is reduced to match the new score. If any Mental Attribute is reduced to 0 SP, the target becomes Unconscious. The target of Mind Drain recovers 1 SP each time he recovers Determination.

Charismatic Modifier: The character's Mind Drain relies in part on his personal magnetism and force of personality. His SPs of Mind Drain cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Mind Drain.

Insightful Modifier: The character's Mind Drain relies in part on his intellect and rationality. His SPs of Mind Drain cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Mind Drain.

Eye Contact Modifier: The target of the Power must have Line of Sight on the character using Mind Drain with a Visual Acuity of at least 3 SPs. Reduce the Variable Cost by 2 and record the power as Eye-Contact Mind Drain.

No Multi-Attack Modifier: The Power cannot be used to Multi-Attack. Reduce the Base Cost by 5 and the Variable Cost by 1. Record it as No Multi-Attack Mind Drain.

Targeted Modifier: The Challenge Action to Mind Drain a target is actually a Ranged Attack. The character must make an AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Mind Drain (as above). Reduce the Base Cost by 5 and the Variable Cost by 1 and record the Power as Targeted Mind Drain.

Touch Range Modifier: The Challenge Action to Mind Drain a target is actually a Melee Attack. Reduce the Power's Range to 0 SPs. The character must make a VAL vs. VAL Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Mind Drain (as above). Reduce the Base Cost by 10 and the Variable Cost by 2 and record the power as Touch-Range Mind Drain.

MIND FIELD

Base Cost: 20   **Variable Cost:** 4   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character is protected against Mental and Emotional Attacks by a field of mental energy. Mind Field has two Variable Attributes, Protection and Durability, determined by the character's SPs of Mind Field on the USPA table; and one Variable Attribute, Recharge Rate, determined by the character's SPs of Mind Field on the Recovery Rate table.

A Mind Field can be activated and deactivated with an Automatic Action. A deactivated Mind Field has no effect. An activated Mind Field provides Protection. Each time a character with an activated Mind Field is struck by a Mental or Emotional Attack, the

Mind Field blocks a number of points of Damage equal to its Protection. As any Damage is blocked by the Mind Field, the Mind Field's Durability is reduced by the amount of Damage it just blocked. If the Mind Field's Durability is reduced to 0, it is deactivated automatically. It cannot be reactivated until the Mind Field recharges. A character's Mind Field is automatically deactivated if the character becomes Overwhelmed or Unconscious.

A character increases his Mind Field's Current Durability by his **Recharge Rate** every 13 SPs of Time (8 hours). A Mind Field cannot recharge to more than its Maximum Durability. At the end of his Panel, a character can spend 1 or more Hero Points to reduce the Time required to recharge by 1 SP per Hero Point. If the Time is reduced to 0, the character increases his Mind Field's Current Durability by his Recharge Rate immediately. Simply deactivating and reactivating a Mind Field does not recharge it.

A Mind Field does not protect against Mind Domination, Mind Drain, Mind Reading, or similar Powers.

Psychic Modifier: If the Mind Field can only protect against Psychic Damage, and not Neural Damage, reduce the Base Cost by 10 and the Variable Cost by 2. The Power should be recorded as Psychic Mind Field.

Spherical Modifier: When activated, the Mind Field protects everything within a volume of space from 0 SPs up to the full SPs of Power. The Spherical Mind Field is centered around the character at a distance equal to the SPs of volume divided by three (rounded down). All characters and objects within the Mind Field are protected. Increase the Base Cost by 20 and the Variable Cost by 2. Record the Power as Spherical Mind Field.

MIND READING

Base Cost: 25   **Variable Cost:** 5   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can read the thoughts and memories of a target in Range on whom he has Line of Sight. Make a Mind Reading vs. RES Mental Attack against the target. The better the color result, the deeper the thoughts and memories the character can read. On a Green result, the target's surface thoughts are accessible. On a Yellow result, the target's recent memories are accessible. On an Orange result, the target's distant memories or deep thoughts are accessible. On a Red result, the target's deepest secrets, innermost fears and desires, and even subconscious beliefs are exposed.

Sometimes it may be important to know the quantity of Information extracted by Mind Reading as well as the quality of it. The character can extract SPs of Information equal to his SPs of Power + 21 each time the Power is used. This is the equivalent to being able to extract SPs of memory with a Duration equal to the SPs of Power.

Designer's Note: Since the human mind has a storage capacity of 48 SPs of Information, (48 − 21) = 27 SPs of Mind Reading is sufficient to read every thought the target has ever had (though distant memories and deep thoughts would still require Orange or Red results). Since the human mind receives 21 SPs of Information every few seconds (0 SPs of Time), SPs of Mind Reading enable the character to extract memories encompassing a sequence of Time of equal SPs.

Sometimes a target may be captured, restrained, and subjected to long-term mental probing. When this occurs, the character can add the SPs of Time spent probing the target's mind to both the Acting Value and the amount of Information extracted (if relevant).

Mind Reading can be used when crimefighting to gather Clues from Witnesses (see p. 318). On a White result, the Witness reveals no clues. On a Green result, the Witness reveals any Green Clues he knows. On a Yellow result, the Witness reveals any Green or Yellow Clues he knows. On an Orange result, the Witness reveals any Green, Yellow, or Orange Clues he knows. On a Red result, the Witness reveals all the Clues he knows.

Charismatic Modifier: The character's Mind Reading relies in part on his personal magnetism and force of personality. His SPs of Mind Reading cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Mind Reading.

Insightful Modifier: The character's Mind Reading relies in part on his intellect and rationality. His SPs of Mind Reading cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Mind Reading.

MIND SCREEN

Base Cost: 20   **Variable Cost:** 4   **Base Score:** 0
Range: Self   **Duration:** Sustained (Special)

The character can screen his mental activity from telepathic probes, mental scans, and similar psychic manipulation. A Mind Screen can be activated and deactivated with an Automatic Action. While the Mind Screen is activated, the character reduces the Range at which he can be targeted by Cosmic Awareness, Empathy, Emotion Adjustment, Illusion, Mind Domination, Mind Drain, Mind Reading, Scrying, Telepathy, or Psychic Blindsight, or any other Power using CHA, INS, or RES as its DV. If the Range is reduced to 0 SPs or less, he cannot be targeted by the Power. However, a character's Mind Screen cannot protect him against Powers that have the Eye Contact, Pheromone, Touch Range, or Verbal modifier. A character's Mind Screen is automatically deactivated if the character becomes Overwhelmed or Unconscious. Unlike most sustained effects, however, a Mind Screen can be maintained if the character becomes Unconscious from voluntary slumber.

Spherical Modifier: When activated, the Mind Screen protects everything within a volume of space from 0 SPs up to the full SPs of Power. The Spherical Mind Screen is centered around the character at a distance equal to the SPs of volume divided by three (rounded down). All characters and objects within the Mind Screen are protected from effects from outside the volume. Increase the Base Cost by 20 and the Variable Cost by 2. Record the Power as Spherical Mind Screen.

SCRYING

Base Cost: 25   **Variable Cost:** 10   **Base Score:** 0
Range: Standard   **Duration:** Sustained

This Power enables the character to receive sensory data about an area from afar. Activating Scrying is an Automatic Action. Once activated, the character may choose any point within Range of the Power, and thereafter receive sensory data (sight, sound, and scent) as if he were actually at that point rather than at his current location. The character must either be able to see the point, dead reckon to it ("exactly 1,500 feet north"), have previously visited it, have a detailed picture or map of it, or have been given a very thorough description of it by someone who has visited it. He can change the point he is Scrying or deactivate the Power with another Automatic Action. The Power immediately deactivates if the characters becomes Unconscious or Overwhelmed.

A Scrying character determines his Range of Line of Sight and Earshot based on the point he is Scrying, not his actual location. A Scrying character with Dark Vision, Ultra-Sensitive Hearing, or similar Powers can use them while scrying. A Scrying character with Mental Powers such as Emotion Blast, Mind Domination, or Mind Reading can use them on targets he is scrying, calculating LOS from the point he is scrying to the target, but calculating Maximum Attack Range based on his physical location. A character can use Scrying to guide his own or ally's Indirect Attacks on targets he can scry. Scrying can be used to investigate forensic sites (see p. 318) from the comfort of the character's home or base.

SPs of Scrying counts as an AV that can be combined with any Mental Attack, Emotional Attack, or Indirect Ranged Attack for purposes of calculating Power Limit (p. 65).

Hearing-Only Modifier: The character can only receive auditory information from Scrying. He sees from his actual location while using the Power. Reduce the Base Cost by 10 and the Variable Cost by 4 and record the Power as Hearing-only Scrying.

Sight-Only Modifier: The character can only receive visual information by Scrying. He hears from his actual location while using the Power. Reduce the Base Cost by 5 and the Variable Cost by 2 and record the Power as Sight-only Scrying.

Non-Transmitting Modifier: The character cannot use Powers that affect others (such as Mind Blast or Telekinesis) while Scrying. Reduce the Base Cost by 5 and the Variable Cost by 2 and record the Power as Non-Transmitting Scrying. Non-Transmitting Scrying does not count as an AV that can be combined with attacks for purposes of calculating Power Limit.

Unenhanceable Modifier: The character cannot use Powers that enhance himself (such as Dark Vision, Ultra-Sensitive Hearing, X-Ray Vision or other Enhancements) while Scrying. Reduce the Base Cost by 5 and record the Power as Unenhanceable Scrying.

Limited Modifier: When choosing points from which to scry, the character is limited in some way. He may be unable to scry on holy ground, unable to scry through a Faraday cage, unable to scry inside buildings, etc. If the limit is rare (holy ground, Faraday cage), reduce the Base Cost by 5 and the Variable Cost by 2. If the limit is relatively common (inside buildings), reduce the Base Cost by 10 and the Variable Cost by 4. Record the Power as Limited Scrying and note the limit down in parenthesis after the Power SPs.

Telepathic Modifier: The character can only Scry from the vantage point of a particular target character with whom he has established a telepathic link using Telepathy (purchased separately). Scrying is an Automatic Action. He thereafter receives the target's sensory data exactly as if he were the target, including whatever Enhancement Powers the target has. However, the Scrying character cannot use Powers that affect others or enhance himself while Scrying. He can change the character from which he is Scrying or deactivate the Power with another Automatic Action. The Power immediately deactivates if the Scrying character or the target becomes Unconscious or Overwhelmed. Reduce the Base Cost by 5 and the Variable Cost by 4. Change the Range of the Power to Special. Telepathic Scrying does not count as an AV that can be combined with attacks for purposes of calculating Power Limit.

TELEKINESIS

Base Cost: 45   **Variable Cost:** 20   **Base Score:** 0
Range: Standard/By Emulated Power   **Duration:** By Effect

The character can move characters and objects at a distance through willpower, gravitational manipulation, magnetic control, or other means. Using Telekinesis, a character may achieve one or more of the following **effects:**

★ Aim telekinetic force at a target in Range and LOS as a Challenge Action, emulating Variable Direction Gust at the character's SPs of Telekinesis. The Attack Check uses the character's INS as the AV.
★ Fling a Stationary object within Range and LOS at a target as an INS vs. AGI Physical Ranged Attack. The Distance and the Speed the object can be thrown is equal to the character's SPs of Telekinesis minus the object's Weight in SPs. Note that the Acting Value of the Attack is the character's INS, not his AGI, since Telekinesis is an act of the mind. The Damage dealt if the object hits will be based on the Throwing Speed and object Weight (and thus the character's SPs of Telekinesis).
★ Make a Ranged Wrestling Attack against a target within Range of the Power using the character's INS as the AV and his SPs of Telekinesis in lieu of his MIG for all other purposes. If the target ends up Held or Pinned, and its Encumbered Speed is reduced to 0, the target can thereafter be picked up, carried, pushed, pulled, and/or thrown like a Stationary character.
★ Pick up, carry, push, pull, throw, or stop the movement of a target within Range of the Power. The character uses his SPs of Telekinesis in lieu of his MIG and his INS in lieu of his AGI or VAL for such Actions. Stationary characters can be picked up, carried, pushed, pulled, and thrown as an Automatic Action. Characters with a VAL of 0 can be pushed, pulled, or stopped as an Automatic Action. Other characters must first be Held or Pinned.
★ Protect himself or another target within Range with a deflection field that repels or deflects bullets, blades, blasts, and other attacks, emulating Deflection at the character's SPs of Telekinesis. Deflection is a Concentration effect requiring an Automatic Action to maintain each Panel.
★ Propel himself and/or a character he is carrying through the air as a Movement Action as if emulating Flight. The affected character can be moved a distance equal to the character's SPs of Telekinesis minus the Weight moved.

Agile Modifier: The character controls his Telekinesis with his hand-eye coordination rather than with pure mentation. He uses his AGI instead of his INS as the AV for the Power. Record the power as Agile Telekinesis. There is no change in Base or Variable Cost.

Material Modifier: Telekinesis may be limited to affecting characters and objects made of a particular material, such as metal, stone, wood, or even organic matter. This modifier reduces the Power's Base Cost by 10 and its Variable Cost by 2. The material type or justification for the modifier should be written down before the Power name and SPs. For instance, a character who can control magnetism might only be able to affect metallic characters and objects; this Power could be recorded as Magnetic Telekinesis.

TELEPATHY

Base Cost: 50   **Variable Cost:** 4   **Base Score:** 0
Range: +10   **Duration:** Sustained

The character with this Power is capable of direct mind-to-mind communication without need for a shared language. As an Automatic Action, the character can request to telepathically link with one or more target characters within Range of his Power. He must have Line of Sight on the target unless he has previously linked with the target. On his next Panel, a target can simply ignore the request or can spend an Automatic Action to either accept the request or actively close his mind.

Requesting a telepathic link is analogous to calling someone on the phone and the responses available to the target are analogous to either letting the phone ring, picking up the phone, or blocking the call. If the target ignores the request, he loses the opportunity to communicate unless the telepathic character requests to link with him again. He "didn't pick up the phone," as it were.

If the target accepts the request, the telepathic character and the target can thereafter exchange telepathic messages while they remain within Range. Sending a message to one or more recipients requires an Automatic Action by the sender but receiving a message does not require an Action. Each time a message is sent, it can contain SPs of Information up to the sender's SPs of INS. Highly intelligent characters can therefore rapidly transmit enormous amounts of Information through Telepathy.

Designer's Note: Every few seconds of consciousness, the human mind processes 20 megabytes of sense-data (21 SP of Information). Since even powerful telepaths are likely to only have an INS of 10 – 15 SPs, Telepathy cannot provide real-time sensory data the way Scrying can, nor can it transmit information as fast as Mind Reading can extract it or Memory Manipulation can erase it. It is most useful for conveying semantic information via the language of thought.

Once established, a telepathic link can be sustained indefinitely, until either the telepathic character or the target terminates the link or becomes Overwhelmed or Unconscious. The maximum number of links a telepathic character can maintain simultaneously is shown on the adjoining Telepathic Links table.

Telepathy SP	Maximum Links
1	1
2	2
3	4
4	8
5	15
6	30
7	60
8	125
9	250
10	500
11	1,000
12	2,000

If the target actively closes his mind, he cannot be telepathically contacted by the character by normal means. As a Challenge Action, the telepathic character can attempt to forcibly establish a link. Make a Telepathy vs. RES Mental Attack. If the result is White, the telepathic character fails to establish a link. If the result is Green or better, the telepathic character establishes a link. How long the telepathic character can forcibly maintain the link depends on his Color Result. On a Green result, for just 0 SPs of Time (until the end of his next Panel); on a Yellow result, for 1 SP of Time (about 6-10 seconds or 2 Pages); on an Orange result, for 2 SPs of Time (about 15 seconds or 4 Pages); and on a Red result, for 3 SPs of Time (about 30 seconds or 8 Pages). Once the Time has elapsed, or the telepathic character goes to sleep or becomes Overwhelmed or Unconscious, the link immediately terminates. The target cannot terminate a forcible link by going to sleep.

Charismatic Modifier: The character's Telepathy relies in part on his personal magnetism and force of personality. His SPs of Telepathy cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Telepathy.

Insightful Modifier: The character's Telepathy relies in part on his intellect and rationality. His SPs of Telepathy cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Telepathy.

Category-Only Modifier: The character can only establish a telepathic link with a particular category of creatures other than human beings. If the category is common (such as animals), reduce the Base Cost by 30 and the Variable Cost by 2. If the category is uncommon (such as undead), reduce the Base Cost by 40 and the Variable Cost by 3. Record the Power as [Category]-Only Telepathy.

Eye Contact Modifier: The character and the target of the Telepathy must have Line of Sight on each other with Visual Acuities of at least 3 SPs to establish a telepathic link. Once established, the link can be maintained without eye contact. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the power as Eye-Contact Telepathy.

Single Target Modifier: The character can only telepathically link with one target at a time. If the character telepathically links with a new target, the character's link with the prior target is immediately terminated. Reduce the Base Cost by 10 and the Variable Cost by 1. Record the Power as Single Target Telepathy.

MOVEMENT POWERS

Movement Powers afford characters improvement or alternatives to their Speed attributes. Note that most Movement Powers have a Base Cost that is based on the Weight of the character selecting the Power. For most characters, this will be a Weight of 3 SPs but this can vary widely when purchasing Powers for objects.

BURROWING

Base Cost: Special **Variable Cost:** 3 **Base Score:** 0
Range: Self **Duration:** Concentration

The character can burrow through subterranean surfaces such as sand, dirt, earth, soil, and rock, traveling at a Digging Speed equal to his SPs of Burrowing minus the substance's SPs of Digging Resistance.

Digging Resistance is usually equal to the substance's SPs of Density. However, if the substance is finely ground and loose (such as sand or tilled topsoil), reduce the Digging Resistance by 8 SPs. If the substance is ground up but firmly packed (such as firm, untilled soil or packed clay), reduce the Density by 4 SPs for purposes of moving through it. If the Digging Resistance is

Substance	Density	Digging Resistance
Loose dirt, sand	8	0
Packed dirt, clay	8	4
Gravel or rocky soil	9	5
Bedrock (sandstone)	9	9
Bedrock (limestone)	9	9
Bedrock (granite)	10	10

at least 4 SPs, the character leaves a tunnel behind himself as he burrows; if it is 3 SPs or less, the tunnel collapses behind him as he burrows.

The base cost of Burrowing is equal to the character's Weight x 3 + 1 CP, with a minimum base cost of 10 CP.

FLIGHT

Base Cost: Special **Variable Cost:** 4 **Base Score:** 0
Range: Self **Duration:** Concentration

The character can move freely in air or space by means of wings, levitation, rocket pack, etc. The character gains a Flight Speed equal to his SPs of Flight. He can travel horizontally or ascend vertically (increase his Altitude) a distance equal to Power SPs in 0 SPs of Time as a Movement Action. He can vertically descend (lower his Altitude) as a Movement Action at his Flight Speed +1 or at 7 SPs, whichever is greater. He can hover (move 0 SPs) as a Movement Action. If a flying character fails to use a Movement Action on his Panel, he begins to fall (p. 288).

The base cost of Flight is equal to the character's Weight x 4 + 3 CP, with a minimum base cost before modifiers of 15 CP.

Contrailing: The character creates a visible contrail of smoke, fire, energy, etc. when he flies. The contrail can be spotted as if it were an object with a Height equal to the Distance the character moved that Page. Decrease the Base Cost by 5 CP and record the Power as Contrailing Flight.

Hover: The character can hover (move 0 SPs) each Page as an Automatic Action. Increase the Base Cost by 5 and record the Power as Hovering Flight. Hovering Flight can be treated as a Sustained Power for purposes of Linked Powers if desired.

Winged: The character's ability to fly relies on flapping, fixed, or rotary wings. His altitude cannot exceed 15 SPs and he cannot fly if his wings are in some manner rendered unavailable. He cannot hover, unless he takes the Hover modifier. Reduce the Base Cost by 5 and record the Power as Winged Flight.

GLIDING

Base Cost: Special **Variable Cost:** 2 **Base Score:** 0
Range: Self **Duration:** Concentration

The character is capable of gliding through the air by means of wings, parachute, levitation, etc. The character gains a Gliding Speed equal to his SPs of Gliding. To begin gliding, a character must have run, jumped, or been moved a horizontal distance of at least 5 SPs on or since his last Panel, and be at an Altitude of at least 1 SP but no more than 15 SP.

He can travel a horizontal distance through the air equal to Power SPs in 0 SPs of Time as a Movement Action. If he moves at less than his Gliding Speed, he descends by 1 SP per SP of difference. He can vertically descend (lower his Altitude) as part of a Movement Action at his Gliding Speed, but he cannot increase his Altitude. If a gliding character fails to use a Movement Action on his Panel, he begins to fall (p. 288). The character can glide for a maximum horizontal distance equal to his SPs of Gliding plus his initial SPs of Altitude; if he is not landed by then, he begins to fall.

A man is piloting a hang glider with 6 SPs of Gliding. He launches himself off a mile-high hill (10 SPs of Altitude). He travels at a Speed of 60mph (6 SPs), covering a Distance of 320 feet (6 SPs) each Panel (0 SPs of Time). He can glide for a maximum of 10 + 6 = 16 SPs of Distance, or 60 miles.

The base cost of Gliding is equal to the character's Weight x 2 + 4, with a minimum base cost of 10 CP.

IMMOVABILITY

Base Cost: 5 **Variable Cost:** 1 **Base Score:** 0
Range: Self **Duration:** Permanent

Due to low center of gravity, mystical rootedness, superior balance, or other factors, the character is very difficult to push around. The character adds his SPs of Immovability to his Weight to resist being moved by a Collision, Gust, Ramming Attack, Knock Back Special Effect, or by an Opponent who has wrestled him. He adds his SPs of Immovability to his DV to resist Judo Throws and Sweeps.

Sustained Modifier: The duration of the Power becomes Sustained instead of permanent. The character can activate or deactivate his Immovability with an Automatic Action. It automatically deactivates if he becomes Unconscious or Overwhelmed. Do not change the Base or Variable Cost. Record the Power as Sustained Immovability.

MOVABILITY

Base Cost: 5 **Variable Cost:** 1 **Base Score:** 0
Range: Self **Duration:** Permanent

The character is remarkably easy to move around. The character subtracts his SPs of Movability from his Weight to resist being moved by a Collision, Ramming Attack, Knock Back Special Effect, Telekinesis, or Opponent who has grappled him.

Sustained Modifier: The duration of the Power becomes Sustained instead of permanent. The character can activate or deactivate his Movability with an Automatic Action. It automatically deactivates if he becomes Unconscious or Overwhelmed. Do not change the Base or Variable Cost. Record the Power as Sustained Movability.

JUMPING

Base Cost: Special Speed **Range:** Self **Variable Cost:** 3 **Base Score:** Jumping Speed **Duration:** Instant

The character is able to leap great heights and long distances, whether through animal-like prowess, rocket boosts, contragravity, or other means. The character's Jumping Speed is equal to his SPs of Jumping, so he can travel a distance through the air equal to Power SPs by taking a Movement Action. The maximum altitude he can achieve with a vertical leap is equal to his Jumping Speed – 1. Each Movement Action represents a complete leap, with the character launching into the air at the start of the Action and landing at the end of it. (Hence Jumping has an Instant rather than Concentration duration). For additional rules on jumping, see p. 284.

The Base Cost of Jumping is 0 for characters who have a pre-existing Jumping Speed from MIG. For characters without a pre-existing Jumping Speed, the Base Cost is equal to object Weight x 3 +1, to a minimum of 10.

Super-Jumping Modifier: The character can, over the course of two Movement Actions over two Panels, jump a vertical distance equal to his SPs of Jumping and/or leap a horizontal distance equal to his SPs of Jumping +1. At the end of the first Movement Action, the character is in the air at the apex of his leap. At the end of the second Movement Action, the character lands. This allows the character to "hang" in the air for one Page and is useful for traversing obstacles that are too high or wide for an ordinary leap. If the character does not expend a Movement Action on his second Panel, he falls (see p. 288). The Base Cost is increased by 3 if this modifier is selected, and the Power should be recorded as Super-Jumping.

PORTAL

Base Cost: 75   **Variable Cost:** 16   **Base Score:** 0
Range: Special   **Duration:** Concentration

As a Challenge Action, the character can attempt to create a gateway permitting instantaneous travel between his location and a terminus point elsewhere in the universe. The following restrictions apply to the selection of terminus point:

★ The character must either be able to see the terminus point, dead reckon to it ("exactly 1,500 feet north"), have previously visited it, have a detailed picture or map of it, or have been given a very thorough description of it by someone who has visited it.
★ If the character creating the Portal is inside another character's Impermeable Forcefield, the terminus point cannot be outside the Impermeable Forcefield.
★ The terminus point cannot be inside an Impermeable Forcefield unless the character is inside the Forcefield himself.
★ The terminus point cannot be the interior of a creature, and it cannot be the interior of an object unless the object has an Internal Capacity at least equal to the Height and Width of the Portal to be created.

If a character attempts to create a Portal to a terminus point that violates these restrictions, the attempt fails; no Portal appears. If a character attempts to create a Portal and has miscalculated his dead reckoning, gotten the wrong description, reviewed an erroneous map, or otherwise is in error about where he's going, the GM determines the actual terminus point.

In any other case, the attempt is resolved with a Challenge Check using the character's SPs of Portal as the AV and using the Distance between the character's current location and the terminus point as the DV. If the Check succeeds, the Portal appears floating within 0 SPs of the character. It resembles a shimmering "door" or "hole" with a Height and Width up to the SPs of Power / 2. If the Check fails, the Portal still appears but its terminus point scatters (p. 380).

Having created the Portal, the character must concentrate to keep the Portal open, expending an Automatic Action each Panel of its duration. The character does not need to stay within 0 SPs of the Portal to maintain it but must keep the Portal in LOS or it automatically closes. The character can maintain the Portal from either side. If the character becomes Unconscious or overwhelmed, the Portal automatically closes.

While the Portal is open, any character whose Height is less than or equal to the Height of the Portal can cross through it in either direction unimpeded as if the two points it connects were adjacent in space. The character retains his Speed while the direction of his movement is adjusted to be relative to the terminus point. Any character can look through the Portal to see the point it connects to on the far side, but the view is dim and hazy. The character's Passive Spotting Range is reduced by 8 SPs and his maximum Visual Clarity is 2 SPs. Powers can be used through the Portal, subject to the limitations of Spotting.

A character cannot look through the Portal from a point parallel to its axis. A character can move through a Portal parallel to its axis without any effect.

Life-Only Modifier: Only living things can pass through the Portal. Any carried or worn Devices, Inventions, or Objects simply tumble to the ground. Vehicles move through the space as if the Portal didn't exist. Reduce the Base Cost by 25 and the Variable Cost by 4. Record the Power as Life-Only Portal.

One-Way Modifier: The Portal only allows one-way travel, from the character's location to the terminus point. This has its advantages and disadvantages, so do not adjust the Base Cost or Variable Cost. Record the Power as One-Way Portal.

Specialized Modifier: The two points where the Portal is placed must both meet a particular criteria, such as "being underwater," "an unlocked door," "in shadow," "in the trunk of a large tree," and so on. If the special points are ubiquitous (clouds, doors, shadows, trees), reduce the Variable Cost by 2. If the special points are situationally common but not ubiquitous (bathroom stalls, chimneys, underwater locations), reduce the Variable Cost by 4. If the special points are uncommon to rare (bonfires, coral reefs), reduce the Variable Cost by 6. If the special points are very rare (nuclear reactors, ancient pyramids), reduce the Variable Cost by 8.

Opaque Modifier: The Portal is entirely opaque. No one can see what lies on the far side without going through it. Powers cannot be used through the Portal. Reduce the Base Cost by 25 and the Variable Cost by 4. Record the Power as Opaque Portal.

Variable Direction Modifier: The Portal can be created to allow one-way or two-way travel in either direction, as the creator desires. Increase the Base Cost by 25 and the Variable Cost by 4. Record the Power as Variable Direction Portal.

RUNNING

Base Cost: Special　　**Variable Cost:** 2　　**Base Score:** Running Speed
Range: Self　　　　　　　　　　　　　　　　**Duration:** Concentration

The character can run at superhuman speeds. The character's Running Speed is equal to his SPs of Running. He can travel a distance equal to Power SPs by taking a Movement Action. Note that this Power only increases Running Speed; it does not speed up the character's ability to process information or perform tasks, which is covered by Superspeed.

The Base Cost of Running is 0 for characters who have a pre-existing Running Speed from AGI. For wheeled objects without a pre-existing Running Speed, the Base Cost is equal to (object Weight -4) x 2, to a minimum of 0. For instance, purchasing Running for a car weighing 7 SPs has a Base Cost of (7-4) x2 = 6 CP.

All-Terrain Modifier: The character can ignore Hazardousness due to rain, ice, snow, and sand for purposes of Running Speed. Increase the Base Cost by 5. Record the Power as All-Terrain Running.

Terrain-Only Modifier: The character can only run across one of the following types of terrain: ice, snow, sand. He ignores Hazardousness due to that type of terrain for purposes of Running Speed. Decrease the Variable Cost by 1. Record the Power as [Terrain]-Only Running. (A snowmobile might have, e.g., Snow-Only Running.)

SPACEFLIGHT

Base Cost: 0　　**Variable Cost:** 2　　**Base Score:** Flight
Range: Self　　　　　　　　　　　　　　　**Duration:** Concentration

When in vacuum of space and beyond the gravity well of any planetary bodies, the character can move at interstellar speeds. The character gains a Spaceflight Speed equal to his SPs of Spaceflight. (A Spaceflight Speed of 30 SPs is the speed of light.) When traveling at his Spaceflight Speed, the character cannot take any Automatic Actions or Challenge Actions. Characters with this Power do not seem to suffer relativistic effects nor be able to time travel, even if they break the speed of light, to the puzzlement of physicists.

The base cost of Spaceflight is 0 but the character must have at least 15 SPs of Flight in order to achieve escape velocity.

12Sigma is creating a starship. His starship has 15 SPs of Flight, so its base score for Spaceflight is 15. 12Sigma purchases 18 SPs of Spaceflight for the starship, giving it a Spaceflight Speed of 33 SPs – or eight times the speed of light.

SUPERSPEED

Base Cost: 50　　**Variable Cost:** 25　　**Base Score:** 0
Range: Self　　　　　　　　　　　　　　　**Duration:** Permanent

The character can achieve a superhuman pace in every activity. This Power has the following **effects:**

★ The character adds his SPs of Superspeed to his Initiative.
★ The character adds his SPs of Superspeed to his Running Speed when taking an Instant Movement Action.
★ The character can add his SPs of Superspeed to his AGI and VAL for any Melee, Ranged, Ramming, or Wrestling Attacks by or against him.
★ The character can add his SPs of Superspeed to his Time spent performing solitary Extended Actions, such as traveling long distances (see p. 280), stopping a moving object (p. 274), processing information (p. 304), investigating a forensic site (p. 318), or developing an invention (p. 168). (He cannot add Superspeed to Time spent on activities that require mental interactions with other characters, such as befriending witnesses or earning income.)
★ The character using Superspeed cannot communicate with other characters (e.g. other characters seem to be speaking at a rate too slow to monitor and the character using Superspeed is speaking at a frequency too fast for them to follow.)
★ The character can use Superspeed to perform Power Stunts at an SP score equal to his Running Speed (subject to Power Limit). The Hero Point cost of the Power Stunts is still based on the CP Cost of Superspeed.

Flashmob has 5 SPs of Superspeed, 5 SPs of VAL, 5 SPs of AGI, and 10 SPs of Parkour. Her Initiative is 5 + 5 = 10. Her Running Speed is 5 + 5 = 10. Her AV for Melee, Ranged, Ramming, and Wrestling Attacks is 5 + 5 = 10. Her DV for Melee Attacks is 10 while for Ranging Attacks it is 10 if stationary or 15 if moving (because of Parkour). Flashmob is running towards the Grand Canyon and decides she wants to use her Superspeed to jump across, emulating Super-Jumping. While she only has 5 SPs of Superspeed, she is allowed to Power Stunt 10 SPs of Jumping because her Running Speed is 10 SPs. The Hero Point cost of the Power Stunt is based on her Superspeed's 175 CP cost.

All-Terrain Modifier: The character can ignore Hazardousness due to rain, ice, snow, and sand. Increase the Base Cost by 2.

Hydroplaning Modifier: The character can run across water due to his velocity. Increase the Base Cost by 2 and the Variable Cost by 1.

Wall-Crawling Modifier: The character can run up walls and across ceilings due to his velocity. Increase the Base Cost by 2 and the Variable Cost by 1. He gains the ability to Wall-Crawl at his SPs of Superspeed.

SWIMMING

Base Cost: Special **Variable Cost:** 2 **Base Score:** Swimming Speed
Range: Self **Duration:** Concentration

The character can swim at superhuman speeds. The character gains a Swimming Speed equal to his SPs of Swimming, so the character can travel a distance through water equal to Power SPs by taking a Movement Action. Note that this Power does not grant the ability to breathe underwater or survive the pressures of the deep sea. For additional rules on swimming, see p. 290.

The base cost of Swimming is equal to the character's Weight x 2 -1, with a minimum base cost of 5 CP.

SWINGLINING

Base Cost: Special **Variable Cost:** 2 **Base Score:** 0
Range: Self **Duration:** Instant

Swinglining is a mode of movement using an anchored line to rappel, zipline, or swing from point to point. A character can anchor his swingline to a point within a Distance equal to his SPs of Swinglining. If the point is on a wall, balcony, or other large static object, anchoring the swingline only requires an Automatic Action and succeeds automatically. If the point is a small target, anchoring the swingline requires a Challenge Action with a successful AGI vs. Minimum Ranged DV Attack Check. If the point is located on a moving target, anchoring the Swingline requires an AGI vs. AGI/Minimum Ranged DV Attack Check.

Once the swingline is anchored, the character may take a Movement Action to swing. In most urban settings where there is no shortage of anchor points, a character can effectively move in any desired direction to a Distance in SPs equal to his SPs of Power, ending his Movement Action either hanging in the air or landing.

When anchor points are scarce or the particular course of movement needs to be known, the exact range of motion is determined by the swingline's anchor point relative to the character's position:

★ **Anywhere below the character:** Zipline a Distance equal to his SPs of Swinglining down and/or across to the anchor.
★ **Near or directly below the character:** Rappel down a Distance from the anchor point equal to his SPs of Swinglining.
★ **Directly above the character:** Propel upward a Distance towards the anchor point equal to his SPs of Swinglining.
★ **Laterally above the character:** Swing laterally towards the anchor point, ending the Movement Action directly below the anchor point at a Distance equal to the original Distance from the character to the anchor point. The character is in the air at the apex of his swing. On the following Page, the character can then expend a Movement Action to either propel upward to the anchor point or to continue swinging laterally, landing at a Distance equal to the original distance. If the character does not expend a Movement Action on his second Panel, he falls (see p. 288).

The base cost of Swinglining is equal to the character's Weight x 2 +4, with a minimum base cost before modifiers of 10 CP.

Unpowered Modifier: The character cannot ascend using his swingline. He can vertically descend (using it like a zipline or rappel rope) or swing laterally below the anchor point. Reduce the Base Cost by 5 and record the Power as Unpowered Swinglining.

TELEPORTATION

Base Cost: Special **Variable Cost:** 10 **Base Score:** 0
Range: +6 **Duration:** Instant

As a Movement Action and/or Challenge Action, the character can instantaneously travel from his current location to a destination location. The character must either be able to see his destination, dead reckon to it ("exactly 1,500 feet north"), have previously visited it, have a detailed picture or map of it, or have been given a very thorough description of it by someone who has visited it.

The Range for the Teleportation is the maximum distance in SPs that the character can travel with each use of the Power. Regardless of distance, however, a character inside of another character's Impermeable Forcefield is considered out of Range of all destinations outside the Impermeable Forcefield. A character outside of another character's Impermeable Forcefield is considered out of Range of all destinations inside the Impermeable Forcefield. Any destination that is inside a creature, or that is inside an object without sufficient Interior Capacity to permit the teleporting character(s) to arrive safely, is considered out of Range.

If a character attempts to teleport to a destination out of Range, he instead teleports as close as possible to the destination as his Range permits. If a character attempts to teleport to a destination in Range, but has miscalculated his dead reckoning, gotten the wrong description, reviewed an erroneous map, or otherwise is in error about where he's going, the GM determines the destination.

When using Teleportation, a character can choose to move one or more targets he is touching in addition to himself. The SPs of Teleportation are reduced by 1 SP for each SP by which the Weight teleported exceeds the character's own Weight. Touching friendly targets is an Automatic Action. If a character wants to teleport an unwilling target, the character must either be Engaged with or Engaging the target or make a successful Melee Attack or Wrestling Attack using a Challenge Action. If there are several unwilling targets, the Multi-Attack penalties apply. Even if touched, an unwilling target can avoid being teleported if he succeeds on a RES/Weight vs. Teleportation Attack Check (no action required). The target can spend Hero Points on the AV of this Attack Check, while the teleporting character cannot increase the DV.

A character who moves or is moved with Teleportation immediately ends the Stuck condition as well as any Conditions caused by Wrestling Attacks unless the opponent he is Engaged with is also teleported. Teleportation does not conserve momentum; a character always arrives at his destination without any velocity.

The base cost of Teleportation is 26 + the character's Weight x 8, with a minimum base cost before modifiers of 50 CP.

Area Modifier: The character can teleport willing targets without needing to expend an Automatic Action to touch them provided they are within 0 SP of him. He must still teleport with the targets unless he has Third-Party Teleportation. Area Teleport can never be used on unwilling targets. Increase the Base Cost by 10 and record the Power as Area Teleportation.

Blink Modifier: The character can teleport as an Automatic Action. Increase the Base Cost by 25 and the Variable Cost by 4. This potent modifier enables the character to teleport to a location (Automatic Action), attack (Challenge Action), and then teleport away (Movement Action). Record the Power as Blinking Teleport.

Criteria of Destination Modifier: The character can only teleport to destinations that meet some specific criteria. If the locations meeting the criteria are ubiquitous or common ("arrive in shadows" or "arrive underwater"), reduce the Variable Cost by 1. If the locations are uncommon to rare ("arrive in a land untouched by civilization"), reduce the Variable Cost by 2. If the locations are very rare or singular ("arrive in my headquarters"), reduce the Variable Cost by 3. Note the destination criteria in parenthesis after the SPs of Power.

Criteria of Origin Modifier: The character can only teleport when his point of origin meets some specific criteria. If the locations meeting the criteria are ubiquitous or common ("be in shadows" or "be underwater"), reduce the Variable Cost by 1. If the locations are uncommon to rare ("be in land untouched by civilization"), reduce the Variable Cost by 2. If the locations are very rare or singular ("be in my headquarters"), reduce the Variable Cost by 3. Note the origin criteria in parenthesis after the SPs of Power.

Kinetic Teleportation Modifier: Some characters might be able to initiate a teleportation in the blink of an eye, enabling them to simply vanish and reappear when attacked. If a character can use his SPs of Teleportation as his DV in lieu of AGI, increase the Variable Cost by 4. If he can use his SPs of Teleportation as the DV in lieu of both AGI and VAL, increase the Variable Cost by 8. The Power should be recorded as Kinetic and Hyperkinetic Teleportation respectively. If stacked with any type of Criteria modifier, the criteria must apply for the character to use his SPs of Teleportation as the DV.

Range Modifier: Decreasing the Range to +3 reduces the Variable Cost by 1. Decreasing the Range to Standard reduces the Variable Cost by 2. The new Range should be written down in parentheses after the Power's SP score.

Self-Only Modifier: The character can only teleport himself. Reduce the Variable Cost by 4 and record the Power as Self-Only Teleportation.

Slow Modifier: The character must use a Challenge Action to teleport. Decrease the Base Cost by 10 and the Variable Cost by 2. Record the Power as Slow Teleportation. The modifier cannot stack with Blink.

Third-Party Modifier: The character can teleport willing targets without teleporting himself. Increase the Variable Cost by 2 and record the Power as Third-Party Teleportation.

Third-Party Offensive Modifier: The character can teleport willing and unwilling targets without teleporting himself. Unwilling targets can still avoid being teleported with a successful RES/Weight vs. Teleportation Attack Check (no action required). Increase the Variable Cost by 6 and record the Power as Third-Party Offensive Teleportation.

WALL-CRAWLING

Base Cost: Special   **Variable Cost:** 1   **Base Score:** 0
Range: Self   **Duration:** Concentration

The character can travel across vertical surfaces and ceilings. He can move up, down, or across a slope as a Movement Action, traveling a vertical distance equal to his Running Speed – the slope's Climbing Grade (see p. 286). For purposes of calculating his Climbing Speed, the Climbing Grade of the slope he is scaling is reduced by his SPs of Power (to a minimum of 0).

If the Climbing Grade is reduced to 0 by his Wall-Crawling, he can cling to the slope with any two limbs without having to expend any sort of Action (just like a person can stand still without expending an Action). He does not fall even when failing a Challenge Check to climb the slope; however, he does still fall if he becomes Unconscious or Overwhelmed.

Wall-Crawling does not grant the character any additional carrying or lifting capability than his MIG, so a weak character with many SPs of Wall-Crawling will not be able to take advantage of his full Power.

The base cost of Wall-Crawling is equal to the character's Weight x2 -1, with a minimum base cost before modifiers of 5 CP.

OFFENSIVE POWERS

Offensive Powers enable the character to cause Damage to a target's Health or cause physical effects against targets. (Powers which can damage Determination or which can cause mental effects are found under Mental Powers.)

Agility and Insight: Except as noted in the Power description, Targeted Offensive Powers rely on the character's AGI as the AV for the Power when making Ranged Attacks. Any Offensive Power may have the Psionic modifier if desired, so that the character uses his INS instead of his AGI.

Psionic Modifier: The character controls his Power with pure mentation rather than with hand-eye coordination. He uses his INS instead of his AGI as the AV for the Power. Record the power as Psionic [Power Name]. There is no change in Base or Variable Cost.

Damage Types: Offensive Powers that deal Damage can be of the Annihilating, Bludgeoning, Concussive, Cosmic, Corrosive, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, or Toxic Damage Types. Bludgeoning, Concussive, Lacerating, Penetrating, and Thermal Damage are considered common Damage Types. The Rare Damage Type Modifier applies to any Offensive Power that can deal a rare Damage Type.

Rare Damage Type Modifier: Any Offensive Power capable of dealing the Annihilating and/or Cosmic Damage Type has its Base Cost increased by 10. Any Offensive Power capable of dealing the Corrosive, Cryogenic, Electrical, Ionizing, and/or Toxic Damage Type has its Base Cost increased by 5. This is in addition to any increase in cost from Extra Damage Types.

Delayed Onset: Any of the following Offensive Powers can have the Delayed Onset modifier: Blast, Gust, Paralysis, Strike.

Delayed Onset Modifier: The Delayed Onset modifier creates a delay between the success of the Attack and the effect of the Attack. The delay is measured in SPs of Time, with the effect occurring at the start of the next Page after the Time has passed. If the Power's Delayed Effect always applies, reduce the Base Cost of the Power by 1 CP per SP of Delay and record it as Delayed Effect (SPs) [Power]. If the Power has a variable Delayed Effect that is chosen when the Attack is made, increase the Base Cost of the Power by 1 CP per SP of possible Delay and record it as Variable Delayed Onset (SPs) [Power].

Triggered Offense: Any of the following area of effect Offensive Powers can have the Trigger modifier: Bang, Cone, Darkness, Explosion, Flash, Fog, Glue, Illumination, Snare, Quake.

Trigger Modifier: The character's Power is automatically and exclusively triggered at a Range of 0 SPs when certain circumstances occur. When this modifier is selected, the player must decide if the trigger has a Permanent or Sustained Duration. A Permanent trigger always applies. A Sustained trigger can be turned on and off with an Automatic Action by the character. The trigger(s) can be any or all of the following:

★ The Power is triggered by a Challenge Action at touch Range defined at the time the Power is selected.
★ The Power is triggered if the character takes damage. The amount of Damage is specified by when the trigger is selected.
★ The Power is triggered after some variable SPs of Time have passed, ranging from -1 SP (one Panel) to any desired length of Time. Setting the Time requires the character to expend a Challenge Action.
★ The Power is triggered by a particular signal from a designated source. Sending the signal requires the source to expend a Challenge Action. The character must have some way of receiving the signal (typically via 0 or more SPs of Radio Communication).
★ The Power is triggered if the character is subject to more than a particular Weight in SPs. The Weight must be specified when the trigger is selected. If applied to an object, the object must have some means of detecting the Weight (typically 1 SP or more of Ultra-Sensitive Touch).
★ The Power is triggered if any other character comes within a particular Distance in SPs. The Distance must be specified when the trigger is selected. If applied to an object, the object must have some means of detecting the approaching character of object (typically 1 SP or more of Radio Blindsight).
★ The Power is triggered if the character is moved over a particular Speed in SPs. The effect takes place at the end of the movement. The Speed must be specified when the trigger is selected. If applied to an object, it must have some means of detecting the Speed (typically 1 SP or more of Radio Blindsight).

Anytime an object has a Triggered Power, the object's Trigger can be disarmed with a Challenge Check against the object's SPs of Security (typically 3 – 9 SPs). See Technology Control (p. 88), Bypassing Security Systems (p. 296), and Disarming Triggers (p. 296).

When a trigger is activated, it interrupts the current Panel like a character using a Reserve Action. Record the Power as Triggered [Power] (trigger:), writing down the specific trigger in parentheses. Triggers default to Sustained, but record if Permanent. Do not change the Base Cost or Variable Cost.

An incendiary grenade with an impact fuse is a Crewed Object with -5 SPs of Weight, 1 SP of Toughness, and 8 SPs of Self-Range Triggered Concussive Thermal Explosion (trigger: subject to Weight of -5 SPs after activated). The grenade's user would spend an Automatic Action to activate the Sustained Trigger (e.g. he'd pull the pin), then throw the grenade as a Challenge Action. When the grenade hits wherever it has been thrown, its own Weight will set off the trigger.

A 1kg stick of dynamite is a Crewed Object with -3 SPs of Weight, 1 SP of Toughness, and 9 SPs of Self-Range Triggered Concussive Thermal Explosion (trigger: some SPs of time pass after activated). Here, the dynamite's user would spend an Automatic Action to activate the Sustained Trigger and set the SPs of Time until it detonates (by lighting the fuse at different lengths).

AURA

Base Cost: 15   **Variable Cost:** 5   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character possesses an Aura that can damage nearby targets. The Aura could be radiation, poison gas, fire, or even a hedgehog-like set of spines. The Aura uses the character's SPs of Aura as the EV to deal Health Damage to the target. The Aura can deal Damage of any one of the following Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic Damage. (Some Damage Types are rare and increase Base Cost.) The Damage Type should be written down before the Power name and SPs, and the Base Damage of the Aura should be written down in parentheses after the SP score. For instance, a radioactive character might possess Ionizing Aura 10 (Damage 64).

Activating and deactivating the Aura is an Automatic Action. Once activated, the Aura remains active until deactivated or until the character becomes Unconscious or Overwhelmed. While the Aura is activated, any targets (including allies) that begin their Panel within 0 SPs of the character or move within 0 SPs of the character on their Panel, automatically suffer damage equal to the Base Damage of the Aura. Protection applies normally.

Extra Damage Types Modifier: Some Auras may deal two or more Damage Types. For instance, a hailstorm might be represented as a Bludgeoning Cryogenic Aura. Increase the Base Cost by 5 and the Variable Cost by 1 for each additional Type after the first.

Extended Modifier: Some Auras may affect targets within 1 SP, 2 SPs, or more. For each additional SP by which the Aura's area of effect is increased, add 15 to the Base Cost and 5 to the Variable Cost. Record the Power as Extended (+#) Aura.

Inhalation Modifier: The Aura only affects targets who breathe while in its area. It cannot affect targets who are holding their breath or are breathing using Air Supply. Decrease the Base Cost by 5 and the Variable Cost by 1 and record the Power as Inhalation Aura. (Inhalation Auras are usually, but not always gases; they could also represent infectious nanites that enter a character's brain via his nasal cavities. Conversely, a gas which affects targets on skin contact is not an Inhalation Aura.)

Nauseating Modifier: The Aura somehow induces vomiting and retching. Anytime a target (including allies) begins its Panel within the Aura or enters the Aura on its Panel, the character makes an Aura vs. MIG Attack Check against the target. (If the character has an Inhalation Aura, the target may add its SPs of Air Filtration to its DV.) On a White result, there is no effect. On a Green result, the target is Dazed. On a Yellow result, the target is Staggered. On an Orange result, the target is Overwhelmed. On a Red result, the target is Overwhelmed and Knocked Prone. Objects are immune to Nauseating Aura. Increase the Base Cost by 15 and the Variable Cost by 5. Record the Power as Nauseating Aura.

Permanent Modifier: The character's Aura is Permanent and cannot ever be deactivated. Increase the Base Cost by 10 and the Variable Cost by 2. Record the Power as Permanent Aura. A Permanent Aura can have very disadvantageous effects for a hero and should not be chosen lightly.

Special Effect Modifier: When a target who has suffered Damage to his Health from the Aura exits the Aura, he gains the Condition associated with the Aura's Damage Type with an SEV equal to the SPs of Aura – 1. Increase the Base Cost by 15 and the Variable Cost by 1. Record the Power as Special [Damage Type] Aura.

> Burning Man has 10 SPs of Special Thermal Aura. While the Aura is activated, any targets (including allies) that begin their Panel within 0 SPs of him or move within 0 SPs of the character on their Panel, automatically suffer 64 points of Thermal Damage. Any target which is damaged by the Aura gains the Burning condition when it exits the Aura. The Special Effect Value of the Burning condition is 10 – 1 = 9 SPs, so the target suffers 48 points of Thermal Damage on its next Panel, etc.

Ultra-Weak Modifier: The Aura deals 1 SP of Damage (3 points) after a target spends 1 or more SPs of Time (2+ Pages) in the Aura. Record the Aura as Ultra-Weak Aura with negative SPs equal to the number of SPs of Time required for the Aura to deal 1 SP of Damage. Reduce the Base Cost by 3 CP per negative SP. Reduce the Variable Cost by 1 CP per negative SP to a minimum of 0 CP, then treat it as 1 SP for cost.

> Frostbite is a supervillain who can chill the air around him to -30 F; an ordinary man will die of hypothermia if he spends 10 minutes near Frostbite. In game, Frostbite has -3 SPs of Ultra-Weak Cryogenic Aura. The Base Cost is 15 – (3 x 3) = 6 CP. The Variable Cost is 5 – 3 = 2 CP per SP. An Ultra-Weak Aura is treated as 1 SP for cost. The total Cost of Frostbite's Aura is therefore 6 +2 = 8 CP. This is much less expensive than 1 SP of Cryogenic Aura (20 CP) because it's of much less utility in combat.

BANG

Base Cost: 35   **Variable Cost:** 6   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can trigger a deafening Bang centered on any point within Range and LOS. The Bang has a Sound Loudness of 12 + SPs of Bang. The Bang can affect every character within a blast radius equal to the SPs of Bang. Make a Bang vs. AGI/MIG Attack Check against each target to determine the color result of the effect. Add the target's Passive Hearing Range (usually 0) to the SPs of Bang. Reduce the SPs of Bang by 1 SP per every 1 SP of distance between the center of the Bang and the target. Bang can affect multiple targets but cannot be used in a Multi-Attack combat maneuver. Targets protected by Filtered Hearing can add their SPs of Filtered Hearing to their DV.

On a Green or better result, a target temporarily gains the Deafened condition. The duration of the Deafened condition is determined by the color result. On a Green result, the target is Deafened for 0 SPs of Time (1 Page of combat). On a Yellow result, the target is Deafened for 1 SP of Time (2 Pages of combat). On an Orange result, the target is Deafened for 2 SPs of Time (4 Pages of Combat). On a Red result, the target is Deafened for 3 SPs of Time (8 Pages of Combat). At the start of his Panel, a character can end the Deafened condition by spending a number of Hero Points equal to the number of Pages he will otherwise remain Deafened.

A Deafened character is out of Earshot of all sounds. He will be Totally Surprised by any attacks made by opponents outside of LOS unless he has another way to detect them.

Flashbang Modifier: The target gains both the Blinded and Deafened conditions. Increase the Base Cost by 25 and the Variable Cost by 4 and record the Power as Flashbang.

Intensive Modifier: Some Bangs do not degrade in AV with distance. Increase the Variable Cost by 2 and record the Power as Intensive Bang.

Self-Immunity Modifier: The character is immune to the effects of his own sound. Increase the Base Cost by 5 and the Variable Cost by 1 and record the Power as Self-Immune Bang.

Self-Range Modifier: The epicenter of the Bang is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the Power as Self-Range Bang. The character with this Power still suffers Deafness from his Bang unless he also takes the Self-Immunity Modifier. This Modifier is usually applied to the Power when it is added to objects intended to be dropped or hurled.

Targeted Modifier: The Challenge Action to detonate the Bang is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Bang detonates at the desired target. The target is affected based on the Color Result achieved. Every other character in the blast radius is then attacked with SPs of Bang based on that character's distance from the center (as above). If the Attack Check fails, the Bang scatters (see p. 380) before resolving its effects. Reduce the Base Cost by 5 and the Variable Cost by 2 and record the Power as Targeted Bang.

Targeted Indirect Modifier: The Bang is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 1. Record the power as Targeted Indirect Bang.

Variable Radius Modifier: The Bang's radius can be varied from a minimum of 0 SPs to a maximum of ½ the SPs of Bang. Increase the Variable Cost by 2 and record the Power as Variable Radius Bang.

BLAST

Base Cost: 15   **Variable Cost:** Special   **Base Score:** 0
Range: Standard   **Duration:** Instant

The character can make a Ranged Attack that deals Damage of any one of the following Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic Damage. (Some Damage Types are rare and increase Base Cost.) The Attack uses the character's SPs of Blast as the EV to deal Health Damage to the target. The Damage Type should be written down before the Power name and SPs, and the Base Damage of the Blast should be written down in parentheses after the SP score. For instance, a character might possess Thermal Blast 8 (Damage 32). Damage Type determines the nature of the Blast's Special Effects (see p. 374).

For characters, the Variable Cost of Blast is 1 CP per SP up to the character's MIG and then 5 CP per SP thereafter. For objects, the Variable Cost of Blast is 5 CP per SP.

Continuous Modifier: Rather than fire a discrete round or shot, a Blast can be continuous streams of energy, fire, projectiles, etc. Any characters between the attacking character and the target(s) are at risk of damage from a Continuous Blast. Make a Blast vs. AGI/Speed Attack Check against the characters in the stream to determine the color results of the attack and use the character's SPs of Blast as the EV. If a Continuous Blast misses its intended target, it scatters before resolving its effects (see p. 380). Increase the Base Cost by 15 and the Variable Cost by 1 and record the power as Continuous Blast.

Extra Damage Types Modifier: Some Blasts may deal two or more Damage Types. For instance, a lightning bolt might be represented as an Electrical Thermal Blast. Increase the Base Cost by 5 and the Variable Cost by 1 for each additional Type after the first.

Indirect Modifier: The Blast can be fired with a ballistic trajectory, like a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 10 and the Variable Cost by 2.

Long Range Modifier: The Blast has a Range greater than Standard. Increase the Base Cost by 5 per SP of additional Range. Record the Power as Long Range (+#) Blast, where # is the SP increase in Range.

No Multi-Attack Modifier: The Power cannot be used to Multi-Attack. Reduce the Base Cost by 5 and the Variable Cost by 1. Record the Power as No Multi-Attack Blast. A single-shot sniper rifle might be represented as an object with No Multi-Attack Penetrating Blast.

Nonlethal Modifier: The Power cannot reduce the target's Current Health to below 0. Record the Power as Nonlethal Blast. Do not change the Base Cost or Variable Cost.

Rapid Fire Modifier: The Blast fires bursts or salvoes of multiple projectiles or pulses. For purposes of calculating whether a Special Effect is triggered, the attacker's AV is increased by the SPs of Power. Increase the Base Cost by 10 and record the Power as Rapid Fire Blast.

> A US Army trooper has Marksmanship 6 and an assault rifle with Rapid Fire Penetrating Blast 7. When he attacks, he scores a Bleeding Special Effect on a die roll of 1-13 instead of 1-6.

Short Range Modifier: The Blast has a Range lower than Standard. Reduce the Base Cost by 5 per SP of lost Range, to a maximum of -2 SPs. Record the Power as Short Range (-#) Blast, where # is the SP decrease in Range.

CONE

Base Cost: 20   **Variable Cost:** 12   **Base Score:** 0
Range: Special   **Duration:** Instant

As a Challenge Action, the character can unleash a cone-shaped wave of energy, heat, force, etc. The Cone originates at the character, has a Width equal to the SPs of Cone divided by 2, and a Length in SPs equal to the Width + 1. The Cone attacks every character within the area of effect. Make a Cone vs. AGI/Speed Attack Check against each target to determine the color result of the effect. Use the character's SPs of Cone as the EV.

A Cone deals one of the following Types of Damage: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, or Toxic. (Rare Damage Types increase Base Cost.) The Cone's Damage Type should be written down before the Power name and SPs, and the Base Damage of the Cone should be written down in parentheses after the SP score. Damage Type determines the nature of the Cone's Special Effects (see p. 374). Cone can affect multiple targets but cannot be used in a Multi-Attack combat maneuver.

Extra Damage Types Modifier: Some Cones deal two or more Damage Types. Increase the Base Cost by 5 and the Variable Cost by 1 for each additional Type after the second. The Damage Types should be written down before the Power name and SPs.

Nonlethal Modifier: The Power cannot reduce the target's Current Health to below 0. Record the Power as Nonlethal Cone. Do not change the Base Cost or Variable Cost.

Short Range Modifier: The Cone has a reduced area of effect. Reduce the Base Cost by 5 per SP less Length and Width, to a maximum of -4 SPs. Record the Power as Short Range (-#) Cone, where # is the SP decrease in Length and Width.

Variable Modifier: The Cone's Width can be varied from a minimum of 0 SPs to a maximum of the SPs of Cone divided by 2. The Cone's Length equals the chosen Width +1. AV Increase the Variable Cost by 4 and record the Power as Variable Cone.

EXPLOSION

Base Cost: 30   **Variable Cost:** 12   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can detonate an Explosion centered on any point within Range and LOS. The Explosion attacks every character within a Radius equal to the SPs of Explosion divided by 2. (The Volume of the Explosion in SPs is equal to 3 x Radius + 2). Make an Explosion vs. AGI/Speed Attack Check against each target to determine the color result of the effect. Use the character's SPs of Explosion as the EV. For purposes of both the Acting Value and Effect Value, reduce the SPs of Explosion by 2 SPs per every 1 full SP of distance between the center of the Explosion and the target.

An Explosion deals one of the following Types of Damage: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, or Toxic. (Rare Damage Types increase Base Cost.) The Explosion's Damage Type should be written down before the Power name and SPs, and the Base Damage of the Explosion should be written down in parentheses after the SP score. Damage Type determines the nature of the Explosion's Special Effects (see p. 374).

Explosion can affect multiple targets but cannot be used in a Multi-Attack combat maneuver.

> A thermobaric bomb (Concussive Thermal Explosion of 20 SPs) is detonated at the UN Headquarters in New York City. The bomb attacks every character within a radius of 10 SPs (1 mile). Characters at the epicenter are attacked with an Acting Value and Effect Value of 20. Characters that are 160 feet (5 SPs) away from the epicenter are attacked with an Acting Value and Effect Value of 10. Characters that are ½ mile (9 SPs) away from the epicenter are attacked with an Acting Value and Effect Value of 2.

Extra Damage Types Modifier: Most Explosions deal two or more Damage Types. For instance, a fragmentation grenade is modeled as Concussive Lacerating Blast, while a nuclear explosion is represented as a Concussive Ionizing Thermal Blast. Increase the Base Cost by 5 and the Variable Cost by 1 for each additional Type after the first. The Damage Types should be written down before the Power name and SPs.

High Energy Modifier: Some Explosions are so energetic that their shockwaves create additional shockwaves. The blast radius of the Explosion is equal to two-thirds the SPs of Explosion. For purposes of AV and EV, reduce the SPs of Explosion by 3 SPs per every 2 SPs of distance between the center of the Explosion and the target. Increase the Variable Cost by 4 and record the Power as High Energy Explosion. Nuclear weapons have this modifier.

Intense Modifier: Some Explosions do not degrade in AV and EV with distance at all. The Blast Radius does not change. Increase the Variable Cost by 4 and record the Power as Intense Explosion. Intense Explosion can be used to model improved conventional munitions, cluster bombs, barrages of numerous guns, poison gases, etc.

Long Range Modifier: The Explosion has a Range greater than Standard. Increase the Base Cost by 5 per SP of additional Range. Record the Power as Long Range (+#) Explosion, where # is the SP increase in Range.

Limited Radius Modifier: Some Explosions have a smaller Radius than their SP score would otherwise indicate. Reduce the Variable Cost of the Power by 3 if the Radius is limited to 0 SPs, by 2.5 if the Radius is limited to 1 SP, by 2 if limited to 2 SPs, by 1.5 if limited to 3 SPs, by 1 if limited to 4 SPs, and by 0.5 if limited to 5 SPs. The Limited Radius cannot be purchased such that the Limited Radius is greater than the Power's blast Radius of SPs /2. Record the Power as Limited Radius (#), where # is the maximum Radius at which characters are affected by the Explosion.

Nonlethal Modifier: The Power cannot reduce the target's Current Health to below 0. Record the Power as Nonlethal Explosion. Do not change the Base Cost or Variable Cost.

Self-Immunity Modifier: The character is immune to the effects of his own explosions while he is conscious. Increase the Base Cost by 5 and the Variable Cost by 2 and record the Power as Self-Immune Explosion.

Self-Range Modifier: The epicenter of the Explosion is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 4 and record the Power as Self-Range Explosion. The character with this Power still suffers damage from his Explosion unless he also takes Self-Immunity Modifier. Self-Range Explosions cannot be Targeted or Targeted Indirect.

Short Range Modifier: The Explosion has a Range lower than Standard. Reduce the Base Cost by 5 per SP of additional Range, to a maximum of -2 SPs. Record the Power as Short Range (-#) Explosion, where # is the SP decrease in Range.

Targeted Modifier: The Challenge Action to detonate the Explosion is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Explosion detonates at the desired target. The target is Damaged based on the Color Result achieved. Every other character in the blast radius is attacked with SPs of Explosion based on that character's distance from the center (as above). If the Ranged Attack fails, the Explosion scatters before resolving its effects. Reduce the Base Cost by 5 and the Variable Cost by 4. Record the power as Targeted Explosion. Targeted Explosion is often Linked with Blast or Targeted Flash.

Targeted Indirect Modifier: The Explosion is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 2. Record the power as Targeted Indirect Explosion.

Variable Radius Modifier: The Explosion's Radius can be varied from a minimum of 0 SPs to a maximum of ½ the SPs of Explosion. Increase the Variable Cost by 4 and record the Power as Variable Radius Explosion.

Variable Intensity Modifier: The Explosion's Radius can be varied from a minimum of 0 SPs to a maximum of the SPs of Explosion. The Explosion's EV throughout the blast radius is equal to the SPs of Explosion minus the SPs of the chosen Radius. Increase the Variable Cost by 2 and record the Power as Variable-Intensity Explosion. The Power cannot have the High Energy, Intense, Limited Radius, or Variable Radius modifiers.

Designer's Note: When dealing with very large Explosions affecting nameless victims, vehicles, buildings, and other unspecified targets, the guidelines for Bomb Threats can be used to assess overall casualties and destruction without having to roll a lot of dice. See p. 332.

FLASH

Base Cost: 50   **Variable Cost:** 8   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can trigger a blinding Flash centered on any point within Range and LOS. The Flash can affect every character within a blast radius equal to the SPs of Flash. Make a Flash vs. AGI/MIG Attack Check against each target to determine the color result of the effect. Add the target's Passive Spotting Range - 8 (usually 0) to the SPs of Flash. Reduce the SPs of Flash by 1 SP per every 1 SP of distance between the center of the Flash and the target. Flash can affect multiple targets but cannot be used in a Multi-Attack combat maneuver (unless the Spotlight modifier is selected). Targets protected by Polarized Vision can add their SPs of Power to their DV. Objects can only be Blinded if they are Autonomous and have a Passive Spotting Range.

On a Green or better result, a target temporarily gains the Blinded condition. The duration of the Blinded condition is determined by the color result. On a Green result, the target is Blinded for 0 SPs of Time (1 Page of combat). On a Yellow result, the target is Blinded for 1 SP of Time (2 Pages of combat). On an Orange result, the target is Blinded for 2 SPs of Time (4 Pages of Combat). On a Red result, the target is Blinded for 3 SPs of Time (8 Pages of Combat). At the start of his Panel, a character can end the Blinded condition by spending a number of Hero Points equal to the number of Pages he will otherwise remain Blinded.

While Blinded, a character cannot claim LOS to targets. When attacking, he can only make Blind Attacks (p. 377). He will be Totally Surprised by any attacks made by opponents outside of Earshot and Partially Surprised by attacks made by opponents within Earshot (p. 300). If a Blinded character has Blindsight, he can ignore this Condition for purposes of interacting with any characters within Range of his Power.

Flashbang Modifier: The target gains both the Blinded and Deafened conditions. See Bang (p. 137) for other mechanics. Increase the Base Cost by 10 and the Variable Cost by 2 and record the Power as Flashbang.

Intensive Modifier: Some Flashes do not degrade in AV with distance. Increase the Variable Cost by 2 and record the Power as Intensive Flash.

Self-Immunity Modifier: The character is immune to the effects of his own illumination. Increase the Base Cost by 5 and the Variable Cost by 1 and record the Power as Self-Immune Flash.

Self-Range Modifier: The epicenter of the Flash is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the Power as Self-Range Flash. The character with this Power still suffers Blindness from his Flash unless he also takes the Self-Immunity Modifier. This Modifier is usually applied to the Power when it is added to objects intended to be dropped or hurled. Self-Range Flash cannot be Targeted or Targeted Indirect.

Spotlight Modifier: The Flash has no blast radius. It affects one target within Range and Line of Sight. Additional opponents can be targeted using the Multi-Attack combat maneuver. Reduce the Base Cost by 20 and the Variable Cost by 3. The Power cannot have the Spotlight modifier if it has the Variable Radius or Self-Range modifier. Record the Power as Spotlight Flash.

Targeted Modifier: The Challenge Action to detonate the Flash is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Flash detonates at the desired target. The target and every other character in the blast radius is then attacked with SPs of Flash based on their distance from the center (as above). If the Attack Check fails, the Flash scatters (see p. 380) before resolving its effects. Reduce the Base Cost by 5 and the Variable Cost by 4 and record the Power as Targeted Flash. Targeted Flash is often linked with Blast or Targeted Explosion.

Targeted Indirect Modifier: The Flash is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 2. Record the power as Targeted Indirect Flash.

Variable Radius Modifier: The Flash's radius can be varied from a minimum of 0 SPs to a maximum of ½ the SPs of Flash. Increase the Variable Cost by 2 and record the Power as Variable Radius Flash.

FOG

Base Cost: 45   **Variable Cost:** 10   **Base Score:** 0
Range: Standard   **Duration:** Concentration

As a Challenge Action, the character can summon an obscuring cloud of Fog centered on any point within Range and LOS. The Fog has a Volume in SPs equal to the SPs of Fog. It can take the form of a ceiling-high cloud (Length and Width equal to the Power SPs/2, Height of 0 SPs), a sphere (Radius equal to the Power SPs/3), or other simple shapes. Within its Volume, the Fog adds SPs of Obscurity equal to the SPs of Fog.

As a subsequent Challenge Action, he can move the Fog he has created to another point within Range and LOS. The Fog continues as long as the character expends an Automatic Action each Panel to maintain it. Once he stops maintaining it, the Fog begins to dissipate, losing 1 SP at the end of each Page. The character can instantly dissipate the Fog as an Automatic Action.

Damaging: The Fog is a chemical agent that deals Corrosive, Thermal, Toxic, or Nonlethal Toxic Health Damage. (A Damaging Darkening Fog can deal Annihilating Health Damage.) The Fog's EV is its current SPs of Power. While the Fog is maintained, any targets (including allies) that begin their Panel within the Fog or enter it on their Panel are automatically dealt Base Damage by the EV. Increase the Base Cost by 15 (20 for Annihilating) and the Variable Cost by 5. Record the Power as [Damage Type] Fog. Characters breathing with Air Supply are immune to Toxic and Nonlethal Toxic Damage from Fogs but can still be harmed by Corrosive or Thermal Fogs.

Damaging Special: The Power functions as a Damaging Fog. In addition, when a target who has suffered Damage to his Health from the Fog exits the Fog, he gains the Condition associated with the Fog's Damage Type with an SEV equal to the SPs of Fog – 1. Increase the Base Cost by 30 (35 for Annihilating) and the Variable Cost by 6. Record the Power as Special [Damage Type] Fog.

Darkening: The Fog is actually a cloud of pure tenebrous darkness – a metaphysical absence of light. The Fog cannot be affected by Air Control, Weather Control, or similar Powers because it is not an atmospheric phenomenon. Its effects can be reduced or eliminated with Light Control, Illumination, Dark Vision, or similar Powers. Do not modify the Base or Variable Cost. Record the Power as Darkening Fog.

Instant: Once the character creates the Fog, he cannot move it, maintain it, or dissipate it. It automatically begins to dissipate at a rate of 1 SP per Page. Change the Duration of the Power to Instant. Reduce the Base Cost by 10 and record the Power as Instant Fog.

Long Range Modifier: The Fog has a Range greater than Standard. Increase the Base Cost by 5 per SP of additional Range. Record the Power as Long Range (+#) Fog, where # is the SP increase in Range.

Limited Volume Modifier: The Fog affects a smaller Volume than its SP score would otherwise indicate. Reduce the Variable Cost of the Power by 3 if the Volume is limited to 0 SPs, by 2.5 if the Volume is limited to 1 SP, by 2 if limited to 2 SPs, by 1.5 if limited to 3 SPs, by 1 if limited to 4 SPs, and by 0.5 if limited to 5 SPs. The Limited Volume modifier cannot be purchased such that the Limited Volume is greater than the Power's SPs. Record the Power as Limited Volume (#), where # is the Volume of the Fog.

Nauseating Modifier: The Fog's fumes have a disgusting odor that induces vomiting and retching. Anytime a target (including allies) begins its Panel within the Fog or enters the Fog on its Panel, the character makes a Fog vs. MIG Attack Check against the target. If the target has SPs of Air Filtration it may add them to its DV. On a White result, there is no effect. On a Green result, the target is Dazed. On a Yellow result, the target is Staggered. On an Orange result, the target is Overwhelmed. On a Red result, the target is Overwhelmed and Knocked Prone. Objects are immune to Nauseating Fog. Increase the Base Cost by 15 and the Variable Cost by 5. Record the Power as Nauseating Fog.

Self-Immunity Modifier: The character is not affected by the Obscurity or Damage of his Fog power. If the Fog is not Damaging, increase the Base Cost by 5 and the Variable Cost by 1. If the Fog is Damaging, increase the Base Cost by 10 and the Variable Cost by 2. Record the Power as Self-Immune Fog.

Self-Range Modifier: The epicenter of the Fog is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the Power as Self-Range Fog. The character with this power has his own LOS suffer from the Fog's Obscurity unless he also takes Self-Immunity Modifier. This Modifier is usually applied when this power is added to objects intended to be dropped or hurled such as bombs and grenades. Self-Range Fog cannot be Targeted or Targeted Indirect.

Short Range Modifier: The Fog has a Range lower than Standard. Reduce the Base Cost by 5 per SP of lost Range, to a maximum of -2 SPs. Record the Power as Short Range (-#) Fog, where # is the SP decrease in Range.

Targeted Modifier: The Challenge Action to summon the Fog is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Fog is summoned at the desired target. If the Attack Check fails, the Fog scatters (see p. 380). Reduce the Base Cost by 5 and the Variable Cost by 4. Record the power as Targeted Fog.

Targeted Indirect Modifier: The Fog is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 2 Record the power as Targeted Indirect Fog.

Transparent Modifier: The Fog does not cause Obscurity. Note that this modifier is only useful if the Fog is Damaging or somehow linked with some other useful effect! Reduce the Variable Cost by 2 and record the Power as Transparent Fog.

Variable Volume Modifier: The Fog's Volume can be varied from a minimum of 0 SPs to a maximum of the SPs of Fog. The character can change the Volume of Fog he has created when he expends an Automatic Action to maintain it. Increase the Variable Cost by 2 and record the Power as Variable Volume Fog.

Variable Intensity Modifier: The sum of the Fog's Obscurity and its Volume equal the character's SPs of Power. When the Fog is created, its SPs of Volume can be varied from a minimum of 0 SPs to a maximum of the SPs of Fog. The Fog's SPs of Obscurity (and Damage, if Damaging) throughout the Volume are equal to the SPs of Fog minus the SPs of Volume. Do not modify the Base or Variable Cost. Record the Power as Variable Intensity Fog. The Power cannot have the Limited Volume or Variable Volume modifiers.

GLUE

Base Cost: 25   **Variable Cost:** 8   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can create a spatter of incredibly sticky Glue centered on any point on a flat surface within Range and LOS. The Glue covers a Surface Area in SPs equal to the SPs of Glue. It can take the form of a square (Length and Width equal to the Power SPs/2) or other simple shapes. Every target standing on the Glue's Surface Area immediately becomes Stuck. New targets can become Stuck if they begin their Panel in, or move onto, the Glue's Surface Area. While Stuck, the following effects apply:

★ The target adds the SPs of Glue to his Weight for purposes of resisting being moved by a Collision, Ramming Attack, Knock Back Special Effect, Telekinesis, or opponent who has grappled him.

★ The target subtracts the SPs of Glue from all Speeds except Teleportation. If that reduces all of the target's available Speeds to 0, the target's DV against Ranged Attacks is also reduced to 0 SPs.

★ If the target is or becomes Prone or Toppled while Stuck, his Melee, Ranged, and Wrestling AV and DV are reduced by the SPs of Glue. If this results in his DV being reduced to 0, the target cannot Roll with Attacks which use that DV. The foregoing notwithstanding, Glue does not affect Deflection.

On his Panel, a Stuck target can attempt to break free of the Glue. To break free of the Glue, the target must expend a Challenge Action and make a MIG/Speed vs. Glue Attack Check. The target can expend Hero Points to increase the AV of this Attack Check, while the character who created the Glue cannot increase the DV. On a White result, the target remains Stuck. On any other result, the target frees himself from the Condition. He must now use a Movement Action to exit the Area of the Glue or he can become Stuck again as a new target at the start of his next Panel!

Once the character creates the Glue, he cannot move it, maintain it, or dissipate it. Glue dries after SPs of Time equal to the SPs of Power. Once the Glue has dried, it no longer affects new targets. While the Glue can affect multiple characters, the character cannot use the Multi-Attack combat maneuver to create multiple patches of Glue.

Concentration Modifier: The Power has a duration of Concentration instead of Instant. The character must expend an Automatic Action every Panel to maintain the Glue or it deactivates. When the Glue deactivates, any Stuck characters are immediately freed. Reduce the Glue's Base Cost by 10. Record the Power as Concentration Glue.

Damaging: The Glue can deal Corrosive, Cryogenic, Thermal, or Toxic Health Damage to characters within its Area. The Glue's EV is its current SPs of Power. Any characters that begin their Panel within or move into the Glue's Area are automatically dealt Base Damage by the EV. Increase the Base Cost by 10 and the Variable Cost by 4. Record the Power as [Damage Type] Glue.

Invisible: The Glue is transparent and hard to spot. For purposes of being Spotted, treat the Glue as an object with a Height equal to 1/2 the SPs of Power and Obscurity equal to the SPs of Power. Increase the Base Cost by 5 and the Variable Cost by 2. Record the Power as Invisible Glue.

Long Range Modifier: The Glue has a Range greater than Standard. Increase the Base Cost by 5 per SP of additional Range. Record the Power as Long Range (+#) Glue, where # is the SP increase in Range.

Limited Area Modifier: The Glue affects a smaller Volume than its SP score would otherwise indicate. Reduce the Variable Cost of the Power by 3 if the Volume is limited to 0 SPs, by 2.5 if the Volume is limited to 1 SP, by 2 if limited to 2 SPs, by 1.5 if limited to 3 SPs, by 1 if limited to 4 SPs, and by 0.5 if limited to 5 SPs. The Limited Volume modifier cannot be purchased such that the Limited Volume is greater than the Power's SPs. Record the Power as Limited Volume (#), where # is the Volume of the Hazard.

Self-Immunity Modifier: The character is not affected by his own Glue. Increase the Base Cost by 5 and the Variable Cost by 1 and record the Power as Self-Immune Glue.

Self-Range Modifier: The epicenter of the Glue is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the Power as Self-Range Glue. Self-Range Glue cannot be Targeted or Targeted Indirect.

Targeted Modifier: The Challenge Action to summon the Glue is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Glue is summoned at the desired target. If the Attack Check fails, the Targeted Glue scatters (see p. 380). Reduce the Base Cost by 5 and the Variable Cost by 2. Record the power as Targeted Glue.

Targeted Indirect Modifier: The Glue is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 1. Record the power as Targeted Indirect Glue.

Variable Area Modifier: The Glue's Area can be varied from a minimum of 0 SPs to a maximum of the SPs of Glue. Increase the Variable Cost by 2 and record the Power as Variable Volume Glue.

Variable Intensity Modifier: The Glue's Area can be a varied from a minimum of 0 SPs to a maximum of the SPs of Glue. The effect SPs of Glue throughout the Area are equal to the SPs of Glue minus the SPs of Area. Do not modify the Base or Variable Cost. Record the Power as Variable Intensity Glue. The Power cannot have the Limited Area or Variable Area modifiers.

GUST

Base Cost: 15 **Variable Cost:** 5 **Base Score:** 0
Range: Standard **Duration:** Instant

As an AGI vs. AGI Blasting Ranged Attack, the character can expel a force (e.g. gust of wind, sonic boom, graviton pulse, etc.) that can knock back a target. If the Attack Check scores a Green or better result, the target is Knocked Back away from the character, landing Prone. The Distance the character is Knocked Back equals the Knockback Speed. The Knockback Speed in SPs is equal to the character's SPs of Gust minus the target's Weight. On a Yellow result, increase the Knock Back Speed by 1 SP; on an Orange result, by 2 SPs; on a Red result, by 3 SPs. If a target is Knocked Back a distance of 0 SPs, he is simply knocked Prone (see p. 367). If a target is Knocked Back a Distance of -1 SPs or less, he ignores the effect entirely.

Provided the Knocked Back target is not Totally Surprised, Unconscious, or Overwhelmed, he can attempt to grab a nearby heavy object, substituting the lesser of his MIG or the grabbed object's Weight for his Weight. If the target still suffers 1 or more SPs of Knock Back, the object moves with him (if its Weight is less than the target's MIG) or he loses his grip (if its Weight exceeds the target's MIG). On his next Panel, the Knocked Back target loses one Action as the cost of grabbing the object.

Rainstorm can expel forceful gusts of wind (10 SPs of Gust). He targets Jack Hammer (Weight of 3 SPs, MIG of 8 SPs) with his Power and scores a Yellow result. The Knock Back Distance and Speed are 10 + 1 − 3 = 8 SPs or about a quarter mile. However, Jack Hammer is in a parking lot and there's a truck (Weight of 9 SPs) right next to him. He grabs hold of the truck. He can substitute the lesser of his 8 SPs of MIG or the truck's Weight of 9 SPs in lieu of his Weight. The Knock Back Speed and Distance is therefore 10 + 1 − 8 = 3 SPs. Jack Hammer loses his grip on the truck and goes flying back 40 feet.

If Jack Hammer had grabbed a sedan (Weight of 7 SPs), he'd have had to use its Weight instead of his MIG. The Knockback Speed and Distance would then be 10 + 1 − 7 = 4 SPs, or 80 feet. In this case, the sedan would have gone flying with Hammer, because his MIG exceeded its Weight.

If a target is Knocked Back into another character or an object (such as a wall), treat it as an unintentional Collision (p. 275). The maximum Damage either the target or the character/object struck can sustain from the impact is an amount sufficient to instantly slay or destroy the other party to the impact. If the target achieves a breakthrough, he continues to be Knocked Back, but his Knockback Speed is reduced by 2 SP. A target Knocked Back into a static object with a Break DV that is lower than his Weight + Knockback Speed will always achieve a breakthrough; see Breaking & Entering (p. 294).

Let's assume Jack Hammer was Totally Surprised by the Gust, so he was flung backward with a Knockback Speed of 8 SPs. He slams into a parking shack on the other side of the parking lot. The 0-SP Area of shack he strikes has 2 SPs of Bludgeoning Resistance (Protection 4) and 4 SPs of TOU (40 Durability). His AV for the collision is his Speed of 8, while the DV is the shack's Speed of 0, so the RV is +8 and he automatically achieves a Red result. The EV for his impact is his Knockback Speed of 8 SPs plus his Weight of 3 SPs, or 11 SPs total. The Damage is therefore 768 points. However, the shack can only absorb (40 + 40 + 4) 84 points of Damage before being Destroyed. The shack is Destroyed, Hammer takes 84 points of Damage, and then keeps going at a new Knockback Speed of 6 SPs.

Continuous Modifier: Rather than fire a discrete round or shot, a Gust can be continuous stream of force. Any characters between the attacking character and the target(s) are at risk of being Knocked Back by the Continuous Gust. Make a Gust vs. AGI/Speed Attack Check for each character in the stream to determine the color result and apply Knock Back accordingly. If a Continuous Gust misses its intended target, it scatters before resolving its effects (see p. 380). Increase the Base Cost by 15 and the Variable Cost by 1 and record the power as Continuous Gust.

Indirect Modifier: The Gust can be used to make Indirect Ranged Attacks. This might represent tornado-like winds that descend from above. Increase the Base Cost by 10 and the Variable Cost by 2.

Long Range Modifier: The Gust has a Range greater than Standard. Increase the Base Cost by 5 per SP of additional Range. Record the Power as Long Range (+#) Gust, where # is the SP increase in Range.

No Multi-Attack Modifier: The Gust cannot be used to Multi-Attack. Reduce the Base Cost by 5 and the Variable Cost by 1. Record the Power as No Multi-Attack Gust.

Variable Direction: The Gust can Knock Back each target in the direction of the character's choice. Increase the Base Cost by 10 and the Variable Cost by 5. Record the Power as Variable Direction Gust.

HAZARD

Base Cost: 30   **Variable Cost:** 12   **Base Score:** 0
Range: Standard   **Duration:** Concentration

As a Challenge Action, the character can create hazardous conditions that reduce the safe speed of travel within the affected zone. In air, the character might create turbulent winds; on or below water, he might cause churning waves; on land, he might lay down a sheet of ice or mud. The Hazard has a Volume in SPs equal to the SPs of Hazard. It can take the form of a surface-level hazard (Length and Width equal to the Power SPs/2, Height of 0 SPs), a sphere (Radius equal to the Power SPs/3), or other simple shapes.

Hazardousness	Maximum Safe Speed
1 - 2	4 (Swimming), 6 (Running), 8 (Flight/Gliding)
3 - 4	3 (Swimming), 5 (Running), 7 (Flight/Gliding)
5 - 6	2 (Swimming), 3 (Running), 7 (Flight/Gliding)
7 - 8	1 (Swimming), 1 (Running), 0 (Flight/Gliding)
9+	0 (Swimming), 0 (Running), 0 (Flight/Gliding)

Within its Volume, the Hazard adds to the Hazardousness of any movement. The Maximum Safe Speed is reduced to the amount shown on the Hazard Effects table. The Hazard continues as long as the character expends an Automatic Action each Panel to maintain it. Once he stops maintaining it, the Hazard begins to dissipate, losing 1 SP at the end of each Page. The character can instantly dissipate the Hazard as an Automatic Action.

Damaging: The Hazard can deal Bludgeoning, Lacerating, Penetrating, or Thermal Health Damage to characters within its Volume. The Hazard's EV is its current SPs of Power. Any characters that attempt and fail to move hastily (p. 281) within the Hazard are automatically dealt Base Damage by the EV. Increase the Base Cost by 5 and the Variable Cost by 2. Record the Power as [Damage Type] Hazard.

Instant: Once the character creates the Hazard, he cannot move it, maintain it, or dissipate it. It automatically begins to dissipate at a rate of 1 SP per Page. Change the Duration of the Power to Instant. Reduce the Base Cost by 10 and record the Power as Instant Hazard.

Hidden: The Hazard is not easily detected. Characters cannot assess the Maximum Safe Speed and if they enter at a Speed greater than Max Safe Speed, are automatically assumed to be attempting to move hastily. For purposes of being Spotted, treat the Hazard as an object with a Height equal to 1/3 the SPs of Power and Obscurity equal to the SPs of Power. Increase the Base Cost by 5 and the Variable Cost by 2. Record the Power as Hidden Hazard.

Long Range Modifier: The Hazard has a Range greater than Standard. Increase the Base Cost by 5 per SP of additional Range. Record the Power as Long Range (+#) Hazard, where # is the SP increase in Range.

Limited Volume Modifier: The Hazard affects a smaller Volume than its SP score would otherwise indicate. Reduce the Variable Cost of the Power by 3 if the Volume is limited to 0 SPs, by 2.5 if the Volume is limited to 1 SP, by 2 if limited to 2 SPs, by 1.5 if limited to 3 SPs, by 1 if limited to 4 SPs, and by 0.5 if limited to 5 SPs. The Limited Volume modifier cannot be purchased such that the Limited Volume is greater than the Power's SPs. Record the Power as Limited Volume (#), where # is the Volume of the Hazard.

Self-Immunity Modifier: The character is not affected by the Hazardousness of his own Hazard. Increase the Base Cost by 5 and the Variable Cost by 1 and record the Power as Self-Immune Hazard.

Self-Range Modifier: The epicenter of the Hazard is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the Power as Self-Range Hazard. Self-Range Hazard cannot be Targeted or Targeted Indirect.

Targeted Modifier: The Challenge Action to summon the Hazard is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Hazard is summoned at the desired target. If the Attack Check fails, the Hazard scatters (see p. 380). Reduce the Base Cost by 5 and the Variable Cost by 2. Record the power as Targeted Hazard.

Targeted Indirect Modifier: The Hazard is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 1. Record the power as Targeted Indirect Hazard.

Terrain Limited: The Hazard can only function against ground (Running), water (Swimming), or air (Flight/Gliding) movement. Reduce the Base Cost by 10 and Variable Cost by 3. Record the Power as [Terrain] Hazard.

Variable Volume Modifier: The Hazard's Volume can be varied from a minimum of 0 SPs to a maximum of the SPs of Hazard. The character can change the Volume of Hazard he has created when he expends an Automatic Action to maintain it. Increase the Variable Cost by 2 and record the Power as Variable Volume Hazard.

Variable Intensity Modifier: The sum of the Hazard's Hazardousness and its Volume equal the character's SPs of Power. When the Hazard is created, its SPs of Volume can be varied from a minimum of 0 SPs to a maximum of the SPs of Hazard. The Hazard's SPs of Hazardousness throughout the Volume are equal to the SPs of Hazard minus the SPs of Volume. Do not modify the Base or Variable Cost. Record the Power as Variable Intensity Hazard. The Power cannot have the Limited Volume or Variable Volume modifiers.

ILLUMINATION

Base Cost: 25 **Variable Cost:** 2 **Base Score:** 0
Range: Standard **Duration:** Concentration

The character can create bright ambient light at any point within Range and LOS as an Automatic Action. The Illumination removes SPs of Obscurity from low light equal to the SPs of Illumination within a Radius equal to the SPs of Illumination divided by 2. The character must concentrate to maintain the light, expending an Automatic Action each Panel of its duration.

Natural: The character can create the complete spectrum of wavelengths of the Sun. Adverse Reactions, Power Flaws, and Vulnerable States caused by sunlight can be triggered with 6 SPs or more of this Power. Increase the Base Cost by 5 and record the Power as Natural Illumination.

Spotlight Modifier: The Illumination only lights up a single Area of 0 SPs (about 5 feet by 5 feet) within Range and LOS. Reduce the Base Cost by 10 and the Variable Cost by 1. Record the Power as Spotlight Illumination.

Sustained Modifier: The Illumination has a duration of Sustained. The character can activate and deactivate the Illumination with an Automatic Action. The Illumination is immediately deactivated if the character becomes Overwhelmed or Unconscious. The character can have only one point illuminated at any time. Increase the Base Cost by 10 and the Variable Cost by 1. Record the Power as Sustained Illumination.

LIFE DRAIN

Base Cost: 100 **Variable Cost:** 12 **Base Score:** 0
Range: Standard **Duration:** Instant

As a Challenge Action, the character can attempt to drain the life energy from a target in Range on whom he has Line of Sight. Make an Attack Check using the character's SPs of Life Drain as the AV and the SPs of the target's MIG as the DV. Life Drain cannot be used in a Multi-Attack combat maneuver.

If the Attack succeeds, the target suffers Damage to its Health based on the color result. Use the SPs of the Life Drain as the EV. The character recovers Current Health equal to the Damage dealt to the target. (Undead characters using Life Drain recover Current Durability.) Damage dealt by Life Drain has no Type and ignores Protection (excluding Protection purchased with Hero Points during Desperate Damage Reduction).

Charismatic Modifier: The character's Life Drain relies in part on his personal magnetism and force of personality. His SPs of Life Drain cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Life Drain. This modifier cannot be combined with the Insightful modifier.

Insightful Modifier: The character's Life Drain relies in part on his intellect and rationality. His SPs of Life Drain cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Life Drain. This modifier cannot be combined with the Charismatic modifier.

Targeted Modifier: The Challenge Action to Life Drain a target is actually a Ranged Attack. The character must make an AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Life Drain (as above). Reduce the Base Cost by 5 and the Variable Cost by 4 and record the Power as Targeted Life Drain.

Touch Range Modifier: The Challenge Action to Life Drain a target is actually a Melee Attack. Reduce the Power's Range to 0 SPs. The character must make a VAL vs. VAL Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Life Drain (as above). Reduce the Base Cost by 15 and the Variable Cost by 5 and record the power as Touch-Range Life Drain.

Toxic Modifier: The Life Drain relies on biochemical processes. It deals Toxic Damage and can be stopped by Toxic Protection. Reduce the Base Cost by 50 and the Variable Cost by 2. Record the Power as Toxic Life Drain.

NOISE

Base Cost: Special   **Variable Cost:** Special   **Base Score:** Special
Range: Standard   **Duration:** Concentration

The character can create noise at any point within Range and LOS as an Automatic Action. The noise has a Sound Loudness equal to the character's SPs of Noise. The character must concentrate to maintain the Noise, expending an Automatic Action each Panel of its duration. If the Noise exceeds 12 SPs, it causes a Bang (p. 137) at its SPs⁻ 12.

The Base Cost of Noise is 15 for creatures and 0 for objects. The Variable Cost of Noise is 3 CP per SP up until 12 SP, and 6 CP per SP thereafter. The Base Score of Noise for creatures is 5 SPs. The Base Score of Noise for objects is 0. (If placed in a Pool or Set with Bang, treat Noise's Base Cost and Base Score as 0 and its Variable Cost as a flat 3 CP.)

By default this Power creates a specific non-linguistic sound, chosen when the Power is selected. Examples include an alarm's "wah-wah-wah" tone, the British "nee-naw nee-naw" police siren, the American "wuu-hreeeeeee-wuu" police siren, the throaty growl of an animal, the yodel of a mountaineer, and that horrid chittering noise that all monsters make in horror movies.

Intelligible Modifier: The Noise can convey intelligible speech, music, or other sounds useful for communication. Increase the Variable Cost by 1 and record the Power as Intelligible Noise. An object with Intelligible Noise is an amplifier/speaker and can transmit sounds received from One-Way Radio Communication or by a character.

Mimic Modifier: The Noise can be any sound whatsoever, as if it were a Sound-only Illusion. Increase the Base Cost by 35 and the Variable Cost by 2 and record the Power as Mimic Noise. An object with Mimic Noise is an auto-tuner, sound emulator, and so on.

Self-Range Modifier: The Noise always emits from the character. Reduce the Variable Cost by 2 and record the power as Self-Range Noise.

Sustained Modifier: The Noise has a duration of Sustained instead of Concentration. Activating and deactivating the Noise is an Automatic Action. Once activated, the Noise remains active until deactivated or until the character becomes Unconscious or Overwhelmed. A Sustained Noise must be a static looping sound. Increase the Variable Cost by 1 and record the power as Sustained Noise.

> **Designer's Note:** By default, every character actually has Self-Range Intelligible Noise at 5 SPs unless he is Mute or Unspeaking (in which case he has just Self-Range Noise). You don't need to write it down on your character sheet and it doesn't count against your CP. It just lets the character whisper, talk, and shout!

PARALYSIS

Base Cost: 75   **Variable Cost:** 12   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can attempt to paralyze a target in Range on which he has Line of Sight. Make a Paralysis vs. RES Mental Attack. If the Attack succeeds, the target temporarily gains the Mute and Paralyzed conditions. The duration of the conditions is determined by the color result. On a Green result, the target is Mute and Paralyzed for 0 SPs of Time (1 Page of combat). On a Yellow result, the target is Mute and Paralyzed for 1 SP of Time (2 Pages of combat). On an Orange result, the target is Mute and Paralyzed for 2 SPs of Time (4 Pages of Combat). On a Red result, the target is Mute and Paralyzed for 3 SPs of Time (8 Pages of Combat).

While Paralyzed, a character does not have a Jumping Speed or Running Speed. He cannot take any Actions that use VAL, MIG, AGI, or any Powers that substitute for those Attributes. He is considered to have an AGI, VAL, MIG, and Speed of 0 for purposes of DV to Melee, Ranged, Wrestling, and Ramming Attacks and cannot Roll with those Attacks. (However, if he has a Control or Mental power that indirectly affords him a Speed and does not rely on AGI, he can use that power to travel with a Movement Action. He can use the Speed where applicable for DV. He still cannot Roll with Melee, Ranged, Wrestling, and Ramming Attacks, however.) A Paralyzed character can protect himself with an Emergency Power Stunt provided he has the Hero Points and Power with which to do so.

While Mute, a character cannot speak and cannot take any Actions that involve speaking (such as befriending or intimidating NPCs). He cannot use any powers with the Charismatic modifier unless he has another means of communicating.

At the start of his Panel, the affected character can attempt to break free of the Mute and Paralyzed conditions. To break free, the affected character must succeed on a RES vs. Paralysis Attack Check with a color result that is equal to or better than the color result the Paralysis Attack Check scored against him. Alternatively, the affected character can end the conditions at the start of his Panel by spending a number of Hero Points equal to the number of Pages he will remain Mute and Paralyzed if he does not break free. If the character ends the conditions, he can act normally during his Panel.

Charismatic Modifier: The character's Paralysis relies in part on his personal magnetism and force of personality. His SPs of Paralysis cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Paralysis.

Insightful Modifier: The character's Paralysis relies in part on his intellect and rationality. His SPs of Paralysis cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Paralysis.

Extended Duration: On a Red result, the Power's effect lasts for SPs of Time equal to the SPs of Power. An affected character can still end the condition by breaking free with an Attack Check or Hero Point expenditure. However, the number of Hero Points required to break free is equal to the greater of 8 or the SPs of Power. Increase the Base Cost by 25.

Eye Contact Modifier: The target of the Paralysis must have Line of Sight on the character using the Power with a Visual Acuity of at least 3 SPs. Reduce the Variable Cost by 2 and record the power as Eye-Contact Paralysis.

Face-Only Modifier: The target of the Paralysis only gains the Mute condition. Reduce the Base Cost by 50 and the Variable Cost by 3 and record the power as Face-Only Paralysis.

Incapacitating Modifier: The target of the Paralysis gains the Unconscious condition instead of the Mute and Paralysis condition. He cannot break free but can "unconsciously" spend Hero Points to wake up, doing so at the start of any Panel. Increase the Base Cost by 25 and the Variable Cost by 3.

Neck-Down Modifier: The target of the Paralysis does not gain the Mute condition. Reduce the Variable Cost by 1 and record the power as Neck-Down Paralysis.

No Multi-Attack Modifier: The Power cannot be used to Multi-Attack. Reduce the Base Cost by 5 and the Variable Cost by 1. Record it as No Multi-Attack Paralysis.

Physical Modifier: The Paralysis is a physical effect (such as a neurotoxin) rather than a mental effect. The DV of the Paralysis Attack Check, and the AV to break free, uses the target's MIG or Super-Strength instead of its RES. Record the power as Physical Paralysis. There is no change to Base or Variable Cost.

Targeted Modifier: The Challenge Action to Paralyze a target is actually a Ranged Attack (such as a "paralysis ray"). The character must make an AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Paralysis (as above). Reduce the Base Cost by 5 and the Variable Cost by 4 and record the Power as Targeted Paralysis. Targeted Paralysis is often Linked with Blast.

Touch Range Modifier: The Challenge Action to Paralyze a target is actually a Melee Attack (such as a "chilling touch"). Reduce the Power's Range to 0 SPs. The character must make a VAL vs. VAL Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Paralysis (as above). Reduce the Base Cost by 15 and the Variable Cost by 5 and record the power as Touch-Range Paralysis. Touch-Range Paralysis is often Linked with Strike and similar Powers.

POWER DAMPENING

Base Cost: 40 **Variable Cost:** 40 **Base Score:** 0
Range: Special **Duration:** Sustained

The character can weaken or nullify the superhuman abilities of eligible targets. Activating and deactivating Power Dampening is an Automatic Action. Once activated, Power Dampening remains active until deactivated or until the character becomes Unconscious or Overwhelmed. While Power Dampening is activated, any eligible targets (including the character himself and his allies) that begin their Panel within 0 SPs of the character or move within 0 SPs of the character on their Panel, are affected.

Eligible targets include ascendants with Primary Attributes above 5 SPs, Skills above 9 SPs, and/or Powers; animals with Attributes above the baseline for their species; and Devices and Inventions.

Eligible targets exclude ordinary humans (with all Primary Attributes of 5 SPs or less, all Skills of 9 SPs or less, and no Powers), ordinary animals (with the baseline attributes of their species), and ordinary objects (with all attributes subject to the Real-World Limits on Ordinary Objects).

The effects of Power Dampening are as follows:

★ Primary Attributes are always reduced by the SPs of Power Dampening, but not to less than the ordinary maximum of 5 SPs.

★ Enhancement Powers (which increase the SPs of a Primary Attribute, like Super-Strength) might be reduced. First apply the SPs of Power Dampening to the Primary Attribute, then reduce the SPs of the Enhancement Power by an equal amount. If there are SPs of Power Dampening still unapplied, reduce the SPs of the Enhancement Power, but not to less than the Primary Attribute.

★ Other Powers are reduced by the SPs of Power Dampening. If the target is an ascended human, the Powers cannot be reduced below the limits of Real-World Superpowers (p. 489). If the target is an animal, the Powers cannot be reduced below the baseline for its species.

★ Skills might be reduced. Subtract the SPs of the dampened Primary Attribute from the SPs of the Skill. If the value is 4 or more, reduce the value by the SPs of Power Dampening, to a minimum of 4 SPs. Then re-add that value to the SPs of the dampened Primary Attribute.

★ Secondary and Variable Attributes are not directly affected but must be re-calculated based on the character's new Primary Attributes.

★ Devices and Inventions carried by the character are affected as above, except that their Attributes, Skills, and Powers cannot be reduced to less than the Real-World Limits on Ordinary Objects (see p. 226). Power Dampening does not directly affect the Invention Power itself but it can affect the SPs of Inventions.

★ Power Dampening does not stack with Power Dampening, nor does it cancel it out. Two Power Dampeners who encounter each other will dampen each other's Attributes, Powers, and Skills other than Power Dampening. If a character is simultaneously subject to two or more different sources of Power Dampening, only the more powerful Power Dampening is applied.

An affected character's Maximum Health is re-calculated based on his MIG or Super-Stamina. Any Damage he has taken is then applied to his new Maximum Health, which can cause him to become Unconscious or even Slain. The effects of Power Dampening immediately cease when the affected characters leave the area of effect.

An affected character inside the area of effect gains a defense benefit against Attacks coming from outside the area of effect of Power Dampening. Adjust the EV of the Attack as if the attacker were within the Power Dampening field. If the Attack is a Power like Mind Control that has an AV but not an EV, adjust the AV instead. (Typically the AV or EV will be reduced by the SPs of Power Dampening, to a minimum of 5.)

Aurora has been captured and placed in a jail cell with 6 SPs of Power Dampening. It's cold, damp, and has bad lighting, so she wants to escape. How is she affected? Aurora has MIG 3, AGI 7, VAL 5, RES 7, INS 4, CHA 12, Agile Light Control 14, Forcefield 14, Super-Fortitude 10, Super-Stamina 10, Lightning Reflexes 5, Ultra-Sensitive Vision 6, Aerial Combat 14, Avocation (social media) 14, Power Aptitude 14, Smack Talk 14, and Stoicism 10.

First, her Primary Attributes are reduced by 6 SP, down to a minimum of 5. Her new Primary Attributes are therefore MIG 3, AGI 5, VAL 5, RES 5, INS 4, and CHA 6. Next, her Super-Stamina is reduced by 0 SP (because MIG was not reduced) and then by 6 SPs (the remaining SPs of Power Dampening) down to 4 SP. Her Super-Fortitude is reduced by 2 SP (because RES was reduced by 2), and then reduced by 4 more down to 4 SP. Because 4 SP is less than her dampened RES of 5, she has Super-Fortitude of 5 SP. Her other powers are just reduced by 6 points each, leaving her with Agile Light Control 8, Forcefield 8, Lightning Reflexes 0, and Ultra-Sensitive Vision 0.

Next, her Skills are affected. Her Aerial Combat and Power Aptitude were each (14 − 7) = 7 SPs more than her AGI. That's more than 4 SPs, so Power Dampening is applied to reduce those bonuses down to the minimum value 4 SP increase. She ends up with 9 SPs of Aerial Combat and Power Aptitude. Her Avocation is (14 − 4) = 10 SPs more than her INS. Power Dampening reduces that bonus by 6, leaving her with a 4 SP increase over her INS. She has 9 SPs of Avocation. Her Smack Talk is (14 − 12) = 2 SPs more than her CHA. That is less than 4, so it's just added to her dampened CHA of 5 SPs, leaving her with 7 SPs of Smack Talk. Her Stoicism is (10 − 7) = 3 SPs more than her RES, so again that's just added to her dampened RES of 5 SPs, leaving her with 8 SPs of Stoicism.

Extended Radius Modifier: The character can dampen power in characters at a Distance of 1 or more SPs. Increase the Base Cost by 40 and the Variable Cost by 10 CP per additional SP of Extended Radius. Record the Power as Extended Radius (+#) Power Dampening.

Touch-Range Modifier: The character can only dampen power when he is in contact with another character or characters. The character must make a Wrestling Attack Check as a Challenge Action to establish contact with the desired target(s). If a target is Engaged by the Attack, the character and the target immediately become affected by the SPs of Power Dampening. The character and target remain affected until the character relinquishes his grip or the target Escapes. Reduce the Base Cost by 10 and the Variable Cost by 10 and record the power as Touch-Range Power Dampening.

> **Designer's Note:** The rules for Power Dampening are written so that neither characters within ordinary human limits (with Primary Attributes of 5 SPs or less and Skills of 9 SPs or less), nor ordinary objects that conform to the Real-World Limits, are affected. If you are creating a character with Power Dampening, we highly recommend you build the character to fall within these limits as much as possible. You'll avoid being affected by your own Power, and your 9 SPs of Martial Arts will be tremendously effective when the opponent's VAL is reduced to 5.

POWER DRAIN

Base Cost: 75   **Variable Cost:** 10   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can attempt to drain a Power possessed by a target in Range on whom he has Line of Sight. If the character isn't sure what Powers a target has, he can prioritize by most or least powerful Power (highest or lowest SP score), by most or least expensive Power (highest or lowest CP cost), and/or by category (Offensive, Transformation, etc.) if desired. Powers without SP scores cannot be Drained.

> The De-Energizer has 10 SPs of Power Drain. He is confronted by a masked villain in a dark alley. He decides to attempt to Power Drain the villain, targeting his most powerful Offensive Power, followed by most powerful other Power in general. As it happens, the masked villain has 12 SPs of Mind Control (a Mental Power), 10 SPs of Paralysis (an Offensive Power), and 9 SPs of Sound Cloud (an Offensive Power). De-Energizer's Power Drain therefore targets the masked villain's Paralysis.

Make an Attack Check using the character's SPs of Power Drain as the AV and the SPs of the Power being drained as the DV. If the target has two or more Powers that are Linked, all Linked Powers can be targeted simultaneously. Use the lowest SP score of the Linked Powers as the DV. All Linked Powers are drained simultaneously and equally. Power Drain cannot be used in a Multi-Attack combat maneuver.

If the Attack succeeds, the target loses 1 or more SPs from its Power. On a Green result, the target loses 1 SP. On a Yellow result, the target loses 2 SP. On an Orange result, the target loses half the Power's SP value or 3 SPS, whichever is greater. On a Red result, the target loses all the Power's SP. If the Power is reduced to 0 SP, the target can no longer use the Power. The target of Power Drain recovers 1 SP in the drained Power each time he recovers Health.

Charismatic Modifier: The character's Power Drain relies in part on his personal magnetism and force of personality. His SPs of Power Drain cannot exceed his SPs of CHA. Decrease the Variable Cost by 2 and record the power as Charismatic Power Drain. This modifier cannot be combined with the Insightful modifier.

Insightful Modifier: The character's Power Drain relies in part on his intellect and rationality. His SPs of Power Drain cannot exceed his SPs of INS. Decrease the Variable Cost by 2 and record the power as Insightful Power Drain. This modifier cannot be combined with the Charismatic modifier.

Targeted Modifier: The Challenge Action to Power Drain a target is actually a Ranged Attack. The character must make an AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Power Drain (as above). Reduce the Base Cost by 5 and the Variable Cost by 4 and record the Power as Targeted Power Drain.

Touch Range Modifier: The Challenge Action to Power Drain a target is actually a Melee Attack (such as a "chilling touch"). Reduce the Power's Range to Touch. The character must make a VAL vs. VAL Attack Check to hit the desired character. If the Attack Check succeeds with a Green result or better, the target is then attacked by the SPs of Power Drain (as above). Reduce the Base Cost by 15 and the Variable Cost by 5 and record the power as Touch-Range Power Drain. Touch-Range Power Drain is often Linked with Strike and similar Powers.

QUAKE

Base Cost: 25   **Variable Cost:** 10   **Base Score:** 0
Range: Standard   **Duration:** Instant

As a Challenge Action, the character can trigger a Quake centered on any point within Range. The Quake affects characters and objects on the ground within a radius equal to two-thirds the SPs of Quake. The Quake lasts for 0 SPs of Time (one Panel in combat).

For each static object affixed to the ground (such as a building, tree, or streetlamp) in the radius, make a Quake vs. Toughness Attack Check against it to determine the color result of the effect. Use the character's SPs of Quake as the EV. For purposes of both the Acting Value and Effect Value, reduce the SPs of Quake by 3 SPs per every 2 SPs of distance between the center of the Quake and the center of the object. Static objects affixed to the ground suffer double damage at each color result.

If a static object that was affixed to the ground is wrecked (reduced to 0 Durability or less) by a Quake, it collapses in a random clock direction (where '6" is directly back at the character), with fragments scattering all around. The collapsing object attacks any characters inside the object; any characters within a Distance equal to or less than the collapsing object's SPs of Height in the direction it falls; and any characters within a Distance equal to or less than its SPs of Height/2 in any direction. Make a 6 vs. AGI/Speed Ranged Attack Check against each affected character. On a Green or better result, a character suffers Bludgeoning Health Damage using 10 as the EV (representing a chunk of rock with Weight 3 and Speed 7).

Even if they are not damaged by collapsing objects, characters that start within the Quake's radius or enter its radius during their Panel must make AGI/Weight vs. Quake Attack Checks. Characters with Powers or Skills they could substitute for AGI as their Ranged Attack DVs can substitute those Powers or Skills for their AGI for this Check. Reduce the SPs of Quake by 2 SPs per every 1 SP of distance between the center of the Quake and the character's position. If the Check fails, the character is Dazed (p. 370) and knocked Prone.

Stronghold has 13 SPs of Self-Range Quake (Damage 192). He is standing 20' (2 SPs of Distance) from the mansion of a drug lord who threatened his grandmother. Nobody messes with Nana! Stronghold triggers his Self-Range Quake by stomping on the ground. He's not immune to his own Quake, so he must make an AGI/Weight vs. Quake Attack Check or be Dazed. Fortunately, Stronghold has a 6 SPs of Weight and 9 SPs of Immovability, for an AV of 15 SPs, giving him an RV of 15 – 13 = +2. He rolls a 47 and ignores the trembling earth.

The mansion is less fortunate. It has a Height of 3 SPs, a Weight of 14 SPs, a Toughness of 8 SPs, and a Maximum Durability of 160. Stronghold makes a Quake vs. Toughness Attack Check against the house. Since he is 2 SPs away from the mansion, his AV is reduced from 13 to 10. Therefore he has an RV of +2. He rolls a 38 and scores a Yellow result, meaning the Quake deals 256 points of Damage. That instantly reduces the house to a Current Durability of -96, so it collapses.

The GM tosses 1d12 to determine the direction the mansion collapses and rolls a 6. The structure is collapsing right at Stronghold. Since Stronghold is just 2 SPs away from the house and its Height is 3 SPs, he will be affected. If it had collapsed in any other direction he'd have been out of the area of effect! The drug lord (Health of 30) is inside the house so he will be affected as well. The drug lord is attacked at 6 vs. 3, for an RV of +3. Stronghold rolls a 36 on the CHART, scoring an Orange result; with an EV of 10, that deals (64 x 4) = 256 points of Damage to the drug lord. Even Rolling with the Attack to reduce it to a Green result (64 points), the Damage is still enough to reduce him into a pulp. The GM now rolls on the CHART against Stronghold. He has 5 SPs of AGI, so the Attack Check is 7 vs. 5, for an RV of +2. Unfortunately the GM rolls a 02 on the CHART, scoring a Red result. He suffers (64 x 8) = 512 points of Damage as the house falls on top of him. He Rolls with the Attack to reduce it to a Green result. He takes 64 points of Damage, which his 10 SPs of Invulnerability block.

Stronghold has also incidentally devastated most of the neighborhood, as his Quake damages buildings out to a radius of two-thirds its 13 SPs, or about 8 SPs (quarter mile). The adjacent estates (80' or 4 SPs away) are attacked with 7 SPs of Quake, those within 320' or 6 SPs are attacked with 4 SPs of Quake, etc.

Limited Radius Modifier: The Quake has a smaller radius than its SP score would otherwise indicate. Reduce the Variable Cost of the Power by 3 if the radius is limited to 0 SPs, by 2.5 if the radius is limited to 1 SP, by 2 if limited to 2 SPs, by 1.5 if limited to 3 SPs, by 1 if limited to 4 SPs, and by 0.5 if limited to 5 SPs. The Limited Radius cannot be purchased such that the Limited Radius is less than two-thirds the Power's SP. Record the Power as Limited Radius (#), where # is the maximum radius at which characters are affected by the Quake.

Self-Immunity Modifier: The character is rooted to the earth and cannot be knocked Prone or Dazed by the shaking. He can still be harmed by collapsing buildings, however. Increase the Base Cost by 5 and the Variable Cost by 2 and record the Power as Self-Immune Quake.

Self-Range Modifier: The epicenter of the Quake is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 4 and record the Power as Self-Range Quake. The character with this Power is still knocked Prone and Dazed by his Quake unless he also takes Self-Immunity Modifier. Self-Range Quake cannot be Targeted or Targeted Indirect.

Targeted Modifier: The Challenge Action to detonate the Quake is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Quake detonates at the desired target. The target is Damaged based on the Color Result achieved. Every other character in the blast radius is attacked with SPs of Quake based on that character's distance from the center (as above). If the Attack Check fails, the Quake scatters before resolving its effects, Reduce the Base Cost by 5 and the Variable Cost by 4. Record the power as Targeted Quake.

Targeted Indirect Modifier: The Quake is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 2. Record the power as Targeted Indirect Quake.

Variable Radius Modifier: The Quakes radius can be varied from a minimum of 0 SPs to a maximum of 2/3 the SPs of Quake. AV Increase the Variable Cost by 4 and record the Power as Variable Radius Quake.

Designer's Note: Explosions propagate in a sphere and therefore follow the inverse-square law, so the radius of an Explosion is one-half its SPs. Earthquakes propagate partly in a spherical wave (from the focus of the earthquake deep underground) and partly in a circular wave (from the epicenter on the surface). We model this with an attenuation of 3 SPs per 2 SPs distance.

When dealing with very large Quakes affecting nameless victims, vehicles, buildings, and other unspecified targets, the guidelines for Earthquakes can be used to assess overall casualties and destruction without having to roll a lot of dice. See p. 342.

SNARE

Base Cost: 25   **Variable Cost:** 6   **Base Score:** 0
Range: Standard   **Duration:** Instant

This Power can represent flinging a web, shooting a net-gun, or any other technique of entangling and restraining a target at a distance. Make a Ranged Wrestling Attack against a target within Range and LOS using the character's AGI as the AV and his SPs of Snare in lieu of his MIG for all other purposes. Use the target's choice of AGI, MIG, or Weight + Speed as the DV. On a White result, the Attack misses and the Snare has no effect. On a Green or better result, apply the appropriate Wrestling conditions to the attacker and target. In addition, the following other effects apply:

★ As a Movement Action, the character can drag the target directly towards him. The distance the target can be moved is equal to the character's Snare minus the target's MIG/Weight. If the character has multiple targets affected by Snare, he can only drag one target with each Movement Action or drag them all, applying the Multi-Attack Penalty to his SPs of Snare.

★ As an Automatic Action, the character can relinquish his grip on the Snare, ending his own Engaging, Grappling, Holding, or Pinning condition, without ending the target's Engaged, Grappled, Held, or Pinned condition. A character can be forced to relinquish his grip on the Snare with a Disarm Attack achieving at least a Yellow result (p. 395). Any character can pick up a relinquished Snare as an Automatic Action.

★ As an Automatic Action, the character can hand a Snare to a willing ally, who therefore functions as the character for purposes of these effects.

★ As an Automatic Action, the character can affix a Snare to a static object to secure it. The static object thereafter functions as the character for purposes of these effects. This is typically most useful when the static object has a very high Weight, in order to reduce the target's Speed to 0.

★ If the target has sufficient Encumbered Speed to move despite the effects of the Snare, the character can either relinquish his grip on the Snare when the target moves, or retain his grip and be moved by the target, following along at a distance from the target equal to the Range of the Snare.

The target remains in his current Condition until he successfully Escapes or until the Snare is Wrecked or Destroyed. Use the SPs of Snare as the DV for any Escape attempts. The target and/or other characters can attempt to destroy the Snare using Sunder Attacks (see p. 398). Treat the Snare as an object with a VAL and AGI of 0, a TOU equal to the SPS of Snare – 5 (minimum 1 SP) and a Physical Invulnerability equal to its SPs of TOU.

Entrapping Modifier: The Snare is a trap that affects everything within an Area of 2 SPs (100 square feet). Choose one or more Triggers for the Snare (p. 136). All characters who are within the snare's Area when the Trigger occurs are attacked using the SPs of Snare as the AV and in lieu of MIG. Increase the Variable Cost by 4 and record the Power as Entrapping Snare. For a larger Area, increase the Base Cost by 5 per SP and record the Area in parentheses after the modifier. An Entrapping Snare must also have the Triggered Modifier; it cannot have the Touch-Range or No Multi-Attack Modifier.

Unencumbering Modifier: The Snare does not encumber the target's Speed unless the Snare is affixed to a static object. Reduce the Base Cost by 10 and the Variable Cost by 1.

Noncombat Modifier: The Snare can only be used on a target who consents to being restrained, or who is already Pinned, Paralyzed, Unconscious, or otherwise unable to resist. The character can choose to make the target be Grappled, Held, or Pinned by the Snare. Record the Power as Noncombat Snare and reduce the Base Cost by 5 and the Variable Cost by 4.

No Multi-Attack Modifier: The Snare cannot be used to Multi-Attack and only one target at a time can be ensnared. Reduce the Base Cost by 5 and the Variable Cost by 1. Record the Power as No Multi-Attack Snare. Noncombat Snare cannot be assigned No Multi-Attack.

Touch-Range: Reduce the Range of the Power to 0 SPs. To use the Power, make a standard Wrestling Attack against a target within Range and LOS using the character's VAL as the AV and his SPs of Snare in lieu of his MIG for all other purposes. Reduce the Base Cost by 10 and the Variable Cost by 1. Increase the Base Score to the character's MIG. Record the Power as Touch-Range Snare.

SOUND CLOUD

Base Cost: 35   **Variable Cost:** 6   **Base Score:** 0
Range: Standard   **Duration:** Concentration

As a Challenge Action, the character can create a zone of white noise centered on any point within Range and LOS. The Sound Cloud has a Volume in SPs equal to the SPs of Sound Cloud. It can take the form of a ceiling-high cloud (Length and Width equal to the Power SPs/2, Height of 0 SPs), a sphere (Radius equal to the Power SPs/3), or other simple shapes. Within its Volume, the Sound Cloud adds SPs of Ambient Loudness equal to the SPs of Sound Cloud.

As a subsequent Challenge Action, the character can move the Sound Cloud he has created to another point within Range and LOS. The Sound Cloud continues as long as the character expends an Automatic Action each Panel to maintain it. Once he stops maintaining it, the Sound Cloud ceases. The character can maintain multiple Sound Clouds subject to the limits of his available Actions.

If the Sound Cloud causes the Ambient Loudness to exceed 12 SPs, targets that begin their Panel within the Sound Cloud or enter it on their Panel may be deafened. The character makes an (Ambient Loudness – 12) vs. AGI/INS Attack Check against the target and applies the effects of a Bang (p. 137).

For purposes of Sound Clouds that can deal damage or cause deafness or nausea, add the target's Passive Hearing Range to the SPs of Sound Cloud. (Ordinary people have Passive Hearing Range of 0 SPs, but those with Ultra-Sensitive Hearing will have 1 or more SPs and those with Dim Hearing will have -1 or fewer SPs). Deafened characters cannot be affected by these effects at all.

Damaging Modifier: The Sound Cloud causes sonic vibrations that deal Concussive Health Damage. The Sound Cloud's EV is its current SPs of Power. While the Sound Cloud is maintained, any targets (including allies) that begin their Panel within the Sound Cloud or enter it on their Panel are automatically dealt Base Damage by the EV. Filtered Hearing provides Protection against this effect at its SP value. Increase the Base Cost by 15 and the Variable Cost by 5. Record the Power as Concussive Sound Cloud. Deaf characters are immune to Damage from Sound Clouds.

Dampening Modifier: Within its Volume, the Sound Cloud adds SPs of Sound Absorption equal to the SPs of power instead of SPs of Ambient Loudness. Characters within the Cloud are protected by Acoustic Cloaking at the SPs of Power. A Dampening Sound Cloud cannot have the Damaging, Disturbing, or Nauseating modifiers applied to it. Do not change the Base Cost or Variable Cost. Record the Power as Dampening Sound Cloud.

Disturbing Modifier: The sound created by the Sound Cloud is distracting, horrifying, or otherwise disturbing enough to deal Psychic Determination Damage. The Sound Cloud's EV is its current SPs of Power. While the Sound Cloud is maintained, any targets (including allies) that begin their Panel within the Sound Cloud or enter it on their Panel are automatically dealt Base Damage by the EV. Filtered Hearing provides Protection against this effect at its SP value. Increase the Base Cost by 15 and the Variable Cost by 5. Record the Power as Disturbing Sound Cloud.

Instant: Once the character creates the Sound Cloud, he cannot move it or maintain it. It lasts only until his next Panel. Change the Duration of the Power to Instant. Reduce the Base Cost by 10 and record the Power as Instant Sound Cloud.

Long Range Modifier: The Sound Cloud has a Range greater than Standard. Increase the Base Cost by 5 per SP of additional Range. Record the Power as Long Range (+#) Sound Cloud, where # is the SP increase in Range.

Limited Volume Modifier: The Sound Cloud affects a smaller Volume than its SP score would otherwise indicate. Reduce the Variable Cost of the Power by 3 if the Volume is limited to 0 SPs, by 2.5 if the Volume is limited to 1 SP, by 2 if limited to 2 SPs, by 1.5 if limited to 3 SPs, by 1 if limited to 4 SPs, and by 0.5 if limited to 5 SPs. The Limited Volume modifier cannot be purchased such that the Limited Volume is greater than the Power's SPs. Record the Power as Limited Volume (#), where # is the Volume of the Sound Cloud

Nauseating Modifier: The Sound Cloud induces vomiting and retching. Anytime a target (including allies) begins its Panel within the Sound Cloud or enters the Sound Cloud on its Panel, the character makes a Sound Cloud vs. MIG Attack Check against the target. If the target has SPs of Filtered Healing, it may add them to its DV. On a White result, there is no effect. On a Green result, the target is Dazed. On a Yellow result, the target is Staggered. On an Orange result, the target is Overwhelmed. On a Red result, the target is Overwhelmed and Knocked Prone. Objects are immune to Nauseating Sound Cloud. Increase the Base Cost by 15 and the Variable Cost by 5. Record the Power as Nauseating Sound Cloud.

Self-Immunity Modifier: The character is not affected by the Ambient Loudness of his Sound Cloud. Increase the Base Cost by 5 and the Variable Cost by 1 and record the Power as Self-Immune Sound Cloud. If the Sound Cloud is Damaging, increase the Base Cost by 10 and the Variable Cost by 2.

Self-Range Modifier: The epicenter of the Sound Cloud is always the character with the Power. Reduce the Base Cost by 10 and the Variable Cost by 2 and record the Power as Self-Range Sound Cloud. The character with this power has his own Earshot suffer from the Sound Cloud's Ambient Loudness unless he also takes Self-Immunity Modifier. This Modifier is usually applied when this power is added to objects intended to be dropped or hurled such as white noise generators. Self-Range Sound Cloud cannot be Targeted or Targeted Indirect.

Targeted Modifier: The Challenge Action to summon the Sound Cloud is actually a Targeted Area of Effect Ranged Attack (p. 380). The character must make a successful AGI vs. AGI/Minimum Ranged DV Attack Check to hit the desired character, object, or point. If the Attack Check succeeds with a Green result or better, the Sound Cloud is summoned at the desired target. If the Attack Check fails, the Sound Cloud scatters (see p. 380). Reduce the Base Cost by 5 and the Variable Cost by 4. Record the power as Targeted Sound Cloud

Targeted Indirect Modifier: The Sound Cloud is Targeted (as above) but it can use a ballistic trajectory such as that of a mortar shell or artillery round. It can be used to make Indirect Ranged Attacks. Increase the Base Cost by 5 but reduce the Variable Cost by 2 Record the power as Targeted Indirect Sound Cloud.

Variable Volume Modifier: The Sound Cloud's Volume can be varied from a minimum of 0 SPs to a maximum of the SPs of Sound Cloud. The character can change the Volume of Sound Cloud he has created when he expends an Automatic Action to maintain it. Increase the Variable Cost by 2 and record the Power as Variable Volume Sound Cloud.

Variable Intensity Modifier: The sum of the Sound Cloud's Ambient Loudness and its Volume equal the character's SPs of the Sound Cloud. When the Sound Cloud is created, its SPs of Volume can be varied from a minimum of 0 SPs to a maximum of the SPs of Power. The Sound Cloud's SPs of Ambient Loudness (and Damage, if Damaging) throughout the Volume are equal to the SPs of Sound Cloud minus the SPs of Volume. Do not modify the Base or Variable Cost. Record the Power as Variable Intensity Sound Cloud. The Power cannot have the Limited Volume or Variable Volume modifiers.

STRIKE

Base Cost: 0 or 5   **Variable Cost:** 4   **Base Score:** MIG
Range: Touch   **Duration:** Instant

The character can make a VAL vs. VAL Melee Attack that deals Damage of any one of the following Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic Damage. (Some Damage Types are rare and increase Base Cost.) The Strike might represent a martial arts technique, a natural weapon such as claws, or a carried item. The Attack uses the character's SPs of Strike as the EV to deal Health Damage to the target. The Damage Type should be written down before the Power name and SPs, and the Base Damage of the Strike should be written down in parentheses after the SP score. For instance, a character might possess Bludgeoning Strike 11 (Damage 96). Damage Type determines the nature of the Strike's Special Effects (see p. 374).

A character can purchase 0 SPs of Strike just to get a different Damage Type for his punches. In this case the Base Cost is 5 plus any additional cost for a rare Damage Type. In all other cases, the Base Cost is 0.

Boomerang Modifier: The character can make an AGI vs. AGI/ Minimum DV Hurling Ranged Attack with his SPs of Strike as the EV. The maximum Range is equal to the character's SPs of Power. Increase the Base Cost by 10 + the character's MIG. Increase the Variable Cost by 1. Record the Power as Boomerang Strike. This modifier can be used to model a striking weapon that can be thrown and returns to the character's hand.

Cumbersome Modifier: The Strike requires the use of both of the character's hands and arms. If he is Grappled or otherwise does not have use of both arms, he cannot use the Power. Reduce the Base Cost by 5 and record the Power as Cumbersome Strike. This modifier can be used to model a two-handed weapon.

Extra Damage Type Modifier: Some Strikes may deal two or more Damage Types. Any Damage Type except Psychic and Neural can be added to the Strike. Increase the Base Cost by 5 and the Variable Cost by 1 for each additional Type after the first. The Damage Type should be written down before the Power name and SPs. For instance a character with poisonous claws might record the Power as Toxic Lacerating Strike.

Long Reach Modifier: The character increases his Melee Attack Range with the Strike by 1 SP. Increase the Base Cost by 5. Record the Power as Long Reach Strike. This modifier is how weapons such as pikes and spears are built.

No Multi-Attack Modifier: If the Power cannot be used to Multi-Attack, reduce the Base Cost by 5 and the Variable Cost by 1.

Nonlethal Modifier: The Power cannot reduce the target's Current Health to below 0. Record the Power as Nonlethal Strike. Do not change the Base Cost or Variable Cost.

TRANSFORMATION POWERS

ADDITIONAL LIMB

Base Cost: 40 **Variable Cost:** 6 **Base Score:** MIG
Range: Self **Duration:** Permanent

The character has an extra limb or appendage in addition to those that are normally part of the human body form. The Additional Limb can be an arm, a tail, a trunk, tentacle, or any other appendage capable of prehensile activity. The Limb can deal one type of Damage (Bludgeoning, Lacerating, or Piercing) when used to make Melee Attacks.

On his Panel, the character gains an additional Challenge Action with which to use his Additional Limb. He can use the limb to lift, stow, push, pull, stop, or throw objects; to break doors or walls; to make a Melee Attack or Wrestling Attack; to make a Ranged Attack with an object; or to use an object such as a firearm or tool. If desired, the character can make one or more other Offensive Powers requiring a Challenge Action usable with the Additional Limb, but those Powers can thereafter only be used with the Additional Limb's Challenge Action. When throwing, lifting, pushing, pulling, or otherwise using the Additional Limb, the character uses his SPs of Additional Limb in lieu of his MIG. When attacking with his Additional Limb, he can use his SPs of Additional Limb as his EV for Melee Attacks, Hurling Ranged Attacks, and Wrestling Attacks. An Additional Limb suffers from the restrictions of the character's Body Form drawback (if any) unless it has the Utilitarian modifier.

A character can purchase this Power multiple times to have multiple Additional Limbs. Because it affords extra attacks, Additional Limb affects Power Limit (p. 68).

Extra Damage Type: Some Additional Limbs may deal two or more Damage Types. Increase the Base Cost by 5 and the Variable Cost by 1 for each additional Type after the first.

Extended Modifier: The Additional Limb is longer than an ordinary limb. The character's Attack Range with Melee and Wrestling Attacks is increased by 1 or more SP. Increase the Base Cost by 2 CP per SP and record the Power as Extended (+ SP) Additional Limb.

Replacement Modifier: The Additional Limb does not grant an additional Challenge Action. Instead the Additional Limb can be used in lieu of the character's other limb(s) when taking an Automatic Action or Challenge Action. Reduce the Base Cost by 40 CP and record the Power as Replacement Additional Limb.

Striking Modifier: The Additional Limb is no stronger than the rest of the character's body, but it carries some natural weapon such as a stinger, barbs, or claws. The character can use his SPs of Additional Limb as the EV for Melee Attacks but he cannot substitute his SPs of Additional Limb for his MIG for other purposes. Reduce the Variable Cost by 2 and record the Power as Additional Striking Limb.

Utilitarian Modifier: The Additional Limb is unaffected by any restrictions of the character's Body Form drawback. Record the Power as Utilitarian Additional Limb and increase the Base Cost by 10.

Weak Modifier: The Additional Limb is weaker than the rest of the character's body. The Base Score of Additional Limb is 0 SPs. Reduce the Variable Cost of the Power to 1 until the SPs of Power equal the character's SPs of MIG, then return it to 6 thereafter. If the Additional Limb is at least 3 SP lower than the character's MIG, it does not affect his Power Limit (p. 68).

> **Designer's Note:** To build a centaur, you'd start with Quadruped Body Form drawback (-20 CP), then add two Utilitarian Replacement Limbs (Base Cost 40 – 40 + 10 = 10 CP each) with SPs equal to the character's MIG (Variable Cost 6 x 0 = 0). The net CP cost would then be 10 + 10 – 20 = 0. The result would be a character that essentially costs and plays the same as an ordinary four-limb human.

CLOAKING

Base Cost: 20 **Variable Cost:** 2 **Base Score:** 0
Range: Self **Duration:** Sustained

When the Power is activated, the character is difficult to detect with a particular type of Blindsight. The character should record the type of Blindsight that his Cloaking counters: Acoustic (to block sonar), Electroreceptive (to block electroreception), Radio (to block radar), or Psychic (to block mystical awareness).

Activating or deactivating Cloaking requires an Automatic Action. Once activated, Cloaking remains active until deactivated. Cloaking automatically deactivates after SPs of time elapse equal to the SPs of Cloaking or if the character becomes Unconscious or Overwhelmed. While the Power is activated, the character gains SPs of Obscurity against the associated type of Blindsight equal to his SPs of Cloaking.

Permanent Modifier: The character's Cloaking is permanent and cannot ever be deactivated (voluntarily or involuntarily). Record the Power as Permanent Cloaking. The Base Cost and Variable Cost are unaffected.

Total Modifier: The character's Cloaking affects all four types of Blindsight. Record the Power as Total Cloaking. Increase the Base Cost to 80 and the Variable Cost to 8.

DUPLICATION

Base Cost: 80   **Variable Cost:** 80   **Base Score:** 1
Range: Self   **Duration:** Special

This Power enables a character to clone himself, create doppelgangers, or otherwise spawn one or more Duplicates of himself. The maximum number of Duplicates the character can have at

SPs of Power	Duplicates
1	1
2	2
3	4
4	8
5	16

SPs of Power	Duplicates
6	30
7	60
8	125
9	250
10	500

SPs of Power	Duplicates
11	1,000
12	2,000
13	4,000
14	8,000
15	16,000

once is determined by his SPs of Power. Each Duplicate possesses the same Attributes, Powers, Skills, Perks, and Drawbacks as the original character, except as noted below:

★ A Duplicate does not possess the Duplication power itself and cannot make copies of itself.
★ A Duplicate does not gain a duplicate copy of any Singular Inventions possessed by the original character. It does gain a duplicate copy of any Devices (e.g. Powers purchased with the Vulnerable State: Deprived of Device).
★ A Duplicate does not have its own Reputation or Income; it shares the same SP score in each of those Attributes or Perks as the original character.
★ A Duplicate does not have separate Headquarters, Minions, or Sidekicks; it shares those with the original character.
★ A Duplicate does gain its own Invention budget, if the original character had the Invention Power, and all of the Duplicates can use each other's Inventions freely. However, the original character and his Duplicates must all abide by the lower Power Limit for their Inventions.
★ A Duplicate does not have Hero Points of its own; all Duplicates share the original character's Hero Points.
★ A Duplicate does not gain Character Points for advancement; all Duplicates advance exactly like the original character.

When spawned, a Duplicate appears within 0 SPs of distance of the original character with Current Health and Current Determination equal to the character's own. Up to 8 Duplicates can be created simultaneously with an Automatic Action. Some or all of the Duplicates within 0 SPs of distance of the original character can be re-integrated into the original character with an Automatic Action. When the original character re-integrates one or more Duplicates, his Current Health is reduced to lowest Current Health from among the original character himself and his re-integrated copies.

Slain Duplicates cannot be re-integrated. The player and GM should decide what happens to their physical form, e.g. do they remain as corpses, melt into protoplasm, mysteriously vanish, etc. As long as the original character survives, however, slain Duplicates can be re-spawned 18 SPs of Time (10 days) after their death. If the original character is slain, then the Duplication Power passes to the closest Duplicate, and that Duplicate is thereafter considered the original character for all purposes, including re-spawning of slain Duplicates.

A character's Duplicates know what the character knew at the time they were split off, but not anything he has learned since. The character and his Duplicates do not share any sensor data, information, or two-way communication apart from ordinary speech unless granted by other Powers. The Duplicates act independently and are not under the character's direct control. However, a

character's Duplicates will always act in the best interests of the character in exactly the manner that the character himself would do in that situation. As such, for game purposes they are under the control of the player who runs the character.

Because Duplication puts additional characters under the player's control, it affects the character's Power Limit (see p. 67).

Slayable Modifier: When spawned, Slayable Duplicates appear with Maximum Health and Maximum Determination. However, anytime a Duplicate is slain, the character permanently reduces the maximum number of Duplicates he can have at once. If this results in his SPs of Power reducing, then the next time the character earns a CP Award he receives additional CP to compensate him for the lost SP. The Base Cost and Variable Cost are unchanged.

Unstable Modifier: The character's Duplicates are unstable fragments of himself. If the character becomes Unconscious or Overwhelmed, all of his Duplicates immediately re-integrate with him. (Ordinary sleep does not cause re-integration, however.) Otherwise, a Duplicate re-integrates with the character when he spends an Automatic Action to make it do so, when it is slain or after a Duration in SPs equal to the character's SPs of Duplication +9. When the character re-integrates Duplicates, the Duplicates are healed and he loses Current Determination equal to the amount of Current Health lost by the most-damaged Duplicate. He does not lose Current Health from re-integrating Duplicates. Record the Power as Unstable Duplication. The Base Cost and Variable Cost are unchanged.

GROWTH

Base Cost: 50   **Variable Cost:** 10   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character is able to increase his body size and mass. Activating and deactivating Growth is an Automatic Action. The character can use one, some, or all of his SPs of Growth each time the Power is activated; he need not grow to maximize size. Changing the number of SPs used requires an Automatic Action. Once activated, Growth remains active until deactivated. Growth automatically deactivates after SPs of Time elapse equal to the SPs of Growth or if the character becomes Unconscious or Overwhelmed. When the Power is activated, the following effects occur:

★ For each SP of Growth, the character's Weight is increased by 1 SP.
★ For each SP of Growth, the character's Volume is increased by 1 SP.
★ For each 3 SPs of Growth, the character's Height and his Attack Range with Melee and Wrestling Attacks is increased by 1 SP.
★ For each 3 SPs of Growth, the character gains 1 SP of Invulnerability. If the character already has 1 SPs or more of Invulnerability or Resistance, the SPs stack. (The SPs do not stack with Forcefield or Shield, or with worn objects.)
★ For each 3 SPs of Growth, the character gains 2 SPs of MIG due to the increased cross-sectional area of his muscles.
★ For each 3 SPs of Growth, the character loses 3 SPs of Speed for all Movement except Running, Jumping, and Swimming.

Designer's Note: For Running Speed and Jumping Speed, the character's stride length increases by 1 SP per 3 SPs and the cross-sectional area of his muscles increases by 2 SPs per 3 SPs, for a total of 3 SP per 3 SPs. Meanwhile, his Weight increases by an equal amount, leaving Running Speed unchanged. However, for Flight Speed or other Powers, the propulsive force does not increase, while Weight still increases by 3 SPs per 3 SPs, resulting in a net loss of 3 SPs per 3 SPs of Growth.

Characters with Growth Power are familiar with its effects and do not suffer any penalty from their change in size. Targets affected by Growth Touch or Growth Ray become clumsy and reduce their Melee Attack AV, Hurling Ranged Attack AV, Melee DV, and Ranged DV by 2 SP per 3 SPs of Growth because they are not used to their new size.

A character with a very increased Weight may be at risk of falling through floors (p. 296) or causing earthquakes when moving (p. 342).

Clumsy Modifier: When the character grows, he becomes clumsy (as above). Reduce the Variable Cost by 8. Record the Power as Clumsy Growth. This modifier cannot be applied Growth Touch or Growth Ray.

Touch Modifier: Growth can be used on another character at Touch range. Targeting an unwilling subject requires a VAL vs. VAL Melee Attack. The effect expires after SPs of Time equal to the SPs of Growth. Only one character can be enlarged at a time. increase the Variable Cost by 4. Record the Power as Growth Touch.

Ray Modifier: Growth can be used on another character at Standard Range. Targeting an unwilling subject of Growth Ray requires an AGI vs. AGI Ranged Attack. The effect expires after SPs of Time equal to the SPs of Growth. Only one character can be enlarged at a time. Increase the Variable Cost by 5. Record the Power as Growth Ray.

Multiple Targets Modifier: If a character's Growth Touch or Growth Ray can be sustained on more than one character at once, increase the Variable Cost by 1 for each additional target. Record the Power as Multiple Targets (#).

Permanent Modifier: The character's Growth is permanent and cannot ever be deactivated (voluntarily or involuntarily). Record the Power as Permanent Growth. The Base Cost is increased to 60. However, if the character separately purchases Invulnerability and/ or Resistance, the Base Cost of Permanent Growth is reduced by the Base Cost of those Powers. This modifier cannot be applied to Growth Touch or Growth Ray.

HYPER-DENSITY

Base Cost: 50 **Variable Cost:** 10 **Base Score:** 0
Range: Self **Duration:** Sustained

The character is able to increase his body density (and consequently his mass). Activating and deactivating Density is an Automatic Action. The character can use one, some, or all of his SPs of Hyper-Density each time the Power is activated. Changing the number of SPs used requires an Automatic Action. Once activated, Hyper-Density remains active until deactivated. Hyper-Density automatically deactivates after SPs of Time elapse equal to the SPs of Density or if the character becomes Unconscious or Overwhelmed. When the Power is activated, the following effects occur:

★ For each SP of Hyper-Density, the character's Density is increased by 1 SP. (A human being ordinarily has a Density of 8 SP.)
★ For each SP of Hyper-Density, the character's Weight is increased by 1 SP.
★ For each SP of Hyper-Density, the character's Speed is reduced by 1 SP for all modes except Teleportation.
★ For each SP of Hyper-Density, the character gains 1 SP of Invulnerability. If the character already has 1 SPs of more of Invulnerability or Resistance, the SPs stack. (The SPs do not stack with Forcefield or Shield, or SPs from worn objects.)
★ For each SP of Hyper-Density, the character gains 1 SP of Super-Strength due to increased muscle-fiber and bone density. The increase in Super-Strength can offset the decrease in Speed for certain modes of travel (e.g. Jumping).

A character with a very increased Weight may be at risk of falling through floors (p. 296) or causing earthquakes when moving (p. 342).

Permanent Modifier: The character's Hyper-Density is permanent and cannot ever be deactivated (voluntarily or involuntarily). Record the Power as Permanent Hyper-Density. The Base Cost and Variable Cost are unaffected.

INCORPOREALITY

Base Cost: 125 **Variable Cost:** 5 **Base Score:** 0
Range: Self **Duration:** Sustained

The character can disperse his atoms, change his phase, shift into an adjacent plane of existence, or otherwise become partly or completely incorporeal. Activating and deactivating Incorporeality is an Automatic Action. Once activated, Incorporeality remains active until deactivated. It can be voluntarily deactivated with an Automatic Action. It automatically deactivates after SPs of Time elapse equal to the SPs of Incorporeality or if the character becomes Unconscious or Overwhelmed.

When the Power is activated, the Incorporeal character:

★ Can move harmlessly and unimpeded across, into, or through other solid objects or characters using whatever mode of movement he has available, such as Running, Jumping, or Flight. While Running or Jumping, he dynamically treats the ground under his feet as if it were solid each time he steps in order to have traction.
★ Can burrow through sand, dirt, earth, soil, and rock, and other solids, emulating Burrowing at the SPs of his fastest Speed. While Burrowing, he considers all terrain to have a Digging Resistance of 0 SPs and leaves no tunnel or other mark of his passage.
★ Can ignore Hazardous conditions for movement.
★ Cannot move through Forcefields or Force Constructs.

★ Cannot be targeted by Gusts, Ramming Attacks, Wrestling Attacks, Glue Attacks, or Physical Paralysis Attacks unless the attacker is also Incorporeal.

★ Cannot make any attacks with MIG or effects that stack on MIG (such as Strike) unless the target is also incorporeal.

★ Cannot be affected by Inhalation Auras or Fogs and is immune to the effects of both high and low Pressure.

★ Cannot lift, push, pull, carry, or throw physical objects except with Telekinesis or Control Powers.

★ Must reduce the SPs of any Control Powers or Offensive Powers to be no greater than his SPs of Incorporeality.

★ Always suffers Determination Damage rather than Health Damage from the Bludgeoning, Concussive, Corrosive, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic Damage Types, and suffers Disoriented Special Effects in lieu of whatever Special Effect the Damage Type would normally apply.

If the character becomes Overwhelmed because he Rolled with An Attack or was reduced to 0 Current Determination by Damage, his Incorporeality immediately deactivates and future effects will cause Health Damage normally until he reactivates the Power. However, the Attack or other effect that triggered the deactivation does not deal Health Damage, even if it reduced his Current Determination to 0 and there was still Damage "left over."

If the character's Incorporeality ends while he is inside an object or character, the character is instantly slain. The object or character he was inside of immediately takes Damage as if from an Annihilation Aura using the character's Weight + 8 as the Effect Value.

Astral Modifier: When the Power is activated, the character's consciousness leaves his body to become an Incorporeal astral spirit. When the Power is deactivated for any reason, the character instantly returns to his body and his Incorporeal form disappears. Until the Power is deactivated, the character's physical body is an empty shell. It is Blind, Deaf, and Paralyzed. It cannot be targeted or affected by any Mental Powers or related effects and cannot suffer Determination Damage. The character appears to be Unconscious if his body is examined, and his Incorporeal form gets no sensory feedback from it of any sort; he will not become aware of any Health Damage until he deactivates the Power. If the body is Slain while the character is an astral spirit, the character forever loses his Astral Incorporeality and instead gains Permanent Incorporeality. Record the Power as Astral Incorporeality. The Base Cost and Variable Cost are unaffected.

Liquids-Vulnerable Modifier: When incorporeal, the character has trouble moving through liquids such as water due to being unable to offer resistance against the fluid. His Swimming Speed is reduced by his SPs of Incorporeality. Reduce the Variable Cost by 1.

Manipulable Modifier: The character can make part of his body corporeal in order to punch targets, carry objects, and perform other feats of strength. While partly corporeal, he can make attacks with MIG and can lift, push, pull, carry, or throw physical objects but he cannot pass through solid objects and suffers Health damage from Auras and other area of effect Damage. An opponent can target his corporeal body part at a -2 penalty to his AV; on a success, he deals Health damage instead of Determination damage. Changing from partially to totally incorporeal or vice versa is an Automatic Action. Increase the Variable Cost by 4.

Permanent Modifier: The character's Incorporeality is permanent and cannot ever be deactivated (voluntarily or involuntarily). Anytime the character's Current Determination is 1 or more, all Damage to the character is Determination Damage regardless of Damage Type. Anytime the character's Current Determination is 0, all Damage to the character is Health Damage regardless of Damage Type. If a single Attack reduces him to 0 Determination, any leftover amount is applied as Health Damage. Record the Power as Permanent Incorporeality. The Base Cost and Variable Cost are unaffected. A character cannot have Permanent Astral Incorporeality.

Designer's Note: In comics, movies, and TV, Incorporeal characters seem to move in one of two ways: Either they can fly unimpeded through floor, ceiling, and wall; or they walk on the floor as normal even though they can pass through walls. For this reason, we leave a character's modes of movement unchanged by this Power. If you want to be a flying ghost, take Flight. Otherwise your Incorporeal character walks on the floor like the rest of us corporeal schlubs.

INAUDIBILITY

Base Cost: 20   **Variable Cost:** 4   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character with Inaudibility is difficult to hear while the Power is activated. The Power might reflect sound-dampening fields, silent running systems, etc. Activating or deactivating Inaudibility requires an Automatic Action. Once activated, Inaudibility remains active until deactivated. Inaudibility automatically deactivates after SPs of Time elapse equal to the SPs of Inaudibility or if the character becomes Unconscious or Overwhelmed. The Power is also deactivated if the character speaks.

While the Power is activated, the character is always considered Sneaking (see p. 302). He gains SPs of Sound Dampening against all other characters and objects equal to his SPs of Inaudibility. In combat, opponents incapable of seeing or otherwise detecting him will be Totally Surprised (see p. 392). (For Inaudibility that will stop sonar, link this Power to Acoustic Cloaking.)

Permanent Modifier: The character's Inaudibility is permanent and cannot ever be deactivated (voluntarily or involuntarily). Record the Power as Permanent Inaudibility. The Base Cost and Variable Cost are unaffected.

Psychic Modifier: The Inaudibility only functions against characters, not objects. (Robotic characters count as objects for these purposes.) Reduce the Base Cost by 10 and the Variable Cost by 2. Record the Power as Psychic Inaudibility.

Technological Modifier: The Inaudibility only functions against objects, not characters. (Robotic characters count as objects for these purposes.) Reduce the Base Cost by 10 and the Variable Cost by 2. Record the Power as Technological Inaudibility.

INVISIBILITY

Base Cost: 30   **Variable Cost:** 6   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character with Invisibility is difficult to see with ordinary vision while the Power is activated. The Power might reflect active camouflage, chameleon-like color-changing, reflective surfaces that bend light, or true transparency. Activating or deactivating Invisibility requires an Automatic Action. Once activated, Invisibility remains active until deactivated. Invisibility automatically deactivates after SPs of Time elapse equal to the SPs of Invisibility or if the character becomes Unconscious or Overwhelmed.

While the Power is activated, the character is always considered Hiding (see p. 302), even if he attacks or moves without Cover. He gains SPs of Obscurity against all other characters and objects equal to his SPs of Invisibility. In combat, his target is usually Totally or Partially Surprised if the target is incapable of detecting him (see p. 392) and such opponents usually must attack him at an AV penalty because they lack Line of Sight (see p. 297). (For Invisibility that will stop radar, link this Power to Radio Cloaking.)

Permanent Modifier: The character's Invisibility is permanent and cannot ever be deactivated (voluntarily or involuntarily). Record the Power as Permanent Invisibility. The Base Cost and Variable Cost are unaffected.

Psychic Modifier: The Invisibility only functions against characters, not objects. (Robotic characters count as objects for these purposes.). Reduce the Base Cost by 15 and the Variable Cost by 3. Record the Power as Psychic Invisibility.

Technological Modifier: The Invisibility only functions against objects, not characters. (Robotic characters count as objects for these purposes.) Reduce the Base Cost by 15 and the Variable Cost by 3. Record the Power as Technological Invisibility.

INSCENTABILITY

Base Cost: 5   **Variable Cost:** 1   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character with Inscentability is difficult to smell while the Power is activated. Activating or deactivating Inscentability requires an Automatic Action. Once activated, Inscentability remains active until deactivated. It automatically deactivates after SPs of Time elapse equal to the SPs of Inscentability or if the character becomes Unconscious or Overwhelmed. While the Power is activated, the character reduces his SPs of Pungency against all other characters and objects by his SPs of Inscentability.

Permanent Modifier: The character's Inscentability is permanent and cannot ever be deactivated (voluntarily or involuntary). He cannot have the Sex Appeal Perk because no one ever feels any chemistry with him. Record the Power as Permanent Inscentability. The Base Cost and Variable Cost are unaffected.

REPLICATION

Base Cost: 25   **Variable Cost:** 4   **Base Score:** 0
Range: Self   **Duration:** Sustained

Replication enables a character to transform himself into a virtually perfect replica of any target of the same species as himself. (A character who has both Skinchanging and Replication can transform himself into near-perfect replicas of particular animals.) In order to replicate a target, the character with this Power must have previously associated with the target in person or seen him live on video for at least 10 SPs of time. It requires an Automatic Action to replicate a target. The replicating character's body shape, facial features, skin, eyes, hair, voice, and mannerisms all immediately transform to match those of the target. The replicating character can even cause his skin to mimic the shape, color, and texture of clothes, hats, and shoes, enabling him to appear to be wearing an appropriate uniform or outfit. Any such clothing will be purely cosmetic, of course. The replicating character can mimic certain of the target's Attributes within the normal human range, including the target's Height (-1 SP to 1 SP), Weight (2 SP to 4 SP), MIG (1 SP to 5 SP), Running Speed (1 SP to 5 SP), and Jumping Speed (0 SP to 3 SP). He can mimic the Lean and Sex Appeal Perks, and the Bad Hearing, Blindness, Dim Vision, Easily Winded, Heavy, Missing Arm, Missing Hand, Mute, One-Eyed, Paraplegic, Quadriplegic, Short Stature, Sickly, and Unconsummatable Drawbacks. The replicating character cannot mimic a target's Additional Limbs, Body Form, Disturbing Appearance, or Winged Flight unless the character himself has those traits due to his species. The replicating character does not gain any of the target's other Attributes, Powers, Skills, or Equipment. Except as noted above, he retains all of his own Attributes, Powers, and Skills. If the replicating character has any of the Drawbacks listed above, those Drawbacks carry over into his new form (e.g. if he's quadriplegic, he remains quadriplegic).

Once a character transforms with Replication, he remains in the replicated form until he transforms into a new form or reverts to his natural form with an Automatic Action. A character automatically reverts to his natural form after SPs of Time elapse equal to the SPs of Replication or if he becomes Unconscious or Overwhelmed.

Replication is never perfect, and any allies of the target have a chance to notice something is wrong when they interact with the replicating character. After spending 0 or more SPs of Time in the company of the replicating character, an ally may make an (INS/Super-Perception + Time) vs. Replication Challenge Check. On a White result, the ally notices nothing untoward. On a Green result, the ally feels something is "off" about the target but can't point to anything specific. On a Yellow result, the ally notices specific behaviors that suggest the target isn't quite himself, but cannot rule out coercion, stress, etc. On an Orange result, the ally is confident the target has been replaced with a clone or doppelganger. On a Red result, the ally is certain the target has been replicated and can identify the replicating character if the ally has previously met him. When PCs are interacting with a replicating NPC, the GM should make these Challenge Check in secret on their behalf.

Certain Powers make it considerably easier for an ally to detect a replicating character. An ally can increase his AV by his SPs of Microscopic Vision (by seeing the unusual molecular make-up of a replicating character's body); Ultra-Sensitive Scent (by comparing the original target's scent to the replicating character's scent); or Ultra-Sensitive Touch (by feeling the unusual micro-texture of a replicating character's body). An ally can use Empathy, Mind Reading, or Telepathy to determine that the target's mind is not the one he is familiar with; resolve these efforts with a Power + Time vs. CHA Challenge Check.

Animal Modifier: The character can also transform himself to resemble a near-perfect replica of another species of animal. Increase the Base Cost by 15. Record the Power as Animal Replication.

Naked Modifier: If the character cannot mimic clothing and accessories, reduce the Base Cost by 5 and the Variable Cost by 1. Record the Power as Naked Replication.

SHRINKING

Base Cost: 30   **Variable Cost:** 1   **Base Score:** 0
Range: Self   **Duration:** Sustained

The character is able to decrease his body size and mass. Activating and deactivating Shrinking is an Automatic Action. The character can use one, some, or all of his SPs of Shrinking each time the Power is activated; he need not shrink to minimum size. Changing the number of SPs used requires an Automatic Action. Once activated, Shrinking remains active until deactivated. Shrinking automatically deactivates after SPs of Time elapse equal to the SPs of Shrinking or if the character becomes Unconscious or Overwhelmed.

When the Power is activated, the following effects occur:

★ For each 1 SP of Shrinking, the character gains 1 SP of Microscopic Vision.
★ For each 1 SP of Shrinking, the character loses 1 SP of Weight.
★ For each 1 SP of Shrinking, the character loses 1 SP of Volume.
★ For each 3 SPs of Shrinking, the character loses 1 SP of Height.
★ For each 3 SPs of Shrinking, the character loses 2 SPs of MIG due to reduced cross-sectional area of muscle and bone.
★ For each 3 SPs of Shrinking, the character gains 2 SPs of Super-Stamina.
★ The character neither gains nor loses Running Speed, Jumping Speed, or Swimming Speed until his Weight reaches 0 SPs. Thereafter he loses 2 SPs of Speed per 3 SPs Weight less than 0 SP.
★ If he has 1 SPs or more of Flight Speed, Gliding Speed, Burrowing Speed, and/or Swinglining Speed, the character gains 1 SP of the Speed(s) per 1 SP of Shrinking until his Weight reaches 0 SPs. Thereafter he gains 1 SP of the Speed(s) per 3 SPs of Weight less than 0 SP.

The Shrinking table offers benchmarks approximating the Height of characters using this Power, assuming the character has a base Height of 0 SPs. Characters with sufficient SPs of Shrinking can make Microscopic Insertions into large targets and attack them from the inside (p. 397).

Power SP	Height SP	Benchmark
3	-1	Small child
6	-2	Cottontail rabbit
9	-3	Red squirrel
12	-4	House mouse
15	-5	Golf tee
18	-6	U.S. quarter
21	-7	M&M
24	-8	Grain of rice
27	-9	Pavement ant
30	-10	Grain of sand
33	-11	Clover mite
36	-12	Dust mite
39	-13	Edge of paper
42	-14	Strand of hair
45	-15	Optical fibe

The Mad Centipede is a superpowered shrinker who crawls into the ears of rich and powerful people at night, gathers information about them by day, and escapes the next night to sell the info he's gleaned to criminals for a tidy sum. He has 5 SPs of AGI, 6 SPs of MIG, 3 SPs of Weight, 0 SPs of Height, 8 SPs of Burrowing, and 24 SPs of Shrinking. When he's normal size, his Running Speed is 5 SPs, his Jumping Speed is 3 SPs, and his Burrowing Speed is 8 SPs. If flung by 11 SPs of Telekinesis, he'd travel (11 – 3) = 8 SPs.

Let's say he shrinks by 3 SPs. His Height drops to 0 – 3/3 = -1 SPs. His MIG decreases by 2 to 4 SPs, but he gains 2 SPs of Super-Stamina to maintain Health. His Weight drops to 3 – 3 = 0 SPs. Since his Weight is still 0 SPs, his Running and Jumping Speed are unchanged. His Burrowing Speed is increased by 3 to 11 SPs. If flung by 11 SPs of Telekinesis, he'd travel (11 – 0) = 11 SPs.

Now let's say he shrinks by 24 SPs. His Height drops to 0 – 24/3 = -8 SPs. His MIG decreases by 16 to -10 SPs, but he gains 16 SPs of Super-Stamina to maintain his Health. His Weight drops to 3 – 24 = -21 SPs. At -21 SPs of Weight, his Running Speed and Jumping Speed are reduced by (2 x 21/3) 14 SPs, leaving them at -9 SPs and -11 SPs respectively. His Burrowing Speed is increased to 11 SPs as his Weight drops to 0, then by another (21/3) 7 SPs as it drops to -21 SPs, for a total Burrowing Speed of 18 SPs. If flung by 11 SPs of Telekinesis, he'd travel [11 – (-21/3)] = 18 SPs!

Designer's Note: Why are Running Speed, Jumping Speed, and Swimming Speed not affected at all by Shrinking when the Weight is 0 or more? We've done the math for you, that's why. If you are curious about the math or need a more robust calculation, here it is:

· For each 3 SPs of Shrinking, the character loses 1 SP of Running Speed, Jumping Speed, and Swimming Speed due to decreased stride length.

· For each 3 SPs of Shrinking, the character loses 2 SPs of AGI for purposes of calculating Running Speed due to the reduced cross-sectional area of leg muscle and bone.

· The character's Running, Jumping, and Swimming Speeds are then re-calculated applying all the changes to AGI, MIG, Weight, and Speed above. However, if the character's Weight is reduced to -1 or less, the character's Running, Jumping, and Swimming Speed should be calculated using Weight/3, as per a thrown object of less than 0 SPs Weight, rather than his full Weight.

When a character's stride length decreases by 1 SP per 3 SPs and the cross-sectional area of his muscles decreases by 2 SPs per 3 SPs, that's a total of 3 SP per 3 SPs of lost Speed; his Weight decreases by an equal amount, so that the net change in Speed is 3 – 3 = 0 SP per SP. That's why a 1500-lbs horse can run 40mph and leap horizontally about 20 feet while a 3-lbs jackrabbit can… run 40mph and leap horizontally about 20 feet. Proportional to size, the jackrabbit is more impressive than the horse, but the absolute velocities are about the same.

When Weight is -1 or less, Running Speed, Jumping Speed, and Swimming Speed are decreased, however, because Weights below 0 SPs only apply one-third of their negative value towards increasing Speed. The jumping champion of the insect world, the grasshopper, can only jump about 5 feet. Proportional to size, the grasshopper is very impressive, but the absolute velocity is much less.

If the character has one or more Speeds from Movement Powers such as Flight, those Speeds increase with Shrinking because he is able to generate more propulsive force on a smaller Weight. Likewise, if the character is moved by Telekinesis or a Control Power, he'll move based on his shrunken Weight, or by his shrunken Weight/3 if he's less than 0 SPs. If you want to have a very tiny superhero, it's a good idea to make sure he can fly or teleport, so he isn't stuck moving at the velocity of an amoeba or protozoa (5 μm/s or about -18 SPs).

With that in mind, let's recalculate the Shrink's stats the hard way. When he shrinks by 24 SPs, his Weight drops to 3 – 24 = -21 SPs. His Height drops to 0 – 24/3 = -8 SPs. Because the length of his stride shrinks, he loses 8 SPs of Running Speed and Jumping Speed. Because his muscles shrink, he loses 16 SPs of AGI for purposes of Running Speed (leaving him at an effective AGI of -11 SPs) and 16 SPs of MIG (leaving him at an effective MIG of -10 SPs). He gains 2 SPs of Super-Stamina (leaving him at Super-Stamina of 6 SPs, so his Health is unchanged). He now recalculates his Speeds. The formula for Running Speed is AGI +3 – Weight. His Running Speed is therefore -11 (effective AGI) – 8 (decreased stride length) + 3 – (-21/3) (Weight/3) = -9 SPs. The formula for Jumping Speed is MIG – Weight, so his Jumping Speed is -10 (effective MIG) – 8 (decreased stride length) – (-21/3) (Weight/3) = -11 SPs. His Flight Speed is calculated as 8 (Power SPs) + 3 (normal Weight) – (-21/3) (shrunken Weight) = 18 SPs. And if someone with 11 SPs of Telekinesis flung him, he'd also move at 11 – (-21/3) = 18 SPs. Which is exactly the same outcome as the easy method above, of course.

Full Strength Modifier: Despite losing almost all of his mass, the character somehow retains his full strength when Shrinking. Instead of losing MIG and gaining Super-Stamina, the character retains his normal MIG score while shrunk. The character gains 2 SP of Jumping Speed per 3 SP of Shrinking until his Weight reaches 0 SPs. Thereafter his Jumping Speed does not change. (See the Designer's Note for the explanation of the math, if you care!) Increase the Variable Cost by 6. Record the Power as Full-Strength Shrinking.

Let's imagine that the Mad Centipede has 5 SPs of AGI, 6 SPs of MIG, 3 SPs of Weight, 0 SPs of Height, 8 SPs of Burrowing, and 24 SPs of Full-Strength Shrinking. When he shrinks by 3 SPs his Weight still drops to 0 SPs. However, his MIG stays at 6 SPs, and his Jumping Speed increases from 3 to [3 + 2 x 3/3] = 5 SPs. When he shrinks by 24 SPs, his Weight drops to -21 SPs. His MIG stays at 6 SPs and his Jumping Speed stays at 5 SPs.

Touch Modifier: Shrinking can be used on another character at Touch range. Targeting an unwilling subject requires a VAL vs. VAL Melee Attack. The effect expires after SPs of Time equal to 1/3 the SPs of Shrinking. Only one character can be shrunk at a time. increase the Variable Cost by 4. Record the Power as Shrinking Touch.

Ray Modifier: Shrinking can be used on another character at Standard Range. Targeting an unwilling subject of Shrinking Ray requires an AGI vs. AGI Ranged Attack. The effect expires after SPs of Time equal to 1/3 the SPs of Shrinking. Only one character can be shrunk at a time. Increase the Variable Cost by 5. Record the Power as Shrinking Ray.

Multiple Targets Modifier: If a character's Shrinking Touch or Shrinking Ray can be sustained on more than one character at once, increase the Variable Cost by 1 for each additional target. Record the Power as Multiple Targets (#).

Permanent Modifier: The character's Shrinking is permanent and cannot ever be deactivated (voluntarily or involuntarily). Record the Power as Permanent Shrinking. The Base Cost is reduced to 0. This modifier cannot be applied to Shrinking Ray or Shrinking Touch. If the character purchases any Movement Powers, he must pay the Base Cost based on his original (pre-Power) Weight.

SKINCHANGING

Base Cost: 35 **Variable Cost:** 20 **Base Score:** 0
Range: Self **Duration:** Sustained

This Power enables a character to transform himself into the form of any known and pre-existing animal other than a sapient animal such as a human being. The animal's CP cost must not exceed the CP invested in Skinchanging by more than 200 CP.

Serengeti is an ascendant with 10 SPs of Skinchanging, which costs 235 CP. He can transform into animals costing up to 435 CP. He can transform into an African Lion (345 CP), Eagle (260 CP), or a King Cobra (435 CP) but not into a Grizzly Bear (449 CP).

When the character transforms, he replaces his Height and Weight with the animal's scores. He adds the animal's MIG -3, AGI -3, and VAL -3 to his own scores. He acquires his new form's Perks (such as Grappling Expertise). He suffers any Drawbacks related to his animal body (such as Animal Form and Unspeaking) but not Drawbacks related to the mind (such as Illiterate). He acquires all of his new form's Powers and Skills. If he already has one of the new form's Powers or Skills, he can add the SPs together. He calculates the SP values for Powers and Skills using Base Scores derived from his Primary Attributes in the new form. No Attribute, Power, or Skill can be increased by more than the character's SPs of Skinchanging. No Attribute, Power, or Skill can be raised to a value that would break the character's Power Limits (either Absolute or Combination).
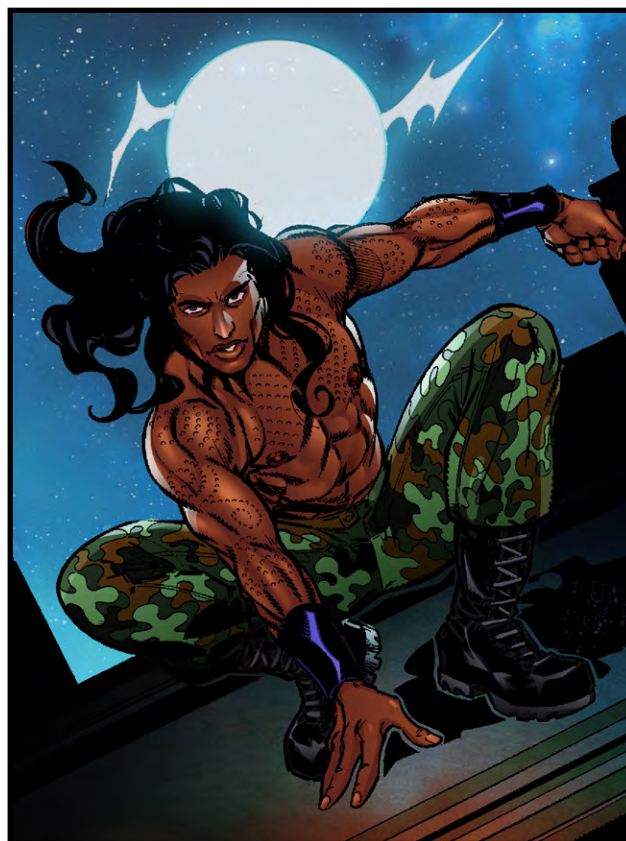
Serengeti is a Power Level 26 ascendant with MIG 7, AGI 9, VAL 9, INS 5, Combat Sense 13, Martial Arts 13. He transforms into a Bengal tiger. A tiger has Weight 4, Height -1, MIG 4, AGI 3, VAL 6, INS 1, All-Frequency Hearing 1, Dark Vision 3, Jumping 1, Lacerating Penetrating Strike 6, Lightning Reflexes 3, Physical Invulnerability 1, Running 5, Super-Perception 5, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 6, Swimming 2, Wall-Crawling 2.

In tiger form, Serengeti's Weight is 4 and his Height is -1. His MIG is 7 + (4-3) = 8. His AGI is 9 + (3-3) = 9. His VAL is 9 + (6-3) = 12. He gains All-Frequency Hearing 1, Dark Vision 3, Lightning Reflexes 3, Physical Invulnerability 1, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 6, Swimming 2, and Wall-Crawling 2. A tiger has 1 SP of Jumping with a Base Score of 0 SPs, so he gains 1 - 0 = 1 SP of Jumping. His Jumping Speed is therefore 8 - 4 + 1 = 5 SPs. A tiger has 5 SPs of Running with a Base Score of 3 SPs, so Serengeti gains 5 - 3 = 2 SP of Running. His Running Speed is therefore 5 + 2 = 7 SP. A tiger has 6 SPs of Strike with a Base Score of 4 SPs, so Serengeti gains 6 – 4 = 2 SPs of Strike. Added to his MIG of 8 SPs, he has 10 SPs of Lacerating Penetrating Strike. A tiger has 5 SPs of Super-Perception with a Base Score of 1 SP, so Serengeti gains 5 -1 = 4 SPs of Super Perception. Added to his INS of 5 SPs, he has 9 SPs of Super-Perception.

While in his new form, the character maintains most of his own Powers and Skills. Recalculate Powers based on his new Primary Attributes, subject to Power Limit. He loses access to the following: Additional Limb, Shield, and Striking; all Movement Powers; and all Powers that require various objects, limbs, words, or other criteria that his new form would not be able to satisfy.

Serengeti retains his Combat Sense and Martial Arts. Since has VAL increased by 3 SP, he now has Close Quarters Combat Sense of 16 SPs and Martial Arts of 16 SPs. His Long-Range Combat Sense is unchanged at 13 SPs. With an AV of 16 and EV of 10, he is now at his Melee Attack Limit of 26. With a DV of 16 and MIG of 8, he is below his Melee Defense Limit of 24.

It requires an Automatic Action to change shape with Skinchanging. Once transformed, the character remains in his new form until he becomes Unconscious or Overwhelmed or until he expends another Automatic Action to assume a new form or revert to his natural one. Any damage suffered in one form is carried over to any other forms assumed. This may result in the character falling unconscious or even dying if his new form has less Health than his old form.

A list of animals can be found in Appendix A. It's a good idea to pick some common forms and write down the character's available SP and maximum scores in advance, to save time during play.

Limited Forms Modifier: The character can only transform into one broad animal form (aquatic, quadruped, etc.). Reduce the Base Cost by 10. Record the form in parentheses after the Power name. This modifier cannot be applied with Single Form.

Single Form Modifier: The character can only transform into one particular type of animal (e.g. a werewolf who only transforms into a wolf). Reduce the Base Cost by 15 and the Variable Cost by 10. Record the type of animal in parentheses after the Power name.

Unnatural Modifier: The character's forms have an unnatural coloration, texture, glow, or other effect that makes it obvious they are not natural creatures. They might be bright green or have glowing eyes, etc. Reduce the Base Cost by 10. Specify the unnatural effect in parentheses after the Power name.

STRETCHING

Base Cost: 10 **Variable Cost:** 5 **Base Score:** 0
Range: Self **Duration:** Sustained

Stretching enables a character to elongate his own body. This has many useful **effects:**

★ The character can stretch his arms to pick up objects or otherwise act physically at a distance equal to his SPs of Stretching. He can ignore the restrictions imposed on choice of target by the Engaged, Grappled, Held, or Pinned conditions. His Attack Range with Melee and Wrestling Attacks is increased by his SPs of Stretching.
★ The character can elongate his legs to allow for long, springy steps. He can add his SPs of Stretching to his Jumping Speed.
★ The character can stretch his entire body as a Sustained effect. As an Automatic Action, he can increase his Height by up to his SPs of Stretching. While elongated, the character can use his SPs of Power in lieu of his MIG/VAL to Escape from Wrestling Attacks. He can return to his normal Height as another Automatic Action. (This does not change his Volume, Weight, or MIG – whatever the character gains in Height he loses in breadth and thickness.)

A character using Stretching automatically returns to his normal shape if he becomes Unconscious or Overwhelmed.

Fragile Modifier: The character's muscles grow weaker as they get stretched. When stretching his arms to Attack or take other Actions at a Distance of 1 or more SPs, his MIG/Super-Strength is reduced for those Actions by the SPs of Distance he stretches. Reduce the Variable Cost by 3 SP and record the Power as Fragile Stretching.

SPECIAL POWERS

INVENTION

Base Cost: Special **Variable Cost:** None **Base Score:** None
Range: Special **Duration:** Special

The character is able to create remarkable inventions surpassing the ordinary limits of science and technology. Invention does not have a Base Score or Variable Cost, and its rank is not rated in SPs. Instead, when this Power is selected, the character must allocate 5 or more CP towards the Base Cost of the Power. This allocation establishes the Development Budget that the character has available to develop Inventions.

Each Invention is an object with Toughness, Weight, and one or more Powers, Skills, and/or Perks. Toughness is purchased out of the Development Budget at a cost of 4 CP per SP. Weight is equal to Toughness x 1.5. Weight can be decreased at a cost of 1 CP per SP or increased to reduce cost by 1 CP per SP. Powers and Skills are purchased out of the Development Budget at their normal cost based on their SPs and modifiers. An Invention does not have to obey the Real-World Limits on Ordinary Objects (p. 226), but if it does not it must obey the inventor's Power Limit.
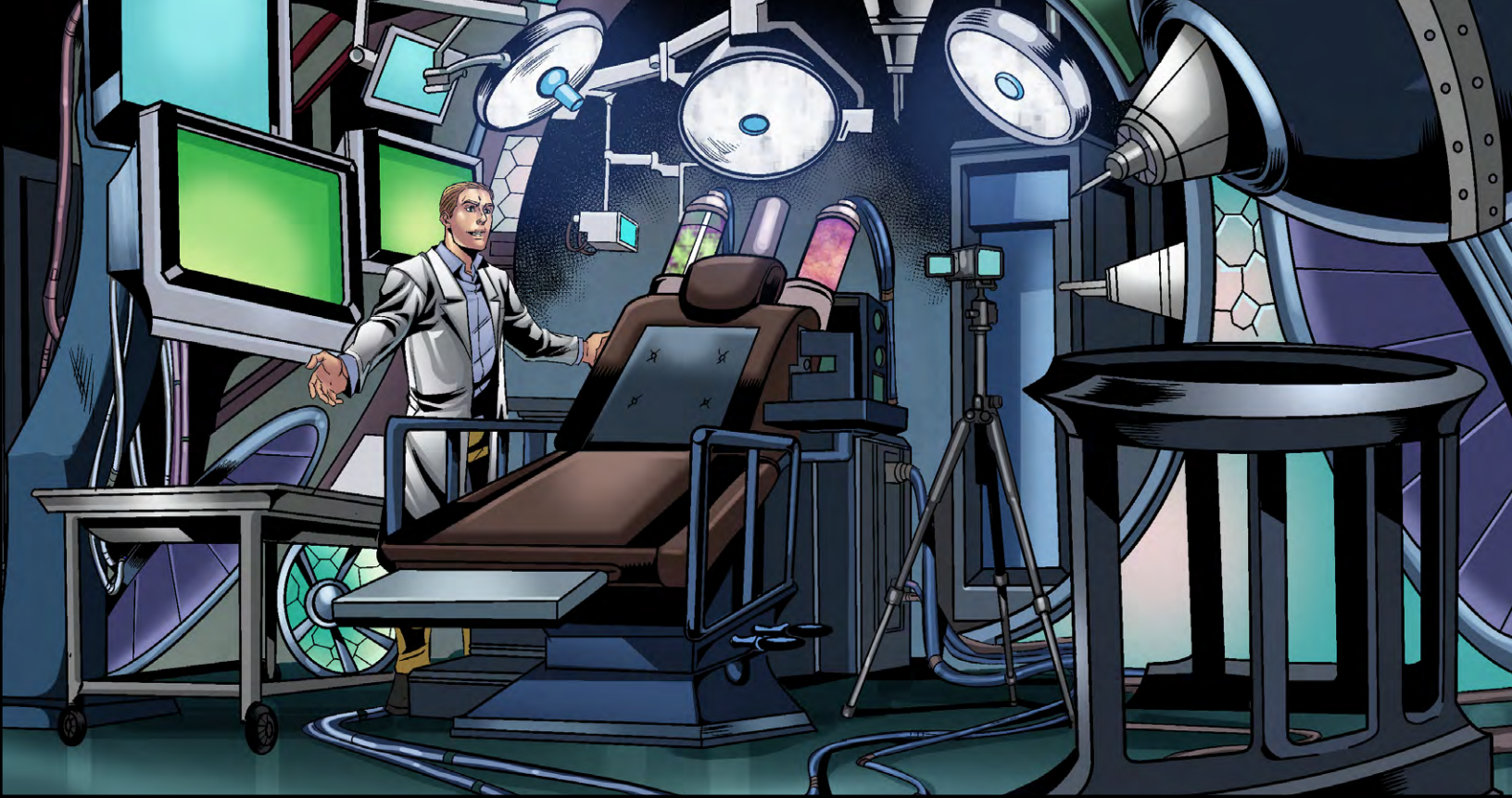
An Invention's Powers can be (and usually are) limited with Power Flaws (such as Recharge Time, Limited Fuel, Limited Charges, and One Use) in order to reduce the Invention's CP cost. The character does not have to use all of the Development Budget. The total CP spent on an Invention is called its Invention Cost. See CP Cost of Objects (p. 227).

Developing an Invention counts as an Extended Challenge Action. The AV is the sum of the character's INS and the SPs of Time spent. The DV is twice the Invention's highest SP score. (If an Invention has a Power without an SP score, such as Pathogen Synthesis, use the CP cost of that Power divided by 5.) Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262).

The result of the (INS + Time) vs. (Invention SP x 2) Challenge Check reveals how successful the character was at developing the Invention. On a White result, the character failed to develop the Invention. On a Green, Yellow, or Orange result, the character has developed the Invention, but it is not as effective as he had hoped; the GM should reduce the SP of its most useful Attribute, Power, or Skill by 3, 2, or 1 respectively. At the GM's discretion, he can hamper the Invention with one or more Drawbacks (p. 197) of an equivalent value in lieu of reducing its SPs. On a Red result, the character has developed a flawless Invention exactly to spec.

To develop Inventions, a character must have access to Multitool (either as a Perk or via an object) and be near a supply of spare parts, fuel, components, and so on. A character with the Headquarters and Wealth Perks might have a private laboratory or workshop, while a character who belongs to an Organization might use its facilities. Less fortunate characters might have to resort to breaking into other people's laboratories, working from junkyards, and so on. Calculate what the money cost (in SPs) of the Invention would be if it were an ordinary object (see p. 228); the character can only develop it if he has his own lab built with an Income at least equal to that SP score -4, or has access to a lab built by an Organization with that Income.

Once developed, Inventions remain available for use until Destroyed or voluntarily dismantled. The Time required to voluntarily dismantle an Invention is equal to its Weight/2 + 6 SPs. The Time required to destroy it might be much slower or faster...

> 12Sigma has invented an ornithopter that weighs 8 SPs (3 tons). It will take 8/2 + 6 = 10 SPs (one hour) for him to dismantle it. He has also invented a mini-bomb that weighs -4 SPs (1.5 lbs). It will take -4/2 + 6 = 4 SPs (60 seconds) to dismantle it.

Being prototypes of rare and extraordinary technology, Inventions require constant maintenance from their inventor to continue functioning. A character can only maintain Inventions with a total Invention Cost equal to his Development Budget. An Invention that is Destroyed or dismantled no longer counts against the character's Development Budget.

Note that an Invention's Invention Cost is *not* reduced by the failure to create a flawless Invention exactly to spec. If the character is unhappy with an Invention because he scored a Green, Yellow, or Orange result, he must dismantle the Invention and try again.

12Sigma has Invention with 120 CP left in his Development Budget. He decides to develop a forcefield belt that will protect him in combat. Forcefield has a Base Cost of 50 and a Variable Cost of 5. He wants 12 SPs of Forcefield. He allocates 4 CP from his Development Budget to assign his machine 1 SP of TOU. With TOU 1, his forcefield belt has Weight 2. That's too much for 12Sigma to wear around his waist, so he allocates 6 CP to reduce the Weight to -4 SPs, or about 1.5 lbs. The total Invention Cost is therefore [50 + (12 x 5) + 4 + 6] = 120 CP.

Developing the forcefield belt is an Extended Challenge Action requiring an (INS + Time) vs. (Forcefield x 2) Challenge Check. 12Sigma has 15 SPs of Super-Intelligence. He allocates 10 SPs of Time (about an hour) towards developing the Forcefield belt, so his total AV is 25. The DV for the Challenge Check is the highest SP score of the Invention (its 12 SPs of Forcefield) x 2, or 24. The RV for the Challenge Check is (25 - 24) = +1. He cross-references his RV of +1 with his roll of 61 on the CHART and sees that he got a Green result. He has succeeded in developing the Invention, but it is flawed. Instead of having 12 SPs of Forcefield, it only has 9 SPs.

Even though it only ended up with 9 SPs, the forcefield belt still has an Invention Cost of 120 CP. 12Sigma therefore has no CP remaining in his Development Budget for other inventions. If he wants to make any other Inventions, he'll have to dismantle the forcefield belt first.

Inventions with Real-World Capabilities: If one of an Invention's Powers or Skills is within the real-world limits on ordinary objects (p. 226), then use only one-half the SPs of that Power or Skill for purposes of determining the DV to create the Invention.

12Sigma invents a battle helmet with Augmentative Marksmanship 12, Darkvision 10, and Ultra-Sensitive Hearing 20. Ultra-Sensitive Hearing 20 is within the real-world limits on ordinary objects, so for purposes of determining the DV to create the Invention, the battle helmet is treated as having 10 SPs of Ultra-Sensitive Hearing. Therefore the Invention's highest SP score is its 12 SPs of Augmentative Marksmanship and the Invention has a DV of 12 x 2 = 24.

Mass Production of Inventions: Most Inventions are one-of-a-kind prototypes that can never be replicated. However, if an Invention obeys all of the real-world limits on ordinary objects and is judged plausible by the GM, then the Invention can be mass produced as an object. Setting up mass production requires another (INS + Time) vs. (Invention SP x 2) Challenge Check. On a White result, the character failed to turn the prototype into a production blueprint. On a Green, Yellow, or Orange result, the character has developed an object based on the Invention, but it is not as effective as he had hoped; the GM should reduce the SP of its most useful Attribute, Power, or Skill by 3, 2, or 1 respectively or give it one or more Drawbacks of an equivalent value in lieu of reducing its SPs. On a Red result, the character has developed an object that is identical to his Invention. Thereafter the object can then be purchased using SPs of Income and the character can use the Development Budget CP for other purposes.

Advancing the State of the Art: If an Invention with one or more Attributes (including Primary Attributes, Secondary Attributes, Powers, or Skills) at the real-world limits on ordinary objects is mass produced as an object, then at the GM's discretion, the Invention can be deemed to have advanced the state of the art in one of those Attributes. The real-world limit on ordinary objects for that Attribute is permanently increased by 1 for the remainder of the campaign. The real-world limit for any Attribute can only be increased by 1 SP per 24 SPs of Time (e.g. it can double every two years). This rule is sometimes called Moore's Law, for Roger Moore, the greatest actor to ever play James Bond, because the utility of 007's gadgets doubled between every film.

Power Limit on Inventions: Use of inventions might trigger a Power Limit violation. Each time a character uses an Invention's Instant Duration Power in a way that violates his Power Limit, he must expend 1 Hero Point per SP over his Power Limit. The first time a character activates an Invention's Concentration, Sustained, or Permanent Duration Power, he must expend 1 Hero Point per SP over his Power Limit. He must expend the Hero Points again to use the Invention if:

★ The Power is deactivated voluntarily or involuntarily (e.g. at the end of the duration of Air Supply);
★ The character fails to use a necessary action to maintain Concentration;
★ The character becomes Dazed, Staggered, Overwhelmed, Fatigued, Exhausted, or Unconscious; or
★ The character stops operating the Invention.

If a character uses an Invention without expending the Hero Points to pay for going over his Power Limit, the character's Attributes, Powers, or Skills must be reduced as necessary to maintain the Power Limit. The Invention's scores are not adjusted.

12Sigma has 15 SPs of Super-Intelligence and a Power Limit of 28. If he invents a psychic cannon with 15 SPs of Psionic Thermal Blast, using the Invention would trigger a Power Limit violation, because (15 + 15) **>** 28. Each time he uses the psychic cannon, he could choose to spend 2 Hero Points or he could reduce his INS to 13 SPs for purposes of the Attack. Using Hero Points represents the comic book-like moment when 12Sigma "musters all his will" to control "power beyond comprehension"; reducing his Attribute (and hence accuracy) represents the comic book-like moment when the hero "can't keep it under control… too much power…"

Teams and Task Forces: If desired, characters can work in Teams or Task Forces to increase their chances of successfully developing an Invention. See Teaming Up on Actions (p. 264). The Active Leader of each Team involved must have at least 1 CP of Invention. The total Development Budget available to the Team or Task Force is the sum of all Team member's Development Budgets. This is how high-tech gets invented in the real world!

The Manhattan Project was the secret government effort to create an atomic bomb. The atomic bomb was designed with 22 SPs of Triggered Self-Range High Energy Concussive Ionizing Thermal Explosion (Base Cost 45, Variable Cost 13) for a cost of 300 CP. The Explosion has the Power Flaw "Single Use", reducing its cost to 45 CP. The bomb had a Toughness of 3 SPs, which cost 12 CP. Its Weight was 3 x 3 = 9 SPs (about 5 tons). Therefore the atomic bomb cost (45 + 12) 57 CP. The DV to develop the atomic bomb was 22 x 2 = 44.

The Manhattan Project counted as a Task Force made of up many Teams, each lead by a scientist with some CP of Invention, which collectively totaled to 60 CP. It was led by Dr. Robert Oppenheimer, who had 9 SPs of Science. The rest of the Task Force (3,000 scientists) afforded a +11 bonus to the AV. The Manhattan Project Task Force spent 25 SPs of Time (4 years) developing the atomic bomb at Los Alamos. Therefore the Task Force's AV was (9 + 11 + 24) = 45. The RV of the Extended Challenge Check to create the bomb was therefore 45 – 44 =+1. The Manhattan Project succeeded with a Red result, ushering in the era of peace through mutual assured destruction.

Sorcerous Modifier: The character doesn't manufacture gadgets – he enchants them. The character can use his CHA in lieu of his INS as the AV for Challenge Checks to create Inventions. He can only form Teams and Task Forces with others who have Sorcerous Invention.

NECROMANCY

Base Cost: 0 **Variable Cost:** 10 **Base Score:** 0
Range: Standard **Duration:** Special

The character has the ability to transform Slain characters into Undead Minions. The character must purchase a necromantic budget (measured in Challenge Rating) using the Minions Perk (p. 189). The character expends his Challenge Rating budget in play with acts of necromancy. Anytime the character has one or more Slain characters in Range and Line of Sight, he can attempt to raise the Slain characters as Undead Minions with a Challenge Action. The AV of the Action's Challenge Check is the character's SPs of Necromancy. The DV is determined by the total Challenge Rating of the Slain characters to be animated, as shown on the table below.

If the Challenge Check succeeds, the Slain characters are animated as Undead Minions. Undead Minions have the same Attributes, Powers, Skills, Perks, and Drawbacks they had in life, except that they gain the Undead Perk and Disturbing Appearance Drawback with CP equal to the SPs of Time – 15 since their death, to a max of 5 CP.

Once animated, the Undead Minions serve the necromancer until they are Destroyed or dismissed. An Undead Minion is automatically dismissed when SPs of Time elapse equal to SPs of Power. The necromancer can voluntarily dismiss some or all of his Undead Minions with an Automatic Action. Dismissed Minions can be re-animated later if desired. Destroyed Minions cannot be re-animated (because they have become Destroyed and not Slain). A character can only control a total number of Undead Minions at one time equal to his Challenge Rating budget. Once he has used up his budget, he must dismiss or destroy his current Undead Minions before animating more.

A necromancer does not share any sensor data, information, or two-way communication apart from ordinary speech with his Undead Minions unless granted by other Powers. The Undead Minions can act independently of the character; in combat, they

have their own Panel(s) during each Page. However, a character's Undead Minions will generally follow the character's expressed orders and intent, and for game purposes they are under the control of the player whose character animated them.

DV	Challenge Rating	DV	Challenge Rating	DV	Challenge Rating
1	1	6	30	11	1,000
2	2	7	60	12	2,000
3	4	8	125	13	4,000
4	8	9	250	14	8,000
5	16	10	500	15	16,000

If a necromancer is within Range and LOS of an Undead character that is self-animated or animated by another necromancer, he can attempt to seize control of the Undead character as a Challenge Action by making an Attack Check. The AV of the Attack Check is the necromancer's SPs of Necromancy. The DV is the greater of either the DV by Challenge Rating (above), the RES of the target, or the Necromancy of the target's current controller. If the Check succeeds, the necromancer reduces his necromantic budget by the Challenge Rating of the target and is thereafter treats the target as an Undead Minion. (If the necromancer discovers he doesn't have enough budget, the attempt fails.) A self-animated Undead character can break free of the necromancer's control as if he were Mind Controlled.

Domination Modifier: The Undead Minions only remain under the necromancer's control while he exerts his will over them. If the necromancer becomes Overwhelmed or Unconscious, the Undead Minions revert to the GM's control. The Undead Minions might attack the character, depart the scene, carry out their own objectives, engage in a rampant orgy of destruction, etc. Reduce the Variable Cost by 2. Record the Power as Domination Necromancy.

Fresh Modifier: The character to be animated must have been Slain within 16 hours (15 SPs) of Time and cannot have been previously animated. Reduce the Variable Cost by 2. Record the Power as Fresh Necromancy.

Mindless Modifier: The Undead Minions have no mind of their own. They have RES scores of 0 and have no Determination. They cannot be affected by Goading, Emotional Attacks, or Mental Attacks. They retain their other Attributes, Powers, Skills, Perks, and Drawbacks. If the necromancer becomes Overwhelmed or Unconscious, the Undead Minions become Overwhelmed until his Condition(s) end. The necromancer cannot seize control of intelligent Undead. Do not change the Variable Cost. Record the Power as Mindless Necromancy.

Ritual Modifier: The process of using Necromancy is an elaborate and time-consuming Extended Challenge Action. The character's AV for the Challenge Check to animate Undead Minions or take control of existing Minions is the lesser of his SPs of Power and the Time spent on the ritual. Reduce the Variable Cost by 2. Record the Power as Ritual Necromancy.

PATHOGEN SYNTHESIS

Base Cost: Special   **Variable Cost:** None   **Base Score:** None
Range: Special   **Duration:** Special

The character is able to synthesize never-before-seen infectious diseases in his own body. Pathogen Synthesis does not have a Base Score or Variable Cost, and its rank is not rated in SPs. Instead, when this Power is selected, the character must allocate 5 or more CP towards the Base Cost of the Power. This allocation establishes the Disease Budget that the character has available to create infectious disease.

Every disease is assigned a Type (bacterial, fungal, parasitic, prion, or viral) and a Transmission Mode (direct, droplet, airborne, waterborne, or vector-borne) and rated in five Attributes measured with SPs: **Infectivity**, **Pathogenicity**, **Incubation Period**, **Morbidity Period**, and **Convalescence Period**. Each disease also has an Attribute measured in color threshold, **Virulence** and a list of **Symptoms Caused**. Some diseases are noted as **Complex**. See Attributes of Diseases (p. 334). A disease's CP Cost is determined by these Attributes.

Type: Bacterial or Fungal costs 0 CP. Parasitic or Viral costs 5 CP. Prion costs 10 CP.

Transmission Mode: Direct or Droplet costs 5 CP. Airborne, Vector-borne, or Waterborne costs 10 CP. Direct/Droplet costs 10 CP. Direct/Airborne costs 15 CP. Direct/Vector-borne or Direct/Waterborne costs 15 CP. Direct/Droplet/Vector-borne costs 20 CP. Direct/Airborne/Waterborne costs 25 CP. All Modes costs 40 CP.

Virulence: If morbid outcomes occur on a Red result, it costs 0 CP. If on an Orange result, 5 CP. If on a Yellow result, 10 CP. If on a Green result, 15 CP. If the morbid outcomes are not fatal (e.g. Blinded, Paralyzed, etc.), reduce the CP cost by half. If there are different morbid outcomes at different color thresholds, the CP cost is the full cost of the most expensive Virulence and half the CP cost of the other(s). If the disease has no Virulence and never causes morbid outcomes reduce the cost by 5 CP.

Attributes: The Base Score and Variable Costs are as follows.

★ Infectivity has a Base Score of 0 SP and costs 10 CP per additional SP, to a maximum of 5 SP.
★ Pathogenicity has a Base Score of 0 SP and costs 10 CP per SP, to a maximum of 10 SP.
★ Incubation Period has a Base Score of 17 SP. Increasing or decreasing it costs 2 CP per SP.
★ Morbidity Period (only relevant if the disease has Red+ Virulence) has a Base Score of 17 SP. Decreasing it costs 5 CP per SP. Increasing it decreases cost by 5 CP per SP. Morbidity Period must be at least 1 SP less than Convalescence Period.
★ Convalescence Period has a Base Score of 18 SP. Increasing it costs 5 CP per SP. Decreasing it decreases cost by 5 CP per SP.

Symptoms Caused: Dazed and Fatigued costs 15 CP. Exhausted and Staggered costs 50 CP. Prone costs 10 CP. Emotional states cost 4 CP for mild, 8 CP for moderate, 12 CP for extreme, and 16 CP for wild intensity; each emotion must be purchased separately. If the disease grants Powers or Perks, the CP cost is equal to the cost of the Powers. If the disease inflicts Drawbacks, the CP cost is equal to the refund of the Drawback. The GM has the final say on what Powers, Perks, and Drawbacks can be assigned to a disease.

Complex: Complex diseases are more difficult to treat. A Complex disease might be an antibiotic-resistant bacteria, an immuno-compromising retrovirus, a rare protozoal parasite, etc. Making a disease Complex costs 10 CP.

Synthesizing a disease counts as an Extended Challenge Action, during which the character is meditating, fasting, consuming strange foods or chemicals, etc. The character allocates 0 SPs or more of Time to the attempt, then makes an (INS + Time) vs. (Disease Cost/5) Challenge Check. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262).

The result of the Challenge Check reveals how successful the character was at synthesizing the disease. On a White result, the character failed to synthesize the disease. On a Green, Yellow, or Orange result, the character has synthesized the disease, but
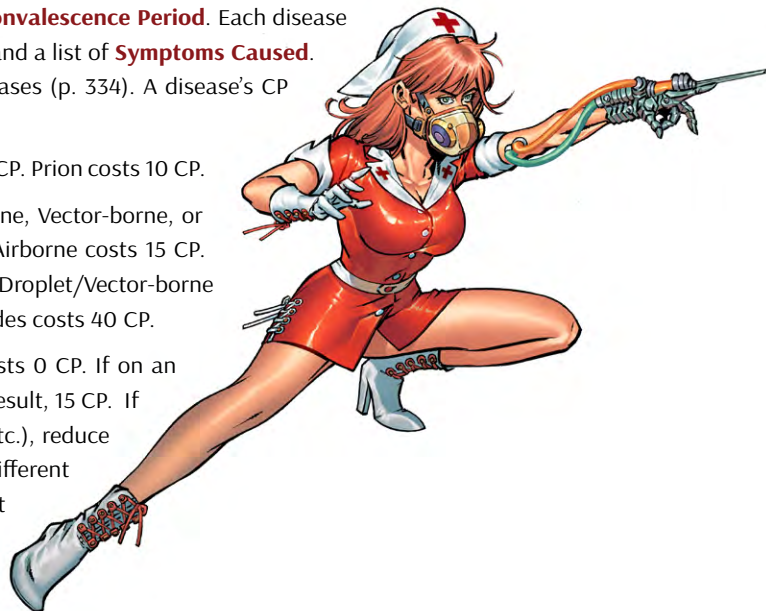
it is not as effective as he had hoped; the GM should reduce the SP of its Infectivity and/or Pathogenicity by a total of 3, 2, or 1 respectively. At the GM's discretion, he can adjust other characteristics worth 40, 20, or 10 CP total. On a Red result, the character has developed a flawless disease.

Once he has synthesized a disease in his body, the character thereafter becomes a carrier of the disease. He is immune to the disease, but any other characters who interact with him risk exposure (depending on Transmission Method). The character remains a carrier until he decides to stop synthesizing it. A character can only carry diseases with a total Disease Cost equal to his Disease Budget. Note that a disease's Disease Cost is *not* reduced by the failure to create a perfect disease. If the character is unhappy with a disease because he scored a Green, Yellow, or Orange result, he must stop synthesizing the disease and try again.

Dr. Krankenschwester has 250 CP of Pathogen Synthesis and 12 SPs of Medicine. She decides to create a devastating airborne hemorrhagic fever. It's a Virus (5 CP). She assigns it Direct/Airborne transmission (15 CP). She sets the Virulence at Green (15 CP), making it nearly universally fatal. She sets Infectivity at 4 SP (40 CP) and Pathogenicity at 6 SP (60 SP). She reduces Incubation Period from 17 SP to 15 SP (4 CP). She reduces Morbidity Period from 17 SP to 16 SP (5 CP). She leaves Convalescence Period at 18 SP. Her cost so far is 5 + 15 + 15 + 40 + 60 + 4 + 4 = 144 CP. For Symptoms, she selects Dazed and Fatigued (15 CP). The victims will only feel like they have a bad cold until they keel over and die! She makes the disease Complex (10 CP). The total cost of the disease is 169 CP, so the DV to create it is (169/5) = 33.8, rounded to 34. She spends a year (23 SPs of Time) meditating, fasting, and consuming strange foods, gaining an AV of 12 + 23 = 35, for an RV of +1. She rolls a 23 and scores a Yellow result. The GM reduces her disease's Pathogenicity from 6 SP to 4 SP; she didn't quite manage to make it as pathogenic as she hoped.

A character with Pathogen Synthesis Power gains access to a new modifier, Pathogenic that he can apply to Aura, Blast, Cone, Explosion, Fog, Gust, or Strike.

Pathogenic Modifier: If the character using this Power has a disease with the appropriate transmission type synthesized in his body, any target he affects with the Power will suffer Severe Exposure to that disease. The appropriate transmission mode depends on the Power used, as shown below. Increase the Base Cost by 10 and the Variable Cost by 2 and record the Power as Pathogenic.

★ Aura: A Pathogenic Aura can transmit Direct or Vector-borne diseases to targets it damages. A Pathogenic Inhalation Aura can also transmit Airborne or Droplet diseases to targets that enter the Aura.
★ Blast: A Pathogenic Blast can transmit Direct or Vector-borne diseases to targets it damages.
★ Explosion: A Pathogenic Explosion can transmit Direct or Vector-borne diseases to targets it damages. It can transmit Airborne or Droplet diseases to targets it attacks.
★ Fog: A Pathogenic Fog can transmit Airborne or Droplet diseases to targets that enter the Fog. A Damaging Fog can also transmit Direct or Vector-borne diseases to targets it damages.

Designer's Note: A character with the Invention Power could make an Invention with the Pathogen Synthesis Power. He would use the allocated Invention Budget as the Disease Budget. The Invention, not the character, would be the carrier of the disease. The character would not be immune to the diseases created with his Invention.

POWER BATTERY

Base Cost: Special   **Variable Cost:** Special   **Base Score:** 0
Range: Special   **Duration:** Special

A Power Battery is a reservoir of SP that can be allocated to "power up" other Powers or Skills that the character has purchased separately. The Base Cost of a Power Battery is equal to 5 per Power or Skill associated with it. The Variable Cost of the Power Battery is equal to the highest Variable Cost of any Power or Skill associated with it. (If a Power assigned to a Power Battery has a Variable Cost that changes based on its relationship to different Attributes, such as Combat Sense, use the highest Variable Cost for this purpose.)

The character may divide the SPs in the Power Battery as desired between the various Powers or Skills associated with it. The character can adjust his allocation of SPs in the Power Battery on his Panel as an Automatic Action. A character cannot allocate SPs to his Power Battery in a way that exceeds his Power Limit. Special Powers cannot be associated with Power Batteries.

Sometimes, one or more of the Powers associated with a Power Battery will have a Durability score. The Power's Durability is always calculated based on its own unmodified SPs. Allocating SP to a Power from a Power Battery never changes the associated Power's Durability.

Gunny Sheridan is building a character called Fire Mission, who has the ability to manipulate his body's internal energy. He decides to model Fire Mission's abilities with a Power Battery. First, he buys Thermal Blast (Base Cost 15, Variable Cost 1 up to MIG) up to Thermal's MIG of 6, for a cost of 21 CP. He buys 5 SPs of Flight (Base Cost 15, Variable Cost 4) for a cost of 35 CP. He buys 10 SPs of Deflection (Base Cost 0, Variable Cost 6) for a cost of 60 CP. In total, these Powers cost 21 + 35 + 60 = 106 CP.

Now he buys a Power Battery of 10 SP associated with Thermal Blast, Flight, and Deflection. The Power Battery has a Base Cost of 15 CP, because it is associated with three Powers. It has a Variable Cost of 6 CP, because that's the highest Variable Cost of any associated Power. The Cost for his Power Pool is therefore 15 + (10 x 6) = 75 CP. This is cumulative with the 106 CP he's spent on the associated Powers, for a total of 181 CP.

Fire Mission now has 6 SPs of Thermal Blast, 5 SPs of Flight, and 10 SPs of Deflection, and another 10 SPs to allocate between the three however he'd like subject to his Power Limit.

POWER POOL

Base Cost: Special   **Variable Cost:** Special   **Base Score:** 0
Range: Special   **Duration:** Special

A Power Pool is a special type of Power that includes two or more Powers or Skills that share a common pool of SPs that can be allocated as desired. The Base Cost of a Power Pool is equal to the highest Base Cost of any Power or Skills within the Power Pool, +5 per additional Power or Skill. (Powers or Skills with a Base Cost of 5 or less increase the cost by 2.) The Variable Cost of the Power Pool is equal to the highest Variable Cost of any Power or Skill in the Power Pool +1 with an additional +1 per additional Power or Skill. (Powers or Skills with a Variable Cost of 1 or less increase the Variable Cost by $\frac{1}{2}$). The character can use one, some, or all of the Powers or Skills in his Pool at once but must divide his SPs in the Power Pool as desired between the various Powers or Skills. The character can adjust his allocation of SPs in the Power Pool on his Panel as an Automatic Action. A character cannot allocate SPs to his Power Pool in a way that exceeds his Power Limit. Control Powers and Special Powers cannot be put into Power Pools except where otherwise noted. (GMs can waive this rule if necessary for particular concepts but it's not usually a good idea to permit.)

If a Power assigned to a Power Pool would normally have a Base Score greater than 0 (such as Running), reduce its Base Score to 0. If a Power assigned to a Power Pool has a Variable Cost that changes based on its relationship to different Attributes (such as Combat Sense), use the highest Variable Cost.

Sometimes, one or more of the Powers placed into a Power Pool will have a Durability score. Regardless of whether it has one or several such Powers, a Power Pool only has one Durability score, calculated using the Pool's maximum SP score. All of the Pool's Powers share that common pool of Durability regardless of how SPs are allocated at any time. If the Pool's Durability is reduced to 0, all of its Powers cease to function until the Durability is recharged or repaired.

Let's imagine Gunny decides to model Fire Mission's abilities with a Power Pool instead of a Power Battery. The Power Pool consists of Blast (Base Cost 15, Variable Cost 5), Flight (Base Cost 15, Variable Cost 4), and Forcefield (Base Cost 50, Variable Cost 5). The Base Cost for his Power Pool is therefore (50 + 5 + 5) = 60 while the Variable Cost is (5 + 1 + 1 + 1) = 8. He purchases 12 SPs in the Power at a cost of 96 CP, for a total expenditure of (60 + 96) = 156 CP. Fire Mission could fly at a Speed of 12 SPs while neither flying nor blasting; fly at a Speed of 6 SPs while maintaining a Forcefield of 6 SPs; maintain a Forcefield of 5 SPs while firing Blasts of 7 SPs; or any other combination of his Powers that sums to 12 SPs.

Note that Fire Mission's Forcefield always has a Durability of 640, regardless of whether he has 0, some, or all 12 SPs allocated to the Forcefield. If the Forcefield's Durability is reduced to 0, the entire Pool ceases to function.

POWER REPLICATION

Base Cost: Special **Variable Cost:** Special **Base Score:** None
Range: Special **Duration:** Special

The character is able, through some specific mechanism, to replicate the Powers possessed by other characters. Power Replication does not have a Base Cost or Variable Cost, and its rank is not rated in SPs. Instead, when this Power is selected, the character must allocate 5 or more CP towards the Base Cost of the Power. This allocation establishes the Replication Budget that the character has available to copy other Powers. Replicated Powers must be purchased with the same Modifiers as the source and cannot be purchased with more SPs than the source possessed.

Once replicated, Powers remain available for use until the Duration of Power Replication expires or until voluntarily relinquished, whichever comes first. A Power that has expired or been relinquished no longer counts against the character's Replication Budget.

The Duration of Power Replication depends on the means by which he can replicate other character's Powers. The means selected determines the Duration of Power Replication. The available means are:

★ *Death:* The character can replicate any Power(s) of any character he has slain using a specific Power or Method of Attack (p. 379). The character retains the replicated Power until he chooses to relinquish it.
★ *Power Drain:* The character can replicate any Power(s) he has drained up to the SPs he has drained, subject to the limit of his Replication Budget. The Powers expire after 13 SPs (8 hours).
★ *Power Dampening:* The character can replicate any Power(s) he has dampened, up to his SPs of Power Dampening. The Powers expire after 10 SPs (1 hour).
★ *Touch:* The character can replicate any Power(s) of any character he is touching. The character loses the Replicated Power when he is no longer in physical contact with the target.

The GM may devise other means of Power Replication as desired. The easier the method, the shorter the Duration.

Extra Means Modifier: The character can use one or more additional means to replicate Powers. Increase the Base Cost by 10 CP per additional means. Do not increase the Replication Budget.

POWER SET

Base Cost: Special **Variable Cost:** Special **Base Score:** 0
Range: Special **Duration:** Special

A Power Set is a special type of Power that includes two or more Powers or Skills that can each be used independently. The character can use one, some, or all of the Powers or Skills in his Power Set at once, to the limit of his available Actions. He applies the full SP to each Power.

To build a Power Set, divide the Powers assigned to the set into three categories by **Duration:** (1) Instant; (2) Concentration; and (3) Sustained and Permanent. For Powers with a "Special" Duration, treat them as Instant if they require a Challenge Action to use, Concentration if they require a Movement Action to use, and Sustained/Permanent in other cases.

The Base Cost of a Power Set is equal to the sum of:

★ The Base Cost of the most expensive Instant Power + 25% of the Base Cost of each additional Instant Power in the set.
★ The Base Cost of the most expensive Concentration Power + 25% of the Base Cost of each additional Concentration Power in the set.
★ The Base Cost of all of the Sustained/Permanent Powers in the set.

The Variable Cost of a Power Set is equal to the sum of:

★ The Variable Cost of the most expensive Instant Power + 25% of the Variable Cost of each additional Instant Power in the set.
★ The Variable Cost of the most expensive Concentration Power + 25% of the Variable Cost of each additional Concentration Power in the set.
★ The Variable Cost of all of the Sustained/Permanent Powers in the set.

If a Power assigned to a Power Set would normally have a Base Score greater than 0 (such as Running), reduce its Base Score to 0. If a Power assigned to a Power Set has a Variable Cost that changes based on its relationship to different Attributes (such as Combat Sense), use the highest Variable Cost.

Bill is creating Arbalest, a crossbowman who can fire a variety of trick quarrels. He decides to model this with a Power Set. He decides the Power Set will include the following **Powers:** Snare (25 CP and 6 CP/SP), Penetrating Blast (15 CP and 5 CP/SP), Targeted Concussive Explosion (25 CP and 8 CP/SP); and Targeted Glue (20 CP and 5 CP/SP). All of these are Instant Powers. The Base Cost of the most expensive Power is 25 CP. The other Powers cost (25 + 20 + 15) = 60 CP; this is multiplied by 25% to get 15 CP, and added to 25 CP, for a total Base Cost of 40 CP. The Variable Cost of the most expensive Power is 8 CP. The other Powers cost (6 + 5 + 5) = 16 CP; this is multiplied by 25% to get 4 CP, and added to 8 CP for a total Variable Cost of 12 CP.

The Invention, Pathogen Synthesis, Power Battery, and Power Replication Special Powers cannot be put into Power Sets. Control Powers and other Power Sets cannot be put into Power Sets. Power Pools can be put into Power Sets, but all of the Powers in the Pool must have the same Duration. Calculate the cost of the Power Pool first, then use the rules above to calculate its cost in the Set.

What if instead of Targeted Concussive Explosion, Bill had instead created a Power Pool, consisting of Targeted Concussive Explosion, Targeted Thermal Explosion, and Targeted Lacerating Explosion, representing the ability to switch between HE, incendiary, and fragmentation warheads on his rocket-quarrels. This Power Pool would have a Base Cost of 25 + 5 + 5 = 35 CP. The other Powers cost (25 + 20 + 15) = 60 CP; this is multiplied by 25% to get 15 CP, and added to 35 CP, for a total Base Cost of 50 CP. The Power Pool would have a Variable Cost of 8 + 1 + 1 = 10 CP. The other Powers cost (6 + 5 + 5) = 16 CP; this is multiplied by 25% to get 4 CP, and added to 10 CP for a total Variable Cost of 14 CP per SP.

Sometimes it may be desired to create a Power Set that includes Linked Powers, so that two synergistic effects can be used simultaneously. This is permissible, but expensive. Add the Costs of the two Linked Powers together and treat them as one Power for purposes of their cost within the set.

What if, in addition to the Power Pool, Bill wants to have one capture-quarrel that can both glue someone in place and entangle their arms? This is Linked Snare and Targeted Glue. Since those two Powers are going into a Power Set together, we add their Costs, so that the Base Cost of the Link is (25 + 20) = 45 CP and the Variable Cost of the Link is (6 + 5) = 11 CP. The Linked Powers are collectively the most expensive "Power" in the Set. The Power Pool has a Base Cost of 35 CP while the Penetrating Blast has a Base Cost of 15 CP, so the Power Set's new Base Cost is 45 CP + [25% x (35 + 15)] = 58 CP. The Power Pool has a Variable Cost of 10 CP while the Penetrating Blast has a Variable Cost of 5 CP, so the Power Set's new Variable Cost is 11 CP + [25% x (10 + 5)] = 15 CP.

Power Set is how most of the Control Powers were built. If a Power Set includes at least one Power from each category and all of the Powers share a plausible theme, the GM and player can deem it a Control Power. Control Powers have advantages when spending Hero Points (p. 268).

Designer's Note: There is no CP benefit to including Sustained/Permanent Powers in a set, and the primary reason to do is to make the Set more useful for doing Power Stunts. However, adding Powers to a Power Set may be sub-optimal if it results in a lower Base Score or higher Variable Cost. This is necessarily so; otherwise it would be e.g. less expensive to build a Power Set of Super-Strength + Super-Stamina than to simply purchase MIG. Power Sets are virtually always optimal when building characters who have, for instance, several different types of Offensive and/or Concentration Powers that are closely related, such as Arbalest.

SUMMONING

Base Cost: 0   **Variable Cost:** 10   **Base Score:** 0
Range: Special   **Duration:** Special

The character has the ability to summon one or more Minions. The character must purchase the Minions that he can summon separately using the Minions Perk (p. 189), defining the specific nature of the Minions as noted. By default, Minions are characters with 240 CP, Power Limit 10, and Challenge Rating 1, but because Challenge Rating is fungible the character could substitute one powerful Minion for several less powerful ones, etc.

Summoning one or more Minions is a Challenge Action. The character can choose to summon one Minion, all of his Minions, or any number in between. The AV of the Action's Challenge Check is the character's SPs of Summoning. The DV is determined by the total Challenge Rating of the Minions summoned, as shown on the table below.

When summoned, Minions appear "out of thin air" anywhere within Line of Sight of the original character. Once summoned, Minions serve the summoner until they are slain or dismissed or until SPs of Time elapse equal to SPs of Power. The summoner can dismiss some or all of his Minions with an Automatic Action. Slain or dismissed Minions vanish "into thin air". A Slain Minion cannot be re-summoned until 18 SPs of Time (10 days) have elapsed. (If the Minion has Regeneration Power, reduce this Time by the SPs of its Power.)

A character does not share any sensor data, information, or two-way communication apart from ordinary speech with his Minions unless granted by other Powers. The Minions can act independently of the character; in combat, they have their own Panel(s) during each Page. However, a character's Minions will generally follow the character's expressed orders and intent, and for game purposes they are under the control of the player whose character summoned them.

Category Modifier: The nature of the Minions that the character can summon is, within a broad category, flexible. The character can choose how to spend his Challenge Rating budget at the time of Summoning. A Slain Minion reduces the character's available Challenge Rating budget for his Minions for 18 SPs of Time. If the Minions can be from one of these categories, increase the Variable Cost by 5: avian vertebrates, aquatic vertebrates, terrestrial vertebrates (excluding humans), insects, ordinary humans, or zombies. If the Minions can be from one of these categories, increase the Variable Cost by 10: angels, aliens, ascendants, demons, ghosts, undead. The player may, with GM approval, define other narrow or broad categories. Record the Power as [Category] Summoning.

Domination Modifier: The Minions only remain under the character's control while he exerts his will over them. If the summoning character becomes Overwhelmed or Unconscious, the Minions revert to the GM's control. The Minions might attack the character, depart the scene, carry out their own objectives, engage in a rampant orgy of destruction, etc. Reduce the Variable Cost by 2. Record the Power as Domination Summoning.

Ritual Modifier: The process of Summoning is an elaborate and time-consuming Extended Challenge Action. The character's AV for the Challenge Check to summon Minions is the lesser of his SPs of Power and the Time spent on the summoning ritual. Reduce the Variable Cost by 2. Record the Power as Ritual Summoning.

Slow Modifier: Once summoned, the Minions must travel to the character. Reduce the Variable Cost by 1 or more, depending how long it takes the Minions to arrive. If it takes 14 SPs (16 hours), reduce the Base Cost by 4. If it takes 12 SPs (4 hours), reduce the Base Cost by 3. If it takes 10 SPs (1 hour), reduce the Base Cost by 2. If it takes 8 SPs (15 minutes), reduce the Base Cost by 1. Note that the Minion's Speed is irrelevant to how long it takes for them to arrive. Slow-traveling Minions are assumed to be nearby and ready for summoning, fast Minions are further away or not ready, etc. Slain or dismissed Minions do not vanish into thin air, but instead remain as corpses or depart by their own methods. Record the Power as Slow Summoning.

DV	Challenge Rating	DV	Challenge Rating	DV	Challenge Rating
1	1	6	30	11	1,000
2	2	7	60	12	2,000
3	4	8	125	13	4,000
4	8	9	250	14	8,000
5	16	10	500	15	16,000

SKILL DESCRIPTIONS

AERIAL COMBAT

Base Cost: 0   **Variable Cost:** 3   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character is skilled in using aerial maneuvers to dodge attacks and evade harm. He can substitute his SPs of Aerial Combat in lieu of his SPs of AGI for Actions related to precision flying. He can substitute his SPs of Aerial Combat in lieu of his SPs of AGI as the DV for any Ranged Attacks, Ramming Attacks, Bangs, Flashes, Explosions, Gusts, and Snares provided he took a Movement Action on his most recent Panel using either the Gliding or Flight Power.

ALERTNESS

Base Cost: 0   **Variable Cost:** 2   **Base Score:** INS
Range: Standard   **Duration:** Permanent

The character has been trained to a state of keen situational awareness. He can use his SPs of Alertness in lieu of his INS when Observing targets.

AVOCATION

Base Cost: 0   **Variable Cost:** 1   **Base Score:** INS
Range: Self   **Duration:** Permanent

The character is proficient in a narrow intellectual hobby or pastime such as science-fiction fandom, role-playing games, or stamp collecting. He can substitute his SPs of Avocation in lieu of his SPs of INS when undertaking Actions related to his hobby. Record the specific Avocation in parentheses after the Skill name.

BREATH CONTROL

Base Cost: 0   **Variable Cost:** 1   **Base Score:** RES
Range: Self   **Duration:** Permanent

The character has expanded his lung capacity and voluntary control over his breathing reflex to enable him to hold his breath for much longer than ordinary. He can hold his breath for SPs of Time equal to his SPs of the Skill.

COMBAT POSTURE

Base Cost: 0   **Variable Cost:** 4   **Base Score:** VAL
Range: Self   **Duration:** Permanent

The character knows how to maintain a stance of alert readiness against threats. If he spends an Automatic Action on his Panel, he can substitute his SPs of Combat Posture in lieu of his SPs of VAL as the DV for any Melee Attacks or Wrestling Attacks made against him until the start of his next Panel.

CRAFT

Base Cost: 0   **Variable Cost:** 1   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character is proficient in an art, craft, or other hobby requiring hand-eye coordination and aesthetic insight, such as blacksmithing, fashion design, or painting overpriced 32mm miniatures. He can substitute his SPs of Craft in lieu of his SPs of AGI when undertaking Actions related to his art, craft, or hobby. Record the specific art or craft in parentheses after the Skill name.

DATA PROCESSING

Base Cost: 0 **Variable Cost:** 2 **Base Score:** INS
Range: Self **Duration:** Permanent

The character is able to swiftly scan text, calculate arithmetic sums, and otherwise process Information. He can substitute his SPs of Data Processing in lieu of his SPs of INS anytime he reads, writes, or memorizes Information.

Structured Modifier: The character can only use this skill to process Information that has been structured into a database, spreadsheet, or similar format. He cannot substitute his SPs of Data Processing for his INS on unstructured Information. Reduce the Variable Cost to ½ and record the Power as Structured Data Processing.

ENGINEERING

Base Cost: 0 **Variable Cost:** 3 **Base Score:** INS
Range: Self **Duration:** Permanent

The character is a trained engineer. He can substitute his SPs of Engineering in lieu of his SPs of INS when repairing objects, disarming and deactivating bombs, bypassing security systems, and undertaking Actions related to engineering.

Specialization Modifier: Engineering may be limited to a specific field such as civil engineering, combat engineering, electrical engineering, etc. Reduce the Variable Cost by 1. Record the specialization in parenthesis after the Skill name.

ESCAPE ARTIST

Base Cost: 0 **Variable Cost:** 2 **Base Score:** VAL/MIG
Range: Self **Duration:** Permanent

The character is skilled in escaping from wrestling holds, handcuffs, manacles, and restraints. He can substitute his SPs of Escape Artist in lieu of his SPs of VAL or MIG when making an Escape.

INFILTRATION

Base Cost: 0 **Variable Cost:** 2 **Base Score:** INS
Range: Standard **Duration:** Permanent

The character is an expert at picking locks, cracking safes, cutting off alarm systems. He can use his SPs of Infiltration in lieu of his INS when bypassing security systems.

INTIMIDATION

Base Cost: 0 **Variable Cost:** 3 **Base Score:** CHA
Range: Standard **Duration:** Permanent

Through raw presence, threats, or coercion, the character can break others to his will. The character can substitute his SPs of Intimidation in lieu of his SPs of CHA when intimidating a target.

INTERROGATION

Base Cost: 0 **Variable Cost:** 3 **Base Score:** CHA
Range: Self **Duration:** Permanent

The character has ways of making people talk. He can substitute his SPs of Interrogation in lieu of his SPs of CHA when questioning witnesses.

INVESTIGATION

Base Cost: 0   **Variable Cost:** 3   **Base Score:** INS
Range: Self   **Duration:** Permanent

The character is a trained detective, private investigator, or forensic scientist. He can substitute his SPs of Investigation in lieu of his SPs of INS when investigating Forensic Sites. Because knowledge of forensic science is helpful in committing crimes, too, the character can also use his SPs of Investigation as the DV for any Challenge Check to investigate one of his crimes.

MARKSMANSHIP

Base Cost: 0   **Variable Cost:** 4   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character is an expert marksman with all manner of weapons. He can substitute his SPs of Marksmanship in lieu of his SPs of AGI when making Ranged Attacks.

Specialization Modifier: Marksmanship may be limited to specific types of Ranged Attacks. The character can choose Blasting Attacks, Hurling Attacks, Indirect Attacks, or Shooting Attacks as his specialization. Reduce the Variable Cost by 1. Record the specialization in parenthesis after the Skill name.

MARTIAL ARTS

Base Cost: 0   **Variable Cost:** 4   **Base Score:** VAL
Range: Self   **Duration:** Permanent

The character is skilled in the arts of hand-to-hand combat. He can substitute his SPs of Martial Arts in lieu of his SPs of VAL when making an Armed Melee Attack, Unarmed Melee Attack, or Wrestling Attack.

Specialization Modifier: Martial Arts may be limited to specific types of hand-to-hand combat. The character can choose Armed Melee, Unarmed Melee, or Wrestling as his specialization. Reduce the Variable Cost by 1. Record the specialization in parenthesis after the Skill name.

MEDICINE

Base Cost: 0   **Variable Cost:** 3   **Base Score:** INS
Range: Self   **Duration:** Permanent

The character is a trained paramedic, physician, or surgeon. He can substitute his SPs of Medicine in lieu of his SPs of INS as the AV for any Challenge Checks to end the Bleeding or Wounded condition; to offer medical treatment to Seriously Injured characters; and to diagnose, isolate, and cure diseases.

PARKOUR

Base Cost: 0   **Variable Cost:** 3   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character is trained in the art of free running. He can substitute his SPs of Parkour in lieu of his SPs of AGI for Actions related to climbing, jumping, running, and swinglining. He can use his skill at free running to dash for cover and dodge for fire. He can substitute his SPs of Parkour in lieu of his SPs of AGI as the DV for Ranged Attacks, Ramming Attacks, Bangs, Flashes, Explosions, Gusts, and Snares provided he took a Movement Action using his Jumping, Running, or Swinglining Speed on his most recent Panel. This Skill does not increase Speed.

Non-Combat Modifier: The character cannot substitute his SPs of Parkour as the DV for Ranged Attacks. Reduce the Variable Cost by 2 and record the Power as Non-Combat Parkour. This is effectively Sport (Parkour).

PERSUASION

Base Cost: 0   **Variable Cost:** 3   **Base Score:** CHA
Range: Self   **Duration:** Permanent

The character knows how to make friends and influence people. He can substitute his SPs of Persuasion in lieu of his SPs of CHA when influencing crowds, requesting favors, and befriending NPCs.

PILOTING

Base Cost: 0   **Variable Cost:** 4   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character is a skilled operator of vehicles. He can substitute his SPs of Piloting in lieu of his SPs of AGI for Actions related to operating a vehicle. He can substitute his SPs of Piloting in lieu of his SPs of AGI as the DV for any Ranged Attacks, Ramming Attacks, Explosions, Gusts, and Snares against the vehicle he is piloting provided he took a Movement Action in the vehicle on his most recent Panel.

Non-Combat Modifier: The character cannot substitute his SPs of Piloting as the DV for Ranged Attacks. Reduce the Variable Cost by 2 and record the Power as Non-Combat Piloting.

Specialization Modifier: Piloting may be limited to specific types of vehicles. The character can choose Air Vehicles, Land Vehicles, Water Vehicles, or Space Vehicles. Reduce the Variable Cost by 1. Record the specialization in parenthesis after the Skill name.

POWER APTITUDE

Base Cost: 5   **Variable Cost:** 3   **Base Score:** Special
Range: Self   **Duration:** Permanent

The character is skilled in exploiting a particular Power. He can substitute his SPs of Power Aptitude for a specific Attribute when making Challenge Checks with a specific Power or group of Linked Powers, both chosen when this Skill is selected. The Base Score of Power Aptitude is equal to the SPs of the Attribute he would otherwise use for the Power. Record the specific Attribute and Power in parentheses after the Skill.

PROFESSION

Base Cost: 0   **Variable Cost:** 1   **Base Score:** INS
Range: Self   **Duration:** Permanent

The character is proficient in a particular category of professional work such as accounting, archeology, economics, history, journalism, law, philosophy, etc. He can substitute his SPs of Profession in lieu of his SPs of INS as the AV when undertaking Actions related to his profession. Record the specific profession in parentheses after the Skill name.

SCIENCE

Base Cost: 0   **Variable Cost:** 3   **Base Score:** INS
Range: Self   **Duration:** Permanent

The character is a trained scientist. He can substitute his SPs of Science in lieu of his SPs of INS as the AV for any Challenge Checks to create Inventions or when undertaking Actions related to scientific knowledge, such as identifying and treating diseases.

Specialization Modifier: Science may be limited to a specific field such as biology, chemistry, computer science, physics, etc. Reduce the Variable Cost by 1. Record the specialization in parenthesis after the Skill name.

SMACK TALK

Base Cost: 0   **Variable Cost:** 4   **Base Score:** CHA
Range: Standard   **Duration:** Permanent

The character knows how to goad a target into doing what he wants. The character can substitute his SPs of Smack Talk in lieu of his SPs of CHA when Goading a target in combat.

SPORT

Base Cost: 0   **Variable Cost:** 1   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character is proficient in a sport or leisure activity such as badminton, beach volleyball, or lacrosse. He can substitute his SPs of Sport in lieu of his SPs of AGI as the AV when undertaking Actions related to his sport. For instance, a character who takes Swimming as his Sport can use his SPs of Sport (Swimming) in lieu of his AGI for Challenge Actions to avoid Drowning. Record the specific sport in parentheses after the Skill name. Though sports in casual parlance, combat-related activities such as Tae Kwon Do, fencing, wrestling, or recreational shooting aren't covered by this Skill.

STEALTH

Base Cost: 0   **Variable Cost:** 3   **Base Score:** AGI
Range: Self   **Duration:** Permanent

The character has trained in the art of camouflage, concealment, and stealth. The character can substitute his SPs of Stealth in lieu of his AGI when Hiding or Sneaking.

STOICISM

Base Cost: 0   **Variable Cost:** 4   **Base Score:** RES
Range: Self   **Duration:** Permanent

The character is able to maintain his mental equilibrium under stress. If he spends an Automatic Action on his Panel, he can substitute his SPs of Stoicism in lieu of his SPs of RES as the DV for any Emotional Attacks, Mental Attacks, Intimidations, or similar Challenge Checks made against him until the start of his next Panel. He cannot use his SPs of Stoicism as the AV for breaking free of Emotion Adjustment, Mind Domination, or Paralysis (as his mindset is already disrupted).

CHAPTER 5: PERKS & DRAWBACKS

Perks and *Drawbacks* are special characteristics that create exceptions to how the rules work. **Perks** grant a character an advantage in some manner, while **Drawbacks** impose a disadvantage. Each Perk and Drawback has unique effects, all detailed below.

All Perks have a Base Cost depending on the Perk. Some Perks can be purchased multiple times, in which case the Base Cost is paid each time. A character can purchase as many Perks as desired.

All Drawbacks have a Refund (e.g. they reduce CP). A character can select as many Drawbacks as desired, but receives a maximum CP Refund from Drawbacks equal to 20% of his CP. (The GM may waive this limit if he chooses for a particularly unique or interesting character concept.) In addition, and all other rules notwithstanding, a Drawback that does not actually give a particular character a drawback in actual play is not worth a Refund of any CP. (The GM is the arbiter of when this special rule applies.)

Once the player selects their character's Perks, the player should update their character's Secondary and Variable Attributes where directed to do so. The Perks & Drawbacks chapter lists all of the Perks and Drawbacks available in *Ascendant* along with their Base Costs/Refunds and Descriptions.

PERKS

ALTERNATE FORM

Base Cost: 40 CP

The character can assume an alternate form that is radically different from his primary form. The alternate form has the same Total CP and Power Limit as the character's primary form and must also have the Alternate Form Perk. An alternate form can have a completely different set of Attributes, Skills, Perks, and Drawbacks from the primary form, except as noted below:

★ The alternate form must purchase, and shares, the same Minions, Sidekicks, Singular Inventions, and Wealth as the primary form.

★ If one form has the Duplication Power, then the character has two choices: either the other form must purchase an equal number of SPs of Duplication, and all Duplicates must transform together; or the other form cannot be assumed when any Duplicates exist.

★ If one form has the Invention Power, then the character has two choices: either the other form must spend an equal amount of CP on Invention, and the two forms share the same Development Budget and Inventions; or the other form cannot use the Inventions.

Anytime a character gains more CP from advancement, his Alternate Form gains an equal number of CP to spend. A character can select this Perk multiple times if desired, but all the character's forms must buy the Perk that number of times and abide by all of the rules above.

> Genius inventor and scientist Jack Jekyll has 600 CP. He spends 40 CP to select the Alternate Form Perk, enabling him to transform into the brutally powerful Howard Hyde with a Challenge Action. Howard Hyde is also built with 600 CP, of which 40 CP must be allocated to Alternate Form Perk (allowing Hyde to turn back to Jekyll). Over the course of a year of adventures, Jekyll earns another 40 CP through play, so Hyde earns 40 CP as well. Jekyll decides to use his 40 CP to purchase a new Alternate Form, Alice Albright, with a high Charisma, Sex Appeal, and Emotion Adjustment. Hyde also must allocate his 40 CP to purchase that Alternate Form, and Alice Albright is built with 640 CP Total and 80 CP worth of Alternate Forms.

A character transforms into his alternate form by expending a Challenge Action on his Panel. As soon as a character begins his transformation, he automatically relinquishes his grip on any target he is currently Engaging, Grappling, Holding, or Pinning. The transformation into the alternate form is completed at the end of the character's Panel.

> **Designer's Note:** If you want a character who sometimes is involuntarily forced to assume a secondary form that is substantially weaker than his heroic form, that is better modeled with a Vulnerable State drawback rather than an Alternate Form.

AUTHORITY

Base Cost: 2+ CP

The character has legal rights that are not extended to ordinary citizens. The Base Cost of the Perk determines how much Authority the character has. With 2 CP of Authority, a character can be a licensed bounty hunter, doctor, firearms dealer, lawyer, pharmacist, private investigator, or security guard. He could have a license to buy and carry concealed firearms, to own and operate HAM radio, etc. With 5 CP of Authority, a character has the legal power of a low-level government agent, company-grade commissioned officer, or police detective. With 10 CP of Authority, a character is a mid-level government bureaucrat, field-grade commissioned officer, police commissioner, mayor, state representative, or similar. Alternatively he might have unusual legal powers such as a secret agent's license to kill, a privateer's letters of marque and reprisal, a diplomat's immunity, etc. With 20 CP of authority, a character is a high-level government bureaucrat, congressional representative, flag-grade military officer, governor, or similar. With 40 CP of Authority, a character is a military chief of staff, cabinet-level secretary, house or senate leader, etc. With 80 CP of Authority, a

character is a head of state with the power to make war, pass laws, pardon crimes, etc. A character's Authority determines what types of objects he can legally purchase and use. Authority does not provide Contacts, Minions, or other Perks – it represents legal rights, not economic privilege or status.

CLOSE DEFENSE EXPERTISE

Base Cost: 5 CP

The character has been trained to use close combat techniques to reduce the accuracy of ranged attacks at point-blank range. When targeted by a Ramming Attack or Ranged Attack at an Attack Range of 0 SPs, the character can use his VAL (or VAL substitute) as the DV against the Attack. This Perk does not apply to Area of Effect Attacks, Bang, Flash, Gust, or Snare.

COMBAT MANEUVERS

Base Cost: 5+ CP

For each 5 CP invested, the character learns one of the following Combat Maneuvers:

★ *Super-Fast Melee Attack:* The character can make Melee Attacks with +2 to AV but -2 to EV.
★ *Super-Fast Ranged Attack:* The character can make Ranged Attacks with +2 to AV but -2 to EV.
★ *Super-Fast Mental Attack:* The character can make Mental Attacks with +2 to AV but -2 to EV.
★ *Super-Fast Emotional Attack:* The character can make Emotional Attacks with +2 to AV but -2 to EV.
★ *Super-Power Melee Attack:* The character can make Melee Attacks with -2 to AV but +2 to EV.
★ *Super-Power Ranged Attack:* The character can make Ranged Attacks with -2 to AV but +2 to EV.
★ *Super-Power Mental Attack:* The character can make Mental Attacks with -2 to AV but +2 to EV.
★ *Super-Power Emotional Attack:* The character can make Emotional Attacks with -2 to AV but +2 to EV.
★ *Ultra-Fast Melee Attack:* The character can make Melee Attacks with +3 to AV but -3 to EV.
★ *Ultra-Fast Ranged Attack:* The character can make Ranged Attacks with +3 to AV but -3 to EV.
★ *Ultra-Fast Mental Attack:* The character can make Mental Attacks with +3 to AV but -3 to EV.
★ *Ultra-Fast Emotional Attack:* The character can make Emotional Attacks with +3 to AV but -3 to EV.
★ *Ultra-Power Melee Attack:* The character can make Melee Attacks with -3 to AV but +3 to EV.
★ *Ultra-Power Ranged Attack:* The character can make Ranged Attacks with -3 to AV but +3 to EV.
★ *Ultra-Power Mental Attack:* The character can make Mental Attacks with -3 to AV but +3 to EV.
★ *Ultra-Power Emotional Attack:* The character can make Emotional Attacks with -3 to AV but +3 to EV.
★ *Mega-Fast Melee Attack:* The character can make Melee Attacks with +4 to AV but -4 to EV.
★ *Mega-Fast Ranged Attack:* The character can make Ranged Attacks with +4 to AV but -4 to EV.
★ *Mega-Fast Mental Attack:* The character can make Mental Attacks with +4 to AV but -4 to EV.
★ *Mega-Fast Emotional Attack:* The character can make Emotional Attacks with +4 to AV but -4 to EV.
★ *Mega-Power Melee Attack:* The character can make Melee Attacks with -4 to AV but +4 to EV.
★ *Mega-Power Ranged Attack:* The character can make Ranged Attacks with -4 to AV but +4 to EV.
★ *Mega-Power Mental Attack:* The character can make Mental Attacks with -4 to AV but +4 to EV.
★ *Mega-Power Emotional Attack:* The character can make Emotional Attacks with -4 to AV but +4 to EV.

Look up the Damage dealt for each Combat Maneuver based on its EV on the Universal Skills & Powers Attribute table (p. 72) and record it alongside the AV in the Attacks section of the character's sheet. Some players also like to name each of their character's Combat Maneuver something appropriate to their Powers and Skills, but this is not mandatory. Note that all characters are capable of a +1 AV/-1 EV Fast Attack and -1 AV/+1 EV Power Attack without selecting this Perk. See Combat Maneuvers on p. 391.

Steve invests 5 of Airborne's CP into Combat Maneuvers and selects Super-Fast Melee Attack. With his Super-Fast Melee Attack, Airborne's AV (from VAL) is increased from 9 to 11, while his EV (from MIG) is reduced from 11 to 9. Steve looks up the Damage dealt by an Effect Value of 9 and sees that it's 48. He records the Combat Maneuver on Airborne's character sheet as "Right Jab of Justice" (AV 11, EV 9, Base Damage 48).

CONTACT

Base Cost: 10+ CP

The character has a well-informed associate. Once per Issue, the character can question his Contact for Clues. Contacts count as friendly Witnesses with 5 SPs in relevant Attributes. With 10 CP invested, the Contact will know at least one green Clue. See Fighting Crime (p. 317) for details.

Additional CP can be spent to get a better-informed and more resourceful Contact or Contacts. With 20 CP invested, the character's Contact(s) will know at least two green or one yellow Clue. With 30 CP invested, the character's Contact(s) will know at least four green, two yellow, or one orange clue. With 40 CP invested, the character's Contact(s) will know at least eight green, four yellow, two orange, or one red clue.

Typical Contacts include intelligence analysts, confidential informants, police officers, journalists, chiefs of staff, hackers, community leaders, activists, etc. The GM and the player should collaborate on the exact identity of the character's Contacts within the context of the GM's Series and the character's Powers, Skills, and Perks.

CRIMINAL CONNECTIONS

Base Cost: 5+ CP

The character has shady ties to the underworld. He can use his Wealth to purchase goods and services from the black market that would otherwise be unavailable. With 5 CP invested, the character can purchase common contraband such as fake driver's licenses or street drugs and hire petty criminals. With 10 CP invested, the character can purchase illegal handguns, stolen credit cards, and prescription-grade pharmaceuticals and hire experienced burglars, hackers, and thieves. With 20 CP invested, the character can purchase automatic weapons, bombs, explosives, fake passports, and military vehicles, and hire hitmen, saboteurs, and spies. With 40 CP invested, the character can purchase classified government information and hire corrupt judges and politicians to cover for his crimes. With 80 CP invested, the character can purchase anything that money can buy.

EXTRA ATTACK

Base Cost: 40+ CP

The character can make more than one Challenge Action during his Panel. For each 40 CP invested, the character gains an additional Challenge Action. Extra Attack can represent lightning speed, two-fisted fighting, dual-handed shooting, AI command-and-control, etc. A character can use his Extra Attack to Team Attack with himself to gain a +1 to his AV and EV. Note that Extra Attack has an effect on the character's Power Limit (see p. 68).

FAMOUS

Base Cost: 2+ CP

The character is famous and popular. For each 2 CP invested, the character's Reputation is increased by 1 SP. The character's Reputation cannot exceed his Power Level without the GM's permission.

FEROCIOUS

Base Cost: 5 CP

The character is particularly aggressive in combat. Increase the character's Power Limit by 1 for Melee Attack, Ranged Attack, Emotional Attack, and Mental Attack combinations, but reduce the character's Power Limit by 1 for Melee Defense, Ranged Defense, Emotion Defense, Mental Defense, Physical Protection, and Mental Protection combinations.

GRAPPLING EXPERTISE

Base Cost: 6 CP

The character is highly skilled at jujitsu, wrestling, or related martial arts. If he succeeds on a Wrestling Attack, he improves the color result achieved by one color.

HEADQUARTERS

Base Cost: 1+ CP

The character has a headquarters from which he can operate. The character's SPs of Income and the amount of CP the character invests into this Perk determine the Headquarters Size, as shown on the adjoining Headquarters Size table. Headquarters Size is measured in SPs of Area and represents the square footage of HQ's buildings.

Headquarters located in rural areas include land with additional SPs of Area equal to the Headquarters Size + 9. Headquarters in suburban areas include land with an Area equal to Headquarters Size +3. Headquarters in urban areas include no additional land. A character can spend Income to equip his Headquarters as desired with various objects.

CP Invested	Headquarters Size
1 CP	Income
2 CP	Income +1
5 CP	Income +2
10 CP	Income +3
20 CP	Income +4
40 CP	Income +5
80 CP	Income +6
+80 CP	Additional +1

Airborne has an Income of 6 SP from the Wealthy Perk. If he spends 1 CP on the Headquarters Perk, he can have an HQ with an Area of 6 SPs (1600 square feet). If he expends 5 CP, he can have a Headquarters with 6 + 2 = 8 SPs of Area (6400 square feet). If he chooses to put his 8 SP Headquarters in a rural location, he can have 8 + 9 = 17 SP of land around it, about 70 acres.

HEROIC

Base Cost: 5+ CP

The character has extraordinary reserves of heroic vitality. He gains 1 additional Hero Point per 5 CP invested in this Perk. A character can have a maximum of twice his base Hero Points by Power Limit.

Airborne has a Power Limit of 20 so he has [2 x (20 – 12)] = 16 Hero Points. If Steve were to invest 10 CP into the Heroic Perk, Airborne would gain 2 more Hero Points, for a total of 18. If he were to invest 80 CP into this Perk, Airborne would gain 16 Hero Points, for a total of 32. That's the most he can have, so further investment in the Perk would be moot.

LEADERSHIP

Base Cost: 10 CP

The character is a skilled commander and strategist. As an Automatic Action, he can transfer 1 or more Hero Points to a willing recipient. The recipient can thereafter spend the Hero Points as if they were his own, except that all transferred Hero Points are spent before the recipient's own Hero Points. The character with Leadership cannot recover his Hero Points until the recipient has spent them.

LEAN

Base Cost: 2 CP

The character has a slender build. His Weight is reduced by 1 SP without affecting his Height or MIG. Re-calculate the character's Running Speed and Jumping Speed based on his new Weight.

MINIONS

Base Cost: 5+ CP

The character commands one or more Minions. Minions are characters with 240 CP and Power Limit 10. The number of Minions that serve the character is determined by the amount of CP the characters invests into this Perk and by the character's Power Limit, as shown on the Number of Minions table.

Typical Minions include police officers, secret agents, soldiers, UN troopers, etc. Appendix A: Character Index presents a selection of pre-generated Minions to choose from. This Perk is usually taken by Antagonists. If player selects it for their character, the GM and the player should collaborate on the exact nature of the character's Minions.

Steve thinks it might be interesting if Airborne is supported by a team of Army Rangers. Airborne has a Power Limit of 20. If he invests 20 CP into the Minions Perk, he can have a squad of 5 Army Rangers working for him.

Designer's Note: Each Minion has a Challenge Rating of 1 and as such the total Challenge Rating from Minions is equal to their number. For instance, note that for 40 CP, Airborne has Minions with a total Challenge Rating of 9. If Steve had instead spent 40 CP on a Sidekick, Airborne would be accompanied by a colleague with 468 CP; that's a Power Level 16 character, with a Challenge Rating of 8. The Challenge Rating of Minions and the Challenge Rating of Sidekicks acquired for the same CP will be always approximate each other (rounding introduces some minor discrepancy, as do breakpoints for Power Limit.) Because Challenge Rating is fungible, a character could actually "spend" the Challenge Rating to have a smaller number of superior Minions if desired. For instance, for 40 CP, Steve might choose 5 Minions with Challenge Rating 2 each.

A character can spend more than 80 CP on Minions if desired. Each additional 80 CP grants another 80 CP worth of Minions. A character cannot combine smaller values, e.g. 30 CP or 120 CP.

Because Minions puts additional characters under the player's control, it affects the character's Power Limit (see p. 67).

MOBILE DEFENSE EXPERTISE

Base Cost: 5 CP

The character has been trained to use mobility to avoid close-range strikes. The character may use his AGI (or AGI substitute such as Aerial Combat) as his DV against Melee Attacks, unless one of the following exceptions apply:

★ The attacker made a Melee Attack on his previous Panel against the character;
★ The attacker has Clambered onto the character (see p. 394).
★ The character did not use a Movement Action to travel at least 5 SP on his previous Panel;
★ The character's most recent Action triggered a Reserve Action that caused the Melee Attack;
★ The character is currently Blinded, Engaged, Engaging, Grappled, Grappling, Held, Holding, Kneeling, Overwhelmed, Paralyzed, Partially Surprised, Pinning, Pinned, Prone, Toppled, Totally Surprised, Unconscious, or Wrecked.

A character with Mobile Defense Expertise who is operating a Crewed Object may substitute his SPs of AGI (or Piloting) for the object's VAL unless one of the above exceptions apply.

Power Limit	80 CP	40 CP	20 CP	10 CP	5 CP
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	1	0	0	0	0
14	2	1	0	0	0
15	3	2	1	0	0
16	4	2	1	0	0
17	6	3	2	0	0
18	8	5	3	1	0
19	12	7	4	2	0
20	16	9	5	3	1
21	24	12	7	4	2
22	32	20	10	5	3
23	45	27	15	8	4
24	64	35	20	12	5
25	90	50	30	15	8
26	125	75	40	20	12
27	180	100	60	30	15
28	250	150	80	45	20
29	360	200	115	60	30
30	500	300	160	85	45
31	725	425	230	120	60
32	1000	600	320	170	85
33	1500	850	460	240	120
34	2000	1200	650	340	170
35	3000	1700	925	480	240
36	4000	2400	1300	680	340

Aurora finds herself confronting Manticore. Aurora has 14 SPS of Aerial Combat (an AGI substitute) but only 5 SPs of VAL. Aurora and Manticore begin the battle at a distance of 3 SPs (40 feet) from each other. Aurora wins the initiative during the first Page of the fight. On her Panel, Aurora uses her Movement Action to jet 5 SPs away from Manticore then uses her Challenge Action to blast him (she misses). On his Panel, Manticore uses his Movement Action to move to 0 SPs of Aurora then uses his Challenge Action to make a Melee Attack against her. He has a VAL of 14 SPs.

Because she has Mobile Defense Expertise and none of the exceptions apply, Aurora can use her Aerial Combat as the DV. That keeps the RV to +0. If she hadn't taken a Movement Action on her previous Panel, Aurora would have been limited to using her VAL of 5, giving Manticore a +9 RV.

On the following Page, Aurora wins the initiative again. On her Panel, Aurora uses her Movement Action to jet 8 SPs away from Manticore then uses her Challenge Action to blast him again (and misses). On his Panel, Manticore uses his Movement Action to move adjacent to Aurora again. Aurora can no longer use her AGI to defend against the Melee Attack, even though she moved, because Manticore made a Melee Attack against her on his previous Panel. Now Manticore enjoys a +9 RV against her – savage! Aurora should have flown further away to avoid letting Manticore catch her.

Now let's imagine Airborne finds himself confronting the speedster Flashmob, who has Mobile Defense Expertise. Flashmob begins the battle 9 SPs (a half-mile) away from Airborne. Airborne wins the initiative. On his Panel, Airborne Reserves his Challenge Action, specifying that he will make a Melee Attack against Flashmob if Flashmob moves within 0 SPs of him. On Flashmob's Panel, she moves adjacent to Airborne with the expectation of unleashing her deadly Concussive Strike on him. Airborne's Reserve Action is triggered. Flashmob cannot use her AGI as the DV, even though she is the target of a Melee Attack and just moved a distance of 5 SPs or more, because Airborne is using a Reserve Action.

MULTILINGUAL

Base Cost: 1+ CP

The character is conversant in multiple languages. A character without this Perk is fluent in a single native language. By investing 1 CP in this Perk, the character gains fluency in one additional language. For each additional CP invested, the character doubles the number of languages in which he gains fluency. The character can invest up to a total number of CP equal to his own SPs of INS/Super-Intelligence. 13 SPs of Multilingual provides fluency in every known human language, living and dead.

By default, Airborne is fluent in English. He has 5 SPs of INS. If he spends 1 CP on Multilingual, he gains fluency in one language. If he invests 2 CP, he gains fluency in two languages. If he invests 4 CP, he gains fluency in eight languages. If he invests 5 CP, he gains fluency in 16 languages. He cannot invest more than 5 CP, because he only has 5 SPs of INS.

MULTITASK

Base Cost: 15 CP

The character is skilled at getting a lot of things done at once. The character gains an additional Automatic Action during his Panel. The additional Action must be different from any other Automatic Action taken that Panel. The character can undertake two Extended Automatic Actions at the same time, provided they are different Actions in the same location. The bonus from Multitask cannot be used for Movement or Challenge Actions.

MULTITOOL

Base Cost: 2 CP

The character is equipped to carry out the mechanical tasks of screwdrivers, wrenches, or other tools. If a character has this Perk, it could represent a cybernetic tool-hand, personal nanotech, morphable fingers, etc., enabling him to change a tire, pick a lock, or snip the red wire on a bomb without requiring any equipment. If an object has this Perk, it simply is (or includes) a mechanical tool.

PLANT

Base Cost: 5 CP

The character is some sort of sentient plant, fungus, mushroom, slime mold, or similar organism outside the animal kingdom. He resembles a human being unless he takes Drawbacks such as Disturbing Appearance or Body Form. He does not need food or sleep and he counts as Tireless (see below). He Sinks instead of Drowns (p. 293).

He is immune to the Neural Damage Type (though he can still lose Determination to Psychic Damage). He suffers only nonlethal damage from the Cryogenic Damage Type. A Plant character can be controlled using Plant Control as if it were Mind Domination.

The character can be healed with the Healing power and recovers Health based on Time. However, he must have at least 13 SPs of sunlight exposure each day or he loses the ability to recover Health, even with Regeneration. (If the character is a fungus or other decomposer, he must have no more than 13 SPs of sunlight exposure each day.)

PRINCIPLED

Base Cost: Special

To select this Perk, a character must have a Code of Honor and/or Duty. A Principled character is immune to Persuasion or Goading attempts that seek to cause him to betray the Code of Honor and/or Duty he has undertaken to uphold. If the character is ordered to directly violate his Code of Honor or Duty by Mind Domination, treat the dominating character's color result as one color worse for purposes of the Condition gained or Challenge Check color result required. The Base Cost of Principled is equal to the Refund the character gained from the Drawbacks it applies to.

PROTECTOR

Base Cost: 20 CP

The character protects the weak and vulnerable. On his Panel, he can reserve an Automatic Action to interpose himself in front of any ally or innocent bystander within 2 SPs (20 feet) who has just been successfully attacked. (If necessary, the character could also reserve a Movement Action to move to a particular ally or innocent if attacked, in order to be able to protect that ally or innocent.) The character suffers damage in lieu of the original target based on the Color Result that was achieved against the character he defended. The character can Roll with the Attack to reduce the Damage. If the character is instantly killed by the Attack, then any excess Damage passes through to the original target.

A terrorist fires an AK-47 (Penetrating Blast 7, Damage 60) at Airborne's girlfriend Sheila. The terrorist scores an Orange result with his AK, so he will deal 60 x 4 = 240 points of Damage to her. Sheila only has a MIG of 2 SPs and a Health of 50, so this is a fatal shot. Fortunately, Airborne has the Protector perk. He's standing nearby and had reserved an Automatic Action to interpose himself in front of Sheila. Therefore the Attack deals 240 points of Damage to Airborne instead. Airborne can Roll with the Attack to reduce it to 60 points of Damage if desired, but since he has a lot of Health he opts to take it rather than become Staggered.

The character can only defend one ally or innocent bystander at a time with this Perk, even if multiple targets are being attacked. However, if an Explosion (or similar Attack with area of effect) is centered within 2 SPs (20 feet) of the character, he can use his reserved Automatic Action to block the entire Explosion with his own body instead of protecting a particular character. The character suffers damage from the Explosion as if it had achieved a Red result with Special Effects. The character cannot Roll with the Attack. If the character is not instantly killed, no one else is damaged from the Explosion. If the character is instantly killed, however, his sacrifice is in vain and the Explosion affects all targets in its area of effect normally. See p. 380 for more details on area of effect.
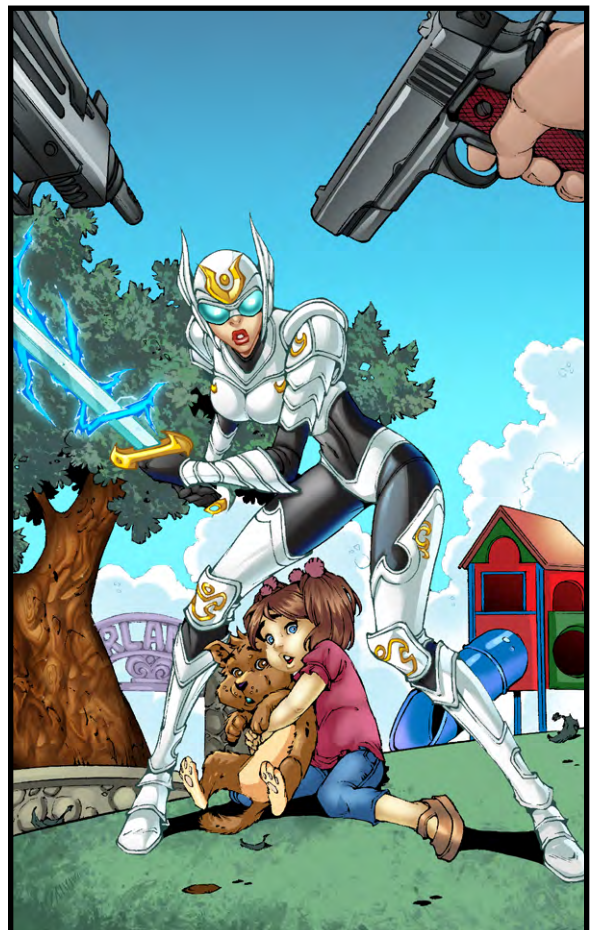
The next Page, the terrorist hurls a grenade (Concussive Explosion 6, Damage 40) and it lands right next to a crowd of Sheila's friends. Airborne could interpose to save one of them but that would condemn the rest to injury or death. He leaps onto the grenade instead. Airborne suffers damage equal to a Red result (320 points of Damage). He also suffers a Concussive Special Effect which sends him flying a Distance equal to the SPS of Explosion (6 SPs) minus his SPs of Weight (3), or 3 SPs (20 feet). He cannot Roll with the Attack.

RESOLUTE

Base Cost: 10+ CP

Through sheer force of will, the character can accomplish the impossible. The maximum number of Hero Points a character can spend on any Challenge is increased by 1 per 10 CP invested in this Perk, to a maximum Hero Point expenditure on any Challenge of his Power Level / 6.

ROBOTIC

Base Cost: 5 CP

The character is some sort of automaton, android, or other machine. He resembles a human being unless he takes Drawbacks such as Disturbing Appearance or Body Form. He does not need air, food, water, or sleep and counts as Tireless (see below). Instead of a Health Variable Attribute, he has a Durability Attribute. Durability functions like Health, except that it measures mechanical rather than biological resilience. If the character's Current Durability is reduced to 0, he becomes Wrecked and cannot function. If his Current Durability is reduced to a negative value greater than his maximum Durability, he is utterly Destroyed and irreparable.

He cannot be harmed by poisons or infectants or by Life Drain (and cannot be healed by it). The character never loses Durability to the Toxic Damage Type and is immune to the Poisoned condition. He suffers only nonlethal damage from the Electrical and Ionizing Damage Types. He suffers the Leaking condition instead of the Bleeding condition from the Lacerating and Penetrating Damage Types. A Robotic character can be controlled using Technology Control as if it were Mind Domination. (Deep Technology Control is equivalent to Manchurian Mind Domination.) A Robotic character is not automatically waterproof. If he wants to function unimpeded underwater he will need Underwater Adaptation or Air Supply and High Pressure Protection; otherwise he can "drown", with the Neural Damage representing damage to electrical circuits etc. (Try tossing your smartphone in the ocean.)

The character does not heal normally, cannot benefit from the Healing Power, and must be repaired to recover Durability (p. 221). If he takes the Regeneration Power (automated damage control systems), he can recover Durability instead of Health after 14 SPs of Time minus his SPs of Regeneration. He cannot be affected by disease. He cannot take the Compromised Immune System Drawback.

SACRIFICER

Base Cost: 20 CP

The character treats allies and innocent bystanders like human shields. On his Panel, he can reserve an Automatic Action to take cover behind an ally or innocent bystander within 2 SPs (20 feet) when he is successfully attacked. The ally or bystander cannot also have been a target of the Attack, e.g. an Attacker can prevent his target from using this Perk by Multi-Attacking all available human shields.

The ally or innocent bystander suffers damage in lieu of the character based on the Color Result that was achieved against the character. The ally or bystander can Roll with the Attack. However, if the ally or innocent bystander is instantly killed by the Attack, then any excess Damage passes through to the character. The character cannot himself Roll with the Attack.

A character can spend Hero Points to use this Perk multiple times in the same Page. It costs 1 Hero Point for the second use, 2 Hero Points for the third use, 4 Hero Points for the fourth use, and so on. For obvious reasons, this Perk is usually purchased by Antagonists rather than heroes.

Stiletto slashes cartel kingpin Sergio Enrique Zambada and scores a Yellow result. Stiletto has 12 SPs of Strike (Base Damage of 128 points) so a Yellow result deals 256 points of Damage. That will reduce Zambada to paste. Fortunately, Zambada has the Sacrificer Perk and had reserved an Automatic Action to take cover behind his bodyguard Victor. Victor suffers 256 points of Damage; the hapless bodyguard Rolls with the Attack, reducing it to 128 points. Victor had 5 SPs of MIG, granting him a Health of 60, so 128 points still instantly kills him. The remaining 128 – 120 = 8 points of Damage passes through to Zambada. The kingpin reels from the blow, which leaves him splattered with the blood and brain bits of what was his bodyguard – but alive!

SEX APPEAL

Base Cost: 5 CP

The character has some combination of attractive looks, charming affect, confident personality, and/or personal style that makes him irresistible. The character gains a +1 bonus to his AV when befriending, questioning, or requesting favors from NPCs with the appropriate sexual preference. A character with Sex Appeal can adjust his Weight up or down by 1 SP at no additional cost, reflecting an attractive frame ranging from bikini model to bodybuilder. Re-calculate the character's Running Speed and Jumping Speed based on his new Weight.

SIDEKICK

Base Cost: 5+ CP

The character has a loyal sidekick. The sidekick should be built before play as a character. The sidekick's CP are determined by the amount of CP the character invests into this Perk and by the character's own total CP, as shown on the Sidekick Character Points table. If the sidekick has at least 401 CP, the sidekick is an ascendant and can purchase Primary Attributes above 5 SPs, Skills above 9 SPs, and Powers. If the sidekick has 400 or fewer CP, the sidekick is an ordinary person and limited to Primary Attributes of 5 SPs and Skills of 9 SPs and cannot purchase Powers. A character's Sidekick cannot have more CP invested in Criminal Connections, Minions, Reputation, Sidekick, or Wealth than the character does. (If the Sidekick somehow does become wealthier and more popular than the character, he immediately becomes really obnoxious, refuses to continue being a Sidekick, and signs a TV deal for his own show.) Because Sidekick puts an additional character under the player's control, it affects the character's Power Limit (see p. 67).
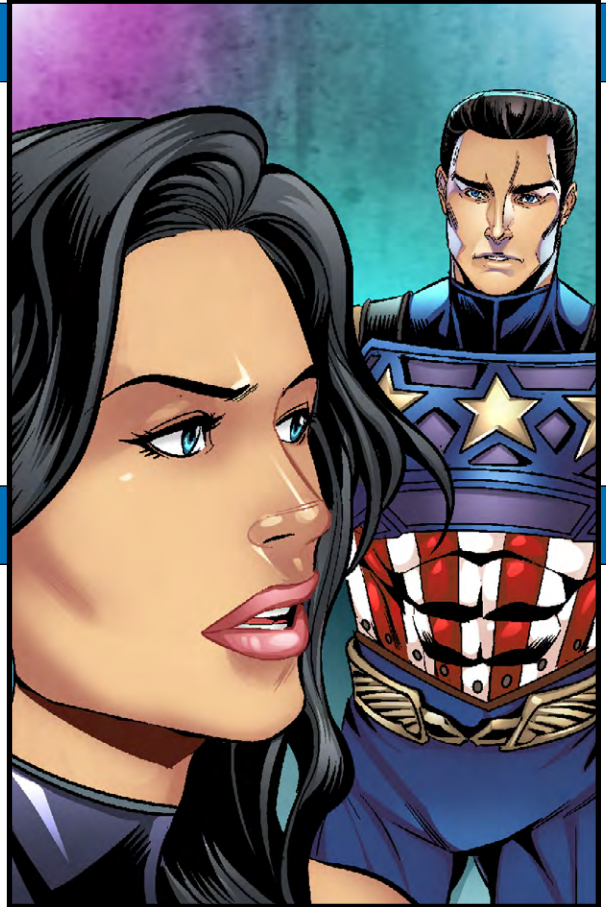
Airborne has 610 CP. If Steve invests 5 of those CP into the Sidekick Perk, his Sidekick would have (610 – 365) 245 CP. If he invested 20 CP, he could have a Sidekick with 400 CP. If he invested 80 CP, his Sidekick would have 530 CP.

CP Invested	Sidekick CP
5 CP	Character's CP - 365
10 CP	Character's CP - 285
20 CP	Character's CP - 210
40 CP	Character's CP - 140
80 CP	Character's CP - 80

SIGNATURE MOVE

Base Cost: 5 CP

The character has specialized in making a particular attack with flair and skill. Specify a specific type of Attack using a particular Attribute or Power (and Combat Maneuver, if desired). The maximum number of Hero Points the character can spend on that Attack is increased by 1.

If Airborne spends 5 CP to make the "Right Jab of Justice" (his Super-Fast Melee Attack) his Signature Move, then he would be able to spend 4 Hero Points instead of 3 Hero Points when attacking with it.

SINGULAR INVENTION

Base Cost: 5+ CP

The character owns one or more Inventions with extraordinary capabilities. Inventions are one-of-a-kind objects that can exceed the real-world limits on ordinary objects (see p. 226). The Development Budget available to buy Inventions is determined by the amount of CP the character invests into this Perk and by the character's own total CP, as shown on the Singular Invention Character Points table. All of the CP in the Development Budget must be allocated during character creation. A Singular Invention must be built following the rules for Inventions (p. 168). A Singular Invention is generally a Crewed or Worn Invention. A Singular Invention can never have the Invention, Necromancy, Pathogen Synthesis, or Summoning Powers and can never have any Primary Attribute or Power that is greater than one-half the character's Power Limit. If a Singular Invention is Worn, it cannot cause the character to exceed his PL. If a Singular Invention is Autonomous, it also has its own Power Limit based on its CP score which it must obey.

CP Invested	Development Budget
5 CP	Character's CP - 365
10 CP	Character's CP - 285
20 CP	Character's CP - 210
40 CP	Character's CP - 140
80 CP	Character's CP - 80

Unlike a character with the Invention Power (p. 168), a character with this Perk cannot dynamically create new Inventions. If his Singular Inventions are irrevocably lost or Destroyed, he gets the CP back the next time he is awarded CP from Character Advancement. A character's Singular Inventions can only be used by him, though others may spend Hero Points to make use of them temporarily. Because Singular Invention puts many additional CP under the player's control, it affects the character's Power Limit (see p. 67).

Designer's Note: When should you equip your character with an Object, a Device, or a Singular Invention? If you want your character to carry a piece of everyday gear like a 9mm pistol, give him an Object – which you can buy with Income to save your precious CP. If you want your character to have typical superhero-like powers but justify it with a gadget or artifact that he might occasionally lose or have stolen, then give him a Device by selecting the Vulnerable State: Deprived of Device drawback. If you want your character to have a utility belt of numerous inventions, a fleet of combat drones, a flying aircraft carrier, and a jet-car, use Singular Invention. Singular Invention is intended to allow a character to expand his breadth at the cost of his maximum Power Limit being lowered.

STALWART

Base Cost: 5 CP

The character is tough and long-lasting in combat. Increase the character's Power Limit by 1 for Melee Defense, Ranged Defense, Emotional Defense, Mental Defense, Physical Protection, and Mental Protection combinations but reduce the character's Power Limit by 1 for Melee Attack, Ranged Attack, Emotional Attack, and Mental Attack combinations.

TIRELESS

Base Cost: 5 CP

The character does not experience the fatigue and exhaustion of ordinary mortals. He does not suffer from the Fatigued or Exhausted conditions. The character still needs to sleep in order to maintain long-term health but can go without sleep during an Issue without penalty. Note that the character doesn't necessarily enjoy, e.g., doing hard physical labor for 48 hours straight, he's just capable of doing so when need be. Only ascendants can take this Perk.

UNDEAD

Base Cost: 5 CP

The character is some sort of ghoul, vampire, zombie, or other undead being. He resembles a human being unless he takes Drawbacks such as Disturbing Appearance. He is a corporeal undead unless he takes Incorporeality as a Power. He does not need air, food, water, or sleep and counts as Tireless. He Sinks instead of Drowns (p. 293). As he is not really a living thing, he has a Durability Variable Attribute instead of a Health Variable Attribute. Durability functions like Health, except that it measures his necromantic rather than biological resilience. If the character's Current Durability is reduced to 0, he becomes Wrecked and cannot function. If his Current Durability is reduced to a negative value greater than his maximum Durability, he is utterly Destroyed.

He cannot be harmed by poisons or infectants or by Life Drain (but can heal himself with Life Drain). The character never loses Durability to the Toxic Damage Type and is immune to the Poisoned condition. He suffers the Leaking condition instead of the Bleeding condition from the Lacerating and Penetrating Damage Types, as he drips ooze, pus, and necromantic fluids. The character can only be healed by means of Life Drain or Regeneration. If he takes the Regeneration Power, he can recover Health after 14 SPs of Time minus his SPs of Regeneration. He cannot be affected by disease. He cannot take the Compromised Immune System Drawback.

An Undead character can be controlled with Mind Domination like a living character. He is also vulnerable to being dominated by a character with Necromancy (p. 171).

WATCHFUL

Base Cost: 10 CP

The character is constantly wary. As long as he is not Overwhelmed or Unconscious, he is considered to be Observing the environment for Hiding and Sneaking characters (p. 302).

WEALTHY

Base Cost: 1+ CP

The character is financially prosperous. The character's Income is determined by the amount of CP the character invests into this Perk and by the character's Power Limit, as shown on the Income by Power Limit table. The character can begin play with any ordinary objects such as equipment, weapons, armor, or vehicles that have a Monetary Cost (in SP) of equal to or less than his Income + 17. A character's Net Worth is equal to his Income + 22. See the Object Catalog (p. 229) and Earning & Spending Money (p. 308) for more details.

CP Invested	Income
1 CP	Power Level/2 - 7
2 CP	Power Level/2 - 6
5 CP	Power Level/2 - 5
10 CP	Power Level/2 - 4
20 CP	Power Level/2- 3
40 CP	Power Level/2 - 2
80 CP	Power Level/2 -1
81+ CP	+1 per additional 80 CP

Airborne has a Power Limit of 20. 20/2 = 10. If he invests 2 CP, his Income is (10-6) or 4 SPs. If he invests 80 CP, his Income is 9 SPs. If he invests 160 CP, his Income is 10 SPs. He decides to invest 10 CP, giving him an Income of 6 SPs. He can begin play with ordinary objects costing up to (6 + 17) 23 SPs ($80,000). He could begin play with a luxury car (23 SPs) and an assault rifle (17 SPs) but not with a private jet (30 SPs).

Designer's Note: In *Ascendant*, as in the real world, some ordinary people accumulate enormous wealth. To build an ultra-rich but not superhuman NPC, first build a 400 CP character and assign him 80 CP of Wealthy, giving him Power Limit 14 and Income of 14/2 -1 = 6. Then add additional Wealth. Each 80 CP will simultaneously increase his Income by 1 and his Power Limit by 2, resulting in a total increase in Income of 1 + 2/2 = 2 per 80 CP. This works out to:

★ 480 CP: Wealthy (160 CP), Power Limit 16, Income 8

★ 560 CP: Wealthy (240 CP), Power Limit 18, Income 10

★ 640 CP: Wealthy (320 CP), Power Limit 20, Income 12

★ 720 CP: Wealthy (400 CP), Power Limit 22, Income 14

★ 800 CP: Wealthy (480 CP), Power Limit 24, Income 16

★ 880 CP: Wealthy (560 CP), Power Limit 26, Income 18

★ 960 CP: Wealthy (640 CP), Power Limit 28, Income 20

★ 1040 CP: Wealthy (720 CP), Power Limit 30, Income 22

You can use this method to put real-world billionaires into game terms if you want. For instance, Jeff Bezos has a reported net worth of $130B (44 SPs), suggesting an Income of 44 – 22 = 22 SPs. Bezos is therefore a 1040 CP character with 720 CP invested in the Wealthy Perk. The other 320 CP were spent on his INS and RES, various Skills, etc. Note that despite his CP, Bezos would still have to obey the limits on Primary Attributes (5 SP) and Skills (9 SPs) that apply to ordinary humans. At least until he uses his wealth to build himself power armor, anyway…

DRAWBACKS

ADVERSE RESPONSE

Base Refund: Special

The character suffers damage from a particular substance. The Adverse Response should be assigned a Damage Type and an SP score representing the severity of the character's allergy. An Adverse Response can result in Damage of any one of the following Types: Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Penetrating, Thermal, and Toxic Damage. The Base Refund of the Adverse Response is 8 CP per SP, regardless of type. This Base Refund is then multiplied by a Refund Modifier determined by the rarity of the substance, the proximity to the substance required to trigger the Adverse Response, and the duration of the Adverse Response caused by the exposure.

Rarity	Modifier
Ever-present (oxygen)	75%
Common (plastic, sunlight, water)	50%
Uncommon (gold, open flame)	25%
Rare (gamma rays, uranium)	10%
Very Rare (moon rock)	5%
Singular (exotic matter, artifact)	3%

Rarity of Substance: Ever-present substances are those that can be avoided only with significant difficulty. Common substances occur frequently but can be avoided through management of time or position. Uncommon substances don't show up often but could be easily procured by those aware of the character's Adverse Response. Rare substances aren't often present and are difficult to procure. Very Rare substances will almost never be encountered by happenstance and are nearly impossible to acquire. Singular substances are one-of-a-kind, like the One Ring, likely to be encountered in only one Issue in an entire Series.

Proximity	Modifier
Ambient	400%
8 SPs	300%
4 SPs	200%
0 SPs	100%
Touch	40%

Proximity to Substance: The substance causes the Adverse Response when the character is within Proximity Range, which can range from 8 SPs (1/4 mile) to touch. (The GM can create other Proximity Ranges if desired.) The proximity can also be ambient such that even a trace or background presence triggers the Adverse Response.

Duration of Response: Exposure to a substance always causes the Response while the character is within Proximity Range of it. If the Adverse Response continues for 1 or more Pages thereafter, the Refund Modifier is higher.

Effects of Adverse Response: Anytime the character begins his Panel within Proximity Range of the substance, moves within Proximity Range of the substance on his Panel, or begins his Panel during the Duration of a prior exposure, he automatically suffers Base Damage

Duration	Modifier
Proximity	80%
Proximity +1 Page	90%
Proximity + 2 Pages	100%
Proximity +3 Pages	110%
Proximity +4 Pages	120%
Proximity +5 Pages or more	130%

appropriate to the SP score of the Adverse Response. In addition, anytime the character suffers Damage from an Aura or Attack that is delivered by means of the substance, he adds the Damage Type of his Adverse Response to the Power's Damage Types and adds his SPs of Adverse Response to the EV to determine damage dealt.

A character can have an Adverse Response and a Vulnerable State caused by the same substance. A character cannot have an Adverse Response if he has Protection against the substance or if he has 13 SPs or more of the Regeneration Power. Because these two rules interact, a protected or regenerating character with an Adverse Response can still be built; just assign him a Vulnerable State of equal Duration that deprives him of the Power(s) while he is exposed to the substance that causes the Adverse Response.

> Let's pretend Airborne has an 8 SP Corrosive Adverse Reaction to water. Any time he gets wet, he suffers 32 points of Damage. This makes showering difficult. Worse, if an enemy were to use, e.g., Water Control to strike him with a 10 SP Concussive Blast, Airborne's Adverse Response would cause him to suffer Corrosive Concussive Damage with an EV of 10 + 8 = 18 SPs from the Attack.
>
> The Base Refund for this Adverse Response is 32 CP. Water is a common substance (50% Refund Modifier). Getting wet is touch (40% Refund Modifier). Let's say that the Adverse Response lasts for 5 Pages after he's immersed, as he has to be fully dry before the damage stops. His Adverse Response's Frequency Modifier is 50% x 40% x 130% = 32.5%. With an Effect Refund of 32 CP, Airborne's Total Refund is 32 x 32.5% = 10 CP.

BODY FORM

Base Refund: Varies

The character has an unusual body form resembling that of an avian, fish, insect, quadruped, or worm. He cannot use Crewed or Worn Objects unless specifically designed for his body form. He cannot use his MIG to throw Objects. He can use his MIG -3 to clumsily pick up objects with his mouth, paws, talons, etc. He can use his full MIG to carry or pull objects that are strapped to him, to push objects, to stop moving objects, as the EV for Melee Attacks, and as the AV for Wrestling Attacks when eligible. Should he attempt an Action that would require a biped to use its hands for fine manipulation (e.g. disarming a bomb, giving first aid, driving a vehicle, or writing information), he must resort to teeth, paws, talons, etc.; he is treated as having an INS and AGI of 0 for purposes of that Action. If the character has an Additional Limb, the limitations of this Drawback do not apply to the Additional Limb.

When this Drawback is selected, the character must choose from one of the following types of Body Forms, which determines the Base Refund for the Drawback. Some forms have additional effects.

Avian (20 CP): The character's body has a pair of wings and a pair of legs. All of the normal effects of Body Form apply. This Drawback doesn't necessarily have to coincide with Winged Flight; an ostrich has Avian Body Firm without having the Flight Power.

Aquatic (40 CP): The character's body has flippers, fins, or other means of submarine locomotion instead of arms and legs. All of the normal effects of Body Form apply. The character does not have a Jumping Speed or Running Speed on land unless purchased separately. He has a Jumping Speed in water equal to his Swimming Speed – 2, if any. He can take a Challenge Action to move at a Running Speed of 0 SPs on land by crawling, twisting, or flopping around. If the character does not have another Speed (through

a power, object, or other means), his DV against Ranged Attacks is also reduced to 0 SPs when on land. He suffers a -1 penalty to his AV and DV when making and defending against Melee Attacks on land. He suffers a -2 penalty to his AV and DV when making and defending against Wrestling Attacks on land. (The aforementioned penalties do not apply to Powers that grant a Melee or Wrestling AV or DV through non-physical effects, such as a Telepathic Deflection.) This Drawback doesn't grant Swimming Power but it's highly recommended!

Insectoid (20 CP): The character's body has many legs and no arms. All of the normal effects of Body Form apply.

Quadruped (20 CP): The character's body has four legs and no arms. All of the normal effects of Body Form apply. A quadruped with one Additional Limb has a grasping trunk or tail. A quadruped with two Additional Limbs might be a centaur.

Vermian (20 CP): The character's body has no limbs of any sort, similar to a snake. All of the normal effects of Body Form apply.

BAD HEARING

Base Refund: 1+ CP

The character has a deficient sense of hearing. For each 1 SP by which he reduces his Passive Listening Range, he is refunded 1 CP, to a maximum of 8 SPs reduction and 8 CP refund. A character with Bad Hearing cannot have SPs of Ultra-Sensitive Hearing. The character cannot have the Deafness drawback. Record the Drawback as Bad Hearing #, where # is the penalty to Passive Listening Range.

BLINDNESS

Base Refund: 20 CP

The character is wholly deficient in sight. He permanently suffers the Blinded condition. A Blinded character cannot claim LOS to targets. When attacking, he can only make Blind Attacks (p. 377). He will be Totally Surprised by any attacks made by opponents outside of Earshot and Partially Surprised by attacks made by opponents within Earshot (p. 300) unless he has another way to detect them. If a Blinded character has Blindsight, he can ignore this condition for purposes of interacting with any characters within Range of his Power. A character with Blindness cannot have SPs of Dark Vision, Microscopic Vision, Ultra-Sensitive Vision, or X-Ray Vision. The character cannot have Dim Vision.

CODE OF HONOR

Base Refund: 1+ CP

The character holds himself to a particular standard of behavior and ethics. He cannot expend Hero Points unless doing so is within his Code of Honor. He cannot regain lost Hero Points after an Issue in which he violates his Code of Honor. The CP refund for the Code of Honor determines how restrictive it is.

A 1 CP Code of Honor is similar to a professional code of ethics. It affects the character's behavior in one particular area of his life. It could be a vigilante or pirate's code of grim justice. A 2 CP Code of Honor is similar to bushido, chivalry, lay religious devotion, or various honor-culture traditions. It affects the character's behavior in every area of his life, from career to family to combat. A four-color hero who fights for justice, refuses to kill, and altruistically protects innocent life has a 2 CP Code of Honor. A 5 CP Code of Honor is similar to monastic vows. It profoundly affects the character's behavior in every area of his life, restricting him from engaging in many ordinary activities. The player and GM should collaborate to determine the exact nature of the character's Code of Honor.

COMPROMISED IMMUNE SYSTEM

Base Refund: 10 CP

The character is highly susceptible to infectious disease. Anytime he is exposed to a disease, the AV for his Infectivity v. Exposure Challenge Check is increased by 1. Anytime he is infected by a disease, the AV for his Pathogenicity vs. MIG Challenge Check is also increased by 1. The Incubation Time and Morbidity Time of any disease that infects him is decreased by 1 SP, and the Convalescence Period is increased by 1 SP. He cannot take the Hyper-Immune System Power.

COMPULSION

Base Refund: 1+ CP

The character suffers from an idiosyncratic, bizarre, or even vicious impulse or addiction. The character's Compulsion may not always be relevant; but when it is, he must act on it, even to his detriment, unless he spends Hero Points to ignore it. If the character spends Hero Points equal to the CP refund for his Compulsion, he can thereafter act freely for SPs of Time equal to his RES/Iron Will.

The CP refund for the Compulsion determines how demanding it is. A 1 CP Compulsion can be any habit that is still socially acceptable, such as being addicted to energy drinks or coffee, smoking cigarettes, spending too much time posting selfies on social media, or having a sweet tooth. It can also be a mild idiosyncrasy that sometimes affects the character's crimefighting or villainy, such as never refusing to sign an autograph. A 2 CP Compulsion can be a vice such as alcoholism, gambling addiction, drug abuse, or other "bad habit" that affects the character's behavior in every area of his life. Alternatively a 2 CP Compulsion can be an idiosyncrasy that severely affects the character's crimefighting or criminal pursuits, such as always leaving a calling card, always leaving clues for the heroes to riddle through, etc. A 5 CP Compulsion is a severe disability that profoundly affects the character's behavior in every area of his life, restricting him from engaging in many ordinary activities. The player and GM should collaborate to determine the exact nature of the character's Compulsion.

DAMAGE SUSCEPTIBILITY

Base Refund: Special

The character is highly susceptible to one particular Damage Type. Choose from Annihilating, Bludgeoning, Concussive, Corrosive, Cosmic, Cryogenic, Electrical, Ionizing, Lacerating, Neural, Penetrating, Psychic, Thermal, or Toxic Damage. The extent of the character's Damage Susceptibility should be assigned an SP score. Anytime the character is affected by the Damage to which he is susceptible, he must add his SPs of Damage Susceptibility to the EV to determine damage dealt. The Base Refund for Damage Susceptibility is 2 CP per SP. A character does not gain any CP from Damage Susceptibility if he has 13 SPs or more of Resilience or Regeneration effective against that Damage Type.

DARK SECRET

Base Refund: 1+ CP

The character has a skeleton in his closet that he would kill to keep secret. If an interloper learns his Dark Secret, he cannot expend Hero Points until the problem has been handled (e.g. by killing, paying off, or otherwise dealing with the interloper). The CP refund for the Dark Secret determines how difficult it would be for someone to learn the secret.

A 1 CP Dark Secret is known only to the character and could only be discovered by someone able to compel the character to talk or to read his mind. A 2 CP Dark Secret is known to the character and a small handful of Friendly NPCs. The NPCs will not voluntarily betray the Dark Secret, but might reveal it if blackmailed, coerced, or influenced by mental powers. A 5 CP Dark Secret is known to the character and a small handful of Friendly NPCs, but there is enough documentary or forensic evidence of the Dark Secret that it could be pieced together by a third party given reason to suspect the Dark Secret exists.

If the Dark Secret is publicly exposed, the character must immediately buy off the Dark Secret by reducing his SPs of Reputation, taking SPs of Notorious, and/or taking the Hunted drawback.

DEAFNESS

Base Refund: 10 CP

The character is wholly lacking the sense of hearing. He permanently suffers the Deafened condition. A Deafened character is out of Earshot of all sounds. He will be Totally Surprised by any attacks made by opponents outside of LOS unless he has another way to detect them. The character cannot have SPs of Extended Hearing, Filtered Hearing, or Ultra-Sensitive Hearing. He cannot have the Bad Hearing drawback.

DEATHWISH

Base Refund: 20 CP

The character subconsciously wants to die. As a result, he cannot spend Hero Points to increase his DV against Attacks or on Desperate Damage Reduction (p. 371).

DEPENDENT

Base Refund: 1+ CP

The character has a parent, spouse, child, sibling, or other loved one that he values more than his own life. He cannot expend Hero Points when his Dependent is in danger except directly in pursuit of the Dependent's rescue or protection. He cannot regain lost Hero Points while his Dependent is held captive or in harm's way. If his Dependent is killed, the character loses all Hero Points immediately and cannot regain more Hero Points until he either buys off this Drawback or acquires a new Dependent. The latter should be a matter of comic book melodrama (e.g. after a crushing depression from the loss of his wife, the hero becomes the guardian of a precocious child and regains the ability to care).

The CP refund for the Dependent determines how likely the Dependent is to be in danger. A 1 CP Dependent is relatively safe. The character's attachment to the Dependent may not be widely known, or the Dependent may be in witness protection or otherwise hard to assail. A 2 CP Dependent is at risk from anyone who knows about the character's personal life. The Dependent will be endangered regularly. A 5 CP Dependent actively puts himself at risk by interfering in the character's missions and activities and will constantly be in danger. The player and GM should collaborate to determine the exact nature of the character's Dependent.

DIM VISION

Base Refund: 2+ CP

The character has a deficient sense of sight. For each 1 SP by which he reduces his Passive Spotting Range, he is refunded 2 CP, to a maximum of 8 SPs reduction and 16 CP refund. A character with this Drawback cannot have SPs of Ultra-Sensitive Vision. The character cannot have the Blindness drawback. Record the Drawback as Dim Vision #, where # is the penalty to Passive Spotting Range.

DISTURBING APPEARANCE

Base Refund: 1+ CP

The character's appearance is unpleasant, alien, or grotesque. The CP refund for the Drawback determines the impact of the character's Monstrous Appearance.

1 CP of Disturbing Appearance means the character is superficially normal but has a few disturbing features such as long and pointed canines, cat-like eyes, or diseased skin. It takes 3 SPs of Visual Clarity to notice these oddities; the character suffers a -1 penalty to his AV to Befriend NPCs who notice them. In dim light or other conditions of Obscurity he can pass as human.

2 CP of Disturbing Appearance means the character is grotesquely abnormal. He might have an animalistic, deformed, or badly scarred face, strangely shaped limbs, weird body covering, twisted body form, etc. It takes 2 SPs of Visual Clarity to notice these oddities; the character suffers a -2 penalty to his AV to Befriend NPCs who notice them.

5 CP of Disturbing Appearance means the character is nowhere close to human. He might be a tentacled mass of vegetative matter covered with slime…or worse. It takes just 1 SP of Visual Clarity to notice the character's Monstrous Appearance; he suffers a -5 SP penalty to his AV to Befriend NPCs who notice them. No amount of disguise can make him pass as human.

Unless the character takes other Drawbacks such as Notorious or Unlikeable, Disturbing Appearance does not preclude him from having and benefiting from SPs of Reputation. Even a slime beast from hell can be famous and popular with the right PR team.

DUTY

Base Refund: 1+ CP

The character has legal obligations to fulfill certain functions or roles. He cannot expend Hero Points in violation of his Duty, and if his actions in game result in him being so derelict in his Duty that he is relieved of his obligations, he loses all Hero Points immediately and cannot regain more Hero Points until he either buys off this Drawback or acquires a new Duty. The latter should be a matter of comic book melodrama (e.g. "after being kicked off the police force, the maverick detective gets a second chance working for a secret Catholic exorcist team.") Note that Duty does not necessarily entail any corresponding Authority – the character must purchase that separately as a Perk.

The restrictiveness of the obligations determines the Base Refund from the Duty. With 1 CP of Duty, he has a part-time avocation that occasionally imposes obligations. He might be a member of the National Guard or a volunteer firefighter. With 2 CP of Duty, the character might have a 9-to-5 job that leaves him free outside work, or maintain a practice as an independent doctor, lawyer, priest, or other professional with a code of ethics that limits his behavior. He could also be a "maverick" cop who has a lot more independence and free time than any actual detective has or an undercover operative with substantial autonomy. With 5 CP of Duty, the character has a full-time occupation that places demanding obligations on him without entirely stripping him of autonomy. He might be a police detective or a military officer on detached duty. With 10 CP of Duty, the character has obligations that exceptionally limit his personal freedom. He might be a paroled criminal who has to check in constantly, an active-duty enlisted soldier, or a patrol officer working shifts on the street.

> **Designer's Note:** Be sure the players and GM collaborate to make sure the player characters have selected Duties that are compatible with the Series that the GM plans to run. If the characters are members of an Organization, the GM may ask that they select the Authority Perk and a commensurate Duty Drawback to represent their affiliation. See Organizations on p. 401.

EASILY WINDED

Base Refund: 1+ CP

The character becomes Fatigued and Exhausted more quickly from Extended Actions. He is refunded 1 CP for each SP of Time. A character with this Drawback cannot have the Tireless perk. Record the Drawback as Easily Winded #, where # is the SPs of Time.

> A normal character becomes Fatigued after 3 SPs (30 seconds) of physical activity and Exhausted after 12 SPs (4 hours) of physical activity. A character with Easily Winded 2 becomes Fatigued after 1 SP (7s) of physical activity and Exhausted after 10 SPS (1 hour) of physical activity.

HEAVY

Base Refund: 1+ CP

The character is heavier than usual. For each 1 SP by which he increases his Weight, he is refunded 1 CP, to a maximum Weight of 6 SPs (1,600lbs). Re-calculate the character's Running Speed and Jumping Speed based on his new Weight.

HESITANT

Base Refund: 5 CP

When the going gets tough, the character is prone to indecision. He begins the first Page of any action scene or combat with the Dazed condition.

HUNTED

Base Refund: 1+ CP

The character is hunted by powerful enemies that seek to arrest, capture, or kill him. The enemies are committed and numerous, and at least one is as or more powerful than the character. If the character has the support of an organization, the enemies have the support of a more powerful organization.

The CP refund for the Drawback determines how likely the character is to be in danger. If the refund is worth 1 CP, the character is being passively hunted by a secret organization, but they have few active leads on his whereabouts, and he can avoid them by limiting publicity. If the refund is worth 2 CP, the character is being actively hunted by a secret organization or passively pursued by a public organization (such as the FBI). If he is recognized publicly, he may be in danger. If the refund is worth 5 CP, the character is the top priority of a secret organization or is actively hunted by a public organization. He is regularly endangered by his foes. If the refund is worth 10 CP, the character is the top priority of a public organization. He will be endangered by his enemies unremittingly. Keeping a low profile and having an escape plan are essential to his survival.

ILLITERATE

Base Refund: 2 CP

The character cannot read or write. He is unable to use his INS to process written information. He cannot find or understand Clues if they involve text in any way.

MISSING ARM

Base Refund: 10 CP

The character has only one functional arm. He suffers a -1 penalty to his AV and DV when making and defending against Melee Attacks. He suffers a -2 penalty to his AV and DV when making and defending against Wrestling Attacks. (A character using or emulating Deflection does not suffer the DV penalty.) He suffers a -2 penalty to MIG for purposes of lifting because he cannot lift with his whole body. He cannot use objects that require two hands to operate, such as weapons with Cumbersome Strike. The GM should apply other circumstantial penalties where appropriate. (If a character has a functioning bionic arm that eliminates these penalties, then he does not have this Flaw!)

MISSING HAND

Base Refund: 5 CP

The character has only one functional hand. He suffers a -1 penalty to his AV and DV when making and defending against Wrestling Attacks. (A character using or emulating Deflection does not suffer the DV penalty.) He suffers a -1 penalty to MIG for purposes of lifting because he cannot get a two-handed grip. He cannot use objects that require two hands to operate, such as weapons with Cumbersome Strike. The GM should apply other circumstantial penalties where appropriate. (If a character has a functioning bionic hand that eliminates these penalties, then he does not have this Flaw!)

MUTE

Base Refund: 10 CP

The character permanently suffers the Mute condition. He cannot speak and cannot take any Actions that involve speaking (such as befriending or intimidating NPCs) unless he has another means of communicating. He cannot use any powers with the Charismatic modifier unless he has another means of communicating.

NOTORIOUS

Base Refund: 1+ CP

The character is infamously unpopular. For each 1 CP refund, he gains 1 SP of Notoriety. Notoriety functions like Reputation, only the crowds it attracts are Hostile to the character. Anytime a character accidentally or deliberately attracts a crowd of fans from his Reputation, he will attract a crowd of haters from his Notoriety. Notoriety can be used to increase the AV of Intimidation checks against NPCs but does not help in other circumstances. See Interacting with NPCs (p. 310). A character's Notoriety cannot exceed his Power Level – 10 without GM permission. If the GM is using Dynamic Reputation Advancement (p. 438), this Drawback grants no CP refund.

ONE-EYED

Base Refund: 2 CP

The character is blind in or missing one eye. He suffers a -1 penalty to his AV when making Ranged Attacks due to lack of depth perception.

PARAPLEGIC

Base Refund: 20 CP

The character is paralyzed from the waist down. He does not have a Jumping Speed or Running Speed. If he has arms, he can take a Challenge Action to move at a Running Speed of 0 SPs by crawling or clambering around. If the character does not have another Speed (through a power, object, or other means), his DV against Ranged Attacks is also reduced to 0 SPs. A character with this Drawback cannot have the Quadriplegic drawback or the Jumping, Running, or Superspeed powers.

QUADRIPLEGIC

Base Refund: 40 CP

The character is paralyzed from the neck down. He permanently suffers the Paralyzed condition. He does not have a Jumping Speed or Running Speed. He cannot take any Actions that use VAL, MIG, AGI, or any Powers or Skills that use those Attributes as their Base Score or substitute for those Attributes. He is considered to have an AGI, VAL, MIG, and Speed of 0 for purposes of DV to Melee, Ranged, Wrestling, and Ramming Attacks and cannot Roll with those Attacks.

If a character does not have a VAL, MIG, and AGI score of at least 1 each, he gains no CP for this Drawback. A character with this Drawback gains no refund from the Body Form, Paraplegic, Missing Arm, or Missing Hand Drawback. The character cannot select any Movement powers that afford him a Speed. However, if he has a Control or Mental power that indirectly affords him a Speed (such as Telekinesis affording him Flight) and does not rely on AGI, he can use that power to travel with a Movement Action. He can use the Speed where applicate for DV. He still cannot Roll with Melee, Ranged, Wrestling, and Ramming Attacks, however.

Professor Chi has 4 SPs of AGI, 2 SPs of Weight, and 12 SPs of Telekinesis. He also has the Quadriplegic drawback. He does not have a Jumping Speed or Running Speed. He cannot take any Actions using VAL, MIG, AGI, as the AV. He has a DV of 0 against any Melee, Ranged, Wrestling, or Ramming Attacks. However, if he uses an Automatic Action to deflect attacks with Telekinesis, he can use its SPs of Power as his DV. If he uses a Movement Action to move himself with Telekinesis, he can travel up to (12 – 2) 10 SPs and can use his Speed as the DV against appropriate attacks (such as Explosion).

SHORT STATURE

Base Refund: 2 CP

The character has an extraordinarily short stature due to achondroplasia, growth hormone deficiency, or other condition. His Height is reduced by 1 SP. His Weight, Running Speed, and Jumping Speed are reduced by 2 SP each. (Note that the decrease in Weight may counteract the decrease in Running Speed and Jumping Speed for some characters.)

The Gnat has MIG of 4 SPs and AGI of 9 SPs. Before selecting this Drawback, he has a Height of 0 SPs and Weight of 3 SPs. His Jumping Speed is his MIG – Weight, or 1 SP. His Running Speed is the lesser of 5 SPs and his AGI – Weight +3, so it is 5 SPs. After selecting this Drawback, he has a Height of -1 SP and a Weight of 1 SP. His Jumping Speed is now his MIG – Weight – 2, or 4 – 1 – 2 = 1 SP. His Running Speed is now the lesser of 3 SP or his AGI – Weight +3 – 2, so it is 3 SP.

SICKLY

Base Refund: 4+ CP

The character has a weak constitution that causes him to recover slowly from ailments and injuries. For each 3 CP refund from this Drawback, he increases the SPs of Time required to recover Health by 1. A character with this Drawback cannot have SPs of Regeneration. Record the Drawback as Sickly #, where # is the increase in Time to recover.

UNCONSUMMATABLE

Base Refund: 2 CP

The character desires intimate relations with others, but cannot consummate them due to injury, lack of capacity, etc. As a result, his RES is treated as if it were 1 SP lower than its actual value for purposes of calculating his Determination Recovery and when resisting emotional states of anger, depression, and lust. (Note that this Drawback is intended for tragic characters who want to be intimate with others but cannot; a character who has no desire to consummate intimate relations with others does not experience a Drawback. He probably just has a lot of free time for his RPG design hobby.)

UNHEROIC

Base Refund: 5+ CP

The character just isn't made of the right stuff. He loses 1 Hero Point per 5 CP refund from this Drawback. A character can have a minimum of half his base Hero Points by Power Limit. (Non-ascendant NPCs can have a minimum of 0 Hero Points.)

UNLIKEABLE

Base Refund: 2 CP

The character has an abrasive and unpleasant personality. He can still be admired, famous, and popular, but not by those who know him. He cannot shift NPCs to Friendly Attitude except by using Powers such as Emotion Adjustment or Manchurian Mind Domination. NPCs who begin with a Friendly attitude towards him automatically shift to Indifferent after 13 SPs of Time (8 hours) in his company.

UNOBSERVANT

Base Refund: 2 CP

The character has limited situational awareness and is easily distracted or lost in thought. It requires a Challenge Action rather than an Automatic Action for him to Observe the environment for Hiding and Sneaking characters.

UNSPEAKING

Base Refund: 5 CP

The character can bark, grunt, roar, or otherwise vocalize sounds but cannot speak intelligibly. He cannot take any Actions that involve speaking (such as befriending or intimidating NPCs) unless he has another means of communicating.

VULNERABLE STATE

Base Refund: Special

The character has some sort of vulnerability that, when triggered, leaves him substantially less powerful. There are three aspects to determining the Refund afforded by selecting a Vulnerable State: The effect of the Vulnerable State (how weakened is the character while vulnerable), the frequency of the Vulnerable State (how often the character becomes vulnerable) and the duration of the Vulnerable State (how long the character stays vulnerable).

Effect of Vulnerable State: Determine what the character's Primary Attributes, Powers, Skills, Perks, and Drawbacks are when in his Vulnerable State. Then calculate the difference in CP cost between the character's normal state and his Vulnerable State. The CP difference is the Effect Refund for the Vulnerable State. A character's Vulnerable State must have a CP cost that is less than his normal state. A character's Vulnerable State cannot have Perks, Powers, or Skills that his normal state does not, nor can it have higher SP score in any existing Attributes, Powers, or Skills than his normal state.

Imagine Airborne has a Vulnerable State that deprives him of his 12 SPs of Gliding. The difference in cost between Airborne's normal condition and his Vulnerable State is the 32 CP cost of the Power, so that's the Effect Refund.

Frequency and Duration of Vulnerable State: The frequency and duration of a character's Vulnerable State will depend on what triggers the state. Some Vulnerable States are triggered by common circumstances ("exposure to daylight"), others by a period of usage ("operates for 8 hours"), others by a combat outcome ("disarmed of the sword of power" or "reduced to half Health"). The triggers determine a Refund Modifier which is applied to the Effect Refund to find the Total Refund for the Vulnerable State. The more frequent the Vulnerable State, and the longer the duration, the higher the Refund Modifier, and hence the bigger the Total Refund.

Limit on Vulnerable States: Before we go into the details, let's state a blanket rule. All other rules notwithstanding, a Vulnerable State that does not actually make a character vulnerable is not worth a Refund of any CP. Because of the infinite possibilities of point-buy character creation, it is impossible to identify every possible loophole; therefore this rule gives the GM the final decision as to whether a particular Vulnerable State is worth any CP. Common examples of "Vulnerable States that don't actually make a character vulnerable" include but are not limited to:

Rarity	Modifier
Ever-present (oxygen)	75%
Common (plastic, sunlight, water)	50%
Uncommon (gold, open flame)	25%
Rare (gamma rays, uranium)	10%
Very Rare (moon rock)	5%
Singular (exotic matter, artifact)	3%

★ Vulnerable States that take away powers when a character becomes Unconscious or Overwhelmed, if those Powers aren't useful when the character is Unconscious or Overwhelmed.
★ Vulnerable States that hinge on taking Damage of a type the character can virtually always avoid, such as Incorporeal characters hinging Vulnerable States on Health Damage.
★ Vulnerable States that activate when characters reach emotional states when the character is built to be impossible to emotionally effect, such as Mind Screened characters with maximum RES claiming Vulnerable States from emotions.
★ Vulnerable States that trigger when a character is affected by a situation he can almost never be affected by, such as a character with Air Supply having a Vulnerable State triggered by being unable to breathe.
★ Vulnerable States that activate on loss of Devices that are invisible, intangible, incorporeal, microscopic, or otherwise impossible for an enemy to identify and take.

Proximity	Modifier
Ambient	100%
8 SPs	75%
4 SPs	50%
0 SPs	25%
Touch	10%

Multiple Vulnerable States: Sometimes a character may have several Vulnerable States for different conditions affecting the same Attributes, Powers, and/or Skills. Determine the Total Refund for the Vulnerable State with the highest Refund Modifier normally. Then move on to the next-highest Refund Modifier, reducing that Vulnerable State's Base Refund by the prior state's Total Refund, then applying the Refund Modifier. Repeat as necessary.

Suggested Vulnerable States: The method to calculate the Refund Modifiers for a variety of Vulnerable States is described below.

Exposed to Substance: The character's Vulnerable State is triggered by exposure to a particular substance and lasts while the substance is present and possibly for a short period thereafter. The Refund Modifier is determined by the rarity of the substance, the proximity to the substance, and the duration of the Vulnerable State caused by the exposure.

Duration	Modifier
Proximity	80%
Proximity +1 Page	90%
Proximity + 2 Pages	100%
Proximity +3 Pages	110%
Proximity +4 Pages	120%
Proximity +5 Pages or more	130%

Ever-present substances are those that can be avoided only with significant difficulty. Common substances occur frequently but can be avoided through management of time or position. Uncommon substances don't show up often but could be easily procured by those aware of the character's Vulnerable State. Rare substances aren't often present and are difficult to procure. Very Rare substances will almost never be encountered by happenstance and are nearly impossible to acquire. Singular substances are one-of-a-kind, like the One Ring, likely to be encountered in only one Issue in an entire Series.

The substance causes the Vulnerable State when the character is within Proximity Range, which can range from 8 SPs (1/4 mile) to touch. (The GM can create other Proximity Ranges if desired.) The proximity can also be ambient such that even a trace or background presence triggers the Vulnerable State.

Exposure to a substance always causes the Vulnerable State while the character is within Proximity Range of it. If the Vulnerable State lingers for 1 or more Pages thereafter, the Refund Modifier is higher. If a character remains weakened even after exiting the proximity of the substance that triggered the Vulnerable State, that can be very disastrous for him.

Once these choices are made, the Refund Modifiers for rarity, proximity, and duration are multiplied together, then applied to the Effect Refund.

Emotional Intensity	Modifier
Mild	20%
Moderate	10%
Extreme	5%
Wild	1%

What if Airborne's Gliding Power is nullified when he gets wet? Water is a common substance (50% Refund Modifier). Getting wet is touch (10% Refund Modifier). Let's say that the Vulnerable State lasts for 5 Pages after he's immersed, as he has to be fully dry for his Power to be restored (130%). His Vulnerable State's Frequency Modifier is 50% x 10% x 130% = 6.5%. With an Effect Refund of 32 CP, Airborne's Total Refund is 32 x 6.5% = 2 CP.

What if Airborne's Gliding Power is nullified by sunlight? Sunlight is a common substance (50% Refund Modifier). It's ambient (100%). Let's say the Vulnerable State lasts only while he is directly in the sunlight (80%). His Vulnerable State's Frequency Modifier is 50% x 100% x 80% = 40%. Airborne's Total Refund is 32 x 40% = 12.8 CP, rounding to 13.

Emotional State: The character's Vulnerable State is triggered by entering a particular emotional state. Choose from one of the following emotions: agreeable, angry, calm, depressed, fearful, and lustful. (The GM can devise other states as desired.) The Refund Modifier is determined by the intensity of the emotions that trigger the Vulnerable State: mild, moderate, extreme, and wild.

An enemy who achieves a Yellow or Orange result on an Empathy Attack Check against the character notices that the character chronically has the emotion that is the opposite of his Vulnerable State but doesn't know why. An enemy who achieves a Red result on an Empathy Check or Mind Reading Check against the character knows the character's specific emotion and intensity to trigger the Vulnerable State.

The character's Vulnerable State can be triggered by another character using the Emotion Adjustment power who succeeds in forcing the appropriate intensity of emotion. Alternatively it can be triggered by experiencing emotional events. The GM should make an Attack Check against the character. The AV of the Attack Check depends on the GM's judgment of the intensity of event the character is experiencing. The ordinary events of daily life have an AV of 3 to 5. Intense but not life-changing emotional events have an AV of 6 to 8. Extraordinary or traumatic events have an AV of 9 to 11. Mind-blowing emotional events have an AV of 12+. Use the character's RES as the DV. On a Green result, the character has mild emotions; on a Yellow result, moderate; on an Orange result, extreme; and on a Red result, wild.

After losing the love of his life to terrorists, Gideon Wolf takes on the identity of the Saint, foreswearing love and intimacy in exchange for the God-given power to wreak havoc on evil. In game, this is represented with a Vulnerable State triggered by experiencing moderate lust. When the shapeshifting succubus Lilith shows up at his home disguised as The Saint's long-lost love, saying God has sent her back to him, The Saint is tempted by lust. The Saint is suspicious but still hopeful, so the GM judges this to be an extraordinary event (AV 9). He makes an Attack Check against The Saint, using his RES of 8 as the DV. With an RV of +1, the Judge rolls a 13 and gets an Orange result. The Saint experiences extreme lust and enters his Vulnerable State. They start kissing, but mid-embrace Lilith transforms back into her demonic form and starts clawing him. "Men are so easy," she sneers.

Provided he is not under Emotion Adjustment, a character can voluntarily get out of the emotional state through emotion-laden activity, e.g., positive self-talk (depressed), chewing on his shield and beating his chest (calm), meditative breathing (angry), and so on. Once per Page, the character can change the intensity of his emotional state by one tier as an Automatic Action. If a character is under Emotion Adjustment, he must be break free of the grip of the Power (see p. 114).

The Saint has just been grievously wounded by Lilith's attack. On his Panel, he uses a Movement Action to flee the bedroom and an Automatic Action to calm himself down. He reduces his emotional state from extreme to moderate. He's still aroused but it's getting under control. If he can survive for one more Page, he'll be able to reduce the intensity of his lust to mild and exit his Vulnerable State.

Caught Out of Costume: The character's Vulnerable State is triggered anytime the character is not in costume. For purposes of a Vulnerable State being "in costume" can mean anything from wearing a Device such as power armor to undergoing lycanthropic transformation into a werewolf to accepting the power of Greyskull.

Costume Time	1 Page Change	2 Page Change	3 Page Change	4 Page Change	5 Page Change	6 Page Change	7 Page Change	8 Page Change
10 (1 hour)	4.00%	5.00%	8.00%	15.00%	20.00%	24.00%	31.00%	45.00%
11 (2 hours)	3.00%	4.00%	7.00%	13.00%	18.00%	22.00%	29.00%	40.00%
12 (4 hours)	2.00%	3.00%	6.00%	11.00%	15.00%	20.00%	25.00%	35.00%
13 (8 hours)	1.00%	2.00%	4.00%	8.00%	10.00%	15.00%	17.00%	25.00%
14 (16 hours)	0.00%	1.00%	2.00%	4.00%	5.00%	6.00%	8.00%	10.00%

The Refund Modifier for this Vulnerable State is determined by cross-referencing the amount of Time each day the character can remain in costume with the length of Time it takes for the character to don the costume. Donning a costume is an Extended Automatic Action during which the character cannot take any other Actions.

The Time the character can remain in costume each day can range from 10 SPs (1 hour) to 14 SPs (16 hours). The Time required to change into a costume can range from 1 Page to 8 Pages (3 SP). Times outside these ranges are permitted but do not change the Refund Modifier past the minimum and maximum listed.

Let's assume that in order to use his Jumping and Gliding Powers, Airborne has to strap into his jump-boots. Putting on his jump-boots takes 10 seconds (3 Pages to don). He can wear them all day except when sleeping (16 hours). Therefore the Refund Modifier is 2%, and this Vulnerable State would be worth (32 CP + 9 CP) x 2% = 0.84 CP, rounded to 1 CP. It's not worth many CP because Airborne is very unlikely to be caught with this boots off, and even if he is, he'll be able to quickly join the fray.

On the other hand, let's say the jump-boots use radioactive fuel so Airborne can only safely wear them for an hour per day, and that it takes 8 Pages to strap them on and activate the nuclear jets. Now Vulnerable State would be worth 45% of 41 CP, which rounds to 18 CP. Now it's a lot more likely that Airborne will be caught without his boots, and he will probably not have time to put them on and join a fight.

Deprived of Device: The character's Vulnerable State is triggered anytime the character loses access to a particular Device. When this Vulnerable State is selected, the character must first define the nature of the Device, including what it looks like, how it functions, and what Attributes, Powers, and Skills the character loses without it.

A Device can be worn or carried, as the player chooses. The player can choose the Weight of the Device, up to the character's Carrying Capacity. The Device's Height is set to its Weight/3 then modified +/-2 as desired. The Device is assumed to be indestructible (unless the character also selects **Destruction of Device**, below). The Refund Modifier is determined by the risk of the character being deprived of the Device in combat.

★ 1% Refund Modifier: A worn Device that becomes unavailable only when the character decides voluntarily to remove it, or when it is taken from him as an Extended Automatic Action (3+ SPs Time) while he is Unconscious, Paralyzed, or otherwise unable to resist. Examples in this category are suits of armor or costumes that are difficult and time-consuming to remove.

★ 5% Refund Modifier: A worn Device that can be taken from the character in combat as an Automatic Auction anytime he is Unconscious, Paralyzed, or otherwise unable to resist. Examples in this category are tight footwear, collars, earrings, rings, and other accessories that are difficult to remove.

★ 10% Refund Modifier: A worn Device that can be taken from him via a Red result on a Disarm Trick Attack, or as an Automatic Action anytime he is Unconscious, Paralyzed, or otherwise unable to resist. Examples in this category are amulets, backpacks, belts, goggles, helmets, necklaces, and other gear worn strapped to the head or torso or carried in the pocket.

★ 15% Refund Modifier: A carried or worn Device that can be taken from him via an Orange result on a Disarm Trick Attack, or as an Automatic Action anytime he is Unconscious, Paralyzed, or otherwise unable to resist. Examples in this category include weapons or objects carried with two hands or worn strapped to the arm (like a shield).

★ 20% Refund Modifier: A carried Device that can be taken from him via a Yellow result on a Disarm Trick Attack, or as an Automatic Action anytime he is Unconscious, Paralyzed, or otherwise unable to resist. Examples here are weapons and handheld objects such as cameras, phones, magical orbs, and so on.

★ If the character automatically drops the Device any time that he is knocked Prone or becomes Overwhelmed or Unconscious, increase the Refund Modifier by an additional 10%.

> Let's assume that Airborne's Gliding and Jumping actually derives from his jump-boots. In addition to having the "Caught out of Costume" Vulnerable State, Airborne also might have the "Deprived of Device" Vulnerable State. Let's say that Airborne's boots are magnetically strapped to his feet and can only be removed outside of combat while he is Unconscious, Paralyzed, or otherwise unable to resist. That would grant a Refund Modifier of 1%, and thus be worth 42 C P x 1% = .4 CP, rounded to 0 CP. It's just not a big enough disadvantage to matter.
>
> What if instead of jump-boots Airborne relied on a witch's broom to fly? Let's say he can be deprived of the broom with a Disarm scoring a Yellow result, and also that he automatically loses the witch's broom anytime he becomes Overwhelmed or Unconscious or is knocked Prone. Now the Refund Modifier would be 30%, and thus be worth 13 CP.

Destruction of Device: The character's Vulnerable State is triggered if a particular Device is Destroyed. When this Vulnerable State is selected, the character must first define the nature of the Device, as above. A destructible Device has a Toughness (TOU) Attribute and a Durability calculated from its TOU. Anytime a destructible Device is damaged, it must be repaired like an Object (p. 221). If a Device is Wrecked or Destroyed, it ceases to provide its Powers.

If a character's destructible Device has any SPs of Invulnerability, Resistance, or Shield, it has SPs of Toughness equal to its highest SPs of Protection. Anytime the Device's Protection protects the character from Damage, the Device simultaneously takes Durability Damage equal to the amount of Damage it stopped. The Device cannot be damaged by a Sunder Attack by a Damage Type it protects against; otherwise it can be damaged via a Yellow result on a Sunder Trick Attack. The Refund Modifier is 15%.

Otherwise, a character's destructible Device has SPs of TOU equal to the sum of (Device Weight x 1.5) + (Character's Power Level / 4). The Refund Modifier is determined by how difficult the object is to Sunder.

★ 5% Refund Modifier: A Device that can be damaged via a Red result on a Sunder Trick Attack or as an Automatic Action anytime the character is Unconscious, Paralyzed, or otherwise unable to resist. Examples in this category are amulets, backpacks, belts, googles, helmets, necklaces, and other gear worn strapped to the head or torso or carried in the pocket.

★ 10% Refund Modifier: A Device that can be damaged via an Orange result on a Sunder Trick Attack or as an Automatic Action anytime the character is Unconscious, Paralyzed, or otherwise unable to resist. Examples in this category include weapons or objects carried with two hands or worn strapped to the arm.

★ 15% Refund Modifier: A Device that can be damaged via a Yellow result on a Sunder Trick Attack or as an Automatic Action anytime the character is Unconscious, Paralyzed, or otherwise unable to resist. Examples here are suits of armor, worn clothing, and weapons and handheld objects such as cameras, phones, magical orbs, and so on.

An Attack with an area of effect (such as Explosion) treats each carried Device within the area of effect as an eligible target that uses the character's DV. Worn Devices are not affected by area of effect attacks unless they provided Protection (as above).

If a Device can be both Disarmed and Sundered, add the Refund Modifiers together. If a Device (destructible or indestructible) is permanently lost for any reason, the character must be reimbursed for the lost CP value of the Device (discussed in the GM section) in some manner. Remember that Devices are not objects. The Deprived of Device and Destruction of Device Vulnerable States cannot be used reduce the CP cost of an object as such. The fact that objects can be stolen or lost is already factored into their cost.

Damaged: The character's Vulnerable State is triggered when he suffers Damage equaling or exceeding a chosen percentage of his Maximum Health. The Refund Modifier for the Damaged Vulnerable State is determined by the amount of Damage that causes the Vulnerable State. The Refund Modifier for the Vulnerable State is:

★ 50% if the State is caused by *any* Damage;
★ 40% if the State is caused by Damage equaling or exceeding 20% of the character's Maximum Health;
★ 30% if the State is caused by Damage equaling or exceeding 50% of the character's Maximum Health;
★ 20% if the State is caused by Damage equaling or exceeding 80% of the character's Maximum Health; and
★ 10% if the State is caused by Damage equaling or exceeding the character's Maximum Health.

A character cannot select a Damaged Vulnerable State if he has 13 SPs or more of Regeneration. A character cannot select a Damaged Vulnerable State other than "any Damage" if his MIG/Super-Stamina exceeds his (Power Level / 2) – 2. To avoid recursive math, a character's SPs of Super-Stamina or Health cannot be affected by the character's Damaged Vulnerable State.

Drained: The character's Vulnerable State is triggered when he suffers Damage equaling or exceeding a chosen percentage of his Maximum Determination. The Refund Modifier for the Damaged Vulnerable State is determined by the amount of Damage that causes the Vulnerable State, exactly as above. A character cannot select a Drained Vulnerable State if he has 13 SPs or more of Resilience. A character cannot select a Drained Vulnerable State other than "any Damage" if his RES/Super-Fortitude exceeds his (Power Level / 2) – 2. To avoid recursive math, a character's SPs of Super-Fortitude or Determination cannot be affected by the character's Drained Vulnerable State.

Not Damaged Enough: The character's Vulnerable State is triggered when his Current Health equals or exceeds a chosen percentage of his Maximum Health. In other words, he gets less vulnerable as he takes more Damage! Characters with this Drawback are wont to say things like "that which does not kill me makes me stronger" or "if you strike me down, I shall grow more powerful." The Refund Modifier for the Not Damaged Enough Vulnerable State is determined by the amount of Current Health that causes the Vulnerable State. The Refund Modifier for the Vulnerable Sate is:

★ 50% if the character is Vulnerable anytime his Current Health equals or exceeds 1.
★ 40% if the character is Vulnerable anytime his Current Health equals or exceeds 20% of the character's Maximum Health;
★ 25% if the character is Vulnerable anytime his Current Health equals or exceeds 50% of the character's Maximum Health;
★ 10% if the character is Vulnerable anytime his Current Health equals or exceeds 75% of the character's Maximum Health.

To avoid recursive math, a character's SPs of Super-Stamina or of his Health Variable Attribute cannot be affected by the character's Not Damaged Enough Vulnerable State.

Stronghold has 15 SPs of a Power Battery (Base Cost 25 CP, Variable Cost 8 CP, Total Cost 145 CP). He has a Maximum Health of 1920. He also has the Vulnerable State (Not Damaged Enough: Current Health equals or exceeds 50% of his Maximum Health; -15 SPs of Power Battery) and Vulnerable State (Not Damaged Enough: Current Health equals or exceeds 20% of his Maximum Health; -10 SPs of Power Battery).

This is an example of having multiple Vulnerable States. We start by determining the Total Refund for the highest Refund Modifier. "Vulnerable State: Current Health equals or exceeds 20% of his Maximum Health", which has a Refund Modifier of 40%. In that Vulnerable State, he loses 10 SPs of Power Battery, which is worth (10 x 8) = 80 CP. Since the Refund Modifier is 40%, the Total Refund is 32 CP.

Next, we determine the Total Refund for the subsequent Vulnerable State (Current Health equals or exceeds 50% of Maximum Health). In that Vulnerable State, he loses his Power Battery entirely. The Base Refund for that is (15 x 8) = 145 CP. We reduce that by the 32 CP Total Refund for the prior Vulnerable State, down to 113 CP. We then multiply that by the Base Refund of 25%, yielding a Total Refund of 28 CP for this Vulnerable State.

In total, Stronghold gets 32 + 28 = 60 CP back for his Vulnerable States.

WEAK WILLED

Base Refund: 2+ CP

The character lacks the self-assurance to easily recover from setbacks. For each 2 CP refund from this Drawback, he increases the SPs of Time required to recover Determination by 1. A character with this Drawback cannot have SPs of Resilience. Record the Drawback as Weak Willed #, where # is the increase in Time to recover.

CHAPTER 6: OBJECTS

OBJECTS

Objects are inanimate things in the game that are treated as characters because they possess one or more Attributes. **Inventions** are a special class of object. **Devices** are somewhat object-like but are not objects for game purposes.

All of the everyday things in the real world are just objects: manhole covers, park benches, light poles, and so on. Real-world armor, weapons, vehicles, and equipment of the sort available to everyday citizens, police, and military personnel are also objects. A catalog of common objects is presented in a section below and additional Items can be built by the GM using real-world data. Objects are assigned a CP cost that allows them to be compared in cost to characters and Inventions. However, characters do not actually spend CP to acquire everyday objects. Characters acquire such objects by purchasing them using their character's Income or by stealing, finding, or borrowing them. Objects can be – and frequently are – destroyed, lost, or stolen.

Inventions are one-of-a-kind objects created by a character with the Invention Power (see p. 168) or acquired with the Singular Invention perk (p. 195). Inventions cannot be found just laying around, nor can they be purchased using Income. Instead each

Invention must be built and paid for out of its inventor's Development Budget of CP or purchased as Singular Inventions. As objects, Inventions can be lost, destroyed, or stolen, but the loss or destruction of an Invention merely restores the inventor's Development Budget to its original total. Inventions can generally only be used by the character who invented them, though others may spend Hero Points to make use of them temporarily.

Devices are pieces of equipment that are "part of who a character is". **Ascendant** treats Devices as part of the character who owns them, and not as objects. While they are "object-like," Devices are purchased with the character's own CP and cannot be permanently lost, destroyed, or otherwise removed from play unless the character to which they belong is slain. Devices can generally only be used by the character who owns the Device (and paid the CP Cost for it), though others may spend Hero Points to make use of them temporarily.

The custom-made katana that Helen Killer carries is a Device. As such it appears under the Powers section of Helen Killer's character sheet and was purchased from her budget of Character Points. On the other hand, the black vinyl outfit that Stiletto wears on her missions is just a standard object.

OBJECT MECHANICS

All objects have at least four **Attributes:** Toughness, Durability, Weight, and Height. An object's other Attributes might include Primary Attributes (other than RES), Secondary Attributes (other than Income or Reputation), Variable Attributes (other than Determination), Powers, Skills, Perks, or Drawbacks. The Attributes of an object are measured in the same way as the Attribute would be if possessed by a creature, and except where otherwise noted, anything that is true of a creature is true of an object with the same Attributes, and vice versa.

Toughness (TOU) is a Primary Attribute that functions like Might, except that it is purely passive. An object with a high TOU is as hard, durable, and unyielding as a creature with the same MIG, but does not have the strength and lifting power. If an object has some form of strength and lifting ability, it typically has SPs of Super-Strength to represent its lifting or carrying capacity. For instance, a steel shield would possess the Toughness Attribute, but a crane would have the Toughness Attribute and the Super-Strength Power.

Durability is a Variable Attribute that functions like Health, except that it measures mechanical rather than biological resilience. If an object's Current Durability is reduced to 0, it is Broken and inoperable. If an object's Current Durability is reduced to a negative value greater than its maximum Durability, it is utterly Destroyed and irreparable. Otherwise, an object whose Durability is damaged can be repaired.

Weight and **Height** function just as they do for creatures.

A sniper rifle has the Attributes of Durability (measuring how damage it can sustain before breaking), Toughness (used to calculate its Durability), Weight (measuring how much it weighs), Height (measuring its length), and Penetrating Blast (measuring its range and stopping power). Its Toughness, Weight, Height, and Penetrating Blast Power would be measured in SPs, while its Durability would simply be a number, because that Attribute isn't rated in SPs. A sniper rifle would not possess the Attributes of Charisma (being an inanimate object) or Speed (rifles tend not to move around much except when brandished by a sniper).

OBJECT TYPE

Objects can be either *Static, Pharmaceutical, Autonomous, Worn,* or *Crewed*. A **Static Object** is an object that possesses Weight, Height, Toughness, and Durability. It is incapable of taking Actions. If it has any Powers, they must be switched on and off by another character. Examples of Static Objects include streetlights, dumpster bins, and potted plants.

A **Pharmaceutical Object** is a like a Static Object except that it can be consumed by creatures via ingestion or injection. The character who consumes it then temporarily gains whatever Powers, Skills, Perks, or Drawbacks the Pharmaceutical Object grants. A Pharmaceutical Object always has a Toughness of 0 SPs, Maximum Durability of 1, and Weight of around -20 SPs (about 50mg). A Pharmaceutical Object is always Destroyed when used, so all of its Powers have the Single Use Power Flaw. If a Pharmaceutical

Object grants a power that ordinarily would affect another target, it instead attempts to affect the character who consumed it. For instance, if a Pharmaceutical Object has 10 SPs of Toxic Strike, this means it's a deadly poison, not that the character gains a killing touch. Instant effects are applied when consumed. Otherwise, the length in Time that the object's effects apply is determined by the Pharmaceutical Object's **Duration** Attribute.

An **Autonomous Object** is an object that has 1 or more SPs of INS and at least one sensory Power that it uses to orient itself within its environment. While active, Autonomous Objects have their own Panel on each Page, during which they can take Actions. Examples of Autonomous Objects include androids, driverless cars, drones, and missiles.

A **Worn Object** is an object that is donned as armor or clothing by another character. The Weight of the Worn Object counts towards its wearer's Encumbrance. A Worn Object does not have its own Panel on a Page. Instead, its wearer acts on his own Panel, making use of the Worn Object's Attributes through his own Actions. Examples of Worn Objects include cloaks, hats, rings, and suits of armor.

A **Crewed Object** is an object that requires one or more characters called **Crew** to operate it. The number of Crew required is determined by the object's SPs of **Crew Requirement**. The Crew Requirement table lists the range of personnel required for each SP value. For instance, an M1A2 Abrams requires four characters to operate it, so its Crew Requirement is 2 SPs.

When building a Crewed Object, a Crew Requirement score of 0 SPs is free. A Crew Requirement score of 1 SP or more actually has a negative CP cost, and is used as a means to make large, complex objects affordable. See CP Cost of Objects on p. 227.

SP	Crew Req.	CP Cost	SP	Crew Req.	CP Cost
0	1	0	8	201-400	-32
1	2-3	-4	9	401-800	-36
2	4-6	-8	10	801-1,600	-40
3	7-12	-12	11	1,601-3,200	-44
4	13-25	-16	12	3,201-6,400	-48
5	26-50	-20	13	6,401-12,800	-52
6	51-100	-24	14	12,801-25,600	-56
7	101-200	-28	15	25,601-51,200	-60

A Crewed Object does not have its own Panel on a Page. Instead, its operator acts on his own Panel, making use of the Crewed Object's Attributes through his own Actions. When an object's Crew consists of 2 or more characters, the Crew must be assigned a **Crew Chief**. The Crew Chief acts on his own Panel, making use of his Crew's Attributes and the Crewed Object's Attributes where applicable. All other members of the Crew are assumed to be supporting the Crew Chief.

External or Internal Crew: Crew can either be **External** or **Internal**. External Crew work around or outside of the object, while Internal Crew operate from inside the object. External Crew are targeted separately from the Crewed Object. Internal Crew cannot be targeted, though they may be damaged by Attacks on their object.

A rifle is a Crewed Object with an External Crew Requirement of 0 SP - a character holds the weapon and fires it. An M60 machinegun is a Crewed Object with an External Crew Requirement of 1 SP; one person fires the machinegun and another feeds in ammo. A towed 155mm howitzer is a Crewed Object with an External Crew Requirement of 2 SPs, because four to six artillerists load and fire the howitzer. An M109 self-propelled howitzer is a Crewed Object with an Internal Crew Requirement of 2 SP; the same crew operates from inside the weapon system. The USS Nimitz is a Crewed Object has an Internal Crew Requirement of 11 SPs; 3184 sailors are required to operate it.

Missing Crew: Sometimes a Crewed Object might be operated by less than its full Crew. When this occurs, find the SPs of Crew based on the number of characters actually operating the object. The Attributes used for any Actions involving the Crewed Object are reduced by the difference between its Crew Requirement and its actual Crew.

An M60 machinegun requires two soldiers to fire, so it has a Crew Requirement of 1 SP. If one soldier (0 SP of Crew) had to both shoot and load the M60, the Attributes used for any Actions would be reduced by (1 – 0) 1 SP.

The USS Nimitz requires 3,184 sailors to operate, so it has a Crew Requirement of 11 SPs. If the USS Nimitz were at sea with just 300 sailors (8 SPs of Crew), the Attributes used for any Actions by the Nimitz would be reduced by (11 – 8) 3 SP.

Note that a Crew functions as an inverse to a Team (p. 264). A Team could act separately but gains a benefit by undertaking Action(s) jointly. A Crew could act separately but suffers a penalty if it undertakes Actions without all of its members. A Crew Requirement can be thought of as a penalty that applies unless a sufficiently large Team is present to make up for it.

Crew Attributes: The Crew's SP value for any given Challenge Check is the lowest Attribute, Power, or Skill from among the Crew member(s) responsible for that Check. A Crew is only as strong as its weakest link; putting Stiletto in charge of a battleship doesn't let the battleship fire its guns with 14 SPs. Most large, complex vehicles end up with Crew Attributes of around 3-7 SPs.

> A T80 has an Internal Crew of three soldiers – a tank commander, a driver, and a gunner. The tank commander is responsible for directing the tank's movement (Piloting Skill) and controlling its fire (Marksmanship Skill). The driver steers the tank (Piloting Skill). The gunner fires the tank's guns (Marksmanship Skill). The tank commander is the Crew Chief, so the T80 would move and fire on his Panel using his Actions. For purposes of Challenge Checks, the T80 is steered with the lesser of the tank commander or driver's SPs of Piloting and its gun is fired with the lesser of the tank commander or gunner's SPs of Marksmanship.

INTERIOR AND EXTERIOR CAPACITY

Some objects are designed to hold personnel or cargo inside their hull or fuselage (called **Interior Capacity**) or outside their hulls in an open bed or mount (called **Exterior Capacity**). Interior Capacity and Exterior Capacity are special Attributes only available to objects.

SPs of Interior or Exterior Capacity enable an object to carry equal SPs of Weight. SPs of Interior or Exterior Capacity can be divided between personnel and cargo as desired (counting each person as 200 lbs of cargo or every 10 persons as 1 ton). An object can have either, neither, or both Interior and External Capacity.

Interior Capacity has a Base Cost of 2 CP (for 0 SPs) and costs an additional 2 CP per SP thereafter. Exterior Capacity has a Base Cost of 1 CP (for 0 SPs) and costs an additional 1 CP per SP thereafter.

Maximum Capacity: The greater of an object's Internal Capacity and External Capacity cannot exceed its Weight -1.

Crew: An object designed to have Internal Crew must have enough Interior Capacity to carry its Crew. Additional capacity can be used for passengers or cargo. External Crew can use, but do not need, Exterior Capacity, as they can work around rather than on the object.

Effect on Speed: An object's Speed is based on its Weight, which is (for simplicity) based on its fully loaded mass. Therefore Interior or Exterior Capacity are treated as Carrying Capacity, with Encumbrance reducing Speed if the object carries passengers and cargo weighing more than its Interior or Exterior Capacity.

Area and Volume of Interior Capacity: The actual Volume of an object's personnel compartments and/or cargo hold is approximately equal to its SPs of Interior Capacity – 6. The actual Area used for an object's personnel compartments and/or cargo holds is approximately equal to its SPs of Interior Capacity – 6 if it has one man-sized level, deck, or floor. If it has 2-3 levels, reduce Area of each level by 1; 4-6 levels by 2; 5-8 levels by 3, etc. These quantities can sometimes be relevant if a character uses a Power to affect the Interior Capacity.

> A Honda Civic has an Interior Capacity of 6 (enough to carry a driver, four passengers, and a few hundred pounds of cargo in the trunk). The Area of the Honda Civic's Interior Capacity is (6 – 6) 0 SPs, or 25 square feet. The Volume of the Honda Civic's Interior Capacity is (6 – 6) 0 SPs, or 125 cubic feet. Does that make sense? A real-world Honda Civic has 98.1 cubic feet of seating and 15.1 cubic feet for cargo, for a total of 113.2 cubic feet, so yes.

Relationship to Super-Strength: Interior Capacity and Exterior Capacity simulate an object's load-bearing capabilities in its cockpit, cab, cargo bed, trunk, or related compartment(s). An object's capability to carry, push, or pull a target connected to it via cargo hook or tow hitch should be modeled by assigning the object 1 or more SPs of Noncombatant Super-Strength without any SPs of AGI. An object's capability to lift, move, push, pull, or throw targets using a crane, hoe, forklift, etc. should be modeled by assigning the object SPs of AGI and Noncombatant Super-Strength.

SUB-OBJECT LAUNCH CAPABILITY

Some objects use their Internal Capacity and/or External Capacity to carry **sub-objects** that can launch from the object that carries them. For instance, a ballistic missile submarine carries nuclear missiles, an aircraft carrier carries jet fighters, and a jet fighter carries missiles. The ability to launch sub-objects from Internal or External Capacity is called **Launch Capability**. Launch Capability is a special Attribute only available to objects.

A sub-object must be an Autonomous or Crewed Object and must have at least 1 SP of Speed. Each sub-object's Weight must be at least 6 SPs less than the Weight of the object that carries it. The total Weight of all sub-objects carried must be less than or equal to the available Weight from the Interior or Exterior Capacity of the object. The sub-objects must be purchased separately.

# of Launches /Challenge Action	1 Page (3.5 sec)	2 Pages (7 sec)	4 Pages (15 sec)	8 Pages (30 sec)
1 object	40	20	10	5
2 objects	80	40	20	10
3 objects	120	60	30	20
4 objects	160	120	40	30

The cost of Launch Capability depends on the number of sub-objects that can be launched simultaneously and the time delay (in Pages) between launches. The Launch Capacity table shows the CP cost for various launch rates. Record the Attribute as Launch Capability (# [type of sub-object] per @ Pages) where # is the number of simultaneous launches permitted and @ is the number of Pages before another launch can be made.

Launching a sub-object (or sub-objects, if simultaneous launches are permitted) requires a Challenge Action by the parent object or its crew. As soon as the Challenge Action is expended, the sub-object interrupts the current Panel to immediately take an Action as if it were a character taking a Reserved Action (p. 364). On the following Page(s), the sub-object acts on its own or its crew's Panel using its or its crew's Initiative and Attributes as appropriate.

A jet fighter has an Exterior Capacity of 10 SPs (12 tons). It uses this capacity to carry 6 missiles, each of which is built as an Autonomous Object. The jet fighter can fire 2 missiles with one Challenge Action once per Page, so the cost is 80 CP.

SECURITY

All Autonomous and Crewed Objects have a Security Attribute, which indicates how difficult the object is to hack or modify. Some Static Objects may also have SPs of Security (e.g. if they can be locked and unlocked.) An object's Security is relevant in three circumstances:

Type of Object	Security DV
Mass-produced consumer good	3
Enterprise/Industrial equipment	5
Military equipment	7
Classified or cutting-edge technology	9
Invention	Inventor's INS

★ If the object is the target of a character with Technology Control, its SPs of Security are the DV to control the object.
★ If the object is a security system such as a padlock, its SPs of Security are the DV to bypass the security system.
★ If the object has a Power with the Trigger modifier, such as Triggered Explosion, its SPs of Security are the DV to disarm the Trigger.

An invention's SPs of Security are equal to its inventor's SPs of INS. An inventor can create an object with a lower Security than his INS if desired. For other objects, refer to the Security table to determine the object's SPs.

OTHER ATTRIBUTES

Objects never have the MIG or RES Primary Attributes. They never have the Income or Reputation Secondary Attributes or the Health or Determination Variable Attributes.

Objects do not have a Speed Attribute unless they purchase a Movement Power. Objects do not have an Initiative Attribute unless they are Autonomous Objects with 1 or more SPs of INS. Objects do not have Passive Spotting Range or Passive Listening Range unless they purchase an Enhancement Power that provides those senses.

Objects can have an Attribute that they cannot use autonomously; the Attribute can be used by their Wearers or Crew.

> Consider these two objects: A security camera (Autonomous Object with 1 SP of INS, 6 SPs of Ultra-Sensitive Vision, 5 SPs of Thermal Dark Vision, 32 SPs of Memory) and night-vision goggles (Worn Object with 5 SPs of Thermal Dark Vision). The security camera has the intelligence (INS) to use its Thermal Dark Vision with its own Passive Spotting Range from its Ultra-Sensitive Vision; it then stores the information (Memory). The night-vision goggles, on the other hand, can't spot anything in and of themselves. The character who wears them gets the SPs of Thermal Dark Vision.

AUGMENTATIVE ATTRIBUTES

Most of the time, an object's Attributes function at their SP score regardless of who is using the object. The Running Speed of a car does not change based on the Running Speed of the driver, and the Explosion of a grenade is unaffected by the thrower's SPs of Explosion.

However, sometimes a Pharmaceutical, Worn, or Crewed Object may augment its user's own Attributes. For instance, a laser targeting sight might increase the user's Projectile Weapons skill. Such objects are assigned **Augmentative Attributes**, which are recorded with the word Augmentative to differentiate them from ordinary Attributes. The SP score of an Augmentative Attribute determines the most skilled or powerful user it can benefit.

When a character (or Crew of characters) uses an object with an Augmentative Attribute, compare the character's own Attribute to the Augmentative Attribute. If the character's Attribute is less than or equal to the Augmentative Attribute, he gains +1 SP to his Attribute when using the object. If the character's Attribute is greater than the Augmentative Attribute, he gains no benefit from using the object.

If the Augmentative Attribute is a Power or Skill that normally substitutes for a Primary Attribute, and the user doesn't have the Power or Skill, then compare his Primary Attribute to the Augmentative Attribute instead.

> Stronghold and Stiletto have infiltrated a weapons research lab and discovered a prototype smartgun with cybernetic targeting. The smartgun's relevant Attributes are Penetrating Blast 7 and Augmentative Marksmanship 8. Stronghold doesn't have the Marksmanship skill, so he would normally fire a projectile weapon using his AGI of 5. Since the smartgun's Augmentative Attribute of 8 is greater than his AGI of 5, he gains a +1 bonus; he'd fire the smartgun with an effective AGI of 6 and deal damage using its Blast of 7.

Stiletto, on the other hand, has 14 SPs of AGI. Because her Attribute is greater than the Augmentative Attribute, she does not receive any benefit from the Augmentative Attribute. She would fire the smartgun using her 15 SPs of Marksmanship and deal damage using its 7 SPs of Blast.

OBJECTS IN COMBAT

DAMAGE TO OBJECTS

Physical Damage: Objects that suffer Physical Damage lose points of Durability instead of Health. Durability functions like Health, except that it measures mechanical rather than biological resilience. If an object's Current Durability is reduced to 0, it is Wrecked and inoperable. If an object's Current Durability is reduced to a negative value greater than its maximum Durability, it is utterly Destroyed and irreparable. Otherwise, an object whose Durability is damaged can be repaired.

Since they are not living creatures, objects cannot be harmed by poisons or infectants. They never lose Durability to the Toxic Damage Type and are immune to the Poisoned condition. They suffer only Nonlethal Damage from the Electrical and Ionizing Damage Types and do not suffer the Disoriented condition unless they are Autonomous. Objects receive the Leaking Condition instead of the Bleeding condition from the Lacerating and Penetrating Damage Types.

Objects that become Prone have rolled or toppled over. A Static or Crewed Object cannot end the condition on its own and must be set upright with a character whose MIG exceeds its Weight. An Autonomous Object with Super-Strength greater than its own Weight, and with both the AGI and INS Attributes, can stand back up like a character.

Mental Damage: Objects never have RES nor Determination. They cannot be harmed by Emotional Attacks, Mental Attacks, or any effects that use RES as the DV. They ignore the Neural and Psychic Damage Types and never suffer the Disoriented condition.

STATIC OBJECTS IN COMBAT

Static Objects cannot make Attacks. If targeted by a Melee or Wrestling Attack, the DV of the Attack is 0. If targeted by a Ranged Attack, the DV of the Attack is the Minimum DV. Damage and Special Effects from Attacks on the object have the effects described above. Static Objects count as Worn Objects when being carried if their Height is 0 or less. Otherwise they count as Externally-Crewed Objects when being carried.

PHARMACEUTICAL OBJECTS IN COMBAT

Pharmaceutical Objects cannot make Attacks. If targeted by a Melee or Wrestling Attack, the DV of the Attack is 0. If targeted by a Ranged Attack, the DV of the Attack is the Minimum DV. Damage and Special Effects from Sunder Trick Attacks on the object have the effects described above. Pharmaceutical Objects count as Worn Objects when being carried.

Ingesting or self-injecting a Pharmaceutical Object in combat is an Automatic Action. Injecting a Pharmaceutical Object into another character is a Challenge Action. To inject a target, the character must make a successful Melee Attack against the target and deal at least 1 point of Damage (using his MIG as the EV). The effects of the Pharmaceutical Object then occur, as if they were Linked to the character's Attack. If a Pharmaceutical Object inflicts harmful Conditions or Drawbacks without an SP rating, make a Duration – 3 vs. MIG Attack Check to determine the result. On a Green result, the effects apply but with a -3 penalty to Duration. On a Yellow result, the effects apply with -2 Duration. On an Orange result, the effects apply but with -1 Duration. On a Red result, the effects apply with full Duration.

AUTONOMOUS OBJECTS IN COMBAT

Autonomous Objects can make Attacks if they have appropriate Attributes or Powers. The AV and DV of Attacks by and on Autonomous Objects is determined by the object's Attributes, Powers, and Skills. Damage and Special Effects from Attacks on the object have the effects described above.

WORN OBJECTS IN COMBAT

Worn Objects cannot make Attacks on their own. Depending on the object, the wearer might be able to make Attacks with the object. The AV of such Attacks is determined by the object's relevant Attribute, Power, or Skill (if any) or otherwise by the wearer's. A Worn Object cannot be attacked as a target unless the attacker uses a Disarm or Sunder Trick Attack (p. 398).

Damage and Special Effects from Sunder Trick Attacks on the object have the effects described above. If the wearer has a Forcefield or Absorption Field, the Protection from those Powers reduces Damage to the object.

Damage and Special Effects from Attacks that targeted the wearer only apply to the wearer, except if the Worn Object gives the wearer Protection. In this case the Worn Object's Protection applies to the wearer, but the object simultaneously takes Durability Damage equal to the amount of Damage it stops. (However, if Toxic Damage is dealt to a character wearing a Worn Object, the Worn Object's Toxic Protection will protect the wearer, but the object itself will not lose Durability because objects cannot be damaged by the Toxic Damage Type.)

A US Army soldier with 4 SPs of Might (Health 40) is wearing a suit of ballistic armor. The armor is a Worn Object with 6 SPs of Toughness (Durability 80) and 6 SPs of Penetrating Resistance (Protection 16). The soldier comes under fire from a terrorist with an AK-47 (Penetrating Blast 7). The terrorist achieves a Green result and deals 24 Penetrating Damage. The Damage is therefore reduced by the armor's Protection from 24 to 8. 16 points of Damage then gets applied to the armor's Durability and 8 points to the soldier's Health.

What if the soldier were a minor ascendant who had 2 SPs of Invulnerability, granting him 4 additional points of Protection? The trooper's Invulnerability would further reduce the Damage to his Health from 8 to 4. It would not reduce the Damage to the armor's Durability.

What if the ballistic armor was actually a hazmat suit with 6 SPs of Toxic Resistance (Protection 16)? Let's assume the terrorist scores a Green result on the soldier with a mustard gas bomb (Toxic Explosion 7) instead of an AK-47. Here, the terrorist deals 24 Toxic Damage. The armor's Protection would reduce that to 8 Toxic Damage, which would reduce the soldier's Current Health. The armor would not be harmed.

EXTERNALLY-CREWED OBJECTS IN COMBAT

Externally-Crewed Objects carried by the character are treated as Worn Objects in combat for purposes of attacks by, with, and against them. The following rules only apply to Externally-Crewed Objects that carry the character or that are operated from a fixed position.

Externally-Crewed Objects can be used by their Crew to make Attacks if they have relevant Attributes, Powers, and Skills. The AV of the Attacks is determined by the object's relevant Attribute, Power, or Skill (if any) and otherwise by the Crew's.

Externally-Crewed Objects can be targeted by Attacks. The DV of Attacks against a Crewed Object is the object's relevant Attribute, Power, or Skill (if any) and otherwise the Crew's. The Crew cannot apply its own AGI or AGI substitute unless the object has a Speed of 1 or more SPs and has taken a Movement Action on its most recent Panel. The Crew cannot apply its own VAL or VAL substitute unless the object has a Speed of 1 or more SPs and at least 1 SP of Augmentative VAL or VAL substitute, or unless Mobile Defense Expertise (p. 190) applies.

External Crew, and any characters carried using the object's External Capacity, can be targeted independently of the object. A Multi-Attack can target an object and its Crew or carried characters at the appropriate penalty.

Damage and Special Effects from Attacks on the object have the effects described above. External crew and other externally carried characters are not ordinarily affected by Damage and Special Effects that target the object. However, an Attack with an area of effect (such as Explosion) treats each carried character within the area of effect as an eligible target.

An object's Protection does not protect External crew or other characters carried in External Capacity, unless a specific Power would direct otherwise (e.g. a Spherical Forcefield).

A motorcycle is a Crewed Object with an External Crew of 0 SPs (one operator). The crew is carried using the motorcycle's External Capacity of 3 SPs (200 lbs). Imagine that a Star-Spangled Squadron recon trooper is riding a motorcycle when he comes under fire from terrorists with a variety of weapons.

A terrorist with a sniper rifle (7 SPs of No Multi-Attack Penetrating Blast) would have to target either the trooper or the motorcycle, and any Damage and Special Effects would only apply to that target.

A terrorist with a semiautomatic AK-47 (7 SPs of Penetrating Blast) could target either the trooper or the motorcycle, like the sniper rifle. However, he could also Multi-Attack both targets (taking a -1 SP penalty for doing so). Damage and Special Effects would apply to both targets separately. The motorcycle's Protection would reduce the Damage dealt to it, and the rider's Protection would apply to the Damage dealt to him.

A terrorist who tosses a grenade (6 SPs of Concussive Thermal Explosion) would roll against both the trooper and the motorcycle, possibly dealing Damage and Special Effects to either, neither, or both. As above, the motorcycle's Protection would reduce the Damage dealt to it, and the rider's Protection would apply to the Damage dealt to him.

INTERNALLY-CREWED OBJECTS IN COMBAT

Internally-Crewed Objects can be used by their Crew to make Attacks if they have relevant Attributes, Powers, and Skills. The AV of the Attacks is determined by the object's relevant Attribute, Power, or Skill (if any) and otherwise by the Crew's.

Internally-Crewed Objects can be targeted by Attacks. The DV of Attacks against a Crewed Object is the object's relevant Attribute, Power, or Skill (if any) and otherwise the Crew's. The Crew cannot apply its own AGI or AGI substitute unless the object has a Speed of 1 or more SPs and has taken a Movement Action on its most recent Panel. The Crew cannot apply its own VAL or VAL substitute unless the object has a Speed of 1 or more SPs and at least 1 SP of Augmentative VAL or VAL substitute, or unless Mobile Defense Expertise (p. 190) applies.

Damage and Special Effects from Attacks on the object have the effects described above. Internal Crew, and any characters carried using the object's Internal Capacity, cannot be targeted independently of the object. However, they can still suffer harm from attacks against the object in some circumstances.

Area of Effect Attacks: If an object is caught within a Ranged Attack's area of effect, any internal crew and internally carried characters in the area of effect are also affected at the appropriate SP value (based on distance from the epicenter of the radius). However, any Damage dealt to them is reduced by the object's Protection first.

A squad of four Star-Spangled Squadron soldiers are serving as the internal crew of an M1A2 main battle tank. The tank has 12 SPs of Toughness, 640 points of Durability, and 12 SPs of Bludgeoning Concussive Lacerating Penetrating Thermal Resistance, granting it 128 points of Protection. An artillery shell (8 SPs of Explosion) detonates on top of them. The GM rolls an Explosion vs. Speed Attack Check on the tank and scores an Orange result. The shell does 32 x 4 = 128 Concussive Thermal Damage. The crew within are unharmed because the tank's Protection reduces the Damage to 0.

If the Attack Check had yielded a Red result, the shell would have done 32 x 8 = 256 Concussive Thermal Damage. Crammed into an area of 0 SPs, the crew would have suffered 256 – 128 = 128 Concussive Thermal Damage.

Other Attacks: If an Internally-Crewed Object is hit by an Attack without an area of effect, and the damage dealt by the attack is greater than the object's Protection, then one randomly selected character within the object is also damaged by the attack as well using the same color result. If an Internally-Crewed Object is Destroyed by an attack, then all characters within it are damaged due to debris, spalling, etc.

The EV applied to the character or characters is reduced by the difference between the object's Weight and its Interior Capacity. The object's Protection reduces Damage as well, unless the object is Wrecked or Destroyed by the attack.

An experimental anti-tank cannon (12 SPs of Penetrating Blast) blasts the Squadron tank. It scores a Red result, so it deals 128 x 8 = 1,024 Penetrating Damage to the Squadron tank. The Squadron tank has 128 points of Penetrating Protection, so it loses 1,024 – 128 = 896 points from its Current Durability. That reduces it to -256 Current Durability, meaning the tank is Wrecked.

In addition, because the tank was dealt damage by the attack that was greater than its Protection, one of the crew inside the tank is also damaged. The GM rolls 1d100, assigning 1-25 to the commander, 26-50 to the gunner, 51-75 to the loader, and 76-100 to the driver. The roll is a 94, so the driver is damaged.

The M1A2 tank has a Weight of 12 SPs and an Interior Capacity of 6 SPs, so the EV is reduced by 12 – 6 = 6 SPs. Therefore the Damage is calculated as if from a Red result with a EV of 12 -6 = 6 SPs. A Red result with an EV of 6 SPs deals 16 x 8 = 128 Damage. Normally this would be reduced by the tank's 128 points of Protection to 0, but the tank was Wrecked, so all 128 points of Damage get through. With 4 SPs of MIG and 40 points of Health, the driver is instantly slain by the Damage.

What if the tank had already been damaged prior to this, such that instead of being Wrecked it was Destroyed by the 120mm cannon fire? In that case, the entire crew would have suffered the same fate as the driver!

Designer's Note: The higher an object's Internal Capacity is relative to its Weight, the more vulnerable its internally carried characters are to attacks that damage the object. If the attack above had struck a Honda Civic (7 SPs of Weight, 6 SPs of Internal Capacity), the driver would have only reduced the EV by 7 -6 = 1 SP instead of by 6 SPs. While this didn't matter in the case of a Red result with a 120mm cannon, it would make a big difference for smaller weapons. When dealing with unpowered NPCs in vehicles, you can usually assume that if the vehicle is Wrecked, one occupant was slain and if the vehicle is Destroyed, all occupants are slain.

REPAIRING DAMAGE TO OBJECTS

Damaged objects do not recover Durability until they are repaired. Repairing an object counts as an Extended Challenge Action. The repairer allocates 0 SPs or more of Time to the attempt, then makes an (INS + Time) vs. (Object CP Cost/8) Challenge Check. The repairer must have the Multitool Perk or an object with the Perk in order to make the attempt. If the result is Green, the object's Current Durability is increased towards its Maximum Durability by its Durability Repair Rate. If Yellow, it is increased by twice its Durability Repair Rate; if Orange, by four times the Repair Rate; and if Red, by eight times the Repair Rate.

If the object had the Wrecked condition from having a Current Durability of 0 or less, the condition ends if its Current Durability is now 1 or more. If the object's Current Durability is still less than its Maximum Durability, it can be repaired again as another Extended Challenge Action.

Teaming Up: Repairers can work in Teams or Task Forces to repair objects more quickly or effectively. See the rules for Teaming Up On Actions (p. 264).

Facilities: Objects can be repaired most efficiently in a clean, dry facility with enough space to work around the object. If the repairer does not have access to a garage, hangar, workshop, or other facility large enough to enclose the object, he is forced to do "field repairs" and suffers a -1 penalty to his AV.

Cost of Repairs: The tools, raw materials, and parts used in making repairs cost money – sometimes a lot of money. Each time the object's Durability increases by its Repair Rate, the repairer must expend SPs of money equal to the object's SP cost -4. (See Earning & Spending Money on p. 308.)

TOU SPs	Repair Rate
1	3
2	4
3	6
4	8
5	12
6	16
7	24
8	32
9	48
10	64
11	96
12	128
13	192
14	256
15	380

Frank Hetty runs a no-questions-asked garage in the bad part of Capital City. Frank has 7 SPs of Engineering (automotive), which he uses in lieu of INS to repair vehicles. Stiletto's Ducati racing bike has been totaled in an encounter with Jack Hammer, and she wants it fixed. The Ducati has 5 SPs of Toughness, so normally it has a Durability of 60 and a Repair Rate of 12. When Stiletto wheels it into Frank's garage, it's down to -36 Current Durability, leaving it in Wrecked condition.

Frank gets to work on Monday. The Ducati has a CP cost of 135, so the DV for the Challenge Check to repair it is 135/8 = 17. Frank puts in 2 hours (11 SPs of Time), so his AV is 7 + 11 = 18. An RV of +1 is enough to let him take an automatic Yellow result. The Ducati's Current Durability is increased from -36 to -12.

The mechanic puts another 2 hours in on Monday, bringing the bike to 12 Current Durability. Since its Durability is now greater than 0, the bike is no longer Wrecked.

On Tuesday, he puts another 2 hours and decides to roll on the CHART. It pays off; he rolls a 15 and achieves an Orange result. The Ducati's Current Durability is increased by four times its Repair Rate. That puts it at 12 + (4 x 12) = 60 Current Durability. It's fully repaired.

The Ducati has an SP cost of 22 ($55,000), so each time its Current Durability is repaired by its Repair Rate, there's a money cost of 22 – 4 = 18 SP ($2,500). Since the bike's been repaired by its Repair Rate eight times, that's a cost of $20,000.

MODELING OBJECTS WITH REAL-WORLD DATA

Because **Ascendant** uses a physics-based model based on real-world quantities, it is possible to model objects in the game by translating their real-world size, performance metrics, and other data into equivalent SP scores.

TYPE

If an object is used as a tool, driven or piloted as a vehicle, or operated as a machine, it's a Crewed Object. If an object has some sort of machine intelligence that allows it to operate independently, it's an Autonomous Object. If an object is worn as an accessory, article of clothing or suit of armor, it's a Worn Object. If an object is a drug or similar consumable item, it's a Pharmaceutical Object. All other objects are Static Objects.

WEIGHT AND HEIGHT

An object's Weight and Height are simply its real-world weight and height converted into SPs. Always use the object's fully loaded weight (e.g. its weight when fully fueled, armed, and filled with crew and cargo) when converting to an SP value.

The primary purpose of Height is to assess how difficult it is to spot and shoot at an object. Therefore it should be measured based on the longest dimension typically presented by the object during combat. For buildings, cars, helicopters, and tanks, this is typically its actual vertical height. For aircraft, this is usually its wingspan.

CREW REQUIREMENT

An object's Crew Requirement (if any) is simply its real-world crew requirement converted into SPs. Tools, small arms, and towed weapons typically have External Crew, while buildings, factories, and vehicles typically have Internal Crew.

INTERIOR AND EXTERIOR CAPACITY

An object's SPs of Interior Capacity are determined by the real-world pounds of personnel and cargo it can carry inside itself. This is calculated as the sum of (200 lbs x number of personnel) + (cargo capacity). Alternatively it can be calculated as SPs of Volume + 6.

A fully loaded 747-8 weighs 485 tons, giving it a Weight of 15 SPs. It has a crew of 3 pilots, giving it a Crew Requirement of 1 SP. In addition to its pilots, it carries 467 passengers and 18 flight attendants, for a total of 488 personnel. At 10 personnel per ton, 488 personnel weigh 48 tons. It has a cargo capacity of 153 tons, for a total of (48 + 153) 201 tons. This is represented with an Interior Capacity of 14 SPs (200 tons).

Seawise Giant, the largest supertanker ever built, had a fully loaded weight of 724,239 tons, giving it a Weight of 27 SPs. It had a crew of 25 sailors, giving it a Crew Requirement of 4 SPs. It could carry 400,000 tons of petroleum, giving it an Interior Capacity of 26 SPs. Note that the weight of the crew (2.5 tons) was essentially irrelevant because it was so small relative to the cargo.

Likewise, an object's SPs of Exterior Capacity are determined by the real-world pounds of personnel and cargo it can carry in its external cargo bed, wing pylons, etc.

Object Material	Toughness Modifier
Styrofoam	-1
Ice	0
Flesh, Leather	+1
Glass, Softwood	+1
Brick, Hardwood	+2
Concrete, Plastic	+2
Aluminum	+3
Copper	+3
Steel	+4
Spider Silk	+4
Ceramic Composite	+5
Diamond	+5
Graphene	+7

> An F-15 Strike Eagle can carry 23,000 lbs of ordnance on its wing and fuselage pylons. It has an External Capacity of 10 SPs (12 tons).

LAUNCH CAPABILITY

An object's Launch Capability is simply the nearest set of values to its real-world launch capabilities.

> A Nimitz-class carrier can launch an F18 every 30 seconds. Therefore it has a Launch Capability of 1 Jet Fighter per 8 Pages.

TOUGHNESS

An object's Toughness is equal to its Weight multiplied by two-thirds. A Toughness Modifier is then applied depending on the material that the object is made from. The Material Toughness Modifiers table lists some common materials and their Toughness Modifiers.

> A 747-8 is made of aluminum (Toughness Modifier +3). With a Weight of 15 SPs, it therefore has a Toughness of 15 x 2/3 + 3 = 13 SPs.
>
> Seawise Giant is made of steel (Toughness Modifier +4). With a Weight of 27 SPs, it therefore has a Toughness of 27 x 2/3 + 4 = 22 SPs.

> **Designer's Note:** Engineering-minded GMs can calculate the Material Toughness Modifier for any known material except ceramic using its real-world Ultimate Tensile Strength in MPa. The formula is log2 [(Material's Ultimate Tensile Strength)0.5 / (4.5)] +1. (For ceramic, substitute in Compressive Strength in MPa instead of Tensile Strength.)
>
> The Ultimate Tensile Strength of human flesh is 20, which yields a Material Toughness Modifier of log2 [(4.5/ 4.5) +1, or log2 (1) +1. Log2 of 1 is 0, so the Toughness Modifier for flesh is +1. An android with a Weight of 3 SPs would have a Toughness of (3 x 2/3) + 1 = 3 SPs. (Note that's exactly what the average human has.)
>
> The Ultimate Tensile Strength of Kevlar is 3757, which yields a Material Toughness Modifier of log2 [(61.3/ 4.5] +1, or log2 (13.6) +1. Log2 of 13.6 is 3.8., for a Toughness Modifier of +5. Kevlar body armor weighing 50 lbs (1 SP) would have a Toughness of (2/3 x 1) + 5 = 6 SPs.

SPEED

An object's Speed is its real-world cruising speed converted into SPs. Land vehicles have Running Speed, water vehicles have Swimming Speed, air vehicles have Flight Speed, and spacecraft have both Flight and Spaceflight Speed.

Tracked land vehicles, and wheeled land vehicles with 4 x 4 suspension and off-road tires, have All-Terrain Running. Snow vehicles have Snow-Only Running.

Air vehicles do not have to purchase a separate Speed in order to take-off and land. If they have Winged Flight, they can takeoff or land at a Speed equal to their Flying Speed - 2 SPs. If they have Hovering Flight or Hovering Winged Flight they simply takeoff and land as an Automatic Action. If they want to be able to take off and land on water, they must purchase Swimming separately. See Flying & Gliding (p. 283) for more details.

> A 747-8 has a cruising speed of 570mph or Mach 0.85, giving it a Flight Speed of 9 SPs. Seawise Giant had a cruising speed of 16.5 knots or 19mph, giving it a Swimming Speed of 4 SPs.

WEAPONS

Real-world weapons are modeled as objects with relevant Powers such as Strike, Blast, or Explosion.

Melee Weapons: Melee weapons are modeled using Strike. Because they rely on the user's muscle power, a melee weapon's Strike will be an Augmentative Attribute unless it is self-powered (like a chainsaw). Damage Type will be either Penetrating, Bludgeoning, or Lacerating. Small one-handed melee weapons have Strike 4. Large one-handed melee weapons have Strike 5. Very large two-handed melee weapons have Strike 6.

Projectile Weapons: Projectile weapons are modeled using Blast. Bolt-action and pump-action firearms, breach-loaded cannon, and crossbows have No Multi-Attack Blast. Bows have Augmentative Blast. Fully automatic firearms have Rapid Fire Blast. Howitzers, mortars, and other large weapons capable of firing in a ballistic trajectory have Indirect Blast.

Arrows, hollow-point bullets, full-metal jacket bullets, and APDS rounds deal the Penetrating Damage Type. HEAT rounds deal Concussive Thermal Damage Type while HESH rounds deal Concussive Penetrating Damage Type. HE rounds should be modeled using Targeted Explosion (see below). Other unusual weapons might deal other Damage Types (e.g. flamethrowers deal Thermal Damage).

The SP score for a round with a known armor penetration (in millimeters) can be calculated by using the formula Damage = log2 (Armor Penetration x 5) +2. Armor penetration for a round with a known kinetic energy (in joules) can be calculated using the real-world Krupp Formula, which is Projectile's Kinetic Energy)0.5 / [(Projectile's Diameter)0.5 x 2.4]. Kinetic energy for a round of known mass and muzzle velocity can be calculated as ½ Mass x Velocity2.

> A compound bow delivers 100 joules of kinetic energy via an arrowhead 6mm in diameter. Its armor penetration is therefore (100)0.5 / (60.5 x 2.4) = 1.7mm. Its Damage is therefore log2 (1.7 x 5) +2. The log2 of 8.5 is 3.1, so the compound bow's Damage is (3 +2) = 5. It would be modeled as Penetrating Blast 5. 5 SPs of Blast gives the compound bow an effective range of 160 feet or about 50 meters. Because it's muscle-powered, a compound bow's Blast would be an Augmentative Attribute.
>
> An AK-47 assault rifle delivers 2010 joules of kinetic energy via a bullet 7.62mm in diameter. Its armor penetration is therefore (2010)0.5 / (7.620.5 x 2.4) = 6.8mm. Its Damage is therefore log2 (6.8 x 5) +2. The log2 of 34 is 5.1, so the AK-47's Damage is (5 + 2) = 7. It would be modeled as Rapid Fire Penetrating Blast 7. 7 SPs of Blast gives the AK-47 a range of 640 feet or about 200 meters.
>
> A Rheinmetall Rh-120 tank gun delivers 12 megajoules of kinetic energy via a DM53 APFSDS sabot 27mm in diameter. Its armor penetration (per Krupp) is therefore (12,000,000)0.5 / (270.5 x 2.4) = 277.8mm. Its Damage is therefore log2 (227.8 x 5) +2, so the Rh-120's Damage is (10.5 + 2) = 12.5, rounded to 12. It would be modeled as Penetrating Blast 12. 12 SPs of Blast gives the Rh-120 an effective range of 4 miles or about 6,400 meters.

Explosives: Explosives are, of course, modeled with Explosion. Bombs and grenades are crewed objects with Self-Range Triggered Explosion. Missiles are autonomous objects with Self-Range Triggered Explosion. Grenade launchers, howitzers, mortars, and similar weapons are crewed objects with Targeted Indirect Explosion.

Explosions are Concussive Thermal Damage Type in most cases; atomic and thermonuclear weapons may add the Ionizing Damage Types. Explosion Damage is calculated in kilograms of TNT using the formula Damage = log2 [680 x (kilograms of TNT)0.5]. Damage is calculated in joules using the formula Damage = log2 [(joules)0.5/3].

> A grenade has 0.2kg of TNT equivalent. Its Damage is therefore log2 (680 x 0.20.5). That is 8.25, so a grenade has 8 SPs of Explosion. The 50-megaton Tsar Bomba exploded with the equivalent of 50 billion kilograms of TNT. Its Damage was therefore log2 (680 x 50,000,000,0000.5 or 27.2, so the Tsar Bomba had 27 SPs of Explosion. Boom!

Designer's Note: For those of you riding along on the physics train, you may have noticed that damage from hurled objects or collisions is proportional to momentum (mass x velocity, or Weight + Speed in SPs), without regard for diameter; while projectile damage is proportional to the square root of kinetic energy or mass0.5 x velocity and inversely proportional to diameter. The mechanism by which damage is dealt to a body is different (penetrating to vital organs vs. whole body shock and trauma) and to plausibly model these differences we used slightly different formulas.

AMMUNITION

Ascendant does not directly model ammunition for objects or devices. Ammunition limits can be modeled abstractly, as Power Flaws, for weapons with very low ammunition capacity and long load times. Otherwise, the game assumes that combatants using weapons carry adequate ammunition for the situations they find themselves in.

Designer's Note: Tracking ammunition on a bullet-by-bullet basis only makes sense if there is a clear correlation between shots fired and attacks made in game, such as "each ranged attack represents one bullet fired" or "each ranged attack represents a burst of 3-5 rounds." However, in the real world, highly trained shooters use aimed fire and short bursts to suppress and kill many targets with minimum ammunition expenditure, while inexperienced shooters can empty entire magazines in seconds without even making a single effective attack. Simo Häyhä, "the White Death," used less than 300 bullets to snipe 259 men in WW2. At the other extreme, US Infantry have used 250,000 bullets for each kill in Iraq. With a difference in kills per bullet of six orders of magnitude from skill and circumstances, any attempt to physically correlate rate of fire in the real world to number of attacks in a game is largely pointless. And that makes any sort of direct simulation of ammunition largely pointless for a game, especially for a game where one character may have a Ranged Attack AV that is 10,000 times better than another's. Therefore we assume that for most weapons, the characters using them have sufficient ammunition to get through a typical firefight; and when they don't, or when reloading time is an issue, we apply Power Flaws to model it.

PROTECTION

Most objects have 1 or more SPs of Resistance. Unarmored civilian vehicles typically have SPs of Resistance equal to the Toughness Modifier of the material they are built from. Buildings and armored objects such as fighting vehicles, bulletproof vests, and tanks have SPs of Resistance of up to their Weight/3 plus the Toughness Modifier of their armor (which may be better than that of the rest of the vehicle). If an armored vehicle has a Height lower than Weight/3, it can increase its maximum SP of Resistance by its Weight/3 – Height.

When an everyday object such as a car or building has Resistance, it usually only applies to the Bludgeoning, Lacerating, Penetrating, and possibly Thermal Damage Types. Blast-hardened objects such as bunkers or tanks also have Concussive Protection. An object designed to withstand nuclear/biological/chemical warfare might have a low level of Protection against Electrical, Ionizing, Thermal, and/or Toxic Damage, typically equal to its armor's Toughness Modifier. A hazmat suit might have Protection against Corrosive, Electrical, Ionizing, and Toxic Damage, but not against e.g. Penetrating Damage. Ordinary objects never have Protection against Annihilating or Cosmic Damage, although Inventions might.

An M1A2 Abrams weighs 12 SPs. Its armor is ceramic composite (Toughness Modifier +5). With a Height of 1, it can have up to (12/3 – 1) 3 SP of additional armor. It therefore has 12/3 + 5 + 3 = 12 SPs of Resistance for Bludgeoning Concussive Lacerating Penetrating Thermal Damage. As an NBC-shielded fighting system, it also has 5 SPs of Electrical Ionizing Toxic Resistance. The Toxic Resistance is to protect the crew, since the tank itself is not harmed by it.

Designer's Note: To model penetration, we assumed the armor in front of a projectile falls back in one piece by being forced out of its path as a cork-like plug, which is a plausible approximation for pointed projectiles hitting moderately thick armor. For a given thickness of armor, T, the plug will not move until the applied force F from the projectile is greater than the resistance force R. The resistance force here is from friction along the sides of the plug, which is proportional to the thickness of the plug. The work required to move the plug is equal to the resistance force multiplied by the distance the plug moves, which is also proportional to

the thickness of the plug. Thus the work required to overcome the armor is proportional to thickness squared. The energy available to do that work is equal to the kinetic energy of the projectile. Since we model damage as proportional to the square root of kinetic energy, we thus model protection as proportional to the square root of thickness squared, e.g. thickness. Since Weight is proportional to cubic feet, thickness is proportional to Weight0.33 which, in logs, is Weight/3.

REAL-WORLD LIMITS ON ORDINARY OBJECTS

Ordinary objects (e.g. those which can be acquired with Income rather than CP) cannot exceed certain real-world limits set by the laws of physics and the current state of human technology. Objects which exceed these limits are either Inventions or Devices and cannot be purchased with Income. Note that these limits are circa January 2020; if you're playing this RPG in the future, feel free to update!

POWERS AND SKILLS AVAILABLE

Only the following Attributes, Powers, and Skills can be purchased with ordinary objects. Some additional limitations are noted in parenthesis. Where an SP value is noted in parentheses, that is the maximum value that can be purchased.

★ *Primary Attributes:* AGI (2 SPs), VAL (2 SPs), INS (1 SP), CHA (1 SP)
★ *Defensive Powers:* Air Filtration (10 SPs), Bombproofing (to object's TOU), Healing (1 SP), Hyper-Immune System (Unmodified 4 SPs, Alleviative Broad Spectrum Limited 4 SPs, Alleviative Disease-Specific 6 SPs, Preventative Disease-Specific 6 SPs, no Prion treatments), Invulnerability or Resistance (excluding Annihilating and Cosmic Damage Type), Pressure Protection, Shield
★ *Enhancement Powers:* Air Supply, All-Frequency Hearing, Biochemical Analysis (8 SPs, or Methodical 10 SPs), Blindsight (must be Transmitting, may be Degradable, signal can be Acoustic or Radio), Darkvision (6 SPs), Extended Hearing (7 SPs), Filtered Hearing (7 SPs), Lightning Reflexes, Microscopic Vision (30 SPs), Polarized Vision (7 SPs), Radio Communication, Super-Perception (6 SPs), Super-Strength (21 SPs), Telescopic Vision (18 SPs), Ultra-Sensitive Hearing (20 SPs), Ultra-Sensitive Vision (7 SPs), Underwater Vision (3 SPs), X-Ray Vision (8 SPs)
★ *Mental Powers:* Memory (62 SPs)
★ *Movement Powers:* Burrowing (2 SPs), Flight (15 SPs), Gliding (10 SPs), Jumping (3 SPs), Running (9 SPs), Spaceflight (17 SPs), Swimming (8 SPs), Swinglining (5 SPs), Wall-Crawling (5 SPs)
★ *Offensive Powers:* Blast (13 SPs), Bang (10 SPs), Explosion (27 SPs), Flash (10 SPs), Fog (7 SPs, cannot be Darkening), Illumination (10 SPs), Noise (16 SPs), Snare (8 SPs), Sound Cloud (7 SPs if Damaging, Disturbing, or Nauseating, 12 SPs otherwise), Strike (6 SPs); Damage Type cannot be Annihilating or Cosmic for any Powers
★ *Transformation Powers:* Air Supply
★ *Special Powers:* Pathogen Synthesis (200 CP)
★ *Skills:* Marksmanship (7 SPs), Piloting (7 SPs), Structured Data Processing (62 SPs), any Augmentative (9 SPs)
★ *Pharmaceutical Objects:* Only permitted effects are Hyper-Immune System (Unmodified 4, Alleviative Broad Spectrum Limited 4, Alleviative Disease-Specific 6, Preventative Disease-Specific 6, no Prion treatments), Lightning Reflexes 1, Paralysis (Extended Duration Delayed Onset Physical Paralysis only, SPs of Power – SPs of Delayed Onset must be 4 or less), Regeneration 2 (Power Flaw: Lacerating, Penetrating, Bleeding only), Strike, Drawbacks (Disturbing Appearance, Hesitant, Unconsummatable, Unlikeable, Unobservant, Weak Willed), and Conditions (Emotional, Watchful, Tireless)

WEIGHT RESTRICTIONS

Physics narrows the possible configurations of various Attributes with Weight. The following limits apply to all ordinary objects. The GM can apply other restrictions he deems reasonable on an ordinary object.

★ *Protection:* An ordinary object's SPs of Protection cannot exceed (Weight/3) + Toughness Modifier + 1.
★ *Data Processing and Memory:* An ordinary object's Structured Data Processing and Memory cannot exceed its Weight + 42.
★ *Snare:* An ordinary object's Snare cannot exceed its Toughness + 5.
★ *Super-Strength:* An ordinary object's Super-Strength cannot exceed its Weight + 3.
★ *Toughness:* An ordinary object's Toughness cannot exceed (2/3 x Weight) + Toughness Modifier + 2.

★ *Vehicles (Air):* An ordinary air vehicle's Speed cannot exceed its Weight by more than 3 SPs and is capped at 15 SPs. The sum of the Vehicle's Weight and Speed cannot exceed 25 SPs.

★ *Vehicles (Land):* An ordinary land vehicle's Speed cannot exceed its Weight by more than 3 SPs and is capped at 9 SPs. The sum of the Vehicle's Weight and Speed cannot exceed 15 SPs.

★ *Vehicles (Water):* An ordinary water vehicle's Speed cannot exceed its Weight by more than 2 SPs and is capped at 8 SPs. The sum of the vehicle's Weight and Speed cannot exceed 31 SPs.

★ *Vehicles (Space):* An ordinary space vehicle's Weight must exceed its Speed by at least 3 SPs and is capped at 20 SPs. The vehicle's Speed is capped at 17 SPs.

★ *Weapons (Melee):* An ordinary melee weapon's Strike cannot exceed its Weight by more than 9 SPs and is capped at 6 SPs.

★ *Weapons (Ranged):* An ordinary ranged weapon's Blast cannot exceed 6 + (Weight+3)/2.

★ *Weapons (Explosive):* An ordinary explosive weapon's Explosion cannot exceed its Weight by more than 12 SPs unless it has the Ionizing Damage Type. If so, then the weapon's Explosion can exceed its Weight by up to 16 SPs. It must have either the Self-Range or Targeted modifier and cannot have the Self-Immunity modifier. The conventional limits also apply to objects with Bang, Flash, Fog, or Sound Cloud.

CP COST OF OBJECTS

When determining the CP cost of objects, the same mechanics apply as do for other types of characters. Except as noted below, all Attributes, Powers, and Skills are purchased at their normal cost based on their SPs and modifiers.

TOUGHNESS, DURABILITY, WEIGHT, AND HEIGHT

An object will always have at least these four **Attributes:** Toughness, Durability, Weight, and Height.

★ Toughness has a Base Score of 0. At least 1 SP of Toughness must be purchased. Each SP of Toughness costs 4 CP.

★ Durability is based on Toughness in the same way that Health is based on Might. It cannot be increased or decreased without a Power.

★ Weight has a Base Score of Toughness x 1.5. Weight can then be decreased at a cost of 1 CP per SP. Weight can be increased to reduce cost by 1 CP per SP.

★ Height has a Base Score of Weight / 3. Height can be adjusted up or down by 2 SP at no cost to represent different shapes. Any further modification of Height requires a Power.

The foregoing notwithstanding, Pharmaceutical Objects always have 0 SPs of Toughness, Durability of 1, Weight of -18 to -22 SPs, and Height of between -6 and -8 SPs at 0 CP cost.

PHARMACEUTICAL OBJECTS

The CP cost of a Pharmaceutical Object depends on the effects it causes in its target. If the object grants Attributes, Skills, Powers or Perks, the CP cost is equal to the cost of those benefits. If the object inflicts Drawbacks, the CP cost is equal to the refund of the Drawback. Imposing the Dazed condition costs 5 CP. Imposing Dazed and Fatigued costs 15 CP, while imposing the Exhausted and Staggered conditions costs 50 CP. Emotional states cost 4 CP for mild, 8 CP for moderate, 12 CP for extreme, and 16 CP for wild intensity; each emotion must be purchased separately.

If a Pharmaceutical Object has any Powers with Concentration, Sustained, or Permanent Duration, it must be assigned SPs of Duration. Duration has a Base Cost of 0. It has a Variable Cost equal to the Variable Cost of the most expensive Attribute, Power, or Skill that the Pharmaceutical Object grants, excluding any Instant effects. If the Pharmaceutical Object imposes conditions (such as Dazed or Emotional) the minimum Variable Cost for Duration is 5 CP per SP. If all of its effects are Instant, Duration is N/A.

The smallpox vaccine is a Pharmaceutical Object with Preventative Disease-Specific Hyper-Immune System (smallpox) of 6 SPs. The Base Cost of the Power is 2 CP and the Variable Cost is 1 CP per SP, for a total cost of 8 CP. The Duration of the vaccine is 25 SPs (4 years). The Variable Cost of the Duration is equal to that of the Power, or 1 CP per SP, for a cost of 25 more CP. The total cost of the vaccine is 33 CP. This is then multiplied by 15% (Single Use Power Flaw) for a final cost of 5 CP.

CREW REQUIREMENT AND INTERIOR CAPACITY

Objects with 1 SP or more of Crew Requirement reduce their CP cost by the amount listed on the Crew Requirement table. Objects with 0 SPs or more of Interior Capacity or Exterior Capacity have their CP cost increased by 2 CP + 2 CP per SP (Internal) or 1 CP + 1 CP per SP (External). It does not cost any or save any CP to be a Worn Object or a Crewed Object with an External Crew of 0 SP (1 crew).

LAUNCH CAPABILITY

Objects with Launch Capability have their cost increased by the CP cost listed on the Launch Capability table.

SECURITY

SPs of Security do not cost any CP.

AUGMENTATIVE ATTRIBUTES

Augmentative Attributes are purchased at one-half the Variable Cost of the Attribute.

MONETARY COST

Ordinary objects (but not Inventions or Devices) can be purchased using a character's Income. Characters can begin play with any ordinary objects that have a Monetary Cost (in SP) of equal to or less than the character's Income + 17.

During play, a character can purchase other objects provided his Income + 17 equals or exceeds the object's Monetary Cost in SPs. Otherwise, purchasing the object requires a Challenge Action with an AV equal to the character's Income and a DV equal to its Monetary Cost – 17. See Earning & Spending Income (p. 308) for additional rules.

DETERMINING MONETARY COST WITH REAL-WORLD DATA

Where available, the Monetary Cost of an object can be based on real-world data, simply by converting its cost into SPs.

> A Land Rover Defender costs $50,000 in the real world. It has a Monetary Cost of 22 SPs in game terms.

DETERMINING MONETARY COST WITH GAME DATA

Pricing in the real-world is, of coursed based on supply, demand, cost of production, brand appeal, economies of scale, and many other factors, but when the real-world price is not available, an appropriate price can be estimated from the object's game attributes. Just find the square root of the CP Cost and add the most appropriate Cost Modifier from the table below. Afterwards, adjust the cost up or down by 1-2 SPs to reflect custom styling, luxury furnishings, brand name, etc.

> A Land Rover Defender has a CP Cost of 151. The square root of 151 is 12.28, which rounds to 12. As a Civilian Land Vehicle, the Land Rover has a Cost Modifier of +10. Therefore it has a Monetary Cost of (12 + 10) = 22 SPs.

Object Category	Modifier
Miscellaneous Equipment	8
Workshops	9
Pharmaceutical Objects	8
Archaic Armor	8
Contemporary Armor	9
Hazardous Environment Suits	12 (hazmat/marine) or 19 (space)
Melee Weapons	9
Ranged Weapons	9
Grenades	10
Bombs (nuclear/fuel-air)	23
Bombs (improvised)	15
Bombs (conventional)	8
Missiles	13
Civilian Air Vehicles	15
Civilian Land Vehicles	10
Civilian Water Vehicles	14
Government Air Vehicles	8 (rotary) or 12 (fixed wing)
Government Land Vehicles	9 (standard) or 12 (turreted)
Government Water Vehicles	11
Government Space Vehicles	27

OBJECT CATALOG

PERSONAL EQUIPMENT

ALARM SYSTEM

Type: Autonomous Object
Cost: 16 SP ($750) / 160 CP
Attributes: Height -3, Weight -4, INS 1, Toughness 1, Durability 15
Powers: Self-Range Triggered Bang 0 (12 SP sound volume; trigger: Blindsight detects moving object with 0+ SPs of Height), Degradable Radio Transmitting Blindsight 3, Dynamic Visual Memory 32, UHF/SHF Radio Communication 5

BINOCULARS

Type: Crewed Object
Cost: 17 SP ($900) / 18 CP
Attributes: Height -3, Weight -4, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Limited FOV Telescopic Vision 3

CLIMBING GEAR

Type: Crewed Object
Cost: 17 SP ($1600) / 17 CP
Attributes: Height -1, Weight 0, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Unpowered Swinglining 5, Wall-Crawling 1

ELECTRON MICROSCOPE

Type: Crewed Object
Cost: 27 SP ($500,000) / 38 CP
Type: Crewed Object
Attributes: Height -2, Weight 3, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Limited FOV Microscopic Vision 30

FLASHLIGHT (400 LUMEN)

Type: Crewed Object
Cost: 11 SP ($25) / 18 CP
Attributes: Height -3, Weight -5, Toughness 1, Exterior Crew Requirement 0
Powers: Sustained Spotlight Illumination 3

HANDCUFFS/RESTRAINTS

Type: Crewed Object
Cost: 11 SP ($25) /66 CP
Attributes: Height -3, Weight -5, Toughness 3, Durability 30, Exterior Crew Requirement 0
Powers: Noncombat No-Multi Attack Unencumbering Snare 8, Physical Invulnerability 3

HEADLAMP (250 LUMEN)

Type: Worn Object
Cost: 11 SP ($25) / 20 CP
Attributes: Height -4, Weight -7, Toughness 1, Durability 15
Powers: Sustained Spotlight Illumination 3

LAPTOP COMPUTER

Type: Crewed Object
Cost: 17 SP ($1280) / 132 CP
Type: Crewed Object
Attributes: Height -2, Weight -1, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Structured Data Processing 32, Memory 37, UHF/SHF Radio Communication 5
Note: A hacker's computer would also have 3 to 9 SPs of Deep Network Technology Control for a cost of 265+ CP.

LASER SIGHT

Type: Worn Object
Cost: 15 SP ($425) / 26 CP
Attributes: Height -4, Weight -6, Toughness 1, Durability 15
Powers: Augmentative Marksmanship (shooting) 9

METAL DETECTOR

Type: Crewed Object
Cost: 15 SP ($425) / 26 CP
Attributes: Height 0, Weight -3, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Metal-only Transmitting Radio Blindsight 0

NARCOTICS TESTING KIT

Type: Crewed Object
Cost: 14 SP ($150) / 45 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Methodical Specific Biochemical Analysis (multiplex toxicology screening) 7

NIGHT VISION GOGGLES

Type: Worn Object
Cost: 19 SP ($5000) / 31 CP
Type: Worn Object
Attributes: Height -4, Weight -4, Toughness 1, Durability 15
Powers: Limited FOV Telescopic Vision 1, Dark Vision 5

NIGHT VISION GOGGLES (MILITARY GRADE)

Type: Worn Object
Cost: 20 SP ($10,000) / 44 CP
Attributes: Height -4, Weight -4, Toughness 1, Durability 15
Powers: Limited FOV Telescopic Vision 1, Power Set [Dark Vision 6, Infrared Dark Vision 6]

OPTICAL MICROSCOPE

Type: Crewed Object
Cost: 18 SP ($3000) / 22 CP
Attributes: Height -2, Weight -1, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Limited FOV Microscopic Vision 10

PARACHUTE

Type: Worn Object
Cost: 18 SP ($3,500) / 18 CP
Attributes: Height 2, Weight -1, Toughness 1, Durability 15
Powers: Gliding 4
Power Flaws: Miscellaneous (Gliding character must begin at Altitude of 6 SPs or more; Gliding can only be used for 6 SPs of Time and then parachute must be re-packed)

POLARIZED SUNGLASSES

Type: Worn Object
Cost: 15 SP ($250) / 20 CP
Attributes: Height -4, Weight -6, Toughness 1, Durability 15
Powers: Polarized Vision 3

SATELLITE PHONE

Type: Crewed Object (handheld), Worn Object (headset)
Cost: 17 SP ($1,150) / 46 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, Exterior Crew Requirement 0 (if handheld)
Powers: UHF/SHF Radio Communication 25

SECURITY CAMERA

Type: Autonomous Object
Cost: 16 SP ($750) / 109 CP
Attributes: Height -2, Weight -4, INS 1, Toughness 1, Durability 15
Powers: Dynamic Visual Memory 32, Infrared Dark Vision 5, Ultra-Sensitive Vision 6

SMARTPHONE

Type: Crewed Object (handheld), Worn Object (headset)
Cost: 16 SP ($650) / 157 CP
Attributes: Height -3, Weight -6, Toughness 1, Durability 15, Exterior Crew Requirement 0 (if handheld)
Powers: Structured Data Processing 30, Memory 32, UHF/SHF Radio Communication 15, Ultra-Sensitive Vision 6

SPY BUG

Type: Autonomous Object
Cost: 15 SP ($265) / 56 CP
Attributes: Height -6, Weight -10, INS 1, Toughness 1, Durability 15
Powers: Concentrated Self-Range Glue 0 (self-adhesive), Filtered Hearing 3, One-Way UHF/SHF Radio Communication 9, Ultra-Sensitive Hearing 3

TACTICAL FLASHLIGHT (1000 LUMEN)

Type: Crewed Object
Cost: 12 SP ($40) / 77 CP
Attributes: Height -1, Weight -4, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Bludgeoning 5, Power Set [Spotlight Flash 4, Sustained Spotlight Illumination 4]

TELESCOPIC HUNTING SCOPE

Type: Worn Object
Cost: 16 SP ($500) / 35 CP
Attributes: Height -4, Weight -4, Toughness 1, Durability 15
Powers: Dark Vision 6, Limited FOV Telescopic Vision 3

TOOL BELT

Type: Crewed Object
Cost: 12 SP ($40) / 17 CP
Type: Crewed Object
Attributes: Height -2, Weight -3, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Engineering (various) 5
Perks: Multitool

WALKIE TALKIE

Type: Crewed Object (handheld), Worn Object (headset)
Cost: 13 SP ($75) / 34 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, Exterior Crew Requirement 0 (if handheld)
Powers: MF/HF Radio Communication 13

WORKSHOPS

Note that each workshop can accommodate one user. Larger workshops are a combination of several smaller workshops.

AMBULATORY SURGERY CENTER

Type: Crewed Object
Cost: 25 SP ($400,000) / 195 CP
Attributes: Height 1, Weight 11, Toughness 5, Durability 60, Interior Crew Requirement 0, Interior Capacity 10
Powers: Augmentative Medicine 9, Memory 37, Structured Data Processing 32, UHF/SHF Radio Communication 5
Perks: Multitool, Multitask

AUTOBODY WORKSHOP

Type: Crewed Object
Cost: 21 SP ($25,000) / 222 CP
Attributes: Height 1, Weight 11, Toughness 7, Durability 120, Interior Crew Requirement 0, Interior Capacity 10
Powers: Augmentative Engineering (automotive) 9, Memory 37, Noncombat Super-Strength 8, Structured Data Processing 32, UHF/SHF Radio Communication 5
Perks: Multitool, Multitask

FORENSICS LABORATORY

Type: Crewed Object
Cost: 25 SP ($250,000) / 419 CP
Attributes: Height 1, Weight 11, Toughness 5, Durability 60, Interior Crew Requirement 0, Interior Capacity 10
Powers: Augmentative Investigation 9, Limited FOV Microscopic Vision 10, Memory 39, Biochemical Analysis 8, Methodical Biochemical Analysis 10, Structured Data Processing 34, UHF/SHF Radio Communication 5
Perks: Multitool, Multitask

GENETIC SEQUENCING LABORATORY

Type: Crewed Object
Cost: 25 SP ($250,000) / 419 CP
Attributes: Height 1, Weight 11, Toughness 5, Durability 60, Interior Crew Requirement 0, Interior Capacity 10
Powers: Augmentative Science (Biology) 9, Limited FOV Microscopic Vision 10, Memory 39, Biochemical Analysis 8, Methodical Biochemical Analysis 10, Structured Data Processing 34, UHF/SHF Radio Communication 5
Perks: Multitool, Multitask

VIROLOGY LABORATORY

Type: Crewed Object
Cost: 27 SP ($1,500,000) / 649 CP
Attributes: Height 1, Weight 11, Toughness 5, Durability 120, Interior Crew Requirement 0, Interior Capacity 10
Powers: Air Filtration 8, Augmentative Science (Biology) 9, Augmentative Medicine 9, Biochemical Analysis 8, Methodical Biochemical Analysis 10, Structured Data Processing 34, Limited FOV Microscopic Vision 30, Memory 39, Pathogen Synthesis (200 CP), Pressure Protection 1, UHF/SHF Radio Communication 5
Perks: Multitool, Multitask

PHARMACEUTICAL OBJECTS

All pharmaceutical objects have the "Single Use" Power Flaw, which affords an 85% refund on the CP cost of their Powers.

ANTI-INHIBITOR COAGULANT COMPLEX

Type: Pharmaceutical Object
Cost: 10 SP ($10) / 16 CP
Attributes: Height -8,Weight -20, Toughness 0, Durability 1, Duration 12
Effects: Regeneration 2
Power Flaw: Miscellaneous (character can only benefit from Regeneration once per day)

BROAD-SPECTRUM ANTIBIOTIC

Type: Pharmaceutical Object
Cost: 8 SP ($2) / 6 CP
Attributes: Height -8,Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Broad-Spectrum Limited Hyper-Immune System (bacterial) 4

BROAD-SPECTRUM ANTIFUNGAL

Type: Pharmaceutical Object
Cost: 8 SP ($2) / 6 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Broad-Spectrum Limited Hyper-Immune System (fungal) 4

BROAD-SPECTRUM ANTIPARASITIC

Type: Pharmaceutical Object
Cost: 8 SP ($2) / 6 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Broad-Spectrum Limited Hyper-Immune System (parasitic) 4

BROAD-SPECTRUM ANTIVIRAL

Type: Pharmaceutical Object
Cost: 8 SP ($2) / 3 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Broad-Spectrum Limited Hyper-Immune System (viral) 4

DISEASE-SPECIFIC ANTIBIOTIC

Type: Pharmaceutical Object
Cost: 10 SP ($10) / 3 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Disease-Specific Hyper-Immune System (specific bacterial disease) 6

DISEASE-SPECIFIC ANTIFUNGAL

Type: Pharmaceutical Object
Cost: 10 SP ($10) / 3 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Disease-Specific Hyper-Immune System (specific fungal disease) 6

DISEASE-SPECIFIC ANTIPARASITIC

Type: Pharmaceutical Object
Cost: 10 SP ($10) / 3 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Disease-Specific Hyper-Immune System (specific parasitic disease) 6

DISEASE-SPECIFIC ANTIVIRAL

Type: Pharmaceutical Object
Cost: 10 SP ($10) / 3 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 15
Effects: Alleviative Disease-Specific Hyper-Immune System (specific viral disease) 6

IMMUNE GLOBULIN INTRAVENOUS

Type: Pharmaceutical Object
Cost: 21 SP ($25,000) / 38 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 19
Effects: Hyper-Immune System 4

INTRAMUSCULAR FIELD ANESTHETIC (KETAMINE)

Type: Pharmaceutical Object
Cost: 14 SP ($200) / 29 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration N/A
Effects: Extended Duration Delayed Onset (6) Touch-Range Incapacitating Physical Paralysis 9

PSYCHOACTIVE (MDMA)

Type: Pharmaceutical Object
Cost: 10 SP ($10) / 21 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 13
Effects: Emotional (moderately euphoric), Empathy 3, Super-Perception 1, Tireless

QUICKCLOT

Type: Pharmaceutical Object
Cost: 10 SP ($10) / 21 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 13
Effects: Regeneration 2
Power Flaw: Miscellaneous (Regeneration only applies to Bleeding condition, Lacerating Damage, and Penetrating Damage)

RAPID-ONSET NEUROMUSCULAR BLOCKER

Type: Pharmaceutical Object
Cost: 14 SP ($200) / 20 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration N/A
Effects: Extended Duration Delayed Onset (3) Touch-Range Physical Paralysis 7

RAPID-ONSET SUBCUTANEOUS POISON

Type: Pharmaceutical Object
Cost: 13 SP ($85) / 6 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration N/A
Effects: Toxic Strike 8

SEDATIVE (BENZODIAZEPINE)

Type: Pharmaceutical Object
Cost: 9 SP ($4) / 18 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 13
Effects: Dazed, Emotional (moderately calm), Hesitant

STIMULANT (AMPHETAMINE)

Type: Pharmaceutical Object
Cost: 10 SP ($8) / 11 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 13
Effects: Emotional (mildly angry), Lightning Reflexes 1, Tireless, Watchful

TRUTH SERUM (SCOPOLAMINE)

Type: Pharmaceutical Object
Cost: 14 SP ($200) / 14 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 10
Effects: Dazed, Emotional (moderately agreeable)

VACCINE

Type: Pharmaceutical Object
Cost: 7 SP ($1) / 5 CP
Attributes: Height -8, Weight -20, Toughness 0, Durability 1, Duration 25
Effects: Preventative Disease-Specific Hyper-Immune System (various specific diseases) 6

ARCHAIC ARMOR

LEATHER JERKIN

Type: Worn Object
Cost: 14 SP ($200) / 24 CP
Type: Worn Object
Attributes: Height 0, Weight 0, Toughness 1, Durability 15,
Powers: Bludgeoning Lacerating Penetrating Resistance 2

CHAINMAIL HAUBERK

Type: Worn Object
Cost: 15 SP ($400) / 44 CP
Attributes: Height 0, Weight 0, Toughness 4, Durability 40
Powers: Bludgeoning Resistance 4, Lacerating Resistance 5, Penetrating Resistance 3

PLATE ARMOR

Type: Worn Object
Cost: 16 SP ($800) / 45 CP
Attributes: Height 0, Weight 1, Toughness 4, Durability 40
Powers: Bludgeoning Lacerating Penetrating Resistance 5

CONTEMPORARY ARMOR

BALLISTIC ARMOR

Type: Worn Object
Cost: 17 SP ($1,600) / 65 CP
Attributes: Height 0, Weight 0, Toughness 5, Durability 60
Powers: Bludgeoning Penetrating Resistance 6, Concussive Lacerating Thermal Resistance 4

BULLETPROOF VEST

Type: Worn Object
Cost: 16 SP ($500) / 47 CP
Attributes: Height 0, Weight -2, Toughness 4, Durability 40
Powers: Bludgeoning Penetrating Resistance 5, Lacerating Resistance 3

KEVLAR HELMET

Type: Worn Object
Cost: 14 SP ($200) / 46 CP
Attributes: Height -3, Weight -3, Toughness 3, Durability 30
Powers: Bludgeoning Penetrating Resistance 3, Concussive Lacerating Resistance 2

SPY CATSUIT / SUPERHERO COSTUME

Type: Worn Object
Cost: 16 SP ($600) / 26 CP
Attributes: Height 0, Weight -2, Toughness 1, Durability 15
Powers: Bludgeoning Lacerating Penetrating Resistance 2

ENVIRONMENT SUITS

ATMOSPHERIC DIVING SUIT

Type: Worn Object
Cost: 25 SP ($250,000) / 174 CP
Attributes: Height 0, Weight 5, Toughness 6, Durability 80
Powers: Air Supply 16, High Pressure Protection 9, Sustained Spotlight Illumination 4, Invulnerability 5 (Flawed: Annihilating, Cosmic), MF/HF Radio Communication 13, Swimming 2, Underwater Vision 3

FIRE-RETARDANT SUIT

Type: Worn Object
Cost: 18 SP ($2,500) / 22 CP
Attributes: Height 0, Weight -2, Toughness 1, Durability 15
Powers: Lacerating Resistance 2, Thermal Resistance 5

FIREFIGHTER ENTRY SUIT

Type: Worn Object
Cost: 19 SP ($5,000) / 69 CP
Attributes: Height 0, Weight 1, Toughness 4, Durability 40
Powers: Air Supply 10, Concussive Lacerating Toxic Resistance 5, Thermal Resistance 7

GAS MASK

Type: Worn Object
Cost: 13 SP ($100) / 19 CP
Attributes: Height -2, Weight -5, Toughness 1, Durability 15
Powers: Air Filtration 7
Power Flaws: Limited Fuel (Air Filtration becomes available after 13 SPs of Time, fuel type air filters)

HAZMAT SUIT

Type: Worn Object
Cost: 19 SP ($6,000) / 98 CP
Attributes: Height 0, Weight 1, Toughness 4, Durability 40
Powers: Air Supply 10, Lacerating Penetrating Thermal Resistance 4, Corrosive Toxic Resistance 7, MF/HF Radio Communication 13

HIGH-ALTITUDE FLIGHT SUIT

Type: Worn Object
Cost: 19 SP ($5,000) / 74 CP
Attributes: Height 0, Weight 0, Toughness 3, Durability 30
Powers: Air Supply 10, Cryogenic Thermal Resistance 2, Low Pressure Protection 20, Physical Invulnerability 3

SCUBA GEAR

Type: Worn Object
Cost: 18 SP ($3500) / 47 CP
Attributes: Height 0, Weight 1, Toughness 3, Durability 30
Powers: Air Supply 10, Augmentative Pressure Protection 7, Augmentative Swimming 3, Cryogenic Resistance 1, Underwater Vision 3

SPACE SUIT

Type: Worn Object
Cost: 30 SP ($12,000,000) / 126 CP
Attributes: Height 0, Weight 1, Toughness 5, Durability 60
Powers: Air Supply 12, Corrosive Cryogenic Lacerating Ionizing Penetrating Thermal Toxic Resistance 4, Low Pressure Protection 20, UHF/SHF Radio Communication 13

MELEE WEAPONS

BASEBALL BAT/BATON

Type: Crewed Object
Cost: 13 SP ($65) / 20 CP
Attributes: Height 0, Weight -4, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Bludgeoning Strike 5

BATTLE AXE

Type: Crewed Object
Cost: 13 SP ($85) / 20 CP
Attributes: Height 0, Weight -4, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Lacerating Strike 5

CHAINSAW

Type: Crewed Object
Cost: 14 SP ($180) / 38 CP
Attributes: Height 0, Weight -3, Toughness 2, Durability 15, Exterior Crew Requirement 0
Powers: Cumbersome Lacerating Strike 6

GREAT SWORD / HALBERD

Type: Crewed Object
Cost: 17 SP ($1000) / 39 CP
Attributes: Height 0, Weight -2, Toughness 3, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Cumbersome Long Reach Lacerating Penetrating Strike 6

HAND AXE / MACHETE

Type: Crewed Object
Cost: 12 SP ($50) / 19 CP
Attributes: Height -1, Weight -5, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Lacerating Strike 4

KNIFE/SHORT SWORD

Type: Crewed Object
Cost: 15 SP ($250) / 29 CP
Attributes: Height -1, Weight -3, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Augmentative Lacerating Penetrating Strike 4

NUNCHAKU

Type: Crewed Object
Cost: 12 SP ($50) / 19 CP
Attributes: Height -1, Weight -5, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Bludgeoning Strike 4

PIKE

Type: Crewed Object
Cost: 15 SP ($360) / 21 CP
Attributes: Height 1, Weight -2, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Augmentative Cumbersome Long Reach Penetrating Strike 6

RAPIER

Type: Crewed Object
Cost: 14 SP ($180) / 24 CP
Attributes: Height 0, Weight -3, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Augmentative Penetrating Strike 5

SHIELD

Type: Worn Object
Cost: 14 SP ($200) / 93 CP
Attributes: Height 0, Weight -1, Toughness 3, Durability 30, Exterior Crew Requirement 0
Powers: Physical Shield 5

SPEAR

Type: Crewed Object
Cost: 14 SP ($180) / 24 CP
Attributes: Height 0, Weight -3, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Long Reach Penetrating Strike 5

STILETTO

Type: Crewed Object
Cost: 13 SP ($100) / 19 CP
Attributes: Height -2, Weight -5, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Penetrating Strike 4

SWORD

Type: Crewed Object
Cost: 16 SP ($525) / 32 CP
Attributes: Height 0, Weight -3, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Augmentative Lacerating Penetrating Strike 5

RANGED WEAPONS

ASSAULT RIFLE

Type: Crewed Object
Cost: 17 SP ($1,500) / 73 CP
Attributes: Height -1, Weight -2, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Rapid Fire Penetrating Blast 7

COMBAT SHOTGUN

Type: Crewed Object
Cost: 16 SP ($750) / 103 CP
Attributes: Height -1, Weight -2, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Linked Short Range (-2) Penetrating Blast 7 / Targeted Limited Volume (0) Short Range (-2) Penetrating Explosion 7

COMPOUND BOW

Type: Crewed Object
Cost: 15 SP ($400) / 36 CP
Attributes: Height 0, Weight -2, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Augmentative Penetrating Blast 5

CROSSBOW

Type: Crewed Object
Cost: 15 SP ($400) / 41 CP
Type: Crewed Object
Attributes: Height -1, Weight -1, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: No Multi-Attack Penetrating Blast 6

FLAMETHROWER

Type: Crewed Object
Cost: 18 SP ($3,200) / 75 CP
Attributes: Height 1, Weight 1, Toughness 4, Durability 40, Exterior Crew Requirement 0
Powers: Continuous Thermal Blast 5
Power Flaws: Limited Uses (Blast must be reloaded after 5 shots; reload require 3 SPs of Time)

HEAVY HANDGUN

Type: Crewed Object
Cost: 16 SP ($700) / 55 CP
Attributes: Height -2, Weight -3, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Penetrating Blast 6

HUNTING RIFLE

Type: Crewed Object
Cost: 16 SP ($750) / 63 CP
Attributes: Height -1, Weight -2, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Long Range (+1) Penetrating Blast 7

LIGHT HANDGUN

Type: Crewed Object
Cost: 15 SP ($350) / 50 CP
Attributes: Height -3, Weight -4, Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Penetrating Blast 5

MAN-PORTABLE ANTI-TANK MISSILE LAUNCHER

Type: Crewed Object
Cost: 23 SP ($85,000) / 208 CP
Attributes: Height 0, Weight 1, Toughness 3, Durability 30, Exterior Crew Requirement 1 (2 crew)
Powers: Linked No Multi-Attack Penetrating Thermal Blast 11 / Targeted Long Range (+3) Concussive Thermal Explosion 8 with Power Flaw, FOV Limited Telescopic Vision 4, Thermal Dark Vision 5
Power Flaws: Limited Uses (Blast/Explosion must be reloaded after 1 shot; reload requires 3 SPs of Time)

MAN-PORTABLE ANTI-TANK ROCKET LAUNCHER

Type: Crewed Object
Cost: 21 SP ($15,000) / 124 CP
Attributes: Height -1, Weight -1, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: No Multi-Attack Short Range (-2) Thermal Blast 11 / Targeted Concussive Thermal Explosion 8, FOV-Limited Telescopic Vision 2
Power Flaws: Limited Uses (Blast/Explosion must be reloaded after 1 shot; reload requires 3 SPs of Time)

MAN-PORTABLE S.A.M. LAUNCHER

Type: Crewed Object
Cost: 22 SP ($38,000) / 177 CP
Attributes: Height 0, Weight 0, Toughness 3, Durability 30, Exterior Crew Requirement 0
Powers: Linked No Multi-Attack Long Range (+1) Penetrating Thermal Blast 11 / Targeted Long Range (+4) Concussive Thermal Explosion 8, FOV-Limited Telescopic Vision 4, Augmentative Marksmanship (shooting) 7
Power Flaws: Limited Uses (Blast/Explosion must be reloaded after 1 shot; reload requires 3 SPs of Time)

PEPPER SPRAY

Type: Crewed Object (handheld)
Cost: 11 SP ($15) / 72 CP
Attributes: Height -3, Weight -7 (3 oz), Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Targeted Limited Volume (0) Short-Range (-2) Instant Nauseating Fog 4

SNIPER RIFLE

Type: Crewed Object
Cost: 19 SP ($4,000) / 77 CP
Attributes: Height -1, Weight 0, Toughness 3, Durability 30, Exterior Crew Requirement 0
Powers: Long Range (+2) No Multi-Attack Penetrating Blast 8

SUBMACHINEGUN

Type: Crewed Object
Cost: 17 SP ($1,000) / 68 CP
Attributes: Height -2, Weight -2, Toughness 2, Durability 20, Exterior Crew Requirement 0
Powers: Rapid Fire Penetrating Blast 6

TASER

Type: Crewed Object (handheld)
Cost: 16 SP ($600) / 30 CP
Attributes: Height -3, Weight -4 (1.5 lbs), Toughness 1, Durability 15, Exterior Crew Requirement 0
Powers: Short-Range (-2) Nonlethal Ionizing Blast 4
Power Flaws: Limited Uses (Blast must be reloaded after 1 shot; reload requires 3 SPs of Time)

TRIPOD-MOUNTED AUTO GRENADE LAUNCHER

Type: Crewed Object
Cost: 21 SP ($20,000) / 192 CP
Attributes: Height 0, Weight 2, Toughness 5, Durability 60, Exterior Crew Requirement 1 (2 crew)
Powers: Targeted Indirect Intense Long Range (+2) Concussive Thermal Explosion 8

TRIPOD-MOUNTED HEAVY MACHINEGUN

Type: Crewed Object
Cost: 21 SP ($15,000) / 97 CP
Attributes: Height 0, Weight 2, Toughness 5, Durability 60, Exterior Crew Requirement 1 (2 crew)
Powers: Long Range (+2) Rapid Fire Penetrating Blast 8

TOWED HOWITZER

Type: Crewed Object
Cost: 27 SP ($1,000,000) / 285 CP
Attributes: Height 2, Weight 8, Toughness 9, Durability 240, Exterior Crew Requirement 3 (8 crew)
Powers: Power Set [Targeted Indirect Long Range (+1) Concussive Thermal Explosion 12, Targeted Indirect Long Range (+3) Fog 9, Targeted Indirect Long Range (+3) Toxic Fog 9]
Power Flaws: Limited Uses (Power Set must be reloaded after 1 shot; reload requires 3 SPs of Time)

GRENADES

While the grenades below assume a timed fuse, any grenade could be built or bought with an impact fuse instead of a timed fuse by changing the trigger. The SP and CP costs are the same. All grenades have the "Single Use" Power Flaw, which affords an 85% refund on the CP cost of their Powers.

FLASHBANG GRENADE

Type: Crewed Object
Cost: 15 SP ($400) / 25 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, External Crew 0
Powers: Linked Self-Range Triggered Concussive Explosion 1 / Self-Range Triggered Flashbang 10 (trigger: one Panel of time elapses after activation)

FRAGMENTATION GRENADE

Type: Crewed Object
Cost: 14 SP ($200) / 16 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, External Crew 0
Powers: Self-Range Triggered Concussive Lacerating Explosion 8 (trigger: one Panel of time elapses after activation)

INCENDIARY GRENADE

Type: Crewed Object
Cost: 14 SP ($200) / 16 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, External Crew 0
Powers: Self-Range Triggered Concussive Thermal Explosion 8 (trigger: one Panel of time elapses after activation)

NERVE GAS GRENADE

Type: Crewed Object
Cost: 15 SP ($400) / 22 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, External Crew 0
Powers: Linked Self-Range Triggered Concussive Explosion 1 / Self-Range Triggered Toxic Fog 4 (trigger: one Panel of time elapses after activation)

SMOKE GRENADE

Type: Crewed Object
Cost: 12 SP ($50) / 16 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, External Crew 0
Powers: Linked Self-Range Triggered Concussive Explosion 1 / Self-Range Triggered Fog 4 (trigger: one Panel of time elapses after activation)

TEAR GAS GRENADE

Type: Crewed Object
Cost: 15 SP ($400) / 22 CP
Attributes: Height -3, Weight -5, Toughness 1, Durability 15, External Crew 0
Powers: Linked Self-Range Triggered Concussive Explosion 1 / Self-Range Triggered Nonlethal Toxic Fog 4 (trigger: one Panel of time elapses after activation)

BOMBS

See the rules for Bomb Threats (p. 332) for information on using bombs in play. All bombs have the "Single Use" Power Flaw, which affords an 85% refund on the CP cost of their Powers.

ATOMIC BOMB, 23 KT

Type: Static Object
Cost: 30 SP ($6,000,000) / 56 CP
Attributes: Height 1, Weight 9, Toughness 7, Durability 120
Powers: Self-Range Triggered High Energy Concussive Ionizing Thermal Explosion 22 (trigger: varies)

CAR BOMB, ½-TON

Type: Static Object
Cost: 20 SP ($10,000) / 27 CP
Attributes: Height 0, Weight 5, Toughness 6, Durability 80
Powers: Self-Range Triggered Concussive Thermal Explosion 14 (trigger: varies)

CAR BOMB, 5-TON

Type: Static Object
Cost: 23 SP ($100,000) / 32 CP
Attributes: Height 1, Weight 9, Toughness 10, Durability 320
Powers: Self-Range Triggered Concussive Thermal Explosion 16 (trigger: varies)

HYDROGEN BOMB, 20MT

Type: Static Object
Cost: 31 SP ($12,000,000) / 67 CP
Attributes: Height 1, Weight 9, Toughness 7, Durability 120
Powers: Self-Range Triggered High Energy Concussive Ionizing Thermal Explosion 27 (trigger: varies)

THERMOBARIC BOMB, 44 TON

Type: Static Object
Cost: 29 SP ($3,500,000) / 31 CP
Attributes: Height 1, Weight 9, Toughness 7, Durability 120
Powers: Self-Range Triggered Concussive Thermal Explosion 17 (trigger: varies)

TNT, 1 KILOGRAM

Type: Static Object
Cost: 13 SP ($50) / 17 CP
Attributes: Height -3, Weight -3, Toughness 1, Durability 15
Powers: Self-Range Triggered Concussive Thermal Explosion 9 (trigger: varies)

MISSILES

Missiles are autonomous sub-objects launched by other objects. Most missiles have Self-Range Triggered Explosions. Missiles that target heavily armored slow-moving or stationary targets typically have the trigger "missile is damaged." The missile will use a Challenge Movement Action to make a Speed vs. AGI/Speed Ramming Attack, so that if it hits, it deals Weight + Speed Penetrating Damage as well as the Explosion. Missiles that target fast-moving targets have the trigger "missile moves within # SPs of its target". These missiles will use a Movement Action to get within the noted SPs of the target and then detonate its Explosion. Missiles with purely kinetic kill capability simply ram the target. Missiles launched simultaneously as sub-objects can team attack a target.

AIR-TO-AIR MISSILE

Type: Autonomous Object
Cost: 24 SP ($125,000) / 150 CP
Attributes: Height 1, Weight 4, Insight 1, Toughness 5, Durability 60, Flight Speed 12
Powers: Degradable Radar Transmitting Blindsight 10, Flight 12, Narrow Band One-Way Radio Communication 15, Piloting 7, Self-Range Triggered Concussive Thermal Explosion 12 (trigger: missile is within 0 SPs of target)

Power Flaws: Single Use (Explosion), Limited Fuel (Blindsight, Flight, and Radio Communication become unavailable after 3 SPs of Time)

Notes: An air-to-air missile with active radar guidance armed with an 88 lbs warhead based on the AIM-7 Sparrow.

AIR-TO-SURFACE MISSILE

Type: Autonomous Object
Cost: 23 SP ($100,000) / 134 CP
Attributes: Height 0, Weight 2, Insight 1, Toughness 3, Durability 30, Flight Speed 10
Powers: Degradable Radar Transmitting Blindsight 10, Flight 10, Narrow Band One-Way Radio Communication 13, Piloting 7, Self-Range Triggered Concussive Thermal Explosion 13 (trigger: missile is damaged)
Power Flaws: Single Use (Explosion), Limited Fuel (Blindsight, Flight, and Radio Communication become unavailable after 3 SPs of Time)
Notes: An air-to-surface missile with active radar guidance armed with a 100 lbs warhead based on the AGM-114 Longbow Hellfire.

SURFACE-TO-AIR MISSILE

Type: Autonomous Object
Cost: 31 SP ($18 million) / 186 CP
Attributes: Height 2, Weight 7, Insight 1, Toughness 3, Durability 30, Flight Speed 13
Powers: Flight 13, Narrow Band One-Way Radio Communication 21, Piloting 7, Thermal Dark Vision 6, Ultra-Sensitive Vision 13
Power Flaws: Limited Fuel (all Powers become unavailable after 8 SPs of Time)
Drawbacks: Vulnerable State (missile drops to Weight 0 when within 8 SPs of target)
Notes: A surface-to-air missile with infrared homing guidance and kinetic kill warhead based on the RIM-161 Standard Missile 3. When it approaches its target, the missile sheds its rocket motors (dropping its Weight to 0) and approaches via aerojet. At 0 SPs it attempts a Ramming Attack against its target, dealing 13 SPs of Penetrating Damage.

SUBSONIC CRUISE MISSILE

Type: Autonomous Object
Cost: 27 SP ($2 million) / 254 CP
Attributes: Height 2, Weight 7, Insight 1, Toughness 7, Durability 120, Flight Speed 9
Powers: Degradable Radar Transmitting Blindsight 10, Hovering Flight 9, Narrow Band Radio Communication 21, Piloting 7, Self-Range Triggered Concussive Thermal Explosion 14 (trigger: missile is within 0 SPs of target)

Power Flaws: Single Use (Explosion), Limited Fuel (Blindsight, Flight, and Radio Communication become unavailable after 13 SPs of Time)

Notes: A subsonic cruise missile with active radar guidance armed with a 1,000 lbs warhead based on the RGM-109 Tomahawk. Two-way Radio Communication allows it to send reconnaissance and target data back to its launcher while Hovering Flight allows it to loiter over its target.

INTERCONTINENTAL BALLISTIC MISSILE

Type: Autonomous Object
Cost: 32 SP ($31 million) / 255 CP
Attributes: Height 3, Weight 12, Insight 1, Toughness 10, Durability 320, Flight Speed 14
Powers: Flight 14, Limited Non-transmitting Sight-Only Unenhanceable Scrying 13 (Limit: can only scry astronomical position), Piloting 3, Self-Range Triggered High-Energy Concussive Ionizing Thermal Explosion 24 (trigger: missile is within 8 SPs of target)
Power Flaws: Single Use (Explosion), Limited Fuel (Flight, Radio Communication, and Scrying become unavailable after 9 SPs of Time)
Notes: An intercontinental ballistic missile with astro-inertial guidance armed with a 450-kiloton warhead based on the UGM-133 Trident II and LGM-30 Minuteman. Scrying with the Limited modifier is used to represent the ICBM's astro-inertial guidance; the missile cannot "see" anything except the stars, so the only targets it can attack are fixed points guided by GPS.

TORPEDO

Type: Autonomous Object
Cost: 27 SP ($2 million) / 364 CP
Attributes: Height 2, Weight 7, Insight 1, Toughness 7, Durability 120, Swimming Speed 6
Powers: Acoustic-Only Inaudibility 6, Power Set [Acoustic Submarine Blindsight 13, Acoustic Submarine Transmitting Targeting Blindsight 15], VFH/UHF Radio Communication 15, Piloting 7, Self-Range Triggered Concussive Thermal Explosion 14 (trigger: torpedo is within 0 SPs of target), Swimming 6
Power Flaws: Single Use (Explosion), Limited Fuel (Blindsight, Flight, and Radio Communication become unavailable after 9 SPs of Time)
Notes: A heavyweight submarine-launched torpedo designed to sink deep-diving submarines based on the Mark 48 ADCAP.

CIVILIAN AIR VEHICLES

LIGHT HELICOPTER

Type: Crewed Object
Cost: 27 SP ($1 million) / 178 CP
Attributes: Height 1, Weight 7, Toughness 8, Durability 160, Crew Requirement 0 (1 pilot), Interior Capacity 6, Flight Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3
Other Powers: Hovering Winged Flight 7, Noncombat Super-Strength 6 (cargo hook), HF/VHF Radio Communication 15
Power Flaws: Limited Fuel (Flight becomes unavailable after 12 SPs of Time)

JUMBO JETLINER

Type: Crewed Object
Cost: 34 SP ($150 million) / 342 CP
Attributes: Height 4, Weight 15, Toughness 13, Durability 640, Crew Requirement 1 (3 crew), Interior Capacity 14, Flight Speed 9
Protection: Air Filtration 3, Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3, Low Pressure Protection 13
Other Powers: Degradable Radio Transmitting Blindsight 15, Winged Flight 9, HF/VHF Radio Communication 18
Power Flaws: Limited Fuel (Flight becomes unavailable after 14 SPs of Time)

PRIVATE JET

Type: Crewed Object
Cost: 31 SP ($20 million) / 303 CP
Attributes: Height 3, Weight 11, Toughness 10, Durability 320, Crew Req. 1 (2 crew), Interior Capacity 9, Flight Speed 9
Protection: Air Filtration 3, Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3, Low Pressure Protection 13
Other Powers: Degradable Radio Transmitting Blindsight 15, Winged Flight 9, HF/VHF Radio Communication 18
Power Flaws: Limited Fuel (Flight becomes unavailable after 14 SPs of Time)
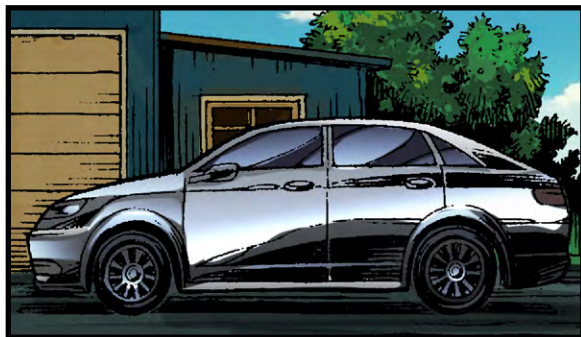
CIVILIAN LAND VEHICLES

ARMORED TRANSPORT TRUCK

Type: Crewed Object
Cost: 24 SP ($120,000) / 152 CP
Attributes: Height 0, Weight 10, Toughness 9, Durability 240, Crew Requirement 0 (1 driver), Interior Capacity 8, Running Speed 6
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 7
Other Powers: One-Way MF/HF Radio Communication 13, Running 6, Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

BICYCLE

Type: Crewed Object
Cost: 15 SP ($250) / 47 CP
Attributes: Height 0, Weight 0, Toughness 2, Durability 20, Exterior Crew Requirement 0 (1 driver)
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 2
Other Powers: Augmentative Running 6

BULLDOZER

Type: Crewed Object
Cost: 24 SP ($150,000) / 146 CP
Attributes: Height 2, Weight 11, Toughness 11, Durability 480, Crew Requirement 0 (1 driver), Interior Capacity 0, Running Speed 3
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Other Powers: All Terrain Running 3, Noncombat Super-Strength 11, Sustained Self-Range Noise 7 (backup beeper), Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running and Super-Strength become unavailable after 14 SPs of Time)

COUPE

Type: Crewed Object
Cost: 21 SP ($21,000) / 129 CP
Attributes: Height 0, Weight 7, Toughness 8, Durability 160, Crew Req. 0 (1 driver), Interior Capacity 6, Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3
Other Powers: One-Way MF/HF Radio Communication 13, Running 7, Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

HEAVY TRUCK

Type: Crewed Object

Cost: 24 SP ($150,000) / 168 CP

Attributes: Height 1, Weight 12, Toughness 11, Durability 480, Crew Requirement 0 (1 driver), Interior Capacity 11, Running Speed 7

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4

Other Powers: MF/HF Radio Communication 13, Running 7, Sustained Self-Range Noise 7 (backup beeper), Sustained Spotlight Illumination 5

Power Flaws: Limited Fuel (Running becomes unavailable after 14 SPs of Time)

LIGHT TRUCK

Type: Crewed Object

Cost: 22 SP ($30,000) / CP 145

Attributes: Height 0, Weight 8, Toughness 9, Durability 240, Crew Requirement 0 (1 driver), Interior Capacity 7, Running Speed 7

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4

Other Powers: All Terrain Running 7, One-Way MF/HF Radio Communication 13, Sustained Spotlight Illumination 5

Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

MEDIUM TRUCK

Type: Crewed Object

Cost: 23 SP ($90,000) / 146 CP

Attributes: Height 0, Weight 9, Toughness 9, Durability 204, Crew Requirement 0 (1 driver), Interior Capacity 8, Running Speed 6

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4

Other Powers: One-Way MF/HF Radio Communication 13, All-Terrain Running 6, Sustained Spotlight Illumination 5

Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

OFF-ROAD MOTORCYCLE

Type: Crewed Object

Cost: 20 SP ($8,000) / 98 CP

Attributes: Height 0, Weight 4, Toughness 5, Durability 80, Exterior Crew Requirement 0 (1 driver), Running Speed 7

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 2

Other Powers: All-Terrain Running 7, One-Way MF/HF Radio Communication 13, Sustained Spotlight Illumination 5

Power Flaws: Limited Fuel (Running becomes unavailable after 12 SPs of Time)

PASSENGER BUS

Type: Crewed Object

Cost: 17 SP ($150,000) / CP 158

Attributes: Height 2, Weight 11, Toughness 10, Durability 320, Crew Requirement 0 (1 driver), Interior Capacity 10, Running Speed 7

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3

Other Powers: One-Way MF/HF Radio Communication 13, Running 7, Sustained Self-Range Noise 7 (backup beeper), Sustained Spotlight Illumination 5

Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

RACING MOTORCYCLE

Type: Crewed Object

Cost: 22 SP ($55,000) / 114 CP

Attributes: Height 0, Weight 4, Toughness 5, Durability 60, Exterior Crew Requirement 0 (1 driver), Running Speed 8

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4

Other Powers: Augmentative Piloting (ground) 7, One-Way MF/HF Radio Communication 13, Running 8, Sustained Spotlight Illumination 5

Power Flaws: Limited Fuel (Running becomes unavailable after 11 SPs of Time)

SCHOOL BUS

Type: Crewed Object

Cost: 24 SP ($150,000) / 155 CP

Attributes: Height 1, Weight 10, Toughness 10, Durability 320, Crew Req. 0 (1 driver), Interior Capacity 9, Running Speed 7

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3

Other Powers: One-Way MF/HF Radio Communication 13, Running 7, Sustained Self-Range Noise 7 (backup beeper), Sustained Spotlight Illumination 5

Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

SEDAN

Type: Crewed Object
Cost: 21 SP ($24,000) / 131 CP
Attributes: Height 0, Weight 7, Toughness 8, Durability 160, Crew Requirement 0 (1 driver), Interior Capacity 6, Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3
Other Powers: One-Way MF/HF Radio Communication 13, Running 7, Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

SNOWMOBILE

Type: Crewed Object
Cost: 20 SP ($10,000) / 86 CP
Attributes: Height 0, Weight 4, Toughness 5, Durability 60, Exterior Crew Requirement 0 (1 driver), Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 2
Other Powers: One-Way MF/HF Radio Communication 13, Snow-Only Running 7, Sustained Spotlight Illumination 5
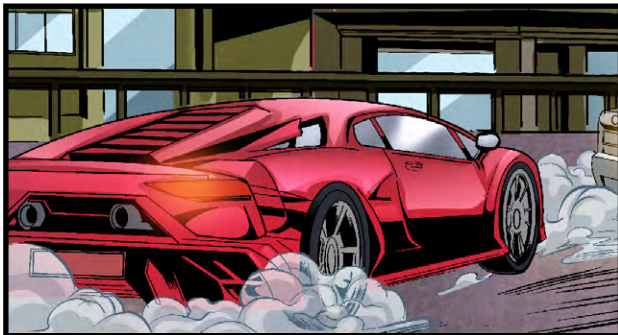**Power Flaws:** Limited Fuel (Running becomes unavailable after 11 SPs of Time)

SPORTS CAR

Type: Crewed Object
Cost: 23 SP ($65,000) / 137 CP
Attributes: Height 0, Weight 7, Toughness 8, Durability 160, Crew Requirement 0 (1 driver), Interior Capacity 5, Running Speed 8
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 2

Other Powers: Augmentative Piloting (ground) 7, One-Way MF/HF Radio Communication 13, Running 8, Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 12 SPs of Time)

SUV

Type: Crewed Object
Cost: 22 SP ($30,000) / 151 CP
Attributes: Height 0, Weight 8, Toughness 9, Durability 240, Crew Requirement 0 (1 driver), Interior Capacity 7, Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Other Powers: All Terrain Running 7, One-Way MF/HF Radio Communication 13, Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

TOURING MOTORCYCLE

Type: Crewed Object
Cost: 21 SP ($16,000) / 94 CP
Attributes: Height 0, Weight 5, Toughness 5, Durability 60, Exterior Crew Requirement 0 (1 driver), Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 2
Other Powers: One-Way MF/HF Radio Communication 13, Running 7, Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

CIVILIAN WATER VEHICLES

CABIN CRUISER / MOTOR YACHT

Type: Crewed Object
Cost: 28 SP ($3,000,000) / 270 CP
Attributes: Height 2, Weight 12, Toughness 12, Durability 640, Crew Requirement 0 (1 pilot), Interior Capacity 11, Swimming Speed 5
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Other Powers: Degradable Radio Transmitting Blindsight 15, VHF/UHF Radio Communication 16, Sustained Spotlight Illumination 6, Swimming 5

CONTAINER SHIP

Type: Crewed Object
Cost: 33 SP ($100 million) / 336 CP
Attributes: Height 5, Weight 24, Toughness 20, Durability 10240, Crew Requirement 4 (22 crew), Interior Capacity 24, Swimming Speed 5
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Other Powers: Degradable Radio Transmitting Blindsight 15, VHF/UHF Radio Communication 16, Sustained Spotlight Illumination 6, Swimming 5

CRUISE LINER

Type: Crewed Object
Cost: 36 SP ($800 million) / 312 CP
Attributes: Height 5, Weight 24, Toughness 20, Durability 10240, Crew Requirement 5 (30 crew), Interior Capacity 15, Swimming Speed 4
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Other Powers: Degradable Radio Transmitting Blindsight 15, VHF/UHF Radio Communication 16, Sustained Spotlight Illumination 6, Swimming 4

JET SKI

Type: Crewed Object
Cost: 21 SP ($15,000) / 80 CP
Attributes: Height -1, Weight 5, Toughness 5, Durability 60, Exterior Crew Requirement 0 (1 pilot), Swimming Speed 6
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 2
Other Powers: Sust. Spotlight Illumination 5, Swimming 6
Power Flaws: Limited Fuel (Swimming becomes unavailable after 11 SPs of Time)

POWER BOAT

Type: Crewed Object
Cost: 22 SP ($30,000) / 133 CP
Attributes: Height 0, Weight 6, Toughness 7, Durability 120, Crew Requirement 0 (1 pilot), Interior Capacity 6, Swimming Speed 6
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3
Other Powers: One Way MF/HF Network Radio Communication 15, Sustained Spotlight Illumination 5, Swimming 6

SUPERTANKER

Type: Crewed Object
Cost: 34 SP ($200 million) / 352 CP
Attributes: Height 5, Weight 27, Toughness 22, Durability 20480, Crew Requirement 4 (25 crew), Interior Capacity 26, Swimming Speed 4
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Other Powers: Degradable Radio Transmitting Blindsight 15, VHF/UHF Radio Communication 16, Sustained Spotlight Illumination 6, Swimming 4

GOVERNMENT AIR VEHICLES

ATTACK HELICOPTER

Type: Crewed Object
Cost: 31 SP ($35 million) / 585 CP
Attributes: Height 2, Weight 9, Toughness 9, Durability 240, Crew Requirement 1 (2 crew), Exterior Capacity 6, Interior Capacity 5, Launch Capability (2 missiles per Page), Flight Speed 8
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Toxic Resistance 4
Weapons: Rapid Fire Penetrating Blast 9 (30mm autocannon), 4 Air-to-Air Missiles, 16 Air-to-Surface Missiles
Other Powers: Augmentative Marksmanship (shooting) 7, Augmentative Piloting (air vehicles) 7, Degradable Radio Transmitting Targeting Blindsight 15, HF/VHF Radio Communication 18, Hovering Winged Flight 8, Radio Cloaking 2, Thermal Dark Vision 6
Power Flaws: Limited Fuel (Flight becomes unavailable after 11 SPs of Time)
Perks: Multi-Attack
Notes: Based on the AH-64 Apache.

HEAVY TRANSPORT HELICOPTER

Type: Crewed Object

Cost: 31 SP ($38 million) / 362 CP

Attributes: Height 2, Weight 10, Toughness 10, Durability 320, Crew Requirement 2 (5 crew), Exterior Capacity 10, Interior Capacity 7, Flight Speed 8

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3

Weapons: Long Range (+2) Rapid Fire Penetrating Blast 8 (door guns)

Other Powers: HF/VHF Radio Communication 18, Hovering Winged Flight 8, Noncombat Super-Strength 10 (cargo hook)

Power Flaws: Limited Fuel (Flight becomes unavailable after 12 SPs of Time)

Perks: Multi-Attack 2

Notes: "Special Forces" version adds Degradable Radio Transmitting Targeting Blindsight 13, Radio Cloaking 2, Thermal Dark Vision 6, Limited FOV Telescopic Vision 2; increase CP cost to 543 CP and money Cost to 32 SP.

Notes: Based on the CH-47 Chinook.

LIGHT TRANSPORT HELICOPTER

Type: Crewed Object

Cost: 31 SP ($21 million) / 399 CP

Attributes: Height 2, Weight 9, Toughness 9, Durability 240, Crew Requirement 2 (4 crew), Exterior Capacity 7, Interior Capacity 7, Launch Capability (2 missiles per Page), Flight Speed 8

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3

Weapons: Long Range (+2) Rapid Fire Penetrating Blast 8 (door guns)

Other Powers: HF/VHF Radio Communication 18, Hovering Winged Flight 8, Noncombat Super-Strength 9 (cargo hook)

Power Flaws: Limited Fuel (Flight becomes unavailable after 12 SPs of Time)

Perks: Multi-Attack

Notes: Based on the UH-60 Black Hawk. "Special Forces" version adds Degradable Radio Transmitting Targeting Blindsight 13, Radio Cloaking 2, Thermal Dark Vision 6, Limited FOV Telescopic Vision 2, and 16 Air-to-Surface Missiles. Increase CP cost to 573 CP and money Cost to 32 SP.

JET FIGHTER

Type: Crewed Object

Cost: 34 SP ($150 million) / 490 CP

Attributes: Height 2, Weight 11, Toughness 10, Durability 320, Crew Requirement 0 (1 crew), Exterior Capacity 10, Interior Capacity 0, Launch Capability (2 missiles per Page), Flight Speed 11

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3

Weapons: 6 Air-to-Air Missiles

Other Powers: Augmentative Marksmanship (shooting) 7, Augmentative Piloting (air vehicles) 7, Degradable Radio Transmitting Targeting Blindsight 17, HF/VHF Radio Communication 18, Winged Flight 11, Radio Cloaking 10

Power Flaws: Limited Fuel (Flight becomes unavailable after 11 SPs of Time)

Perks: Multi-Attack

Notes: Based on the F-22 Raptor.

SCOUT HELICOPTER

Type: Crewed Object

Cost: 29 SP ($7 million) / 471 CP

Attributes: Height 2, Weight 9, Toughness 9, Durability 240, Crew Requirement 2 (4 crew), Exterior Capacity 5, Interior Capacity 5, Launch Capability (2 missiles per Page), Flight Speed 7

Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 3

Weapons: 4 Air-to-Surface Missiles

Other Powers: Degradable Radio Transmitting Targeting Blindsight 13, HF/VHF Radio Communication 18, Hovering Winged Flight 7, Radio Cloaking 2, Thermal Dark Vision 6

Power Flaws: Limited Fuel (Flight becomes unavailable after 11 SPs of Time)

Perks: Multi-Attack

Notes: Based on the OH-58 Kiowa.

GOVERNMENT LAND VEHICLES

AMBULANCE

Type: Crewed Object
Cost: 24 SP ($225,000) / 155 CP
Attributes: Height 1, Weight 9, Toughness 10, Durability 320, Crew Requirement 0 (1 driver), Interior Capacity 8, Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Weapons: None
Other Powers: VHF/UHF Radio Communication 15, Running 7, Sustained Self-Range Noise 9 (siren), Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

ARMORED PERSONNEL CARRIER

Type: Crewed Object
Cost: 25 SP ($300,000) / 336 CP
Attributes: Height 1, Weight 10, Toughness 11, Durability 480, Crew Requirement 1 (2 crew), Interior Capacity 10, Running Speed 5, Swimming Speed 2
Protection: Air Filtration 3, Bludgeoning Concussive Cryogenic Lacerating Penetrating Thermal Resistance 7
Weapons: Long Range (+2) Rapid Fire Penetrating Blast 8 (13mm machinegun), Targeted Limited Volume [2] Fog 4 (smoke launcher)
Other Powers: All Terrain Running 5, VHF/UHF Radio Communication 16, Swimming 2
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)
Notes: Based on the M113 APC.

FIRE ENGINE

Type: Crewed Object
Cost: 25 SP ($450,000) / 290 CP
Attributes: Height 1, Weight 11, Toughness 11, Durability 480, Crew Requirement 0 (1 driver), Interior Capacity 10, Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Weapons: Linked Nonlethal Bludgeoning Blast 4 / Gust 4 (high-pressure water hose)
Other Powers: VHF/UHF Radio Communication 15, Running 7, Sustained Self-Range Noise 9 (siren), Sustained Spotlight Illumination 5, Inorganic Standing Water Control 4
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

HMMWV

Type: Crewed Object
Cost: 22 SP ($30,000) / 219 CP
Attributes: Height 0, Weight 8, Toughness 9, Durability 240, Crew Requirement 1 (2 crew), Interior Capacity 7, Running Speed 6
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Weapons: Long Range (+2) Rapid Fire Penetrating Blast 8 (13mm machinegun)
Other Powers: All Terrain Running 6, MF/HF Radio Communication 13, Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

MAIN BATTLE TANK

Type: Crewed Object
Cost: 30 SP ($10,000,000) / 583 CP
Attributes: Height 1, Weight 12, Toughness 12, Durability 640, Crew Requirement 2 (4 crew), Interior Capacity 6, Running Speed 6
Protection: Air Filtration 5, Bombproofing 10, Bludgeoning Concussive Cryogenic Lacerating Penetrating Thermal Resistance 10
Weapons: No Multi-Attack Penetrating Blast 11 (120mmm main gun), Long Range (+2) Rapid Fire Penetrating Blast 8 (13mm machinegun), Rapid Fire Penetrating Blast 7 (7.62mm machinegun), Targeted Limited Volume [2] Fog 4 (smoke launcher)
Other Powers: Augmentative Marksmanship (shooting) 7, VHF/UHF Radio Communication 16, FOV-Limited Telescopic Vision 6, Thermal Dark Vision 6
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)
Perks: Multi-Attack
Notes: Based on the M1A2 Abrams.
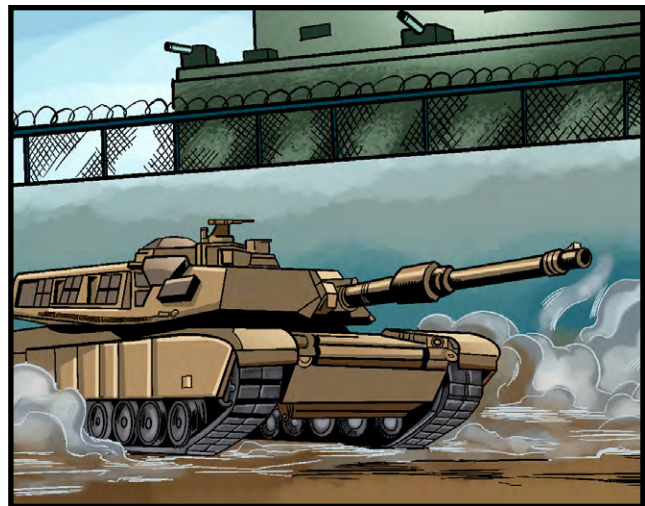
INFANTRY FIGHTING VEHICLE

Type: Crewed Object
Cost: 28 SP ($3,000,000) / 670 CP
Attributes: Height 1, Weight 11, Toughness 10, Durability 320, Crew Requirement 1 (3 crew), Interior Capacity 7, Running Speed 5, Swimming Speed 2
Protection: Air Filtration 3, Bombproofing 8, Bludgeoning Concussive Cryogenic Lacerating Penetrating Thermal Resistance 8
Weapons: Long Range (+1) Rapid Fire Penetrating Blast 9 (25mm autocannon with APDS), Rapid Fire Penetrating Blast 7 (7.62mm machinegun), Targeted Limited Volume [2] Fog 4 (smoke launcher), Linked No Multi-Attack Penetrating Thermal Blast 11 / Targeted Long Range (+3) Concussive Thermal Explosion 8 (TOW missile)
Other Powers: VHF/UHF Radio Communication 16, Thermal Dark Vision 6, FOV-Limited Telescopic Vision 4
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time), Limited Uses (Linked Blast/Explosions must be reloaded after 1 shot; reload requires 3 SPs of Time)
Notes: Based on the M2 Bradley.

POLICE CRUISER

Type: Crewed Object
Cost: 22 SP ($30,000) / 145 CP
Attributes: Height 0, Weight 8, Toughness 9, Durability 240, Crew Requirement 0 (1 driver), Interior Capacity 6, Running Speed 7
Protection: Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 4
Other Powers: VHF/UHF Radio Communication 15, Running 7, Sustained Self-Range Noise 9 (siren),Sustained Spotlight Illumination 5
Power Flaws: Limited Fuel (Running becomes unavailable after 13 SPs of Time)

GOVERNMENT WATER VEHICLES

AIRCRAFT CARRIER

Type: Crewed Object
Cost: 40 SP ($13.5 billion) / 821 CP
Attributes: Height 6, Weight 23, Toughness 19, Durability 7680, Internal Crew Requirement 11 (3184 crew), Interior Capacity 20, Launch Capability (1 Air Vehicle per 8 Pages), Launch Capability (2 Missiles per Page), Swimming Speed 5
Protection: Air Filtration 5, Bombproofing 7, Bludgeoning Concussive Cryogenic Lacerating Penetrating Thermal Resistance 7
**Weapons:** 48 Jet Fighters, 8 Light Transport Helicopters, 2 Air-to-Air Missiles, 2 Surface-to-Air Missiles, Rapid Fire Penetrating Thermal Blast 12 (Phalanx CIWS x4), Short-Range (-2) Rapid Fire Penetrating Blast 12 (gun turrets x 12)
Other Powers: Augmentative Piloting (water vehicle) 7, Degradable Radio Transmitting Targeting Blindsight 18, Deflection 7, Marksmanship (shooting) 7, Sensitive VHF/UHF Radio Communication 18, Sustained Spotlight Illumination 6, Swimming 5
Power Flaws: Miscellaneous (Marksmanship Skill limited to Phalanx CIWS)
Perks: Multi-Attack 3, Multitask
Notes: Based on Nimitz-class nuclear carrier.

ATTACK SUBMARINE

Type: Crewed Object
Cost: 38 SP ($2.4 billion) / 797 CP
Attributes: Height 2, Weight 20, Toughness 17, Durability 3840, Crew Requirement 7 (155 crew), Interior Capacity 18, Launch Capability (8 Missiles/Torpedoes per 8 Pages), Swimming Speed 5
Protection: Air Filtration 15, Bombproofing 7, Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 7, High Pressure Protection 9
Weapons: Any combination of 50 Subsonic Cruise Missiles or Torpedoes
Powers: Acoustic Cloaking 10, Air Supply 21, Augmentative Piloting (water vehicle) 7, Degradable Radio Transmitting Blindsight 15, Power Set [Acoustic Submarine Blindsight 13, Acoustic Submarine Transmitting Targeting Blindsight 15] VHF/UHF Radio Communication 18, Sustained Spotlight Illumination 6, Swimming 5
Perks: Multi-Attack, Multitask
Notes: Based on Seawolf-class nuclear submarine.

BALLISTIC MISSILE SUBMARINE

Type: Crewed Object
Cost: 38 SP ($3 billion) / 728 CP
Attributes: Height 2, Weight 20, Toughness 17, Durability 3840, Crew Requirement 7 (140 crew), Interior Capacity 18, Launch Capability (4 Missiles per 8 Pages), Swimming Speed 5
Protection: Air Filtration 15, Bombproofing 7, Bludgeoning Cryogenic Lacerating Penetrating Thermal Resistance 7, High Pressure Protection 8
Weapons: 24 Intercontinental Ballistic Missiles
Powers: Acoustic Cloaking 8, Air Supply 21, Augmentative Piloting (water vehicle) 7, Degradable Radio Transmitting Blindsight 15, Power Set [Acoustic Submarine Blindsight 13, Acoustic Submarine Transmitting Targeting Blindsight 15], VHF/UHF Radio Communication 18, Sustained Spotlight Illumination 6, Swimming 5
Perks: Multi-Attack, Multitask
Notes: Based on Ohio-class nuclear submarine.

GUIDED MISSILE CRUISER

Type: Crewed Object

Cost: 37 SP ($1.8 billion) / 1502 CP

Attributes: Height 3, Weight 20, Toughness 17, Durability 3840, Internal Crew Requirement 8 (330 crew), Interior Capacity 18, Launch Capability (1 Air Vehicle per 8 Pages), Launch Capability (12 Missiles per Page), Swimming Speed 5

Protection: Air Filtration 5, Bombproofing 7, Bludgeoning Concussive Cryogenic Lacerating Penetrating Thermal Resistance 7

Weapons: Any combination of 96 Surface-to-Air Missiles or Subsonic Cruise Missiles, 2 Light Transport Helicopters, Targeted Indirect Long Range (+2) Concussive Thermal Explosion 12 (dual 127mm cannon turrets), Rapid Fire Short-Range (-1) Penetrating Blast 11 (gun turrets x 6), Long Range (+2) Rapid Fire Penetrating Thermal Blast 10 (Phalanx CIWS)

Other Powers: Augmentative Piloting (water vehicle) 7, Degradable Radio Transmitting Targeting Blindsight 18, Deflection 7, Marksmanship (shooting) 7, Power Set [Acoustic Submarine Blindsight 13 / Acoustic Submarine Transmitting Targeting Blindsight 15], Radar Cloaking 10, Sensitive VHF/UHF Radio Communication 18, Sustained Spotlight Illumination 6, Swimming 5

Perks: Multi-Attack 4, Multitask

Power Flaws: Miscellaneous (Marksmanship Skill limited to Phalanx CIWS)

Notes: Based on Ticonderoga-class cruiser and Arleigh Burke-class destroyer.
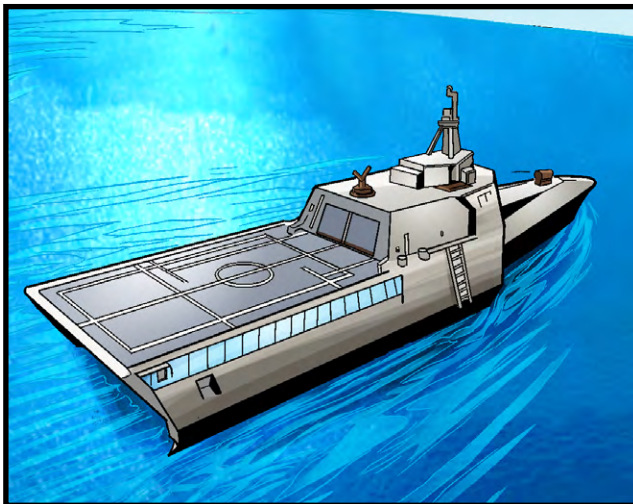
GOVERNMENT SPACE VEHICLES

ROCKET

Type: Crewed Object

Cost: 33 SP ($90 million) / 254 CP

Attributes: Height 5, Weight 16, Toughness 12, Durability 640, External Crew Requirement 4 (16 mission control staff) Interior Capacity 11, Flight Speed 15, Spaceflight Speed 17

Protection: Bludgeoning Concussive Lacerating Penetrating Resistance 4, Cryogenic Ionizing Thermal Resistance 2, Low Pressure Protection 20

Other Powers: Flight 15, Radio Communication 25, Spaceflight 17

Power Flaws: Limited Fuel (Flight becomes unavailable after 6 SPs of Time)

Notes: Based on Falcon 9 reusable launch vehicle.

SPACE STATION

Type: Crewed Object

Cost: 43 SP ($150 billion) / 239 CP

Attributes: Height 6, Weight 15, Toughness 12, Durability 640, Internal Crew Requirement 2 (6 crew), Interior Capacity 14, Exterior Capacity 14, Launch Capability (1 spacecraft or EVA per 8 Pages)

Protection: Air Filtration 5, Bludgeoning Concussive Lacerating Penetrating Resistance 4, Cryogenic Ionizing Thermal Resistance 2, Low Pressure Protection 20

Other Powers: Air Supply 25, Radio Communication 21

SPACE TELESCOPE

Type: Crewed Object

Cost: 43 SP ($150 billion) / 454 CP

Attributes: Height 2, Weight 10, Toughness 10, Durability 320, Insight 1, External Crew Requirement 2 (3 mission control staff)

Protection: Bludgeoning Concussive Lacerating Penetrating Resistance 4, Cryogenic Ionizing Thermal Resistance 2, Low Pressure Protection 20

Other Powers: Augmentative Science (astronomy) 9, Data Processing 32, Memory 37, Radio Communication 21, Telescopic Vision 18, Thermal Dark Vision 7, Ultra-Sensitive Vision 7

MISC. STATIC OBJECTS

When fighting in and around cities and buildings, the following static objects might appear.

BRONZE COLOSSUS

Attributes: Height 5, Weight 14, Toughness 12, Durability 640, Interior Capacity 7, Bludgeoning Lacerating Penetrating Thermal Resistance 3

CAST IRON DUMPSTER

Attributes: Height 0, Weight 8, Volume 1, Toughness 9, Durability 240, Interior Capacity 7, Bludgeoning Lacerating Penetrating Thermal Resistance 4

CAST IRON MANHOLE COVER

Attributes: Diameter -1, Weight 3, Toughness 6, Durability 80, Bludgeoning Lacerating Penetrating Thermal Resistance 4

CONCRETE OBELISK

Attributes: Height 7, Weight 23, Toughness 17, Durability 3840, Bludgeoning Lacerating Penetrating Thermal Resistance 2

LEATHER COUCH

Attributes: Height 0, Weight 2, Toughness 2 Durability 20, Bludgeoning Lacerating Penetrating Thermal Resistance 1

STEEL STREETLAMP

Attributes: Height 3, Weight 7, Toughness 7, Durability 120, Bludgeoning Lacerating Penetrating Thermal Resistance 3, Illumination 5

STEEL REFRIGERATOR

Attributes: Height 0, Weight 3, Volume -3, Toughness 4, Durability 40, Interior Capacity 3, Bludgeoning Lacerating Penetrating Thermal Resistance 4, Special Cryogenic Aura (**Power Flaw:** only affects characters in interior capacity)

UPHOLSTERED CHAIR

Attributes: Height -1, Weight -1, Toughness 1, Durability 15, Bludgeoning Lacerating Penetrating Thermal Resistance 2

RESIDENTIAL HOME

Attributes: Height 2, Weight 14, Volume 8, Toughness 11, Durability 480, Interior Capacity 14, Bludgeoning Lacerating Penetrating Thermal Resistance 2

SKYSCRAPER

Attributes: Height 8, Weight 25, Volume 19, Toughness 19, Durability 7680, Interior Capacity 25, Bludgeoning Lacerating Penetrating Thermal Resistance 2

WOODEN UTILITY POLE

Attributes: Height 4, Weight 7, Toughness 6, Durability 80, Bludgeoning Lacerating Penetrating Thermal Resistance 3, Electrical Magnitude 10

WOODEN TABLE

Attributes: Height 0, Weight 3, Toughness 4, Durability 40, Bludgeoning Lacerating Penetrating Thermal Resistance 2

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Jinky Coronado

CHAPTER 7: ACTIONS

This chapter explores many of the Actions a character can take in a comic book world. As a refresher from Core Mechanics (p. 50), Actions include anything and everything from walking down a corridor to investigating a forensic site to punching a villain. There are six inclusive and overlapping categories of Actions:

★ **Instant Actions** are those which take 0 SPs of time or less (e.g. just a few seconds) to perform. Instant Actions do not have to involve actual combat, but that's when they most often occur. Shooting a gun is an example of an Instant Action.

★ **Extended Actions** are those which take 1 SP of time or more to perform. Cleaning a gun is an example of an Extended Action.

★ **Automatic Actions** are Actions that are so trivial that any ordinary person can automatically accomplish them. Opening an ordinary door, pressing a button, or talking on the phone are all Automatic Actions.

★ **Challenge Actions** are Actions that are difficult enough that success is not assured. An Action might be challenging because of active opposition from another character (as in combat), intellectual complexity (as in a forensic investigation), or environmental conditions (as in flying through a sandstorm). The outcome of Challenge Actions is determined with dice rolls.

★ **Movement Actions** are Actions that involve moving from one location to another.

★ **Stationary Actions** are Actions that do not involve moving from one location to another.

Keep in mind that some of the categories are assumed by default, to keep notation concise. Every Action is assumed to be Instant unless specifically designated as Extended; every Action is assumed to be Stationary unless specifically designed as Movement; and every Movement Action is assumed to be Automatic unless specifically designated as Challenge.

CHALLENGE ACTION MECHANICS

Challenge Checks are dice rolls used to resolve the outcome of uncertain events in the game. Every Challenge Action involves a Challenge Check, but sometimes a Challenge Check might be called for even if a character doesn't take a Challenge Action. For instance, a character might be required to make a Challenge Check if he is the target of another character's Action or caught in a trap that he has triggered. (Gamers familiar with D20 mechanics may find it helpful to think of Challenge Checks as inclusive of attack rolls, skill checks, *and* saving throws.)

ACTING VALUE AND DIFFICULTY VALUE

Every Challenge Check involves a pair of opposing Supermetric values, the **Acting Value (AV)** and the **Difficulty Value (DV)**. The AV will almost always be an Attribute of the character making the Challenge Check, possibly with some modifiers. The DV will usually be the Attribute of a character resisting or opposing the Challenge. Sometimes, however, the Difficulty Value of a Challenge Check may be a static number. Typically a static number is used for Challenges undertaken against the environment. When the rules call for a Challenge Check, the following format is generally used: "Make a [Attribute and Modifiers to use for the AV] vs [Attribute and Modifiers or Number to use for the DV] Challenge Check."

Some Challenge Checks may permit a character to use the higher of two Attributes as the AV or DV of the check or require them to use the lower of two Attributes. If the higher of two Attributes can be used, the two Attributes separated with a "/". For instance, "make a VAL/MIG vs MIG Challenge Check" means that the character should make a Challenge Check using the higher of his VAL or MIG Attribute as the AV and his opponent's MIG as the DV. If the lower of the two Attributes must be used, the two are separated with a "</>". Thus "make a VAL</>MIG vs MIG Challenge Check" means the character must use the lower of VAL or MIG.

CHALLENGE ACTION RESOLUTION TABLE (CHART)

Once the AV and DV have been determined, the DV is subtracted from the AV to yield the **Resolution Value (RV)**. Next, consult the **Challenge Action Resolution Table (CHART)**. The CHART is divided into seven columns and thirteen rows (-6 to 6). Find the row matching the character's RV in one of the two RV Columns on the left-hand side of the table. If the character is making an Attack

RV (Attack)	RV (Other)	Red	Orange	Yellow	Green	White
-6	-3	-	01	02-03	04-07	08-100
-5	(-2.5)	-	01-02	03-06	07-09	10-100
-4	-2	-	01-03	04-07	08-12	13-100
-3	(-1.5)	-	01-04	05-09	10-19	20-100
-2	-1	-	01-06	07-13	14-25	26-100
-1	(-0.5)	-	01-07	08-19	20-35	36-100
0	0	01	02-11	12-26	27-50	51-100
1	(0.5)	01-02	03-13	14-33	34-67	68-100
2	1	01-03	04-20	21-50	51-98	99-100
3	(1.5)	01-09	10-37	38-79	80-99	100
4	2	01-23	24-55	56-98	99	100
5	(2.5)	01-47	48-95	96-98	99	100
6	3	01-96	97	98	99	100

or certain other interactive actions, it is making an **Attack Check** and uses the RV column labeled RV (Attack). If the character is attempting any other type of Challenge, it uses the RV column labeled RV (Other). The player or GM controlling the character then rolls 1d100 and finds the column matching the number they rolled. The color of that column is the **Color Result** of the Challenge Check.

COLOR RESULTS

There are five possible **Color Results**:

★ *White* indicates that the Challenge Check has ended in failure. The character missed his attack, crashed his car, missed all the clues, or otherwise did not succeed in the Challenge.
★ *Green* means that the Challenge Check resulted in minor success. The character grazed his target, narrowly avoided crashing, or spotted a minor clue, and so on. In combat, a Green result deals base damage to the target.
★ *Yellow* designates that the Challenge Check resulted in major success. The character solidly struck his target, maintained control of his vehicle, spotted an important clue, etc. In combat, a Yellow result deals double (x2) damage to the target.
★ *Orange* indicates that the Challenge Check resulted in critical success. The character powerfully struck his target, confidently and easily controlled his car, spotted several important clues, and so on. In combat, an Orange result deals quadruple (x4) damage to the target.
★ *Red* means that the Challenge Check resulted in triumph. The character struck his target as hard as he possibly could, perfectly controlled his vehicle, spotted every clue he could have spotted, etc. In combat, a Red result deals octuple (x8) damage to the target.

Not every Color Result is available at every RV. Note that the maximum RV is capped at 6 for Attacks and 3 for other Challenges, and that the minimum RV is capped at -6 for Attacks and -3 for other Challenges. See Color Threshold and Automatic Success, below.

Depending on the particular Challenge Check, the results may require additional game mechanics to fully resolve. These sub-mechanics are detailed in the Powers & Skills, Actions, and Combat chapters for each specific Challenge Check.

COLOR THRESHOLD

Some Challenge Checks may be of such particular difficulty that a Green result is not enough to succeed. Instead, the Challenge Check may require at least a Yellow, Orange, or even Red Color Result to succeed. In this case the color is noted after the DV. For instance, if the rules say "make an AGI vs. 12 Yellow Challenge Check", that means that the character should make a Challenge Check using his AGI as the AV and 12 as the DV, with only Color Results of Yellow, Orange, or Red succeeding. The minimum Color Result required is said to be the Challenge's **Threshold**. By default, actions have a Green threshold.

When Challenge Checks have RVs lower than the lowest value on the CHART, increase the Color Threshold for the check. If the Check's RV is 1 SP lower, increase the Color Threshold of the Challenge Check by one step. If the Check's RV is 2 or more SP lower, increase the Color Threshold by two steps. (In other words, when you can no longer shift up on the RV rows of the CHART, shift left on Color Threshold instead.)

AUTOMATIC SUCCESS

A character attempting an Attack always automatically succeeds with a Red result if the RV of the Challenge Check is +7 or higher. Occasionally other types of Attacks may automatically succeed in other circumstances. For instance, a Clamber (p. 394) always succeeds if the target is a static object.

A character attempting any other Challenge can choose to automatically succeed anytime the RV of the Challenge Check is at least 0. If the Challenge Check has an RV of 0 or better, the character can choose to automatically succeed with a Green color result. If the Check has an RV of 1 or better, the character can choose to automatically succeed with a Yellow color result. If the Check has an RV of 2 or better, the character can choose to automatically succeed with an Orange color result. If the Check has an RV of 3 or better, the character can choose to automatically succeed with a Red color result.

If a character chooses to automatically succeed on a Challenge Check, the player can deem the Action the character took in association with that Challenge Check (if any) to be an Automatic Action instead of a Challenge Action. Except where otherwise noted, this latter rule does *not* apply to Attacks. Attacks count as Challenge Actions, even if the RV is +7 or higher, unless specifically noted otherwise.

When taking an Extended Challenge Action, a character cannot automatically achieve better than a Yellow success (see p. 262).

CHALLENGE ACTION GUIDELINES

Challenge Actions, since they resolve dice rolls with uncertain outcomes, are the most dramatic and important type of Actions. This chapter, along with the Powers & Skills and Combat chapters, provides many rules for resolving specific Challenge Actions. Players, being fiendishly creative, will end up trying something for which there is no specific rule or mechanic. In such cases, the Gamemaster can determine what to use as the AV and DV of the Action's Challenge Check using the following guidelines.

DETERMINING ACTING VALUE

The AV will always be an Attribute of the character making the Challenge Check, possibly with some modifiers. The guidelines below suggest the appropriate Attribute for various Challenge Checks relating to Primary and Secondary Attributes.

Difficulty	DV Range	Ordinary Person (AV 2)	Expert (AV 5)
Trivial	0	Orange+ result 50% likely	Red result 96% likely
Easy	1	Yellow+ result 50% likely	Red result 96% likely
Moderate	2	Green+ result 50% likely	Red result 96% likely
Interesting	3	Green+ result 25% likely	Yellow+ result 98% likely
Stressful	4	Green+ result 12% likely	Yellow+ result 50% likely
Strenuous	5	Green+ result 7% likely	Green+ result 50% likely
Difficult	6	Green+ result 3% likely	Green+ result 25% likely
Very Difficult	7	Green result 1% likely	Green+ result 12% likely
Monstrously Difficult	8	Impossible	Green+ result 7% likely
Superhumanly Difficult	9	Impossible	Green+ result 3% likely
Superhumanly Difficult	10	Impossible	Green result 1% likely

★ **MIG** is used for feats of strength. Lifting, pulling, pushing, and throwing things can all involve MIG Challenge Checks. MIG is also used to resist toxins, environmental damage, and similar effects that sap the strength and vigor of the body.

★ **AGI** is used for activities requiring acrobatics, balance, flexibility, or hand-eye coordination. Driving in a car chase, jumping over a wall, and balancing on a tight rope would all be AGI Challenge Checks.

★ **VAL** is used for activities requiring courage, combat training, "killer" instincts, and reaction time. It is rarely used outside of combat (see p. 363).

★ **RES** is used for feats of determination and grit. Resisting torture, overcoming brainwashing, or maintaining concentration in distracting circumstances are examples of RES Challenge Checks.

★ **INS** is used for activities involving intellectual acuity and intuitive perception. Finding clues at forensic sites, detecting hidden threats, and inventing gadgets are examples of INS Challenge Checks.

★ **CHA** is used for interacting with and influencing non-player characters with persuasion or coercion. Interviewing a witness, interrogating a suspect, or seducing a mark are examples of CHA Challenge Checks.

★ **Speed** is used for various movement-related actions. Sprinting to the finish line is an example of a Speed Challenge Check.

★ **Income** is used for purchasing goods and services in the game world. Purchasing a yacht on credit is an example of an Income Challenge Check.

★ **Reputation** is used to determine the size of the crowds and the nature of press coverage that a character's actions receive. Organizing a press conference or calling on fans to rally downtown are examples of Reputation Challenge Checks.

AV OF EXTENDED CHALLENGE ACTIONS

Anytime the Challenge Check arises from an Extended Challenge Action, the AV should usually be increased by the SPs of Time that the character actually devotes to the task.

DETERMINING DIFFICULTY VALUE

If the Challenge Check arises from an Action targeted at a character, then the DV is whichever Attribute the character would use to resist the Action. Use the same guidelines as above.

If there is not a clear opponent or obstacle to overcome, a numerical DV can be assigned based on the GM's assessment of the difficulty of the task. The Difficulty Value table, below, allows the GM to assess the difficulty of a Challenge Check from the point of view of an ordinary person and/or typical expert in the field.

DV OF EXTENDED CHALLENGE ACTIONS

When creating Challenge Checks intended to be Extended Challenge Action, the GM should make sure to factor in the customary SPs of Time required for a professional to accomplish the task when setting the DV.

> If a padlock would require 5 minutes (6 SPs of Time) for a skilled burglar (7 SPs of Infiltration) to pick, then the DV to pick the lock should be 6 + 7 = 13.

COLOR THRESHOLD

The GM can use Color Thresholds to add variety to Challenge Checks, or to clarify what level of success indicates what result. The GM can inform the player of the Color Threshold required before the roll, or keep it secret, as appropriate to the circumstances.

> F4U5T is attempting to short-circuit a magnetic lock to gain entry into an underground facility. Unbeknownst to him, the magnetic lock is connected to a silent alarm, and if the lock is not short-circuited quickly enough, the alarm will trigger. The GM reveals that the DV to short-circuit the lock is 9, but he keeps secret the fact that there is an Orange threshold for avoiding the alarm.

SECRET DIFFICULTY VALUES

In most cases, the game assumes that the player knows the DV of the tasks their character is attempting so that they can estimate how much Time to spend or how many Hero Points to allocate or whether to try at all. *Ascendant* is a super-powered RPG, after all, and superheroes typically tackle tasks with confidence. In some circumstances, however, a Difficulty Value should be kept secret from the player. In such cases, the player must declare how many Hero Points they spend and roll the dice without knowing the DV or RV. The GM should secretly calculate the RV and then reveal the Color Result he achieved.

> Stronghold (VAL of 11 SPs) is attempting to punch out a troublemaking journalist. Unbeknownst to Stronghold, the troublemaking journalist is actually a shapeshifting ascendant with a VAL of 10 SPs. When he declares his attack, the GM informs Stronghold that he's up against a Secret DV. Puzzled, Stronghold declines to spend any Hero Points and rolls 1d100, scoring an 87. The GM secretly calculates Stronghold's RV of +1 and informs him that he missed with a White result.

> **Designer's Note:** At the GM's option, the first time a character attempts any given task, he can face a secret DV. This optional rule makes characters a bit more cautious as they need to "size each other up" in the first Page of combat, or "move carefully" when going through a hazardous area, etc. It's a little slower but it's more suspenseful. It's the GM's choice based on the tone of his Series.

EXAMPLE OF DEFINING A CHALLENGE ACTION

Stronghold is a member of the local bowling league. His player wants to know how hard it will be for Stronghold to bowl a perfect 300. The GM knows that there are 10 frames in a bowling game, with 2 fills in the last frame for 12 throws total. A professional bowler has about a 50% chance of a strike and a 98% chance of a spare in each frame. Assuming a professional bowler has 7 SPs of Bowling, the GM decides that the DV for bowling is 5, with gutter balls on a White result, a few pins on a Green result, a spare on a Yellow result, and a strike on an Orange or Red result. To get a perfect 300, Stronghold will have to roll twelve consecutive Orange or Red results.

DETERMINING RESOLUTION VALUE

The RV is normally calculated by subtracting the DV from the AV. For instance, if the AV is 7 and the DV is 5, then the RV is 7-5= 2.

HALF-POINT RV SHIFT

Sometimes, due to environmental conditions, unforeseen circumstances, or stress a Challenge might be somewhat harder or easier than the resulting RV suggests, but not quite so difficult as to justify raising or lowering the RV by a full point. At his discretion, the GM can shift the RV of an ordinary Challenge (not an Attack) up or down by a half-point. The CHART indicates half-point RVs in parentheses in the Other column. A half-point RV shift increases or decreases the odds of success by approximately 1.4x (square root of 2).

It's time to bowl! Stronghold has 7 SPs of Bowling, so his AV is 7. The DV is 5. Therefore his RV is +2. However, Warp has played a prank on Stronghold, secretly adding extra weight to his bowling ball. Stronghold is too strong to notice the extra weight but it's enough to throw off his game a bit. The GM decides this merits a half-point RV penalty. With an RV of +2, Stronghold would normally achieve a Red result on 1-23, an Orange result on 24-55, a Yellow result on 56-98, and a Green result on 99. With a half-point penalty, he will instead achieve Red on 1-9, Orange on 10-37, Yellow on 38-79, and Green on 80-99. He'll still bowl well but certainly won't get his perfect 300.

Designer's Note: Attacks already offer more granularity than ordinary Challenges, because the RV rows range from -6 to +6 on the CHART while ordinary Challenges have RV rows ranging from -3 to +3. The GM can achieve a similar level of granularity for ordinary Challenges by shifting up or down one row on the CHART. This is equivalent to having a DV that's halfway between two whole numbers, e.g. DV 2.5.

RV OF EXTENDED CHALLENGE ACTIONS

Anytime a character spends 1 SPs of Time or more on an Extended Challenge Action, his RV is capped at +1. If his AV is such that he could enjoy a higher RV, the character ought to spend less Time on the Action. (This rule is why a character cannot automatically achieve better than a Yellow success on an Extended Challenge Action.)

A police detective (Investigation of 7 SPs) is investigating a crime scene (Complexity of 15 SPs). If he were to spend an hour at the scene (10 SPs of Time), his AV is 7 + 10 = 17 and his RV is 17 − 15 = +2. Because it's an Extended Challenge Action, however, his RV would be capped at +1. Therefore he instead spends 30 minutes (9 SPs of Time) to make the Challenge Check with an RV of +1. If he fails to find the clues he wants, he can try again after another 9 SPs of Time with the same odds. Alternatively, the detective could choose to take an automatic success after 9 SPs of Time, thereby guaranteeing he learns any Green or Yellow clues, and then afterwards spend another 9 SPs of Time and roll in the hopes of finding Red and Orange clues.

Designer's Note: In the real world, a person can create a better product, write a better song, develop a better game, or otherwise do better at a task by spending more time on it – but the return on investment from spending more time is limited. George R.R. Martin can write a novel in a year and be confident it's a good book (automatic Yellow result) but spending more time doesn't mean he can guarantee it's going to be his best book (Red result), no matter how long he spends. This rule is why we don't have an ending to *A Song of Ice and Fire* and why game developers eventually "just ship" the product.

If the character is undertaking an Extended Challenge Action against a secret DV, and he allocates sufficient Time to achieve an RV of +2 or more, the GM should halt the Time and have the character roll at the moment when his RV reaches +1.

F4U5T is attempting to short-circuit another magnetic lock to gain entry into an underground facility. The lock actually has a hidden security layer (DV 11) and the GM tells F4U5T the DV is secret. F4U5T has 9 SPs of Infiltration. He decides to spend 4 SPs of Time (60 seconds) on the Extended Challenge Action. Since 4 SPs of Time would give him an RV of [(9+4) – 11] = +2, the GM stops F4U5T after 3 SPs of Time and has him roll with an RV of +1.

UNDERSTANDING RV AND COLOR RESULTS

Mathematically, color results of Green, Yellow, Orange, and Red are the equivalent to 0, 1, 2, and 3 SPs respectively, or non-logarithmic values of 1, 2, 4, and 8. That is why Damage is multiplied by x1, x2, x4, and x8 for Green, Yellow, Orange, and Red successes on Attack Checks.

This equivalence allows the GM to know the expected color result for any given RV. For Attacks, the expected color results are Green at +0 RV, Yellow at +2 RV, Orange at +4 RV, and Red at +6 RV. For all other Challenges, the expected color results are Green at +0 RV, Yellow at +1 RV, Orange at +2 RV, and Red at +3 RV.

These rules guide the relationship between Automatic Actions and Challenge Actions. Sometimes an Action's color result determines the SPs of Time that the Action can be maintained. In such cases, the formula for the Automatic Action and the formula for calculating the RV of the Challenge Action will be algebraic equivalents when the RV is 0. A Green result will sustain the Action for 0 SPs of Time, Yellow for 1 SP, Orange for 2 SPs, and Red for 3 SPs.

In other cases, the Action's color result determines how successful the Action is, with a Green result indicating marginal success and a Red result indicating complete success. In such cases, the formula for calculating the RV of the Challenge Action will show a -3 modifier applied to the DV. Requiring a Red result makes an Action 3 SP harder, so to balance that out with the Automatic Action equivalent, we have to reduce the DV.

First consider a character moving in a hazardous environment. A character can safely move in hazardous conditions as an Automatic Movement Action by reducing his normal maximum Speed by the SPs of Hazardousness. The formula is Safe Speed = Maximum Speed – Hazardousness.

Meanwhile, as a Challenge Movement Action, a character may attempt to move at a higher Speed in hazardous conditions. The Acting Value for the Challenge Check is the normal maximum Speed of the moving character and the Difficulty Value is the Speed at which the character would like to move plus the Hazardousness. If the character succeeds on the Challenge Movement Action, how long he can continue to move at that Speed again depends on his Color Result: On a Green result, he can maintain the Speed for just 0 SPs of Time (a few seconds); on a Yellow result, for 1 SP of Time (about 6-10 seconds); on an Orange result, for 2 SPs of Time (about 15 seconds); and on a Red result, for 3 SPs of Time (about 30 seconds). Once the Time has elapsed, the character must succeed on another Challenge Check in order to continue moving at that Speed.

Since the color result determines how long the Action can be maintained, this is a case where when the RV is 0, e.g. Maximum Speed = (Safe Speed + Hazardousness), the formula is algebraically equivalent to Safe Speed = Maximum Speed – Hazardousness.

Let's compare to another common game mechanic. A character can process information as an Extended Automatic Action. The formula is Information = INS + Time. Meanwhile, as a Challenge Action, a character can attempt to "speedread" and process information more quickly. The AV is the character's INS plus the Time spent and the DV is the SPs of Information – 3 SPs. On a White result, the character fails to comprehend or learn anything. On a Green result, the character comprehends about 10% of the Information (3 SPs less than the total). On a Yellow result, he comprehends about 25% of the Information (2 SPs less than the total). On an Orange result, he comprehends about half of the Information (1 SP less); and on a Red Result he comprehends all the Information.

Here, the color result determines how well the Action is performed. In this case, when the RV is 0, e.g. (Information -3) = INS – Time, we see the formula is not algebraically equivalent to the formula for the Automatic Action, Information = INS – Time. The 3 SP difference is to reflect the fact that for the Challenge Action to be as successful as the Automatic Action, a Red result is required.

TEAMING UP ON ACTIONS

Multiple characters can work together as a **Team** to accomplish various Actions. Team Actions are resolved with one roll. The character with the highest AV is the Acting Leader of the Team and makes the roll on behalf of all Team members. (If multiple characters have the same AV, any one of them can be Acting Leader.) The Acting Leader's AV is increased by the amount shown on the Team Bonus table based on the number of Team members participating in the Action.

To be able to form a Team to attempt an Action, characters must meet the following criteria:

★ Each member of the Team must have an AV within 2 SPs of the Acting Leader's AV. Team members with 3 or fewer SPs than the Active Leader cannot meaningfully contribute.
★ Each member of the Team must be able to communicate with the Acting Leader.
★ If the Action is an Extended Action, all members of the Team must finish the Action at the same Time. Characters with lower AVs can start earlier in order to better contribute by getting a higher AV from Time spent.

Team Size	Team Bonus
2-3	+1
4-6	+2
7-12	+3
13-25	+4
26-50	+5
51-100	+6
101-200	+7
201-400	+8
401-800	+9
801-1,600	+10
1,601-3,200	+11
3,201-6,400	+12

TEAMS OF TEAMS

Teams can themselves team up with other characters or Teams to create teams of Teams, called **Task Forces**. When a Team joins a Task Force, count the Team as one member of the Task Force with an AV equal to the Team's effective AV. In order to contribute to the Task Force, each Team's effective AV must be within 2 SPs of the AV of the effective Acting Leader of the Task Force.

By combining into Task Forces, ordinary people can accomplish tasks that would be impossible for even a gifted genius.

> Dr. Quantum (Super-Intelligence of 12 SPs), Singularity (INS of 7 SPs), an Interpol agent (Investigation of 7 SPs), and two local detectives (Investigation of 6 SPs each) are investigating a forensic site. Singularity, the Interpol agent and the two detectives can team up. Singularity becomes Acting Leader of the Team and rolls the Challenge Check, gaining a +2 bonus to AV for leading her Team of four. The effective AV for her Team is therefore 8.
>
> However, none of them could team up with Dr. Quantum. She is two orders of magnitude smarter than Singularity, and she would see the rest of the Team's efforts as mere blundering. Conversely, Singularity and her Team would find it unintelligible how Dr Quantum is able to make conclusions out of thin air after the most cursory inspections.
>
> Now imagine that Interpol assembles a Team of 50 agents together (each with Investigation of 7 SPs). The Interpol Team has an effective AV of 12 (Investigation 7 + 5 from the Team Bonus). This Interpol Team could form a Task Force with Dr Quantum. As a Task Force, Dr Quantum and the Interpol Team would have an AV of 13 (12 for Dr Quantum's Super-Intelligence + 1 for a Team Size of 2). Note that the Task Force's Team Bonus is based on a Team Size of 2, not of 151, because the entire Interpol Team counts as one member of the Task Force.

FATIGUE AND EXHAUSTION

Creatures who take Extended Actions get weary over time. Such weariness is represented with two Conditions, **Fatigued** and **Exhausted**. The Extended Action taken determines how much Time is required to trigger the Condition.

Fatigued and Exhausted creatures suffer a penalty to their MIG (or MIG substitute) for purposes of lifting, carrying, pushing, pulling, and throwing; to their Speed (or Speed substitute) for purposes of traveling; to their INS (or INS substitute) for purposes of processing information; and to their Income for earning money. Fatigued creatures suffer a -1 SP penalty while Exhausted characters suffer a -2 SP penalty.

A creature recovers from being Fatigued by resting for 1 hour (10 SP) or expending 1 Hero Point on his Panel. He recovers from being Exhausted by resting for 8 hours (14 SP) or expending 2 Hero Points on his Panel. Creatures who have the Tireless Perk do not suffer from the Fatigued or Exhausted conditions, nor do objects.

POWER STUNTS

Sometimes, an ascendant may use his powers or talents to emulate an ability he doesn't otherwise possess. For instance, a fast-flying ascendant might stun an opponent by creating a sonic boom, or an ascendant with cybernetic claws might use them as climbing spikes to ascend a cliff. **Power Stunts** are the game mechanic which permit ascendants to use their Powers in the same flexible manner seen in comic books.

POWER STUNT DECLARATION

When a character wants to make a Power Stunt, he must state what Primary Attribute or Power he is using as the Base for the Power Stunt, what Power, Skill, or Perk he seeks to emulate, and what SP score he wants the emulated effect to have. If a Power is used, the maximum SP score that can be emulated is the SP score of the Base Power. If a Primary Attribute is used, the maximum SP score that can be emulated is the SP score of the Base Attribute – 5.

After the declaration, the GM then determines if the Power Stunt is plausible or implausible given comic book physics. If the GM finds a Power Stunt to be implausible, the Power Stunt cannot be undertaken. Whether a Power Stunt is implausible is contextual; circumstances particular to the scene and location may make something usually implausible actually quite plausible in that specific case.

> A Power Stunt using Glue to emulate Mind Domination or using Blindsight to emulate Teleport a target would be implausible under almost any circumstances. A Power Stunt using Water Control to burrow through the earth (an emulation of Earth Control) might be implausible or it might not. If there is a large aquifer underground, the GM might rule that the character can use the ground water to hydraulically burrow through the earth. On the other hand, if the character is on top of dry bedrock, the GM might rule that Power Stunt is implausible.

No penalty accrues to a character for declaring an implausible Power Stunt. He can declare another, different, Power Stunt (perhaps more limited in scope or with a different approach) or simply take an ordinary Action. Often a GM may rule that a Power Stunt would be plausible with certain modifications and the character can choose to follow the GM's guidance.

> If a character declares a Power Stunt to use Electrical Blast to emulate Forcefield, the GM could reasonably deem that a plausible Power Stunt. But the GM's evaluation should be different if a character declares a Power Stunt to use Electrical Blast to emulate a Flawed Forcefield that only stops the Corrosive Damage that is about to hit the character. Here it seems like the player is just trying to take the Flawed modifier in order to save Hero Points on the cost. The GM should deny the Power Stunt as implausible but suggest the character emulate Forcefield without the Flawed modified instead.

If the GM deems the Power Stunt to be plausible, he then determines what type of Action is entailed by the Power Stunt. Typically the type of Action is determined by the emulated effect.

> A Power Stunt using Flight to attack with a sonic boom would require a Challenge Movement Action (even though Flight is normally used with just a Movement Action). A Power Stunt using Strike to climb a wall would require a Movement Action (even though Strike is normally used with a Challenge Action). A Power Stunt using Forcefield to become Invisible would require an Automatic Action (because Invisibility is activated with an Automatic Action.)

A character can Power Stunt with any Powers he has access to from Devices, Inventions, and Objects provided that the GM deems it plausible.

> Stronghold picks up an AK-47 assault rifle (Rapid Fire Penetrating Blast 7). If he declares a Power Stunt using the assault rifle's Blast to emulate Telepathy, that would probably be ruled implausible in most contexts. On the other hand, a Power Stunt using the assault rifle's Blast to emulate Paralysis through suppressive fire might be plausible.

A character cannot use the Base Power for its normal effect while also using it to Power Stunt unless the Power enables him to do so in its ordinary usage (such as a Control Power that permits both a Blast and Flight).

EMERGENCY POWER STUNTS

Normally, a character declares a Power Stunt on his own Panel. However, if a character or an ally within his LOS is targeted by an attack, the character can make an Emergency Power Stunt to emulate a Concentration or Sustained Power useful in defending or protecting against the attack. An Emergency Power Stunt does not require that an action be reserved; instead the Hero Point cost of the Emergency Power Stunt is increased by 5 and the character becomes Dazed afterwards until the end of his next Panel. A character cannot make an Emergency Power Stunt if he is Totally Surprised by the Attack.

COST OF POWER STUNTS

In order to accomplish a Power Stunt, a character must expend one or more Hero Points. The cost in Hero Points is determined by the game mechanical difference between the standard effect of the Attribute or Power used and the emulated effect declared for the Power Stunt. Note that whether a Power Stunt is plausible or implausible is unrelated to the cost of the Power Stunt. A Power Stunt might be a highly plausible extension of a Power but nevertheless quite expensive in Hero Points; conversely it might cost few Hero points but be totally implausible within the game world.

EMULATING THE SAME POWER WITH DIFFERENT MODIFIER(S)

If the Power Stunt emulates the same Power with different modifiers than the character actually selected, the cost in Hero Points is equal to the difference in the CP Cost between the emulated Power and the base Power divided by 6. The minimum cost is 1 Hero Point.

HERO POINT COST (SAME POWER, DIFFERENT MODIFIERS):
(EMULATED POWER COST – BASE POWER COST) / 6, MINIMUM 1

Sturm Und Drang can shoot lightning from his fingertips, represented with 11 SPs of Electrical Blast (Base Cost 20, Variable Cost 5, Total Cost 75). Since he doesn't have the Indirect modifier on the Power, he has to have LOS on all his targets. During a fight, he declares a Power Stunt to call a lightning bolt down from the sky on a target out of LOS. In game terms, he is emulating Indirect Electrical Blast. The Indirect modifier increases Blast's Base Cost by 10 and Variable Cost by 2. If Sturm Und Drang uses 11 SPs of Indirect Electrical Blast, the emulated Power will cost [30 + (11 x7)] = 107 CP, so the Stunt will cost (107 – 75) / 6 = 5.33 Hero Points, rounded to 5. If he uses just 10 SPs of Indirect Electrical Blast, the emulated Power will cost [30 + (10+7)] = 100 CP, and the Stunt will cost (100 – 75) / 6 = 4 Hero Points. He couldn't use 12 or more SPs of Indirect Electrical Blast, because the SPs of his Power Stunt cannot exceed the SPs of his Power.

EMULATING A DIFFERENT POWER FROM THE SAME CATEGORY

If the Power Stunt involves emulating a Power from the same general category (e.g. Mental or Transformation) as the character's actual Power, the cost in Hero Points is equal to the difference in the CP Cost between the emulated Power and the base Power divided by 4. The minimum cost is 2 Hero Points.

HERO POINT COST (DIFFERENT POWER, SAME CATEGORY):
(EMULATED POWER COST – BASE POWER COST) / 4, MINIMUM 2

Sturm Und Drang has 11 SPs of Electrical Blast (Base Cost 20, Variable Cost 5, Total Cost 75). He declares a Power Stunt to blind a target with a flash of lightning. The Power Stunt is an emulation of the Flash Power with Spotlight modifier. Flash has a Base Cost of 25 and a Variable Cost of 5. The Spotlight modifier reduces the Base Cost by 5, to 20, but increases the Variable Cost by 2, to 7. Sturm Und Drang wants 10 SPs of Spotlight Flash. The cost of the emulated Power is therefore [20 + (10 x 7)] = 90 CP. The Stunt will cost (90 – 75) /4 = 3.75 Hero Points, rounded to 4.

EMULATING A DIFFERENT POWER FROM A DIFFERENT CATEGORY

If the Power Stunt involves emulating a Power from an entirely different category than the character's actual Power, the cost in Hero Points is equal to the difference in the CP Cost between the emulated Power and the base Power divided by 2. The minimum cost is 5 Hero Points.

HERO POINT COST (DIFFERENT POWER, DIFFERENT CATEGORY):
(EMULATED POWER COST – BASE POWER COST) / 2, MINIMUM 5

Sturm Und Drang has 11 SPs of Electrical Blast (Base Cost 20, Variable Cost 5, Total Cost 75). He comes under fire from Star-Spangled Squadron troopers and declares a Power Stunt to create a protective screen of electrons, emulating 11 SPs of Forcefield. Forcefield has a Base Cost of 50 and a Variable Cost of 5. The cost of the emulated Power is [50 + (11 x 5)] = 105 CP. The cost of the Power Stunt is therefore (105 − 75)/2 = 15 Hero Points.

EMULATING A DIFFERENT POWER WITH A CONTROL POWER

Powers from the Control category, such as Air Control, Earth Control, or Light Control, are ideal for Power Stunts. Because Control Powers have high Base and Variable Costs, the Hero Point cost to emulate other Powers is usually low. If the Control Power already emulates other Powers (such as Air Control emulating Continuous Gust), the character can make Power Stunts as if he possessed those Powers. In addition, a character can use a Power from the Control category to emulate a Power from any other Category as if it were from the Control category as long as the GM rules the Power Stunt is plausible. Control Powers themselves can only be emulated by other Control Powers.

HERO POINT COST (CONTROL POWER, RELATED EFFECT):
(EMULATED POWER COST − BASE POWER COST) / 6, MINIMUM 1
HERO POINT COST (CONTROL POWER, DIFFERENT EFFECT):
(EMULATED POWER COST − BASE POWER COST) / 4, MINIMUM 2

The Aeronaut has 9 SPs of Air Control (Base Cost 50, Variable Cost 16). He needs to make a deep-sea dive in order to retrieve a lost artifact from a shipwreck. He declares a Power Stunt using Air Control to emulate Air Supply by creating a bubble of air around himself. The GM rules this is plausible. Air Supply is a Transformation Power, but since the Aeronaut is using a Power from the Control category for the Power Stunt, he can treat Air Supply as if it were a Control Power. Air Supply only has a Base Cost of 5 and a Variable Cost of 1, so the cost for the Power Stunt will be just the minimum of 2 Hero Points (for different power from the same category). If the Aeronaut were trying to use Forcefield to emulate Air Supply, the cost would have been 5 Hero Points (the minimum cost for a different power from a different category).

EMULATING A PERK

If the Power Stunt involves emulating a Perk, the cost in Hero Points is equal to the difference between the Cost of the Perk and the Total Cost of the Power used to emulate it, divided by 4. The minimum cost is 2 Hero Points for all Perks except Extra Attack. Extra Attack always costs 10 Hero Points.

HERO POINT COST (PERK):
(COST OF PERK − TOTAL COST OF BASE POWER) / 4; MINIMUM 2 OR 10 FOR EXTRA ATTACK

The Aeronaut has been working for hours. He decides to use his 9 SPs of Air Control to deliver pure oxygen to his lungs to restore his drained vigor. He declares a Power Stunt using Air Control to emulate Tireless. Air Control costs more than Tireless, so the Power Stunt costs 2 Hero Points.

EMULATING ANY POWER WITH A PRIMARY ATTRIBUTE

Characters can use their Primary Attributes in Power Stunts to emulate related Powers. Some possibilities are listed on the table below. The notes in parenthesis are intended to suggest plausible justifications for the Power Stunt. The GM can permit or forbid these and other plausible Power Stunts as appropriate to the circumstances.

The cost in Hero Points is equal to the difference in the CP Cost between the emulated Power and the Cost of the Attribute divided by 2. If the character has paid CP to enhance the Attribute (such as with Super-Strength), add the CP cost of the Enhancement Power to the Cost of the Attribute. The minimum cost is 5 Hero Points.

HERO POINT COST (PRIMARY ATTRIBUTE, PERMITTED POWER):
(EMULATED POWER COST – ATTRIBUTE COST) / 2, MINIMUM 5

Primary Attribute	Permitted Power Stunts
Might	Emotional Attack (intimidating muscles); Wall-Crawling (carving handholds into a wall with brute force); Concussive Cone, Continuous Concussive Gust (smashing the ground to cause a tremor)
Agility	Deflection (dodging blows); Swinglining (using lines in the environment), Wall-Crawling (free-running over walls)
Valor	Deflection (parries), Invulnerability ("iron skin" Kung Fu techniques), Resilience (warrior spirit), Shield (blocks), Touch-Range Paralysis (nerve pinch), Bludgeoning Strike (karate chop)
Resolve	Resilience (sheer grit), Air Supply (holding breath); Mind Field, Mind Screen (mental fortitude)
Insight	Empathy, Mind Reading (understanding micro-expressions and subtle body language)
Charisma	Emotional Control, Empathy, Emotional Attack (various uses of words and body language)

> Jack Hammer has 8 SPs of MIG. He wants to smash the ground with his iron fists, causing an 8 SP Concussive Cone. Concussive Cone has a Base Cost of 20 and Variable Cost of 12, so the cost of the emulated Power is [20 + (12 x 8)] = 116. The cost of 8 SPs of MIG is 80. Therefore the Power Stunt costs (116 – 80) / 2 = 13 Hero Points.

EMULATING A POWER FROM A CAPTURED DEVICE OR INVENTION

Devices – the magic swords, powered battlesuits, and rare artifacts that give a hero his exceptional abilities – can generally only be used by the character who owns the Device (and paid the CP Cost for it). Inventions can generally only be used by the character who invented them. However, if a character gains temporary control of another character's Device(s) or Invention(s), he can make use of them via Power Stunts. He can use one or more Powers or Skills granted by a Device at the SP granted by the Device by paying Hero Points equal to the Device owner's Power Limit / 6 for each. He can use the Powers or Skills granted by an Invention by paying Hero Points equal to the Invention's highest SP score / 4.

HERO POINT COST (USE ONE EFFECT OF ANOTHER'S DEVICE):
DEVICE OWNER'S POWER LIMIT / 6 PER POWER/SKILL

HERO POINT COST (USE ANOTHER'S INVENTION):
INVENTION'S HIGHEST SP SCORE / 4

> Airborne has stolen Khepri's beam-khopesh, an Invention with 14 SPs of Annihilating Strike. If Airborne uses the beam-khopesh, it counts as a Power Stunt costing 14 / 4 = 3.5 Hero Points, rounded to 4.

COST OF POWER STUNTS FROM FLAWED POWERS

If a character's Power Stunt follows the restrictions imposed by all the base Power's Power Flaws, calculate the cost of the Power Stunt based on the full CP cost of the base Power. If the Power Stunt bypasses some or all of the base Power's Power Flaws, calculate the cost of the Power Stunt based on the Power's Cost after the Power Flaws are applied. Remember a character must still have a plausible rationale for the Power Stunt; most Power Flaws cannot be plausibly avoided with Stunts.

Sturm Und Drang has 11 SPs of Electrical Blast (Base Cost 20, Variable Cost 5, Total Cost 75). Let's imagine he also has a Power Flaw: Recharge Time that limits him to using his Electrical Blast just once per two Pages, in exchange for a 15% discount (11 CP) that reduces the Power's Discounted Total Cost to 64 CP. The rationale for the Power Flaw is that Sturm needs time to rebuild the bioelectrical charge in his body between each Blast.

On Page 1 of a battle, Sturm uses his Blast in the ordinary manner. On Page 2, he doesn't use it, because of his Recharge Time Power Flaw. On Page 3, he uses his Blast to Power Stunt a Spotlight Flash. Since he has followed the restriction imposed by his Recharge Time Power Flaw, he calculates the Hero Point cost of the Power Stunt based on the Power's 75 CP Total Cost. It costs him 4 Hero Points (see the example earlier under "Emulating a Different Power from the Same Category."

On Page 4 of the Battle, Sturm is in dire straits and needs to Power Stunt a Targeted Electrical Explosion (Base Cost 30, Variable Cost 8, Total Cost 118). He rationalizes this by saying that he'll use an Automatic Action to stick his finger into a nearby light socket in order to "rapidly recharge" and overcome his Power Flaw. The GM deems this plausible. Since Sturm is bypassing his Blast's Power Flaw, the cost of his Power Stunt is calculated using 64 CP and not 75 CP as the base Power's Total Cost. It costs (118 − 64)/4 = 13.5 Hero Points, rounded to 14.

DURATION OF POWER STUNTS

When a Power Stunt emulates a Power with an Instant Duration, the Power Stunt has an Instant Duration. When a Power Stunt emulates a Perk or a Power with a Concentration, Sustained, or Permanent Duration, the Power Stunt lasts until one of the following occurs:

★ 10 SPs of Time (one hour) passes;
★ The character fails to use a necessary action to maintain Concentration;
★ The character becomes Dazed, Staggered, Overwhelmed, Fatigued, Exhausted, or Unconscious;
★ The character makes another Power Stunt using the same Power;
★ The Power is deactivated voluntarily or involuntarily (e.g. at the end of the duration of Air Supply);
★ The character uses the Base Power for its normal effect. This does not apply to Control Powers unless the use of the Control Power makes use of an effect with the same Duration.

When the Aeronaut emulated Air Supply, he emulated a Sustained Power, so the Duration of the Power Stunt was itself Sustained. If the Aeronaut became Dazed or used Air Control for another Power Stunt, the prior Power Stunt would immediately expire. If the Aeronaut used Air Supply for 9 SPs of Time, the Power Stunt would expire, because Air Supply deactivates after SPs of Time equal to the SPs of Power. If the Aeronaut used his Air Control for another effect with a Sustained duration (such as Deflection), then the Power Stunt would expire, but it wouldn't expire if he used his Air Control to send a Gust at a target or to fly.

POWER LIMIT ON POWER STUNTS

Since the maximum SP score that can be emulated is the SP score of the Power used for the Stunt, most Power Stunts will not affect a character's Power Limit. However some combinations of existing Powers and Powers emulated with Power Stunts might trigger a Power Limit violation. The Hero Point cost of a Power Stunt that exceeds a character's Power Limit is increased by 1 Hero Point per SP over the character's Power Limit.

LIFTING, CARRYING, AND THROWING

Nothing says "superhuman" like picking up a car and throwing it through a wall. These rules explain how much characters in *Ascendant* can pick up, push, pull, throw, and otherwise toss around.

THE MEASURE OF MIGHT

Under normal circumstances, a character's ability to lift, carry, push, pull, or throw things is determined by his MIG Attribute. There are three exceptions to this.

★ Characters who have the Super-Strength Power can always substitute their SPs of Super-Strength for their SPs of MIG when taking Actions.

★ Characters who have Telekinesis or other Powers capable of moving various objects can substitute their SPs of Power for their SPs of MIG when doing so.

★ Creatures who do not have the Tireless Perk suffer fatigue over time when exerting their muscle power. After 3 SPs of Time (30 seconds) exerting his strength, a creature gains the Fatigued condition. While Fatigued, his MIG (or MIG substitute) is reduced by 1 for lifting, carrying, pushing, pulling, and throwing. After 12 SPs of Time carrying an object (4 hours), the creature gains the Exhausted condition. His MIG (or MIG substitute) is reduced by 2 for such purposes. Fatigue and Exhaustion can reduce MIG-related Speed, cause the character to drop objects, etc. Most superhumanly strong creatures are Tireless and do not suffer this disadvantage, but it sharply limits ordinary humans. (Fatigue and Exhaustion also directly reduce Speed, Processing Information, and Earning Money, discussed later in this chapter.)

Any time these rules reference MIG, it should be understood to mean "MIG or MIG Substitute, as modified by Fatigue or Exhaustion."

LIFTING & CARRYING OBJECTS

Under normal circumstances, a character's Max Lift Weight in SPs is equal to his Might in SPs. As an Automatic Action, a character can deadlift an object with a Weight in SPs equal to his Max Lift Weight. He can thereafter throw the object or carry it.

A character's Carrying Capacity determines how much he is slowed down by carrying objects. A character's Carrying Capacity is equal to his Max Lift Weight -3. A character's Encumbrance is equal to the carried object's Weight minus his Carrying Capacity. If a character's Encumbrance is positive, then his Speed is reduced by his Encumbrance. All forms of movement (jumping, swimming, flying, etc.) can be Encumbered.

$$\text{MAX LIFT WEIGHT} = \text{MIGHT}$$
$$\text{CARRYING CAPACITY} = \text{MAX LIFT WEIGHT} - 3$$
$$\text{ENCUMBRANCE} = \text{OBJECT WEIGHT} - \text{CARRYING CAPACITY}$$
$$\text{ENCUMBERED SPEED (ENCUMBRANCE} <= 0) = \text{SPEED}$$
$$\text{ENCUMBERED SPEED (ENCUMBRANCE} > 0) = \text{SPEED} - \text{ENCUMBRANCE}$$

Manticore has a MIG of 12 SPs. Therefore as an Automatic Action, he can deadlift a New York City subway car (12 SPs of Weight). He could then use other Actions to carry the subway car around or throw it. Imagine that after Manticore picks up the subway car, he takes a Movement Action to carry it down the underground tunnel. How fast can he travel?

Manticore has a MIG of 12 SPs and a Running Speed of 5 SPs. His Carrying Capacity is (12 – 3 SPs) or 9 SPs. His Encumbrance when carrying the subway car is (12 – 9) 3 SPs. Therefore his Running Speed is reduced by 3 from 5 SPs to 2 SPs. If Manticore had picked up a large truck (9 SPs of Weight), he could carry it at a Running Speed of 5 SPs. He could carry a 50-lbs rucksack (1 SP) at a Running Speed of 5 SPs, too, because that's his maximum Speed; carrying light objects doesn't help him run faster.

LIFTING HEAVIER OBJECTS

As a Challenge Action, a character can attempt to lift an object heavier than his MIG. The attempt is resolved with a MIG vs. Object Weight Challenge Check. On a White result, the character fails to lift the object. On any other result, the character lifts the object off the ground enough to allow pinned characters to crawl free, children to escape, etc.

Duration of Effort: How long the character can continue to carry the object depends on his Color Result. On a Green result, he can lift the object for just 0 SPs of Time (until the end of his next Panel); on a Yellow result, for 1 SP of Time (about 6-10 seconds or 2 Pages); on an Orange result, for 2 SPs of Time (about 15 seconds or 4 Pages); and on a Red result, for 3 SPs of Time (about 30 seconds or 8 Pages). Once the Time has elapsed, the character must drop the object. He can make another Challenge Check on his next Panel.

Speed while Carrying: When carrying the object, the character's Speed is reduced by 1 SP per SP by which the Weight exceeds his Carrying Capacity, as above.

A Boeing 747 (15 SPs of Weight) has crashed-landed atop a military transport truck, trapping several of Manticore's allies inside. Manticore has a MIG of 12 SPs, so he cannot just pick up a 747 as an Automatic Action the way he can pick up a subway car. Manticore takes a Challenge Action to attempt to lift the 747. The AV is Manticore's MIG (12) while the DV is the jetliner's Weight (15), for an RV of -3. Manticore rolls 1d100 and gets a 51 - a White result on the CHART. He is not able to lift the jetliner. Had he rolled a 07, he would have gotten a Green result, and could have lifted the 747 for 0 SPs. If he were able to lift it, Manticore's Running Speed would have been reduced by (15 – 9) 6 SPs, limiting him to -1 SPs of Speed – that's about half the speed of a turtle. He could stumble a few steps, but that's all.

Whole-Body Lifting: If a character taking a Challenge Action to lift an object can get under the object and leverage his arms, his legs, and entire back he can temporarily increase his MIG by 3 SPs for purposes of the Challenge Check AV. If his RV is at least 0, he can take an automatic Green result to lift the object for 0 SPs of Time. His MIG is not increased for purposes of Carrying Capacity. A character cannot throw an object he is whole-body lifting.

LIFTING HEAVY OBJECT:
MIGHT VS. OBJECT WEIGHT

LIFTING HEAVY OBJECT WITH WHOLE BODY:
MIGHT +3 VS. OBJECT WEIGHT

Manticore re-positions himself so that he can get under the 747 and leverage his back and legs. This temporarily increases his MIG from 12 SPs to 15 SPs for purposes of the Challenge Check's AV. His RV is now 0 instead of -3. Manticore can take an automatic Green result, enabling him to lift the jetliner off the truck by a few feet. His Carrying Capacity is not increased, so his Speed remains reduced to -1 SP.

Weight of Objects in Water or Space: For purposes of lifting and carrying objects, an object submerged in water has a Weight of 0 if its Density is 8 or less, and a Weight equal to its Density – 8 otherwise. An object in space has a Weight of 0 for purposes of lifting and carrying.

PUSHING & PULLING OBJECTS

Rather than pick up and carry an object, a character might want to push or pull it. Pushing or pulling objects is handled similarly to picking up and carrying objects. However, for a given object, the force that resists it being pushed or pulled is much lower than the force that resists it being picked up; and if the object can roll instead of slide, the force is lower still. To reflect this, reduce the Effective Weight of the object by 1 SP if the object slides or by 4 SPs if the object rolls.

PUSHING & PULLING WITH A MOVEMENT ACTION

A character can push or pull an object with an Effective Weight equal to or less than his MIG as a Movement Action.

Speed while Pushing/Pulling Objects: When pushing or pulling an object, use the object's Effective Weight to calculate his Encumbrance, e.g. his Speed is reduced by 1 SP per point by which its Effective Weight exceeds his Carrying Capacity. A character cannot use his Jumping Speed to push or pull objects.

Sticky or Smooth Surfaces: At their discretion, the Gamemaster can increase the object's Effective Weight by 1 if the object is on a sticky or rough surface or decrease it by 1 or 2 if the object is on a very smooth surface such as ice or Teflon.

EFFECTIVE WEIGHT (SLIDING OBJECT) = OBJECT WEIGHT -1

EFFECTIVE WEIGHT (ROLLING OBJECT) = OBJECT WEIGHT − 4

PUSH/PULL ENCUMBRANCE = EFFECTIVE WEIGHT - CARRYING CAPACITY

PUSH/PULL SPEED (ENCUMBRANCE <= 0) = SPEED

PUSH/PULL SPEED (ENCUMBRANCE > 0) = SPEED − PUSH/PULL ENCUMBRANCE

> Manticore (MIG 12, Carrying Capacity 9, Running Speed 5) knows he can pick up and carry a subway car weighing 12 SPs at a Running Speed of 2 SPs. How fast could he push it down the track? Because the subway car is wheeled, its Effective Weight is reduced by 4 to 8 SPs. That means the subway car has an Effective Weight that is less than his Carrying Capacity. Manticore can therefore push the subway car at his maximum Speed of 5 SPs as an Automatic Action.
>
> Now Manticore visits a British Rail station and sees an 800-ton passenger train (16 SPs of Weight). The passenger train is too heavy for him to lift without a Challenge Action, but he decides to see if he can push it down the track as an Automatic Action. Because the train is wheeled, its Effective Weight is reduced by 4 to 12 SPs. That exceeds his Carrying Capacity of 9 SPs by 3 SPs. Therefore, his Running Speed while pushing the train would be 5 + 12 − 9 = 2 SPs, or about 5mph. He's not quite as powerful as a locomotive, but still impressively strong!

PUSHING & PULLING WITH A CHALLENGE MOVEMENT ACTION

As a Challenge Movement Action, a character can attempt to push or pull an object heavier than his MIG otherwise allows. The attempt is resolved with a MIG vs. Effective Weight Challenge Check. As above, objects that slide have an Effective Weight of 1 SP less than their actual Weight, while objects that roll have an Effective Weight of 4 SPs less than their actual Weight. The GM can further adjust Effective Weight to reflect sticky or smooth surfaces if desired. On a White result, the character fails to move the object. On any other result, the character moves the object. His Speed is calculated as above.

Duration of Effort: How long the character can push or pull the object depends on his Color Result. On a Green result, he can push or pull the object for 0 SPs of Time (until the end of his next Panel); on a Yellow result, for 1 SP of Time (about 6-10 seconds or 2 Pages); on an Orange result, for 2 SPs of Time (about 15 seconds or 4 Pages); and on a Red result, for 3 SPs of Time (about 30 seconds or 8 Pages). Once the Time has elapsed, the character must stop pushing the object. He can attempt to pull or push the object again on his next Page.

PUSH/PULL HEAVY OBJECT:
MIGHT VS. EFFECTIVE WEIGHT

Jack Hammer (MIG 8, Carrying Capacity 5, Running Speed 4) decides to test his strength on the same 800-ton (16 SPs) train that Stronghold just pushed. Because the train is wheeled, its Effective Weight is reduced by 4 to 12 SPs. The train's Effective Weight is more than his MIG so he must use a Challenge Action. His AV is 8 and his DV is 12, for an RV of -4. If he succeeds on the Challenge Check, Jack Hammer will be able to push the train at a Speed of 4 + (12 – 5) = -3 SPs for 0 or more SPs of Time. If he fails on the Challenge Check, he can't budge the train.

STOPPING MOVING OBJECTS

Sometimes a character will seek to decelerate or halt an object that will otherwise harm innocent bystanders. Given enough time and distance, a character can stop a moving object as an Extended Automatic Action. If pressed for time or space, he can attempt to stop the object with a Challenge Action.

STOPPING A MOVING OBJECT WITH AN EXTENDED AUTOMATIC ACTION

To find the Time required to halt such an object with an Extended Automatic Action, first sum the object's Weight in SPs plus its Speed in SPs. Then subtract the character's MIG + 6, or MIG + 7 if the object is sliding across the ground (to reflect the help of friction). During this time, the character and the decelerating object will travel a Distance equal to the object's Speed plus 1 SP less than the Time required to halt it.

STOPPING TIME (ROLLING/WHEELED OBJECT) = OBJECT WEIGHT + OBJECT SPEED – (MIGHT + 6)
STOPPING TIME (SLIDING OBJECT) = OBJECT WEIGHT + OBJECT SPEED – (MIGHT + 7)
STOPPING DISTANCE = OBJECT SPEED + TIME -1

A passenger train (Weight of 16 SPs) is rolling down the track at 30mph (Speed of 5 SPs). Unfortunately there is a large crowd of Nature's Right activists protesting a quarter-mile (8 SPs) away. Since Nature's Right is allied with Exodus, Manticore feels duty-bound to stop the train. He leaps in front of the locomotive and uses his superhuman strength to attempt to halt it. The sum of the train's Weight and Speed is 21 SPs. Manticore's MIG is 12. The Stopping Time is therefore 21 SPs – (12 SPs + 6 SPs), or 3 SPs. During this time the train will travel a distance equal to its Speed (5 SPs) plus Time (3 SPs) - 1, or 7 SPs total. Manticore halts the train halfway to the crowd.

STOPPING A MOVING OBJECT WITH A CHALLENGE ACTION

To stop a rolling or wheeled object with a Challenge Action, the character must make a MIG vs. (object Weight + object Speed -6) Challenge Check. To stop an object sliding on the ground with a Challenge Action, the character must make a MIG vs. (object Weight + object Speed - 7) Challenge Check.

If the color result is Green or better, the object moves its Speed in SPs -1 over the next 0 SPs of Time and is then halted. If the color result is White, the character and the object have suffered a **Collision**, described below.

A character using Telekinesis or similar Power that allows him to manipulate masses from range is not at risk of colliding with the object, and a White result simply means the character failed to halt the object.

Extended Challenge Action: If desired, the character can increase the Time (taking an Extended Challenge Action) by 1 or more SPs in exchange for reducing the DV by an equal amount. This increases the stopping distance, however.

STOPPING HEAVY ROLLING/WHEELED OBJECT:
MIGHT VS. OBJECT WEIGHT + OBJECT SPEED -6 (- TIME)
STOPPING HEAVY SLIDING OBJECT = MIGHT VS. OBJECT WEIGHT + OBJECT SPEED -7 (- TIME)
STOPPING DISTANCE = OBJECT SPEED -1 (+TIME)

A Nature's Right terrorist has decided to employ "extreme population control measures" by driving his hybrid-electric SUV down the sidewalks of Capital City. Jack Hammer decides to use a Challenge Action to halt the car. His AV for the Challenge Check is 8 (his MIG) + 6 = 14. His DV for the Challenge Check is 8 (object Weight) + 7 (object Speed) = 15. Therefore his RV is 14 − 15 = -1.

Jack Hammer rolls 1d100 and scores a 64. Referencing the CHART on the -1 row, he sees that he has gotten a White result – so instead of halting the SUV, he has collided with it! Had Jack Hammer rolled a 15, he'd have scored a Green result, and he'd have stopped the SUV in 0 SPs of Time.

COLLISIONS

A Collision occurs when a character unintentionally slams into a target. When a Collision occurs, resolve it as Ramming Attack using the greater of the colliding character's Speed or the target's Speed as the AV. (If a character was stationary – standing on the tracks to wait for the train, say – then treat his Speed as 0). Use the colliding character's AGI as the DV.

The Collision deals Bludgeoning Concussive Damage to both the colliding character and the target. The character deals Damage to the target with an EV equal to the greater of the character's or target's Speed plus the character's Weight. (If the Speeds are equal, use the equal value +1). The target deals Damage to the character with an EV equal to the greater of the character's or target's Speed plus its own Weight. The occupants of a vehicle or similar Crewed Object suffer the same Damage the vehicle does, minus any Protection afforded by the vehicle or their own Powers. The maximum amount of Damage a character can sustain in a Collision is equal to the amount sufficient to instantly slay or destroy the other party to the collision.

If the Collision results in no damage being dealt to either the colliding character or the target, then it is considered to be an **Elastic Collision** and the colliding character and target bounce off each other.

If the Collision results in damage to either the colliding character or the target, it is considered to be an **Inelastic Collision** and the character and target get entangled. (If a Knock Back Special Effect also occurs during an Inelastic Collision, see p. 276).

If the Collision results in either the character or the target being instantly Slain or Destroyed, it is considered to be a **Breakthrough** and the other character keeps moving. (A creature is instantly Slain when his Current Health is reduced to a negative value greater than his maximum Health, and an object is Destroyed when its Current Durability is reduced to a negative value greater than its maximum Durability).

COLLISION (RAMMING ATTACK):
TARGET SPEED/CHARACTER SPEED VS. CHARACTER AGI
COLLISION DAMAGE (TO TARGET):
TARGET SPEED/CHARACTER SPEED + CHARACTER WEIGHT
COLLISION DAMAGE (TO CHARACTER):
TARGET SPEED/CHARACTER SPEED + TARGET WEIGHT
ELASTIC COLLISION IF NO DAMAGE DEALT TO EITHER CHARACTER
INELASTIC COLLISION IF DAMAGE DEALT TO EITHER CHARACTER AND NEITHER DESTROYED
BREAKTHROUGH IF DAMAGE DEALT TO TARGET OR CHARACTER DESTROYS IT

Jack Hammer has just run in front of a rampaging SUV to attempt to stop it. Instead he's collided with it. The Collision is resolved as a Ramming Attack. The AV of the Attack Check is the greater of Jack Hammer's Speed of 5 SPs and the SUV's Speed of 7 SPs, so it's 7. The DV of the Attack Check is Jack Hammer's AGI of 6. The RV is 7 − 6 = +1. The GM rolls 1d100 and scores a 40. Cross-referencing the RV of +2 with the roll of 40 reveals that the Ramming Attack has achieved a Green result. The EV to the SUV is equal to the greater of 7 (the SUV's Speed) and 5 (Jack Hammer's Speed) plus 3 (Jack Hammer's Weight), or 7 + 3 = 10. Therefore the SUV suffers 64 points of damage to its Durability. The EV against Jack is 7 + 8 (the SUV's Weight), or 15. Jack Hammer suffers 384 points of damage to his Health.
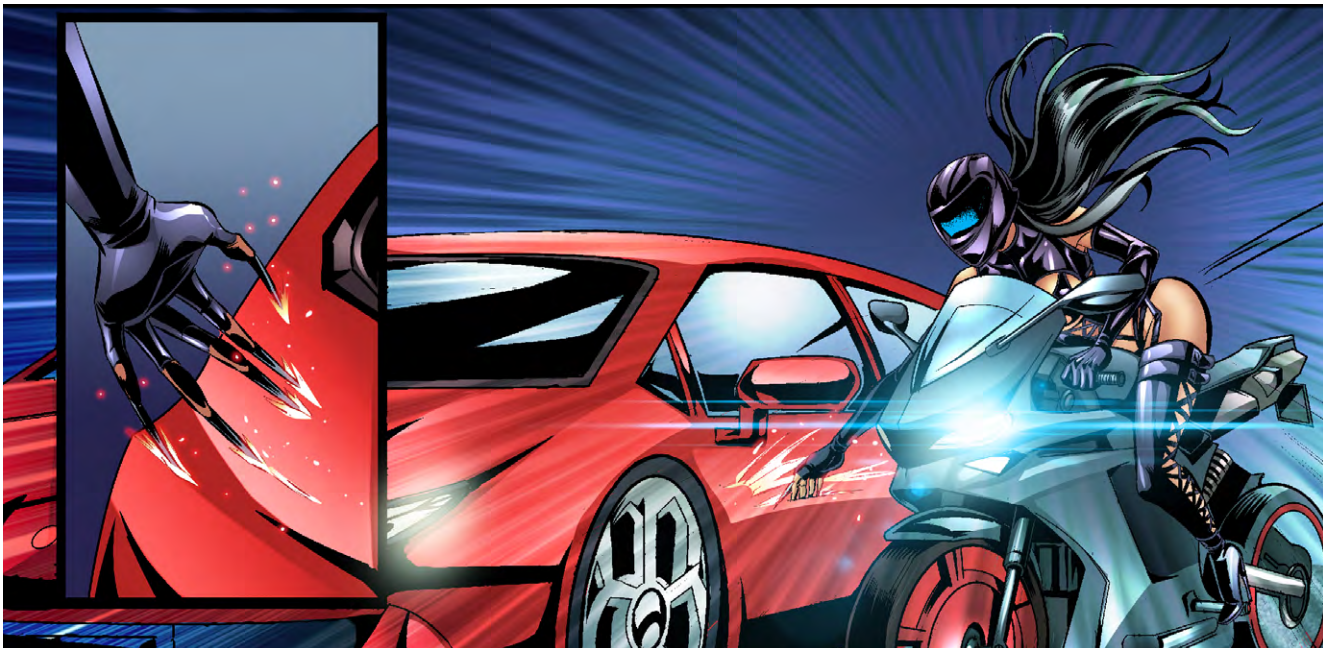
Elastic Collision: If the character's Weight is less than the target's Weight, the Collision knocks him back a distance equal to the greater of his Speed or the target's Speed. If the character's Weight is greater than the target's Weight, the target bounces off the character back a distance equal to the greater of their Speeds. If the character's Weight equals the target's Weight, the character is knocked back a distance equal to the target's Speed and the target is knocked back a distance equal to the character's Speed.

KNOCKBACK (CHARACTER WEIGHT < TARGET WEIGHT): CHARACTER KNOCKED BACK BY TARGET SPEED/SPEED

KNOCKBACK (CHARACTER WEIGHT > TARGET WEIGHT): TARGET KNOCKED BACK BY TARGET SPEED/SPEED

KNOCKBACK (CHARACTER WEIGHT = TARGET WEIGHT): CHARACTER KNOCKED BACK BY TARGET SPEED; TARGET KNOCKED BACK BY CHARACTER SPEED

> Imagine that the Ramming Attack had gotten a White result, such that no Damage was dealt to either Jack Hammer or the SUV. In that case, the Collision would have been Elastic. Since Jack Hammer weighs much less than the SUV, he'd have been knocked back 7 SPs by the impact. The hero simply bounces off the car like a superball hitting a stone wall! The SUV suffers no knockback.

Inelastic Collision: If the character's Weight is less than the target's Weight, the Collision results in the Character being knocked Prone (p. 367). If the target moves before the character takes his next Panel, the character is assumed to be shoved aside so that the target can continue its movement. If the character's Weight is greater than the target's Weight, the Collision results in the target being Toppled and brought to a halt. If the character's Weight equals the target's Weight, both the Character and the target are knocked Prone / Toppled and brought to a halt.

IMPACT (CHARACTER WEIGHT < TARGET WEIGHT): CHARACTER KNOCKED PRONE BY TARGET, TARGET CAN CONTINUE MOVING

IMPACT (CHARACTER WEIGHT > TARGET WEIGHT): TARGET TOPPLED BY CHARACTER AND HALTED

IMPACT (CHARACTER WEIGHT = TARGET WEIGHT): CHARACTER KNOCKED PRONE, TARGET TOPPLED, BOTH AND HALTED

Since the Ramming Attack dealt damage to the SUV and Jack Hammer, the Collision is actually Inelastic. Since Jack Hammer weighs much less than the SUV, he is knocked Prone directly in front of it. If Jack Hammer's next Panel occurs after the eco-terrorist's Panel, he will be shoved aside by the SUV as it continues down the sidewalk.

Breakthrough: If the target is Slain or Destroyed by the Collision, the character breaks through the target. If the Collision resulted because of a Ramming Attack by the character, he can continue to move at his current Speed – 2 SP. If the Collision resulted because the character was Knocked Back, the character continues to move at his current Knockback Speed – 2 SP. This may trigger additional Collisions.

If the character is Slain or Destroyed by the Collision, the target breaks through the character. If the Collision resulted because of a failed attempt to stop the target, or because of a Ramming Attack by the target, it can continue to move at its current Speed – 2 SP. If the Collision resulted because the character was Knocked Back into a stationary target, the target stands there. In either case, the breakthrough is accompanied by a shower of shattered machinery… or rain of gory gibbets. Yes, it is possible for a character to break through another creature! Ascendants with Superspeed who ram ordinary humans are wont to do this.

Imagine that Jack Hammer actually only had a Health Attribute of 30. If the Collision were to deal 64 points of damage to him, this would leave him at -34 Health and thus instantly slain. Instead of an Inelastic Collision, the SUV achieves a breakthrough. Jack Hammer explodes in a shower of gore and the SUV continues on its way with its Speed reduced by 2 SP. Good times!

LIFTING, CARRYING, PUSHING & PULLING OBJECTS OVER TIME

As noted above, after 3 SPs of Time (30 seconds) carrying an object, a character's MIG is reduced by 1 for lifting, carrying, pushing, and pulling. After 12 SPs of Time, his MIG is reduced by 2 for these purposes. This reduces his Max Lift Weight as well as his Carrying Capacity. If the character's Carrying Capacity becomes less than the Weight of the object being carried/pushed/pulled, his Speed is reduced (as above). If his Max Lift Weight becomes less than the Weight of the object carried/pushed/pulled, he must stop or use a Challenge Action to continue.

MIGHT PENALTY WHEN CARRYING/PUSHING/PULLING OBJECT FOR 3 OR MORE SPS OF TIME = -1

MIGHT PENALTY WHEN CARRYING/PUSHING/PULLING OBJECT FOR 12 OR MORE SPS OF TIME = -2

Consider a US Army infantry soldier with a MIG of 4 SPs, a Carrying Capacity of 1 SP, and a Speed of 4 SPs. If the soldier has to carry a crate of .50 caliber ammunition weighing 400 lbs (4 SPs of Weight), his Speed is reduced by (4 – 1) 3 SPs to just 1 SP. He can only maintain this Speed for 3 SPs of Time. Then his MIG and therefore his Max Lift Weight drop to 3 SPs and he has to drop the object (or use Challenge Actions to keep carrying it).

Now consider an elite Special Forces soldier with a MIG of 5 SPs, a Carrying Capacity of 2 SPs, and a Speed of 5 SPs. When he carries the 400-lbs ammo box, his Speed is reduced by (4 – 2) 2 SPs to 3 SP. He can maintain this pace for 3 SPs of Time. Then he'd become Fatigued. His MIG would drop to 4 SPs, and with it his Carrying Capacity to 1 SP. His Speed would also drop by 1 to 4 SPs due to Fatigue. Encumbrance would further reduce his Speed by (4 – 1) 3 SPs, to just 1 SP. At 12 SPs of Time, he'd become Exhausted. His MIG would drop to 3 SPs, and he'd have to drop the crate or use Challenge Actions to keep carrying it.

THROWING OBJECTS

All characters can throw things, and strong characters can throw big, heavy things. To find out how far a character can hurl an object, take the character's MIG and subtract the object's Weight in SPs. The result is the horizontal Distance in SPs that the character can toss the object. An object can be thrown a vertical Distance one SP less.

The same values can be used to calculate the Speed that an object travels when thrown. Subtract the object's Weight in SPs from the character's MIG. The result is the Speed in SPs that the object travels. In most cases the Speed is the same as the Distance in SPs. Since the formula for the Time required to travel a given distance is Time = Distance - Speed, thrown objects typically hit their mark in 0 SPs.

A character can throw an object as an Automatic Action but trying to hit a target with the thrown object counts as a Challenge Action. The Damage that an object does when it strikes a target is based on the object Weight and Throwing Speed, which (arithmetically) equals the character's Might. These relationships are summarized with these equations:

$$\textbf{MAX THROWING DISTANCE} = \text{MIGHT} - \text{OBJECT WEIGHT}$$
$$\textbf{MAX VERTICAL THROWING DISTANCE} = \text{MIGHT} - \text{OBJECT WEIGHT} - 1$$
$$\textbf{MAX THROWING SPEED} = \text{MIGHT} - \text{OBJECT WEIGHT}$$
$$\textbf{THROWING DAMAGE EV} = \text{OBJECT WEIGHT} + \text{THROWING SPEED} = \text{MIGHT}$$

Manticore (Might of 12 SPs) has picked up a Cadillac sedan (Weight of 7 SPs). He can hurl the Cadillac a distance of 12 – 7 = 5 SPs, or about 160 feet – more or less what a college quarterback can hurl a football. The Cadillac will travel at a speed of 5 SPs, or 31mph. When Manticore hurls the Cadillac into the ANN Tower, the EV is the sum of its Weight (7 SPs) and its Speed (5 SPs), or 12 SPs.

AERODYNAMIC OBJECTS

If an object is shaped like a disc (such as a Frisbee, discus, or manhole cover), a character can increase the maximum Distance he can throw it by 1 SP. This does not increase the Speed of the object, so if a character throws a disc-shaped object to its maximum Distance it will arrive in a Time of 1 SP (7 seconds), e.g. there is "hang time" in the air. In combat, the object would arrive during the character's Initiative on the Page after he threw it.

LIGHT OBJECTS

Some objects may have a Weight that is measured in negative SPs. Since object Weight is subtracted from Might to get Throwing Distance and Throwing Speed, a negative Weight actually increases the result! However, light objects cannot be thrown as far or fast as their Weight would suggest because air friction will slow them down before they reach their maximum speed.

For objects with a Weight of -1 SP or less, divide Weight by 3, before calculating Throwing Distance and Throwing Speed. Throwing Damage remains based on the object's Weight and the Speed at which it was thrown, so a very light object will end up dealing less damage than a heavy one.

$$\textbf{MAX THROWING DISTANCE (LIGHT OBJECT)} = \text{MIGHT} - (\text{OBJECT WEIGHT} / 3)$$
$$\textbf{MAX THROWING SPEED (LIGHT OBJECT)} = \text{MIGHT} - (\text{OBJECT WEIGHT} / 3)$$
$$\textbf{THROWING DAMAGE} = \text{OBJECT WEIGHT} + \text{THROWING SPEED}$$

A baseball weighs about 5 ounces, which is -6 SPs of Weight. Manticore can throw a baseball a distance equal to his Might (12 SPs) minus one-third the object Weight (-2 SPs), or 14 SPs total. That's about 16 miles! The baseball will travel at a speed of 14 SPs. If the baseball strikes a character, it will deal damage based on the sum of its Weight (-6 SPs) and its Speed (14 SPs), or 8 SPs total. This is much less than what the Cadillac dealt (12 SPs). This explains why Manticore throws cars, and not baseballs, at skyscrapers.

LIFTING, CARRYING, PUSHING, PULLING, STOPPING, & THROWING IN COMBAT

The preceding rules only worry about the interplay of MIG and Weight; they assume the target is a Stationary object and that it can be handled with unopposed Automatic Actions without first being grappled or hit. In combat, these assumptions may not hold. Sometimes characters might wish to shove around creatures instead of objects, or handle moving rather than stationary targets. If the target is a creature or is an object that is not Stationary, the following rules apply:

★ A willing target can just be handled as a Stationary object.

★ An unwilling target with a VAL of 0 can be pushed, pulled, and stopped as a Stationary object. (The rules above take this into account – hence in the listed example Manticore stopped the train as an Automatic Action. Most objects have a VAL of 0.) It can be lifted and carried only if it is first successfully Engaged with a Wrestling Attack resulting in the Engaging character retaining an Encumbered Speed of 1 or more.

★ An unwilling target with a VAL of 1 or more can be lifted, carried, pushed, pulled, or stopped only if it is first successfully Engaged with a Wrestling Attack resulting in the Engaging character retaining an Encumbered Speed of 1 or more.

★ Any unwilling target can be thrown only it is first successfully Held or Pinned with a Wrestling Attack resulting in the Holding or Pinning character retaining an Encumbered Speed of 1 or more and the target dropping to an Encumbered Speed of 0.

Designer's Note: The mechanics for lifting, carrying, pushing, pulling, and throwing were validated against various human world records. In typical comic book fashion, superhuman abilities were extrapolated linearly from these real-world abilities without concern for issues like heat on very fast-moving objects, structural tension and pressure on objects being lifted, and so on.

We assumed that the world records were set by characters who have the ordinary human maximums in their relevant attributes, e.g. maximum MIG of 5 SPs and maximum Speed of 5 SPs. Both attributes are modified by Fatigue and Exhaustion, with MIG and Speed dropping to 4 after 3 SPs of Time and to 3 after 12 SPs of Time, if applicable.

Deadlift: The world-record deadlift, set by Benedikt Magnússon, is 1015 lbs. That equates to 5 SPs of Weight.

Whole-Body Lift: The "greatest weight ever raised by a human being" was a back lift by Paul Anderson of 6,270 lbs. That equates to a Weight of 8 SP, or MIG of 5 + 3.

Football Throw: During a practice session, quarterback Terry Bradshaw threw a football from end zone to end zone, 300'. That equates to a distance of 6 SPs. A football weighs 1 lbs (-4 SPs). For objects weighing -1 SPs or less, throwing distance is MIG - (Weight/3). With an assumed MIG of 5, that would yield a Distance of 5 – (-1) = 6 SPs.

Baseball Throw: Glen Gorbous holds the world record for longest throw of a baseball, 445'. That equates to a distance of 6.5 SPs. A baseball weighs 5 ounces, which is -6 SPs of Weight. For objects weighing -1 SPs or less, Throwing Distance is MIG - (Weight/3). With an assumed MIG of 5, that would yield a Distance of 5 – (-2) = 7 SPs.

Frisbee Throw: David Wiggins holds the world record for the longest throw of a flying disc, at 1108'. That equates to a distance of 8 SPs. A flying disc weighs 6.2 ounces, which is -6 SPs of Weight. For aerodynamic objects weighing -1 SPs or less, Throwing Distance is MIG – (Weight/3) +1. With an assumed MIG of 5, that would yield a Distance of 5 – (-2) + 1 = 8 SPs.

Washing Machine Throw: Sean McCarthy holds the world record for throwing a washing machine weighing 104 lbs (2 SPs of Weight) a distance of 15'9" (3 SPs of Distance). For objects weighing 0 SPs or more, Throwing Distance is MIG – Weight. With an assumed MIG of 5, that would yield a Distance of 5 – 2 = 3 SPs.

One-Mile Car Push: Mario Mlinaric set a world record by pushing a car weighing 4,144 lbs (7 SPs) a distance of one mile (10 SPs) in 15 min 21 sec (8 SPs), equating to a speed of 4mph (2 SPs). As a wheeled object, the car's Effective Weight was reduced by 4 SPs less than its actual weight to 3 SPs. Assuming Mario's MIG and Speed were 5 SPs, both were reduced to 4 SPs due to Fatigue since the Time of exertion was greater than 3 SPs. Mario's Carrying Capacity was 3 SPs less than his modified MIG, making it (4 – 3) 1 SP. Mario's Encumbrance was therefore the Effective Weight of 3 SPs minus his Carrying Capacity of 1 SP, or 2 SPs. Mario's Speed was therefore reduced by another 2 SPs, leaving it at 2 SPs.

24-Hour Car Push: Tomislav Lubenjak set a world record by pushing a car weighing 1,609 lbs (6 SPs) a distance of 66.4 miles (16 SPs) in 24 hours (15 SPs), equating to a speed of about 2.7mph (1 SP). As a wheeled object, the car's Effective Weight was reduced by 4 SPs less than its actual weight to 2 SPs. Assuming Tomislav's MIG and Speed were 5 SPs, both were reduced to 3 SPs due to Exhaustion since the Time of exertion was greater than 12 SPs. Tomislav's's Carrying Capacity was 3 SPs less than his modified MIG, making it (3 – 3) 0 SP. Tomislav's's Encumbrance was therefore the Effective Weight of 2 SPs minus his Carrying Capacity of 0 SP, or 2 SPs. Tomislav's's Speed was therefore reduced by another 2 SPs, leaving it at 1 SP.

MOVEMENT & TRAVELING

Some superhumans can fly at the speed of sound. Others take the subway. Whatever the character's preferred method of transportation, knowing how fast and how far he can run, jump, fly, and swim is covered below.

MOVING

As a Movement Action, a character can move a Distance equal to his Speed in 0 SPs of Time. All characters have different Speeds for different modes of travel, including at least a Running Speed and Jumping Speed. Some Powers can increase a character's Speed in one of these modes, while other Powers can add new modes of travel such as flying. By default, a character's Running Speed is equal to his AGI +3 – Weight, to a maximum of 5 and a character's Jumping Speed is equal to his MIG minus his Weight, with no maximum.

$$\text{RUNNING SPEED} = (\text{AGI} +3 - \text{WEIGHT}) </> 5$$
$$\text{JUMPING SPEED} = \text{MIGHT} - \text{WEIGHT}$$

As noted under Lifting & Carrying objects, characters can become Encumbered, reducing their speed.

ATTACKS BY MOVING CHARACTERS

Fast-moving characters often attack while moving. When a character expends a Movement Action, he can reserve a Challenge Action to take place at a pre-defined point of the Movement Action. After the Challenge Action, the character completes his Movement Action. A character cannot change his Movement Action based on the result of his Challenge Action or change his Challenge Action if his Movement Action triggers an opponent's reserve action or other change in circumstances. See Reserving Actions (p. 364) in the Combat chapter.

TRAVELING

Since both Speed and Distance are measured in SPs, simple arithmetic can be used to determine how far a character can travel in a given time at a given speed as an Extended Movement Action, as well as how long it will take to travel a given distance at a given speed and how fast a character has traveled for a given distance and time.

To determine how far a character can travel in a given amount of time (an Extended Movement Action), add the character's Speed in SPs to the Time spent traveling in SPs. The sum is the Distance traveled in SPs.

To determine how long it takes for a character to travel a given distance, subtract the character's Speed in SPs from the Distance traveled in SPs. The result is the Time required in SPs.

To determine how fast a character has traveled for a given distance and time, subtract the Time in SPs spent traveling from the Distance traveled in SPs. The result is the Speed in SPs.

The three relationships are summarized below:

$$\text{DISTANCE} = \text{SPEED} + \text{TIME}$$
$$\text{TIME} = \text{DISTANCE} - \text{SPEED}$$
$$\text{SPEED} = \text{DISTANCE} - \text{TIME}$$

A car traveling at 60mph (a Running Speed of 6 SPs) for 1 hour (10 SPs of Time) will travel a Distance of 16 SPs, or 60 miles.

A rescue helicopter flying at 125mph (a Flying Speed of 7 SPs) to a remote mountaintop that is 30 miles away (a Distance of 15 SPs) will take 15 minutes (8 SPs of Time).

An ICBM traveling from North Korea to Hawaii (a Distance of 22 SPs) that will strike Honolulu in 15 minutes (8 SPs of Time) has a Flying Speed of 14 SPs (about Mach 24).

Fatigue: Characters who do not have the Tireless Perk suffer fatigue over time. After 3 SPs of Time (30 seconds) moving, the character becomes Fatigued. A Fatigued character's Speed is reduced by 1. After 12 SPs of Time moving, the character becomes Exhausted. An Exhausted character's Speed is reduced by 2. Most superhumanly fast Characters are Tireless and do not suffer this disadvantage, but it sharply limits ordinary humans. Note that the Fatigue and Exhaustion penalties also apply to MIG and can result (indirectly) in an additional and cumulative reduction in Speed.

An elite soldier has a MIG of 5 SPs, a Carrying Capacity of 2 SPs, and a Running Speed of 5 SPs. The soldier is carrying 100 lbs of armor, weapons, and equipment (2 SPs of Weight), so his Encumbrance is (2 -2) 0 SPs. The soldier can move at his full Running Speed of 5 SPs. After 3 SPs of Time, he becomes Fatigued. His MIG drops to 4 SPs, his Carrying Capacity to 1 SP, and his Running Speed drops to 4 SPs. His Encumbrance is now (2 – 1) 1 SP, and his Speed is now (4 – 1) 3 SPs. After 12 SPs of Time, he becomes Exhausted. His MIG drops to 3 SPs, his Carrying Capacity to 0 SPs, and his Running Speed to 3 SPs. His Encumbrance is now (2-0) 2 SPs, and his Speed therefore (3-2) 1 SP.

MOVING ALL-OUT

Sometimes a hero needs to be somewhere in a hurry. As a Challenge Movement Action, a character can attempt to move at a Speed greater than his normal rate. Resolve the attempt with a Challenge Check. The AV is the character's normal Speed, while the DV is the Speed at which the character would like to travel. On a White result, the character's attempt to hustle causes him to trip, stumble, or otherwise be delayed; the character moves at 1 SP less than his normal Speed. On any other result, the character succeeds in moving at the desired Speed.

How long he can continue to move at that Speed depends on his Color Result: On a Green result, he can maintain the Speed for just 0 SPs of Time (a few seconds or 1 Page of Combat); on a Yellow result, for 1 SP of Time (about 6-10 seconds or 2 Pages); on an Orange result, for 2 SPs of Time (about 15 seconds or 4 Pages); and on a Red result, for 3 SPs of Time (about 30 seconds or 8 Pages). Once the Time has elapsed, the character must succeed on another Challenge Check in order to continue moving all-out. If for any reason the character stops moving all-out before the Time elapses, he must succeed on another Challenge Check to start moving all-out again.

Objects cannot increase their Speed by more than 1 SP when moving all-out.

MOVING ALL OUT:
SPEED VS. DESIRED SPEED
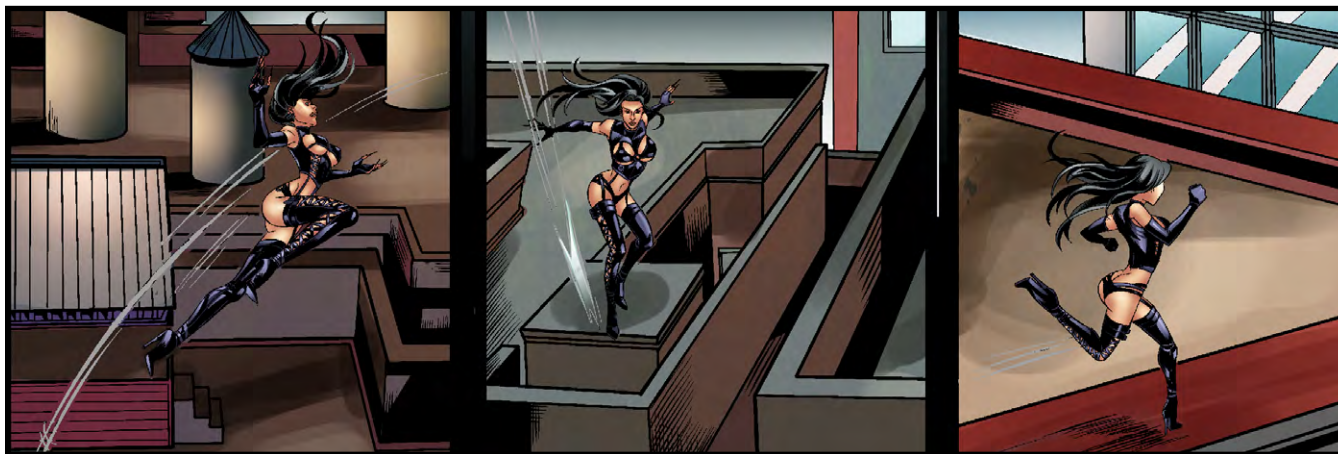
MOVING IN HAZARDOUS CONDITIONS

When hazardous conditions prevail, moving can be dangerous. Examples of hazardous conditions include driving off-road through bad terrain, flying through a thunderstorm, or swimming through white waters. When such circumstances arise, the GM will assign a Maximum Safe Speed in SPs. Characters who exceed this Speed face dangers measured by SPs of Hazardousness. The Hazardous Conditions table has suggested Maximum Safe Speed scores and Hazardousness scores for a range of conditions.

Condition	Maximum Safe Speed	Hazardousness
Light rain; mist (land & water); strong winds (air)	4 (Swimming), 6 (Running), 8 (Flight/Gliding)	2
Heavy rain, light snow; fog (land & water); choppy waves (water)	3 (Swimming), 5 (Running), 7 (Flight/Gliding)	4
Heavy fog, heavy snow, tropical storm; stormy seas (water)	2 (Swimming), 3 (Running), 7 (Flight/Gliding)	6
Blizzard, hurricane; sandstorm (air & land); ice (land & water)	1 (Swimming), 1 (Running), 0 (Flight/Gliding)	8
Bad roads, off-roading or traffic (land)	5 or -2 modifier to above (Running)	2/+2
Rush hour traffic (land)	4 or -3 modifier to above (Running)	4/+4

MOVING IN HAZARDOUS CONDITIONS WITH A MOVEMENT ACTION

A character can safely move in hazardous conditions as a Movement Action as long as his Speed is equal to or less than the Maximum Safe Speed. If the Safe Speed is 0, there is no safe movement. Characters moving with Flight or Gliding Speed begin to fall unless they move at least 1 SP or have Hovering.

Characters moving in water who don't have the Swimming Power reduce the Maximum Safe Speed by 2 SPs. If there are 4 SPs of Hazardousness, they can only move with a Challenge Movement Action.

Climbing characters follow special rules when in Hazardous conditions (see p. 288).

Helen Killer has a Speed of 5 SPs. She needs to cross an icy lake with a Maximum Safe Speed of 1 SP. Therefore, Helen can take a Movement Action to cross the frozen at 1 SP or about 2mph. The lake is about 160 feet wide (5 SPs of Distance). Since Time = Distance – Speed, it will take her about (5 – 1) 4 SPs of Time to cross the lake, about one minute.

MOVING IN HAZARDOUS CONDITIONS WITH A CHALLENGE MOVEMENT ACTION

As a Challenge Movement Action, a character in hazardous conditions may attempt to move at a faster than Max Safe Speed. The Acting Value for the Challenge Check is the AGI (or AGI substitute) of the moving character. The Difficulty Value is the Hazardousness.

HASTY MOVEMENT IN HAZARDOUS CONDITIONS: AGI VS. HAZARDOUSNESS

On a Green or better result, the character succeeds in moving faster than Maximum Speed. On a Green result, he can move 1 SP faster than Maximum Safe Speed; on a Yellow result, 2 SP faster; on an Orange result, 3 SP faster; and on a Red result, his normal Speed without penalty. The character cannot exceed his normal Speed. The bonus applies to the character's Movement Action this Panel; if the character wants to keep moving faster than Maximum Safe Speed, he must expend another Challenge Movement Action and make another Challenge Check again on his next Panel.

On a White result, the character's attempt to move fast in hazardous conditions has failed, possibly disastrously. Consult the Consequences of Failure table below to see what happens. Use the first row that applies based on the mode of travel and hazardous condition.

Mode of Travel	Hazardous Condition	Effect
Running/Jumping	Bad roads, off-roading, or traffic	Collision with nearest object at attempted Speed (if any, otherwise proceed).
Running/Jumping	Snow, blizzard, ice, sandstorm	Knocked Prone (if character) and moves only 0 SP.
Running/Jumping	Mist, fog, rain, hurricane	Move at 1 SP less than Safe Speed.
Flight	Blizzard, hurricane, sandstorm	Fall until regain control with AGI vs. Hazardousness Challenge.
Flight	Mist, fog, rain, snow, storm, winds	Move at Safe Speed
Swimming	Ice	Collision with nearest object at attempted Speed (if any, otherwise proceed).
Swimming	Hurricane, tropical storm, stormy seas	Drown (if creature), Toppled and Sinking (if object), moves only 0 SP
Swimming	Mist, fog, rain, snow, choppy waves	Move at 1 SP less than Safe Speed.

The GM can substitute other effects for hazardous conditions where appropriate. For instance, a vehicle driving on an icy lake might fall through, while a rocket near a black hole might divert course towards the gravitational well.

A Star-Spangled Squadron helicopter is en route in about 15 seconds (2 SPs of Time), and Helen Killer can't afford to be caught on the ice when they show up. Since Speed = Distance – Time, Helen needs to move at a Speed of (5 – 2) 3 SPs to cross it before the helicopter arrives. She takes a Challenge Movement Action to move faster than Safe Speed.

The AV for her Challenge Check is Helen's AGI of 8 SPs. The DV for her Challenge Check is the ice's Hazardousness of 8. With an RV of 0, she rolls an 11 on the CHART, scoring an Orange result. She is able to move 3 SPs faster than Safe Speed, giving her a Speed of 4 SPs for this Action. That means she's made it halfway across the lake (80 feet) already. With another 12 seconds until the chopper arrives, she just needs to run for another Page or two to escape.

What if Helen fails in her Challenge Check? Then she has to consult the Effects of Hazardous Conditions table. She qualifies as off-roading, but because there were no nearby objects to collide with, she just proceeds to the next row. On the next row, she notes she's on ice, so this row applies. Therefore she moves 0 SPs and falls Prone.

Note that because her RV is 0, Helen could have taken an Automatic Action rather than a Challenge Action if she were willing to accept an Automatic result of Green in lieu of risking the Challenge Check (see Automatic Success on p. 259). By using the Challenge Action, though, she was able to make an Orange result and make it halfway across the lake in a single Page.

FLYING & GLIDING

Look – up in the sky! It's a...well, it could be a lot of things. Flight is one of the most common Powers held by Ascendants.

FLYING

To begin flying, a character takes off. The requirements for take-off depend on the character's Weight, Flight Speed, and Power.

★ If the character has Hovering Flight (including Winged Hovering Flight), take-off does not require an Action; it can be included in the character's Automatic Action (to hover) or Movement Action (to travel vertically or horizontally) at his Flight Speed.
★ If the character has Winged Flight without Hover, and the character's Weight exceeds his SPs of Flight Speed, take-off requires an Extended Movement Action down a runway for SPs of Time equal to one-half its Weight – Flight Speed. The character moves at a Running Speed of 7</>Flight Speed during this Time.
★ In all other cases, take-off can be included in the character's Movement Action at his Flight Speed.

A fully loaded 747 has a Weight of 15 SPs and a Winged Flight of 9 SPs. It requires ½ x (15 − 9) = 3 SP to take-off, during which time it moves at a Running Speed of 7 SPs (about 125mph or 640 feet per Page). It travels a total of 7 + 3 = 10 SP, or about one mile, before taking off.

Conversely, American Eagle, who has a Weight of 3 SPs and a Flight of 15 SPs, can propel himself into the air instantly. He has no need for runways!

Once airborne, a flying character can travel horizontally or ascend vertically (increase his Altitude) a Distance equal to his Flight Speed in 0 SPs of Time as a Movement Action. He can vertically descend (lower his Altitude) as a Movement Action at his Flight Speed +1 or at 7 SPs, whichever is greater. He can hover (move 0 SPs) as a Movement Action. Any time a flying character fails to use a Movement Action on his Panel, he begins to fall (p. 288). Characters with Hovering Flight can hover as an Automatic Action, and do not fall unless they fail to either move or hover.

TAKEOFF DURATION (WINGED FLIGHT, WEIGHT > SPEED) = (WEIGHT − FLIGHT SPEED)/2
TAKEOFF SPEED = 7</>FLIGHT SPEED
HORIZONTAL FLIGHT DISTANCE <= FLIGHT SPEED
ASCENDING VERTICAL FLIGHT DISTANCE <= FLIGHT SPEED
DESCENDING VERTICAL FLIGHT DISTANCE <= 7/FLIGHT SPEED +1

GLIDING

To begin gliding, a character must have run, jumped, or been moved a horizontal distance of at least 5 SPs on or since his last Panel, and be at an Altitude of at least 1 SP but no more than 15 SP.

Once gliding, he can travel a horizontal distance through the air equal to SPs of Power in 0 SPs of Time as a Movement Action. If he moves at less than his Gliding Speed, he descends by 1 SP per SP of difference. He can vertically descend (lower his Altitude) as part of a Movement Action at his Gliding Speed, but he cannot increase his Altitude. If a gliding character fails to use a Movement Action on his Panel, he begins to fall (p. 288). The character can glide for a maximum horizontal distance equal to his SPs of Gliding plus his initial SPs of Altitude; if he is not landed by then, he begins to fall.

HORIZONTAL GLIDING DISTANCE <= GLIDING SPEED
DESCENDING VERTICAL FLIGHT DISTANCE = GLIDING SPEED − HORIZONTAL GLIDING DISTANCE
MAX GLIDE DISTANCE <= GLIDING SPEED + ALTITUDE

JUMPING

A character's Jumping Speed is equal to his MIG minus his Weight. Unlike Running Speed, Jumping Speed is not capped. Very strong characters (MIG 9+) can jump faster than they can run. That's because a strong hero's leg muscles are so powerful that they propel him into the air with each stride. Thus, every character can jump, but those with very high MIG scores and/or the Jumping Power are much better at it.

JUMPING WITH A MOVEMENT ACTION

As a Movement Action, a character can jump a horizontal Distance equal to his Jumping Speed. A character can jump a vertical Distance equal to his Jumping Speed − 1. A character can combine a vertical and horizontal jump, traveling up to his Jumping Speed horizontally and his Jumping Speed -1 vertically.

A character's jump must begin at the start of his Movement Action and terminate on or before the end of his Panel. He can reserve an Automatic Action or Challenge Action for use at the apex of his jump.

A character without the Swimming Power is much less mobile in the water. If the character is an object, it begins Sinking. If the character is a creature, he can float or tread water as an Automatic Action. As a Movement Action, a creature can paddle at a Swimming Speed of 0 SPs. As a Challenge Movement Action, a creature can swim at a Speed equal to his MIG – 3 or 2 SPs, whichever is less. Anytime he is in hazardous conditions, the Maximum Safe Speed is reduced by 2 SPs. If the Hazardousness is 4 SPs or more, he cannot paddle and must move as a Challenge Movement Action, making an AGI vs. Hazardousness Challenge Check to determine his Speed. A creature who does not at spend any Action at all always begins Drowning.

PADDLE SPEED (MOVEMENT ACTION) = 0
SWIMMING SPEED (CHALLENGE MOVEMENT ACTION) = MIG – 3 </> 2

A US Navy SEAL with an AGI of 5 and MIG of 5 SPs falls overboard. Although exceptionally athletic, he is not an ascendant, so he does not have the Swimming Power. He can tread water as an Automatic Action and paddle at 0 SPs as a Movement Action. As a Challenge Movement Action, he can swim at a Speed of 2 SPs. Assume the water is choppy (Hazardousness of 4 SPs, Maximum Safe Speed of 3 SPs). Now his Maximum Safe Speed is just 3 - 2 = 1 SP and he cannot paddle as a Movement Action. He must swim as a Challenge Movement Action, making an AGI vs. Hazardousness Challenge Check. He has an RV of 5 – 4 = 1, and rolls a 58, so he scores a Green result. He can move at 1 + 1 = 2 SPs. If he had failed, he'd only have been able to move at 1 – 1 = 0 SPs.

As he swims, the weather worsens and now he faces stormy seas (Hazardousness of 6 SPs, Maximum Safe Speed of 2 SPs). His Maximum Safe Speed is now 2 – 2 = 0 SPs. His Challenge Check is now at an RV of -1, and if he fails the Check he'll start to drown.

COLD WATER

Cold water can cause hypothermia in divers. The effects of cold are treated as an Ultra-Weak Cryogenic Aura.

A US Navy SEAL has fallen into frigid 35 F water. He is considered to be in an Ultra-Weak Cryogenic Aura of -4 SPs. Every 4 SPs of Time (one minute, he will take 3 points of Cryogenic Damage. With a Current Health of 60, he will slip into unconsciousness in 20 minutes and be dead in 40 minutes. If he had on a wetsuit offering even 1 SP of Cryogenic Resistance, though, he'd be fine.

Water Temperature (F)	Aura
32 F	Ultra-Weak Cryogenic Aura -3
33-40 F	Ultra-Weak Cryogenic Aura -4
41-50 F	Ultra-Weak Cryogenic Aura -5
51-60 F	Ultra-Weak Cryogenic Aura -6

DIVING UNDERWATER

A creature with Underwater Adaptation can breathe underwater. A creature with Air Supply can breathe from his air supply while the Power is activated. A creature without either Power must hold his breath when diving underwater. A creature can hold his breath for SPs of Time equal to his SPs of RES (or Breath Control Skill). If still underwater after this Time, he immediately becomes Unconscious and Drowning. Objects do not need to breathe and consequently do not need an Air Supply or Underwater Adaptation.

A character with either Underwater Adaptation or Pressure Protection can safely endure water pressure at a Maximum Safe Depth in SPs equal to his SPs of Power. A character without the Power can safely endure water pressure up to a Maximum Safe Depth equal to his MIG + 1 SP (or TOU +1, if an object). Character who dive deeper than their Maximum Safe Depth begin to suffer damage from the water pressure. Treat the water pressure as a Bludgeoning Aura with SPs equal to the character's Current Depth – his Maximum Safe Depth.

A character underwater has his Vision Clarity reduced by 3, to a minimum of 0 (see p. 297). The Underwater Vision Power can compensate for this loss.

BREATH HOLDING TIME = RES/BREATH CONTROL
MAXIMUM SAFE DEPTH = MIG +1
BLUDGEONING AURA (WATER PRESSURE) = CURRENT DEPTH − MAXIMUM SAFE DEPTH
VISION CLARITY UNDERWATER = VISION CLARITY − 3

A US Navy SEAL has to escape from a wrecked submarine at a Depth of 7 SPs (640 feet). He has an AGI of 5 SPs, a MIG of 5 SPs, and Breath Control of 7 SPs. His Swimming Speed is therefore 5 - 3 = 2 SPs and his Maximum Safe Depth is 5 + 1 = 6 SPs. It will take him just 7 − 2 = 5 SPs of Time (120 seconds) to ascend to the surface, so his 7 SPs of Breath Control will let him hold his breath long enough to make it. Whether he can survive the water pressure is another matter. The distance between a Depth of 7 SPs and 6 SPs is 6 SPs. (Remember, each SP is double the prior SP! See p. 43 for a reminder on adding/subtracting SPs.) It will take him 6 − 2 = 4 SPs of Time to cross. 4 SPs is 16 Pages; each Page he will suffer Bludgeoning Damage worth 7 − 6 = 1 SP, or 3 points. In total that's 3 x 16 = 48 points of Bludgeoning Damage. A human with 3 or 4 SPS of MIG would pass out, but with 5 SPs of MIG, our SEAL has 60 points of Health. He makes it to the surface, coughing up blood as he grasps for air, with 12 Current Health.

DROWNING

A Drowning creature cannot take any Actions. On the start of his Panel, he takes 3 points of Neural Health Damage. Unless he is Unconscious, he then makes an AGI vs. Hazardousness Challenge Check. If the result is Red, he begins swimming again and the condition ends. If the result is Orange, Yellow, or Green the character continues Drowning. If the result is White, the creature becomes Unconscious.

If another character wants to pull a Drowning creature to safety, he must expend a Challenge Action and make a successful Wrestling Attack. Thereafter if he has SPs of MIG sufficient to move the Drowning creature, he can pull him to safety. A Challenge Action is required even if the Drowning creature is a friend or ally – people who are drowning are panicked. An Unconscious Drowning creature can be moved with an Automatic Action provided the rescuer has sufficient SPs of MIG to pull the character to safety.

Even if pulled to safety, a creature who became Unconscious from Drowning continues to take 3 points of Neural Health Damage each Panel until he is resuscitated or Slain. Resuscitating an Unconscious victim of Drowning is a Challenge Action. The rescuer makes an INS vs. Time Challenge Check, using his SPs of INS as the AV and the SPs of Time since the creature became Unconscious as the DV.

If the Check succeeds with a Red result, the creature becomes Conscious, recovering any Health lost to the Neural Damage. If the Check succeeds with an Orange, Yellow, or Green result, the creature takes no additional Damage this Panel but remains Unconscious. If the Check fails, the creature takes 3 points of Neural Health Damage and remains Unconscious. The rescuer can continue to attempt to resuscitate the creature until the creature is Slain. A creature who becomes Seriously Injured from Drowning remains Seriously Injured when resuscitated. A Mind Field does not protect against Drowning damage.

Objects suffer the Sinking condition instead of the Drowning condition. Plant creatures, Robotic creatures, and Undead creatures are treated as objects for these purposes.

DROWNING = 3 NEURAL HEALTH DAMAGE PER PANEL
DROWNING:
AGI VS. HAZARDOUSNESS; RECOVER ON RED, UNCONSCIOUS ON WHITE
RESCUE DROWNING CHARACTER:
MIG/VAL VS. MIG/(WEIGHT + SPEED)
RESUSCITATE UNCONSCIOUS DROWNING CHARACTER:
INS VS. TIME

A world-class mountaineer in top shape (AGI 5, MIG 5, Running Speed 5, Weight 3, Parkour 9, Tireless Perk) wants to climb the 3,300-foot Grade 5.13a Freerider route on El Capitan (10 SPs of Height, 7 SPs of Climbing Grade). His MIG easily exceeds his Weight, so he is able to climb without issue. His Climbing Speed for the climb is his Running Speed of 5 SPs minus the Climbing Grade of 7 SPs, or -2 SPs; so it will take him 10 – (-2) = 12 SPs of Time, or about 4 hours.

CLIMBING WITH WALL-CRAWLING

A character with Wall-Crawling can climb a slope even if his MIG is less than his own Weight. He can ascend or descend a slope as a Movement Action, traveling a vertical distance equal to his Running Speed – the slope's Climbing Grade. For purposes of calculating his Climbing Speed, the Climbing Grade of the slope he is scaling is reduced by his SPs of Power (to a minimum of 0). If the Climbing Grade is reduced to 0 by his Power, he can cling to the slope with any two limbs without having to expend any sort of Action (just like a person can stand still without expending an Action). He does not fall even when failing a Challenge Check to climb the slope. Characters with 10 SPs or more of Wall-Crawling effectively treat vertical surfaces, overhangs, and ceilings as if they were flat ground.

Climbing Gear: Climbing gear grants 1 SP of Wall-Crawling. See Miscellaneous Equipment, p. 229.

EFFECTIVE CLIMBING GRADE (WALL-CRAWLING) = CLIMBING GRADE − WALL-CRAWLING, TO MINIMUM OF 0

IF CLIMBING GRADE = 0, CHARACTER CAN CLING TO WALL WITHOUT EXPENDING AN ACTION AND NEVER FALLS

The Graniteer (Running Speed 5, Wall-Crawling 8, Tireless Perk) decides to climb El Capitan, too. His Wall-Crawling reduces the Effective Climbing Grade of his climb to 0 SPs. His Climbing Speed is therefore 5 SPs, and he ascends the 3,300-foot rock face in about two minutes (5 SPs of Time).

CLIMBING CRUXES

A **Crux** is a segment of exceptional difficulty or danger which must be overcome with dynamic movements, finger holds, etc. Each Crux is rated Green, Yellow, Orange, or Red, representing the Color Threshold for the Challenge Check to overcome it. A slope can have none, some, or many Cruxes. Each time a character encounters a Crux, he must expend a Challenge Movement Action and make an AGI/Parkour vs. Climbing Grade Challenge Check. (Yes, Wall-Crawling reduces the DV by its SP.) On a White result, the character immediately falls. On a result equal to or better than the Crux's Threshold, the Crux is overcome and the character can continue climbing. On any other result, the character stalls out and must try again next Page.

CLIMBING CRUX: AGI/PARKOUR VS. CLIMBING GRADE

While climbing El Capitan, the mountaineer comes to a Yellow-threshold Crux known as "The Boulder Problem," which involves a small hold 1/8" wide followed by a karate kick-like move. To continue climbing, he must expend a Challenge Movement Action and succeed on a Parkour vs. Climbing Grade Challenge Check with a Yellow or better result. His AV is 9 and his DV is 7, so his RV is +2. He rolls a 99 on the CHART, a Green result. His hands start to slip and a wave of vertigo washes over him – he almost fell! On the next Page, he tries again. This time he rolls an 18, for a Red result. He makes his way past the Crux and continues his ascent.

Meanwhile, the Graniteer confronts a DV 0 Challenge when he confronts the Crux. He can succeed with an Automatic Action, effectively ignoring one of the hardest maneuvers in the world as he scuttles up.

About 50' from the surface, the SEAL's foot becomes entangled in seaweed. It takes him 6 minutes to free himself. A total of 7 SPs of Time has now elapsed, and he can't hold his breath any longer. He becomes Drowning and Unconscious. It takes 30 seconds (3 SPs of Time or 8 Pages) for sailors on the surface to pull him to safety of a rescue boat, during which time he takes 8 x 3 = 24 points of Neural Damage. His Current Health is now -12. Because he's Unconscious, he continues to take Damage from his Drowning condition until Slain or Resuscitated. One of the sailors begins to give him mouth-to-mouth resuscitation. The AV is the sailor's 4 SPs of INS. The DV is the 3 SPs of Time that have elapsed since the SEAL became Unconscious. With an RV of +1, the rescuer rolls a 33 and scores a Yellow result. The SEAL's condition is unchanged.

On the next Page, the rescuer rolls a 69 and gets a White result. The SEAL suffers another 3 points of Neural Damage, reducing his Current Health to -15. On the third, fourth, fifth, and sixth Pages, the rescuer rolls a 13, 41, 11, 83, and 21, for an Orange, Green, Orange, White, and Yellow result. The SEAL remains Unconscious and Drowning and is down to a Current Health of -18. On the eighth Page, the rescuer rolls a 02 and scores a Red result. The SEAL coughs water out of his lungs and wakes up with a Current Health of 12. Had he not woken up then, the rescuer's RV would have dropped to 0, because the Time since unconscious would now be 1 minute (4 SPs of Time).

SINKING

An object in water that lacks the Swimming Power starts Sinking. While Sinking, an object descends towards the bottom of the water at a rate called its Sinking Speed. The Sinking Speed is determined by the object's Density and its Current Durability.

An undamaged object descends towards the bottom at a Sinking Speed equal to its Density – 8. If the Sinking Speed is 0 or less, it simply bobs up and down in the water like a buoy. A Wrecked object descends with a Sinking Speed of Density – 6, while a Destroyed object descends with a Sinking Speed of Density – 4. The Density for complex objects like ships can be estimated as its Weight + 8 – Interior Capacity.

Sinking objects are susceptible to pressure damage. An object has a Maximum Safe Depth equal to its SPs of Underwater Adaptation. Therefore, the water pressure counts as a Bludgeoning Aura with SPs equal to the object's Current Depth – its Maximum Safe Depth.

Some Sinking objects are also susceptible to water damage. If the object is technological and does not have Underwater Adaptation, the water counts as a Corrosive Aura with 1 SP. Technological objects include robotic characters; objects with INS; any objects with Internal Crew, Mental Powers, Skills, or any of the following Enhancement Powers: All-Frequency Hearing, Blindsight, Dark Vision, Extended Hearing, Filtered Hearing, Illusion, Memory, Radio Communication, Scrying, Super-Intelligence, Super-Perception, Ultra-Sensitive Hearing, Ultra-Sensitive Vision, X-Ray Vision.

SINKING SPEED = DENSITY – 8
SINKING SPEED (WRECKED) = DENSITY – 6
SINKING SPEED (DESTROYED) = DENSITY – 4
DENSITY OF SINKING OBJECT = WEIGHT + 8 – INTERIOR CAPACITY

Designer's Note: The mechanics for moving were also validated against various human world records. We have assumed that the world records were set by characters who have the ordinary human maximums in their relevant attributes, e.g. maximum MIG of 5 SPs and maximum Speed of 5 SPs. Both attributes are modified by Fatigue and Exhaustion, with MIG and Speed dropping to 4 after 3 SPs of Time and to 3 after 12 SPs of Time, if applicable.

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Speed Climbing: Czech climber Libor Hroza holds the world record in speed climbing, ascending a 50-foot speed course (3 SPs of Distance) in 5.73 seconds (1 SP of Time). That's a Climbing Speed of 2 SPs, suggesting a Running Speed of 5 SPs on a Climbing Grade of 2 SPs.

100-Meter Freestyle Swimming: The world record for the 100-meter freestyle (6 SPs of Distance), held by César Cielo, is 46:91 (4 SPs of Time). Cielo has a Swimming Speed of 6 – 4 = 2 SPs.

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US Army Loaded March: To gain the Expert Infantryman badge, a soldier must complete a ruck march of 19 kilometers (14 SPs of Distance) carrying a total load of up to 70-lbs (1 SP of Weight) within 3 hours (12 SPs of Time). If we assume that the soldier has a MIG of 4 SPs and Speed of 4 SPs, then (after Fatigue) he'll have a Carrying Capacity of (4 – 1 – 3) 0 SPs, and a Running Speed of (4 – 1) 3 SPs. The 70-lb load will give him an Encumbrance of (1 – 0) 1 SP, reducing Running Speed to 2 SPs. That's exactly what's needed to move 14 SPs of Distance in 12 SPs of Time.

BREAKING & ENTERING

Sometimes an ascendant needs to pick a lock; sometimes he needs to break down a door. Sometimes he needs to lock a villain up in a room and throw away the key. Other times he needs to throw away the room.

BREAKING DOORS, FLOORS, LOCKS, WALLS, & WINDOWS

Characters often want to kick down doors, bash through walls or floors, shatter locks, or otherwise break an object so they can move unimpeded. The Breaking Objects table below shows the Attributes of a variety of likely targets. Walls and other homogenous static objects are assumed to be broken by sections of 0 SPs Area (approximately 25 square feet, or about 8' x 3' or 6' x 4'). Doors, windows, and locks are broken object-by-object.

Stone, brick, drywall, and glass objects only have their listed Protection against Bludgeoning, Electrical, Ionizing, Lacerating, and Penetrating Damage and the listed Protection -2 against Corrosive, Cryogenic, and Thermal Damage. They have no Protection against Annihilating, Concussive, or Cosmic Damage. Steel-over-concrete objects have the listed Protection against all Damage Types except Annihilating and Cosmic. Bombproof is SPs of the Bombproofing Power, which makes the object harder to destroy with Explosion. Remember that objects are immune to Toxic Damage and take only Nonlethal Damage from Electrical and Ionizing Damage.

There are two ways a character can attempt to break an object:

★ A Breach Trick Attack against the target object using the Combat rules. In most cases, the DV for the Attack Check will be 0. The object must be Destroyed (reduced to negative Current Durability equal to its Maximum Durability) in order for the Breach to succeed. A Wrecked object no longer functions but it still blocks movement – it might be a dented and deformed hatch that can no longer be opened or a broken window frame filled with jagged shards of glass.

The Spetsikhotron want Stronghold alive, so the Russian hero Uragan soars down to rescue Stronghold. Uragan has a MIG of 6 SPs and Flight of 9 SPs. Let's assume that Uragan arrives just after Stronghold has fallen 320 feet, such that Stronghold's Falling Speed is 6 SPs. How long will it take Uragan to stop Stronghold's fall? Stopping Time equals Stronghold's Weight (3 SPs) plus his Falling Speed (6 SPs) minus Uragan's Flight (9 SPs); 3 + 6 − 9 = 0, so Uragan is able to stop Stronghold in 0 SPs of Time. Stronghold and Uragan plummet a distance equal to the initial Falling Speed of 6 SPs plus the Time of 0 SPs minus 1 SP. That's 5 SPs, or about 160 feet.

STOPPING A FALL WITH A CHALLENGE ACTION

As a Challenge Action, an eligible rescuer can attempt to stop a faller that he couldn't save with an Automatic Action. The rescuer must make a Power vs. (Faller Weight + Falling Speed) Challenge Check. If the color result is Green or better, the faller moves his Falling Speed in SPs -1 over the next 0 SPs of Time and is then halted. If the color result is White, the rescuer and the faller have suffered a Collision (see p. 275). A rescuer using Telekinesis or similar Power that allows him to manipulate masses from range is not at risk of colliding with the faller, and a White result simply means the rescuer failed to stop the faller.

Minimum Strength: When using Flight, Gliding, or Wall-Crawling to stop a fall, use the lesser of the character's SPs of MIG or the Power.

Stopping a Fall Quickly: 0 SPs of Time is still 3.5 seconds. If a faller is already moving fast, or if the fall began at a low height, the faller might need to be halted not in 3.5 seconds but in 2 seconds (-1 SP), 1 second (-2 SPs), a half-second (-3 SPs) or less.

As a Challenge Action, a rescuer can attempt to stop a fall in less than 0 SPs of Time. The AV of the check is the Power the rescuer uses to stop the faller (as above). The DV of the check is the faller's Weight plus his Falling Speed minus the rescue Time allotted. (Note that since the Time will be negative, this will increase the DV). If the color result is Green or better, the faller moves a Distance equal to the Time allotted plus his Falling Speed in SPs -1 and is then halted. If the color result is White, the rescuer failed to stop the faller and (if using Flight or Gliding) collided with him.

When a fall is stopped instantly, the faller takes damage from the shock of the sudden deceleration. The sudden halt deals Base Damage for a Concussive Attack with an EV equal to the faller's Weight minus the allotted Time.

STOPPING FALL:
POWER VS. FALLER WEIGHT + FALLING SPEED (- TIME)
STOPPING DISTANCE = FALLER SPEED -1 (+ TIME)
DECELERATION DAMAGE (TIME < 0) = FALLER WEIGHT − TIME

Let's imagine that when Uragan arrived, Stronghold has somehow fallen 640 feet, such that he was a mere 66 feet (4 SPs) above the water. Since Stronghold's Falling Speed is 6 SPs, Uragan needs to rescue him in -2 SPs of Time or less to avoid him hitting the water. Uragan makes a Flight vs. (Faller Weight + Falling Speed - Time) Challenge Check. The AV is 9 and the DV is 3 + 6 − (-2), so the RV is -2. Uragan rolls an 04, and succeeds with a Yellow result!

Because of the shock of the deceleration, Stronghold takes Concussive Damage. The EV is equal to Stronghold's Weight of 3 SPs minus the Time of -2 SPs, or 5 SPs. Therefore the hero suffers 12 points of Concussive Damage. That's much less than what he'd have taken if he'd hit the water, though still enough to seriously injure an ordinary person.

SWIMMING, DROWNING, AND SINKING

A character with Swimming Power can move and travel through water at a Speed equal to his SPs of Power. He does not have to spend an Automatic Action to float or tread water. If he has Underwater Adaptation, he can safely dive to a depth equal to his SPs of Power and is never in danger of Drowning or Sinking at above that depth. If he does not have Underwater Adaptation, he is in danger of Drowning or Sinking only if he fails a Challenge Check to move in hazardous conditions such as hurricanes, tropical storms, and stormy seas.

A character without the Swimming Power is much less mobile in the water. If the character is an object, it begins Sinking. If the character is a creature, he can float or tread water as an Automatic Action. As a Movement Action, a creature can paddle at a Swimming Speed of 0 SPs. As a Challenge Movement Action, a creature can swim at a Speed equal to his MIG − 3 or 2 SPs, whichever is less. Anytime he is in hazardous conditions, the Maximum Safe Speed is reduced by 2 SPs. If the Hazardousness is 4 SPs or more, he cannot paddle and must move as a Challenge Movement Action, making an AGI vs. Hazardousness Challenge Check to determine his Speed. A creature who does not at spend any Action at all always begins Drowning.

$$\text{PADDLE SPEED (MOVEMENT ACTION)} = 0$$
$$\text{SWIMMING SPEED (CHALLENGE MOVEMENT ACTION)} = \text{MIG} - 3 </> 2$$

A US Navy SEAL with an AGI of 5 and MIG of 5 SPs falls overboard. Although exceptionally athletic, he is not an ascendant, so he does not have the Swimming Power. He can tread water as an Automatic Action and paddle at 0 SPs as a Movement Action. As a Challenge Movement Action, he can swim at a Speed of 2 SPs. Assume the water is choppy (Hazardousness of 4 SPs, Maximum Safe Speed of 3 SPs). Now his Maximum Safe Speed is just 3 - 2 = 1 SP and he cannot paddle as a Movement Action. He must swim as a Challenge Movement Action, making an AGI vs. Hazardousness Challenge Check. He has an RV of 5 − 4 = 1, and rolls a 58, so he scores a Green result. He can move at 1 + 1 = 2 SPs. If he had failed, he'd only have been able to move at 1 − 1 = 0 SPs.

As he swims, the weather worsens and now he faces stormy seas (Hazardousness of 6 SPs, Maximum Safe Speed of 2 SPs). His Maximum Safe Speed is now 2 − 2 = 0 SPs. His Challenge Check is now at an RV of -1, and if he fails the Check he'll start to drown.

COLD WATER

Cold water can cause hypothermia in divers. The effects of cold are treated as an Ultra-Weak Cryogenic Aura.

A US Navy SEAL has fallen into frigid 35 F water. He is considered to be in an Ultra-Weak Cryogenic Aura of -4 SPs. Every 4 SPs of Time (one minute, he will take 3 points of Cryogenic Damage. With a Current Health of 60, he will slip into unconsciousness in 20 minutes and be dead in 40 minutes. If he had on a wetsuit offering even 1 SP of Cryogenic Resistance, though, he'd be fine.

Water Temperature (F)	Aura
32 F	Ultra-Weak Cryogenic Aura -3
33-40 F	Ultra-Weak Cryogenic Aura -4
41-50 F	Ultra-Weak Cryogenic Aura -5
51-60 F	Ultra-Weak Cryogenic Aura -6

DIVING UNDERWATER

A creature with Underwater Adaptation can breathe underwater. A creature with Air Supply can breathe from his air supply while the Power is activated. A creature without either Power must hold his breath when diving underwater. A creature can hold his breath for SPs of Time equal to his SPs of RES (or Breath Control Skill). If still underwater after this Time, he immediately becomes Unconscious and Drowning. Objects do not need to breathe and consequently do not need an Air Supply or Underwater Adaptation.

A character with either Underwater Adaptation or Pressure Protection can safely endure water pressure at a Maximum Safe Depth in SPs equal to his SPs of Power. A character without the Power can safely endure water pressure up to a Maximum Safe Depth equal to his MIG + 1 SP (or TOU +1, if an object). Character who dive deeper than their Maximum Safe Depth begin to suffer damage from the water pressure. Treat the water pressure as a Bludgeoning Aura with SPs equal to the character's Current Depth − his Maximum Safe Depth.

A character underwater has his Vision Clarity reduced by 3, to a minimum of 0 (see p. 297). The Underwater Vision Power can compensate for this loss.

BREATH HOLDING TIME = RES/BREATH CONTROL
MAXIMUM SAFE DEPTH = MIG +1
BLUDGEONING AURA (WATER PRESSURE) = CURRENT DEPTH − MAXIMUM SAFE DEPTH
VISION CLARITY UNDERWATER = VISION CLARITY − 3

A US Navy SEAL has to escape from a wrecked submarine at a Depth of 7 SPs (640 feet). He has an AGI of 5 SPs, a MIG of 5 SPs, and Breath Control of 7 SPs. His Swimming Speed is therefore 5 - 3 = 2 SPs and his Maximum Safe Depth is 5 + 1 = 6 SPs. It will take him just 7 − 2 = 5 SPs of Time (120 seconds) to ascend to the surface, so his 7 SPs of Breath Control will let him hold his breath long enough to make it. Whether he can survive the water pressure is another matter. The distance between a Depth of 7 SPs and 6 SPs is 6 SPs. (Remember, each SP is double the prior SP! See p. 43 for a reminder on adding/subtracting SPs.) It will take him 6 − 2 = 4 SPs of Time to cross. 4 SPs is 16 Pages; each Page he will suffer Bludgeoning Damage worth 7 − 6 = 1 SP, or 3 points. In total that's 3 x 16 = 48 points of Bludgeoning Damage. A human with 3 or 4 SPS of MIG would pass out, but with 5 SPs of MIG, our SEAL has 60 points of Health. He makes it to the surface, coughing up blood as he grasps for air, with 12 Current Health.

DROWNING

A Drowning creature cannot take any Actions. On the start of his Panel, he takes 3 points of Neural Health Damage. Unless he is Unconscious, he then makes an AGI vs. Hazardousness Challenge Check. If the result is Red, he begins swimming again and the condition ends. If the result is Orange, Yellow, or Green the character continues Drowning. If the result is White, the creature becomes Unconscious.

If another character wants to pull a Drowning creature to safety, he must expend a Challenge Action and make a successful Wrestling Attack. Thereafter if he has SPs of MIG sufficient to move the Drowning creature, he can pull him to safety. A Challenge Action is required even if the Drowning creature is a friend or ally – people who are drowning are panicked. An Unconscious Drowning creature can be moved with an Automatic Action provided the rescuer has sufficient SPs of MIG to pull the character to safety.

Even if pulled to safety, a creature who became Unconscious from Drowning continues to take 3 points of Neural Health Damage each Panel until he is resuscitated or Slain. Resuscitating an Unconscious victim of Drowning is a Challenge Action. The rescuer makes an INS vs. Time Challenge Check, using his SPs of INS as the AV and the SPs of Time since the creature became Unconscious as the DV.

If the Check succeeds with a Red result, the creature becomes Conscious, recovering any Health lost to the Neural Damage. If the Check succeeds with an Orange, Yellow, or Green result, the creature takes no additional Damage this Panel but remains Unconscious. If the Check fails, the creature takes 3 points of Neural Health Damage and remains Unconscious. The rescuer can continue to attempt to resuscitate the creature until the creature is Slain. A creature who becomes Seriously Injured from Drowning remains Seriously Injured when resuscitated. A Mind Field does not protect against Drowning damage.

Objects suffer the Sinking condition instead of the Drowning condition. Plant creatures, Robotic creatures, and Undead creatures are treated as objects for these purposes.

DROWNING = 3 NEURAL HEALTH DAMAGE PER PANEL
DROWNING:
AGI VS. HAZARDOUSNESS; RECOVER ON RED, UNCONSCIOUS ON WHITE
RESCUE DROWNING CHARACTER:
MIG/VAL VS. MIG/(WEIGHT + SPEED)
RESUSCITATE UNCONSCIOUS DROWNING CHARACTER:
INS VS. TIME

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Object	Den.	Area	Vol.	Weight	Bombproof	TOU	Durability	Protection	Break DV
Exterior Stone Wall or Stone Floor, 5' x 5' x 22"	9	0	-1	8	-	7	120	5 (12 points)	8
Exterior Brick Wall, 5' x 5' x 18"	9	0	-2	7	-	7	120	4 (8 points)	8
Exterior Brick Wall, 5' x 5' x 14"	9	0	-3	6	-	6	80	4 (8 points)	7
Exterior Wooden Wall or Floor, 5' x 5' x 12"	7	0	-2	5	-	5	60	4 (8 points)	6
Interior Drywall, 5' x 5' x 4.5"	7	0	-4	3	-	4	40	3 (6 points)	5
Steel-over-Concrete Blast Door, 10' x 10' x 3.5'	9	2	2	11	15	11	480	8 (32 points)	12
Steel-over-Concrete Vault Door, 8' x 3' x 6.25"	10	0	-3	7	9	9	240	6 (16 points)	10
Steel Door, 6'8" x 2'6" x 2"	11	-1	-6	5	6	6	80	5 (12 points)	7
Steel Hatch, 30" x 30" x 2"	11	-2	-7	4	6	6	80	4 (8 points)	7
Wooden Interior Door, 6'8" x 2'6" x 1.25"	7	-1	-6	1	-	4	40	3 (6 points)	5
Heavy-duty steel locking mechanism, 10 lbs	11	-9	-13	-2	-	3	30	4 (8 points)	4
Steel doorknob/lock, 2 lbs	11	-10	-14	-3	-	2	20	3 (6 points)	3
Aluminum doorknob/lock, 1 lbs	10	-10	-14	-4	-	1	15	3 (6 points)	3
Bullet-resistant glass windshield, 60" x 26" x 8"	10	-1	-4	6	7	7	120	5 (12 points)	8
Bullet-resistant glass windshield, 60" x 26" x 2"	10	-1	-6	4	5	5	60	4 (8 points)	6
Glass windshield, 60" x 26" x .25"	10	-1	-9	1	-	1	15	1 (3 points)	2
Glass window, 24" x 46" x .25" or less	10	-2	-10	0	-	1	15	1 (3 points)	2

★ A MIG/Super-Strength vs. Break DV Challenge Action or Weight + Speed vs. Break DV Challenge Action can instantly break the object. If the Check succeeds with a Green or better result, the object is Destroyed. The disadvantage of this method is that it does not attrit the object's Durability. The advantage to this method is that the character can breach the object as an Automatic Action if his AV is equal to or greater than the Break DV (because Challenge Actions that aren't attacks can always be treated as Automatic Actions anytime the character can automatically succeed.) This allows strong characters to plow through walls without stopping!

BREAKING THROUGH FLOORS

Particularly heavy characters can break through floors by virtue of their weight alone. If a character begins his Panel on, or moves onto, a floor with a Break DV that is equal to or less than his Weight, the floor collapses under his feet and he begins falling. Once a character begins falling, his Falling Speed should be added to his Weight to determine if he breaks subsequent floors. A falling character will take Damage from the unintentional Collision (p. 275).

BYPASSING SECURITY SYSTEMS

Sometimes brute force can't or won't work. In such circumstances, characters may have to bypass **security systems** such as locks, safes, and alarms. A security system can be static or autonomous. Static security systems are mechanical locks and safes with SPs of Weight, Toughness, and Resistance. Autonomous security systems are electronic systems with SPs in INS, Weight, Toughness, Resistance, and various Powers and Skills such as Blindsight, Triggered Bang, Triggered Explosion, etc.

Type of Object	Security DV
Mass-produced consumer good	3
Enterprise/Industrial equipment	5
Military equipment	7
Classified or cutting-edge technology	9
Invention	Inventor's INS

Whether autonomous or static, all security systems are rated with SPs of Security. An object's Security is the Inventor's INS for Inventions; for other objects see the list of default or average Security scores. An object's Security is not necessarily related to its other Attributes. A sturdy pair of handcuffs with a cheap lock might have a high TOU and Durability but low Security.

EXAMINING A SECURITY SYSTEM

The first step to bypassing a security system is to examine it. Examining a security system is an Extended Challenge Action that uses the character's SPs of INS and Time spent as the AV and the security system's Security as the DV. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262).

On a White result, the character learns nothing about the security system. On any other result, the character learns the security system's Attributes and Powers as well as the number and type of triggers it has. A character can skip this step if desired, though he might end up regretting it…

DISARMING TRIGGERS

A security system may have one or more triggers that must be disarmed before it can be bypassed. Disarming a trigger is an Extended Challenge Action. The character must have the Multitool Perk or an object with the Perk in order to make the attempt. Use the character's SPs of INS and the SPs of Time spent as the AV. Use the system's SPs of Security as the DV.

Each trigger system must be disarmed separately. While two or more triggers are active, the triggers interact with each other to increase the Color Threshold necessary for success on the Challenge Check. If there are two active triggers, the trigger activates on a Green or White result. If there are three or more active triggers, the trigger activates on a Yellow, Green, or White result.

Attempting to bypass a security system before disarming its triggers activates all the triggers.

BYPASSING A SECURITY SYSTEM

Bypassing a security system is a INS + Time vs. Security Extended Challenge Action. The character must have the Multitool Perk or an object with the Perk in order to make the attempt. If the result of the Challenge Check is White, the security system remains functional (sealed, locked, active, etc.) On any other result, the security system is bypassed.

EXAMINE SECURITY SYSTEM:
INS + TIME VS. SECURITY

DISARM TRIGGER:
INS + TIME VS. SECURITY; COLOR THRESHOLD GREEN (1 TRIGGER), YELLOW (2 TRIGGERS), ORANGE (3+ TRIGGERS)

BYPASS SECURITY SYSTEM:
INS + TIME VS. SECURITY

SPOTTING, LISTENING, HIDING, & SNEAKING

Whether soaring above the city streets seeking out wrongdoers, peering through a dark alley looking for a ninja waiting in ambush, hiding from thugs, or sneaking up into a villain's hideout, characters in **Ascendant** have to know who can see and hear what.

RANGE

Spotting and Listening depend on **Range**, measured in SPs of Distance. There are several types of Range:

★ **Actual Range** is the physical distance between a character and another character, object, or other target.
★ **Effective Range** is the Actual Range as modified by powers such as Telescopic Sight. The minimum Effective Range is -6 SPs (about 1") for Spotting and -8 SPs (about 0.125") for Listening.
★ **Passive Spotting Range** is the distance at which a character can see a target with a Height of 0 SPs in the absence of cover or obscuring conditions. In the absence of Powers, Passive Spotting Range is 8 SPs.
★ **Passive Listening Range** is the distance at which a character can hear a sound with a Loudness of 0 SP during conditions of average ambient noise. In the absence of Powers, Passive Listening Range is 0 SPs.

Height	Benchmark
6	Kaiju
4	Sauroposeidon
2	Giraffe
1	Elephant
0	Adult human
-1	Small child
-2	Cottontail rabbit
-3	Red squirrel
-4	House mouse
-5	Golf tee
-6	U.S. quarter
-7	M&M
-8	Grain of rice
-9	Pavement ant
-10	Grain of sand
-11	Clover mite
-12	Dust mite
-13	Sheet of paper
-14	Strand of hair

SPOTTING

Vision Clarity is the degree to which a character can clearly see a particular character, object, or other target. For any given character and target, Vision Clarity equals the character's Passive Spotting Range plus the target's Height minus the Effective Range to the target. If the target has Cover or Obscurity (see below), the SPs of Cover and/or Obscurity are subtracted from the character's Vision Clarity.

If the character's Vision Clarity on a particular target is -1 SP or fewer, the character cannot see that particular target. If the character's Vision Clarity is 0 SPs or more, the character can claim **Line of Sight (LOS)** against that target. The maximum Effective Range at which a character can claim Line of Sight is his Passive Spotting Range plus the target Height minus Cover and Obscurity.

VISION CLARITY =
PASSIVE SPOTTING RANGE + TARGET HEIGHT - EFFECTIVE RANGE
− COVER −OBSCURITY

MAXIMUM EFFECTIVE RANGE OF LOS =
PASSIVE SPOTTING DISTANCE + TARGET HEIGHT − COVER − OBSCURITY

He can perceive more or less detail about the target based on his SPs of Vision Clarity.

* ★ Less than 0 SPs: The target cannot be seen. The target is either too small, too far away, or too obscured by the environment to be visible.
* ★ 0 SP: The target appears as a simple geometric object with a single color. For instance, a human in military battle dress would appear as a green wedge while a police car would appear as a grey-white rectangle.
* ★ 1 SPS: The target has a clear body outline. Colors of different components can be distinguished, but details are blurred.
* ★ 2 SPS: The target can be clearly observed. There is a lack of fine detail (facial features or license plate numbers) but color, outfit, gear, and can be distinguished.
* ★ 3 SPS: The target can be clearly observed in fine detail. Facial features, license plate numbers, and equipment models can be distinguished.
* ★ 4 SPs: The target can be clearly observed in perfect detail.

> A police officer has a Passive Spotting Range of 8 SPs. A thug in a dark green trench coat (Height of 0 SPs) is standing ¼ mile away (Effective Range of 8 SPs). The police officer has a Vision Clarity of 0 SPs on the thug. The thug looks like a dark green wedge. The police officer drives forward, bringing the thug to an Effective Range of 5 SPs (about 150 feet). The police officer now has (8 − 5) 3 SPs of Vision Clarity on the thug, enabling him to see his facial features, shoes, and other details.
>
> If the police officer were trying to claim LOS (Vision Clarity of 0 SPs) on a mouse (Height of -4 SPs), he would need to be at an Effective Range of 8 + (-4) − 0 = 4 SPs (75 feet). To observe the mouse in fine detail (Vison Clarity of 3 SPs), he'd need to be at an Effective Range of 8 + (-4) − 3 = 1 SP (10 feet).

COVER

An object (such as a wall, tree, dumpster, etc.) between a character and his target provides **Cover**. Cover is measured in SPs. 1 SP of Cover means about 50% of the target is concealed from the character, 2 SPs of Cover means 75% is concealed, 3 SPs of Cover means 87% is concealed, and 4 SPs of Cover means 95% is concealed. 5 SPs of Cover means the target is completely concealed and has **Total Cover**. A character cannot claim LOS on a target with Total Cover, regardless of Effective Range. Cover is always relative to the character spotting – a target might have Total Cover against one opponent and no Cover at all against another opponent, depending on terrain and position.

> A police officer has a Passive Spotting Range of 8 SPs. A wanted felon with a Height of 0 SPs is concealed by a wall nearby. The police officer wants to claim LOS (0 SPs of Vision Clarity) on the felon. If the felon is behind a waist-high wall that provides 1 SP of Cover, the police officer can claim LOS on the felon at 8 + 0 − 1 = 7 SPs, or about 600 feet. If it's a neck-high wall that provides 3 SPs of Cover, the police officer can claim LOS on the felon at 8 + 0 − 3 = 5 SPs, or about 150 feet. If it's a 10' tall wall that completely conceals his target, the police officer cannot spot the felon at any range because the felon has Total Cover. Even if he gets to 0 SPs distance, he still can't see through the wall.

OBSCURITY

The effect of poor visibility due to low light, bad weather, or camouflaging terrain is measured with SPs of **Obscurity**. For purposes of spotting, Obscurity is added to the Effective Range to any targets it encompasses. If a target's Obscurity equals or exceeds the character's Passive Spotting Range, he cannot see the Obscured target(s) at all, and he suffers the Blinded condition against the target(s) while the Obscurity applies. Common scores for varying levels of light, weather, and camouflaging terrain are listed on the Obscurity table below. Obscurity from light, weather, and camouflaging terrain are cumulative.

Effect - Light	Obscurity	Effect - Weather	Obscurity	Effect - Camouflage	Obscurity
Night, inside cave	9	Severe sandstorm	9	Thick jungle	3
Night, overcast sky, no moon	6	Blizzard or whiteout	8	Densely cluttered urban	3
Night, starlight, no moon	5	Severe fog or heavy sandstorm	6	Heavy forest or swamp	2
Night, new moon	4	Heavy fog or sandstorm	5	Heavily cluttered urban	2
Night, half moon	3	Fog or dust storm	4	Savannah or bushland	1
Night, full moon	2	Light fog, rain	3	Cluttered street or room	1
Night, streetlights	1	Mist	2	Lawn or grassy plain	0
Twilight	1	Haze or smog	1	Empty street or room	0

A safari hunter with a Passing Spotting Range of 8 SPs is looking for a giraffe (Height of 2 SPs). It's the night of a full moon (Obscurity of 2 SPs) and a light haze (Obscurity of 1 SP) has settled on the savannah (Obscurity of 1 SP). The total Obscurity is therefore 4 SPs. The safari hunter can claim LOS on the giraffe at a Maximum Effective Range of 8 + 2 - 4 = 6 SPs, or about 300 feet. If it were an overcast night with no moon (Obscurity of 6 SPs) and fog (Obscurity of 4 SPs), the total Obscurity in the savannah would be 11 SPs. Since the 11 SPs of Obscurity is greater than his Passive Spotting Range, the safari hunter would be Blinded and unable to claim LOS against any targets at any Range.

Imagine that the safari hunter is looking for a particular giraffe that has a distinct scar on its hindquarters. The GM determines that the hunter needs a Vision Clarity of at least 3 SPs on the giraffe to spot the scar. The giraffe's Height is 2 SPs. It's a hazy night in the savannah with a full moon (Obscurity of 4 SPs). When the Effective Range between the hunter and the giraffe is 100 yards (6 SPs), the hunter's Vision Clarity is 8 +2 – 6 – 4 = 0 SPs. He can spot the giraffe but not make out any details. When he moves to 30 feet (3 SPs) of the giraffe, the hunter's Vision Clarity improves to 8 + 2 – 3 – 4 = 3 SPs and he can finally make out the scar.

Designer's Note: Objects like trees can provide both Cover and/or Obscurity depending on the circumstances. Cover is typically granted by large, visible objects that you can hide behind or under. Obscurity is typically an emergent property of many smaller objects crowding the field of view and creating a "Where's Waldo" effect. Imagine a mouse clambers onto a desk. If the mouse has crawled inside a coffee mug on an otherwise empty desk, it has Cover. If it's sitting in the open on a cluttered desk filled with knickknacks and doodads, it has Obscurity. If it's inside the coffee mug on a cluttered desk, it has both Cover and Obscurity. The GM is the ultimate arbiter of what level of Cover and Obscurity a character enjoys versus his opponents.

In some cases, characters may put themselves in positions where they encounter SPs of Obscurity far exceeding the table above. For example, imagine that an ascendant with a Passive Spotting Range of 28 SPs due to Ultra-Sensitive Vision decides to fly into the stratosphere until his horizon line is 500 miles away (19 SPs). Gazing down on the earth, his Vision Clarity at any point on the horizon (absent Cover or Obscurity) is 28 – 19 = 9 SPs, giving him a crystal-clear view of whatever he looks at. But that does not mean he can instantly find a particular person. The sheer amount of "stuff" in his field of vision will be enormous – it will be looking for a mouse on a cluttered desk that's 500 miles in diameter. When such conditions arise, the SPs of Clutter table on p. 319 can serve as a useful guide for how much Obscurity a character may face from scanning a vast field of view for something in particular.

FIELD OF VIEW

A character can only claim line of sight on a target if it is in his **field of view**. In most circumstances, a character using ordinary human sight has a 180° field of view, so he can claim line of sight on anything in front of him but nothing behind him. However, anytime a character is Observing (p. 303

) his environment and/or anytime a character had line of sight on at least one enemy within the last Page, he has a 360° field of view. (He is "checking his six," "watching his back," etc.)

LISTENING

Hearing Clarity is the degree to which a character can clearly hear a particular sound. For any given character and target, Hearing Clarity equals the character's Passive Listening Range plus the sound's Loudness minus the Effective Range to the sound and any Loudness from ambient noise. If the sound is reduced by Sound Absorption (see below), the SPs of Sound Absorption are subtracted from the character's Hearing Clarity as well.

If the character's Hearing Clarity on a particular sound is -1 SP or fewer, the character cannot hear that particular sound. If the character's Hearing Clarity is 0 SPs or more, the character is within **Earshot** of that sound. (Earshot is the acoustic equivalent of Line of Sight.) The maximum Effective Range at which a character can claim Earshot is his Passive Listening Range plus the sound's Loudness minus the Effective Range, the Sound Absorption, and the Loudness of ambient noise.

HEARING CLARITY = PASSIVE LISTENING RANGE + SOUND LOUDNESS
— EFFECTIVE RANGE - SOUND ABSORPTION - AMBIENT LOUDNESS

EFFECTIVE RANGE = PASSIVE LISTENING RANGE + SOUND LOUDNESS
— HEARING CLARITY — SOUND ABSORPTION — AMBIENT LOUDNESS

MAXIMUM EFFECTIVE RANGE OF EARSHOT = PASSIVE LISTENING DISTANCE + SOUND LOUDNESS
— SOUND ABSORPTION — AMBIENT LOUDNESS

The character can hear more or less detail about the sound based on his SPs of Hearing Clarity.

★ 0 SP: The character can hear the sound but there is some background noise. If he's listening to a conversation, he can follow the gist but misses a few words (like on a bad conference call line or conversation in a nightclub). If it was a sound in the distance, he heard something ("What was that sound?") but couldn't say where it came from or exactly what it was.

★ 1 SP: The character can hear the sound pretty well. If he's listening to a conversation, he can identify a familiar character's voice and easily follow the conversation. If it was a sound in the distance, he can identify the approximate nature of the sound ("that was a gunshot!") and has a very rough idea of the direction to its source.

★ 2 SP: The character can hear the sound quite well. If he's listening to a conversation, it's as clear as a high-quality phone call or MP3 recording. If it was a sound in the distance, he can identity the nature of the sound and the approximate direction to the sound's source but not the distance. ("That was a rifle shot from somewhere down the road!")

★ 3 SP: The character can hear the sound with great clarity. He can identify the exact direction and approximate distance to the sound's source. If he's listening to a conversation, it's as clear as a face-to-face talk with someone close by on a quiet night. If it was a sound in the distance, he can identify the nature of the sound and the approximate direction and distance to the sound's source. ("That was a rifle shot about a mile down the road!")

★ 4 SP: The character can hear the sound with perfect clarity. If he's listening to a conversation, he can make out every accent, breath, and syllable stress. If it was a sound in the distance, he can identify the exact nature of the sound, and the exact direction and approximate distance to the sound's source. ("That was a 30-06 rifle shot about a mile northwest of here, just off the road!")

SOUND LOUDNESS

The Sound Loudness table below shows the Loudness (in SPs) of common sounds. Note that the average ambient noise is about 60 decibels of sound, typical for an office or restaurant, and is rated at 0 SPs. A quiet rural neighborhood has an ambient Loudness of -3 (40 decibels) while a busy city sidewalk has an ambient Loudness of 3 (80 decibels). Sounds of 12 SP or louder count as Bangs (see p. 137) with SP equal to Sound Loudness – 12.

Sound (Decibels)	Loudness	Sound (Decibels)	Loudness	Sound (Decibels)	Loudness
Breath, pin dropping (10 dB)	-8	Talking, walking (60 dB)	0	Police siren (115 dB)	9
Rustling leaves (20 dB)	-7	Vacuum cleaner (70 dB)	1	Thunderclap (120 dB)	10
Whisper (30 dB)	-5	Kitchen appliance (75 dB)	2	Air raid siren, gun (135 dB)	12
Babbling brook (40 dB)	-3	Fighting, Traffic (80 dB)	3	Fireworks (145 dB)	14
Rainfall (50 dB)	-2	Loud Shouting (85 dB)	4	Saturn V rocket (180 dB)	20
Humming refrigerator (55 dB)	-1	Motorcycle (100 dB)	7	Hydrogen bomb (200 dB)	23

Designer's Note: The decibel scale is itself logarithmic such that each 6-decibel increase actually represents a doubling of sound volume. The perceived loudness of a sound approximately decreases by 6 decibels each time the distance to the source of the sound doubles. Hence Loudness increases by 1 SP per 6 dB and decreases by 1 SP per SP of Distance.

SOUND ABSORPTION

A sound may be subject to 1 or more SPs of **Sound Absorption**. Sound Absorption reduces the Hearing Clarity of characters listening to the sound. Wide-open spaces such as football grids or cornfields have no Sound Absorption. Buildings, hills, and forest offer 2 – 4 SPs of Sound Absorption against sounds passing through them, with 3 SPs being a good outdoor default. Excellent indoor soundproofing offers 6 SPs of Sound Absorption between rooms or floors. If Sound Absorption is 5 SPs or more than the sound's Loudness, the sound has **Total Absorption**. A sound with Total Absorption is never in Earshot, regardless of Effective Range.

In some cases, Sound Absorption can be negative, meaning that sounds actually seem louder than normal. Inside buildings, unfurnished hardwood floor has -1 SP of Sound Absorption. Unfurnished concrete or tile floor has -2 SPs of Sound Absorption. A nightingale floor (designed to be creaky to stop ninja) has -3 SPs of Sound Absorption.

A police officer is on patrol at night on the city streets. He has a Passive Listening Range of 0 SPs. The Ambient Loudness is 0 SPs. A villain that is a mile to the west (10 SPs) starts shooting people with an assault rifle (12 SPs of Sound Loudness). The villain is inside a warehouse (2 SPs of Sound Absorption). How well can the police officer hear the gunshots? His Hearing Clarity for the gunshots is 0 + 12 – 10 – 2 – 0 = 0 SPs. The police officer can just make out a sound but can't tell exactly what it is or where it's coming from.

If the villain were shooting people in a warehouse with thick walls (3 SPs of Sound Absorption), then the police officer's Hearing Clarity would be -1 SPs and he wouldn't hear the gunshots at all.

If the police officer were 6 SPs (300 feet) from the warehouse, then his Hearing Clarity would be 0 + 12 – 6 – 2 – 0 = 4 SPs. He would hear a barrage of gunfire by an assault rifle to the west about a hundred yards away. He'd be able to identify how many shots were fired.

If the police officer were 6 SPs from the warehouse, but on a busy sidewalk near honking cars and chatting pedestrians (3 SPs of Ambient Loudness), his Hearing Clarity would be reduced to just 1 SP. He'd hear a barrage of what sounds like gunfire from off to the west.

HIDING, SNEAKING, AND OBSERVING

A character who is **Hiding** is actively attempting to avoid being seen. A character who is **Sneaking** is actively attempting to avoid being heard. A character who is **Observing** is actively attempting to spot and listen.

HIDING

A character may begin Hiding as an Automatic Action if he has at least 1 SP of Cover or Obscurity. While Hiding, the character gains a bonus to his SPs of Obscurity. The bonus from Hiding is equal to the lesser of the character's AGI or the sum of the Cover and Obscurity available to the character from terrain, lighting, and weather.

The additional SPs of Obscurity are retained as long as the character continues Hiding. A character who wishes to continue Hiding cannot move unless he has at least 1 SP of Cover or Obscurity for his entire route. A Hiding character who moves without Cover or Obscurity immediately stops Hiding. A Hiding character who makes an Attack, suffers Damage, or involuntarily gains any Condition immediately stops Hiding. Other Actions can also end Hiding at the GM's discretion.

HIDING:
GAIN OBSCURITY OF AGI </> (COVER + OBSCURITY)

> A police officer has a Passive Spotting Range of 8 SPs. 300 feet away (6 SPs), a burglar (0 SPs of Height, 5 SPs of AGI) is standing behind a garbage can (1 SP of Cover) in a dark alley lit by a streetlamp (1 SP of Obscurity). The police officer's Vision Clarity is 8 + 0 − 6 − 1 − 1 = 0 SP, so he has LOS on the burglar.
>
> The burglar takes an Automatic Action to start Hiding to gain additional SPs of Obscurity. (He crouches down behind the garbage can, for instance, keeping just his eyes and forehead visible.) The bonus the burglar receives from Hiding is the lesser of his AGI (5 SPs) or the sum of his available Cover and Obscurity (2 SPs). Therefore he gains +2 SP of Obscurity. As a result, the police officer drops from a Vision Clarity of 0 SP to a Vision Clarity of -2 SP, and he loses LOS on the burglar.

SNEAKING

A character may begin Sneaking as an Automatic Action. While Sneaking, the character gains a bonus to his SPs of Sound Absorption. The bonus from Sneaking is equal to the lesser of the character's AGI or the Ambient Loudness + 8.

A Sneaking character can take Movement Actions, but his Speed is reduced by 2. A Sneaking character who suffers Damage, involuntarily gains a Condition, or moves at his full Speed immediately stops Sneaking. Other Actions can also end Sneaking at the GM's discretion. Attacking does not necessarily end Sneaking, but the additional Sound Absorption gained by Sneaking do *not* apply to Attacks or other Actions using objects unless the object is a melee weapon with Augmentative Strike. A character can't "sneakily" fire a shotgun!

SNEAKING:
GAIN SOUND ABSORPTION OF AGI </> (AMBIENT LOUDNESS + 8)

> The police officer has resumed his patrol and turned his back on the burglar. The burglar decides to sneak up on the police officer and stab him in the back with a knife (Augmentative Penetrating Strike 4). The police officer only has a 180° field of view because he hasn't spotted an enemy in the last Page and isn't Observing his environment. Therefore the burglar is automatically outside of his Line of Sight. The police officer's only hope to avoid being surprised is to hear the burglar as he approaches.
>
> The police officer has a Passive Listening Range of 0 SPs. It's the dead of night and the Ambient Loudness is -2 SPs. Normal activity like walking has a Loudness of 0 SPs. If he simply approaches the police officer casually, the burglar will be in Earshot when he walks within 0 + 0 − (-2) = 2 SP or 20 feet.

That's not close enough for a Melee Attack. When he gets to 3 SPs (40 feet) distance, the burglar spends an Automatic Action to begin Sneaking. The bonus the burglar receives from Hiding is the lesser of his AGI (5 SPs) or the Ambient Loudness +8 (6 SPs). Therefore he gains 5 SPs of Sound Absorption. Now the burglar won't be in Earshot until he is 0 + 0 − (-2) − 5 = -3 SP away, or about 6"!

Let's assume the burglar attacks the police officer. Fighting has a Loudness of 3 SPs. Because he's using a knife, the burglar can apply the 5 SPs of Sound Absorption he has gained from Sneaking to that Loudness. The police officer hears it, but others nearby probably don't. On the other hand, if he shot the police officer in the back of the head, he'd make 12 SPs of Loudness from the gunshot, and his Sneaking would have no effect on that sound.

OBSERVING

Characters who are distracted by other activities are easy to Hide from or Sneak up on, especially if there is abundant Cover, Obscurity, or Ambient Loudness. To avoid this grim fate, characters can Observe their environment with an Automatic Action.

While Observing, a character gains a bonus to his Passive Spotting Range and Passive Listening Range. The bonus to his Passive Spotting Range is equal to the lesser of his SPs of INS/Super-Perception compared to the greater of the SPs of Cover and/or Obscurity available to target(s). (Observing does not help if the target has Total Cover. No amount of concentration can let someone see through walls.) The bonus to his Passive Listening Range is equal to the lesser of his SPs of INS/Super-Perception and the SPs of Ambient Loudness + Sound Absorption +8 available to target(s). (Again, observing does not help if the sound has Total Absorption.)

Observing can thus effectively "cancel out" the benefits of Cover, Obscurity, Ambient Loudness, Sound Absorption, Hiding, and Sneaking up to the observer's SPs of INS/Super-Perception. Observing also increase a character's field of view, thereby preventing him from being easily snuck up on by enemies to his rear (p. 299).

OBSERVATION (PASSIVE SPOTTING):
ADD (INS/SUPER-PERCEPTION) </> (COVER + OBSCURITY)
OBSERVATION (PASSIVE LISTENING):
ADD (INS/SUPER-PERCEPTION) </> (AMBIENT LOUDNESS + SOUND ABSORPTION + 8)

INTERACTION OF HIDING, SNEAKING, AND OBSERVING

During combat, a character must spend an Automatic Action on his Panel each Page to Observe. The GM can calculate which opponents are in LOS and Earshot at that point. An Observing character might also reserve an Action that will trigger if an opponent comes into LOS or Earshot. In that case, the success of the Observing character's Observation is determined when an opponent takes an Action that might bring him within LOS or Earshot of the Observing character.

Out of combat, a character who has some reason to be alert (such as a sentry on a watchtower or a point man on a trail) can be assumed to be spending Automatic Actions to Observe with another Action reserved to act if something is spotted or heard. As above, the success of the Observing character's Observation is determined when an opponent takes an Action that might bring him within LOS or Earshot of the Observing character. If the opponent is spotted or heard, then the GM should begin a Page of combat at that point, with everyone rolling for initiative (see p. 364). The opponent's intended Action is delayed until his Panel. If the opponent is undetected, his Action takes place and then a Page of combat can begin (if necessary).

A burglar (0 SPs of Height, 5 SPs of AGI) is crouching behind a garbage can (1 SP of Cover) in a dark alley lit by a streetlamp (1 SP of Obscurity) about 300 feet away (6 SPs) from a police officer (8 SPs of Passive Spotting Range). The burglar is Hiding, so the burglar receives bonus Obscurity equal to the lesser of his AGI (5 SPs) or the sum of his available Cover and Obscurity (2 SPs). Therefore he gains +2 SP of Obscurity. The police officer's Vision Clarity is 8 + 0 − 6 − 1 − 1 -2 = -2 SP, so he does not have LOS on the burglar.

But what if the police officer suspected someone was hiding nearby and took an Automatic Action to start Observing his

environment? In that case, he could increase his Passive Spotting Range by the lesser of his INS (5 SPs) or the available Cover and Obscurity (4 SPs, including the burglar's bonus from Hiding). Therefore he gains +4 SPs of Passive Spotting Range. Now the police officer's Vision Clarity is 12 + 0 − 6 − 1 − 1 − 2 = 2 SP, and he has LOS on the burglar.

HIDING, SNEAKING, AND OBSERVING AS A CHALLENGE ACTION

In some cases, a character may know or suspect that the SP bonus from Hiding, Sneaking, or Observing won't suffice against his opponents. A character can take a Challenge Action to increase his SPs of AGI/Stealth or INS/Super-Perception if desired. The AV of the Challenge Check is 0, while the DV of the Challenge Check is the number of additional SPs the character desires.

On a White result, the character receives no bonus. On a Green or better result, the character temporarily gains SPs of AGI/Stealth or INS/Super-Perception. The duration of the bonus depends on his Color Result. On a Green result, the bonus lasts for just 0 SPs of Time (until the end of his next Panel); on a Yellow result, for 1 SP of Time (about 6-10 seconds or 2 Pages); on an Orange result, for 2 SPs of Time (about 15 seconds or 4 Pages); and on a Red result, for 3 SPs of Time (about 30 seconds or 8 Pages). Once the Time has elapsed, the bonus ends. The character can make another Challenge Check on his next Panel if desired.

PROCESSING & MEMORIZING INFORMATION

A vigilante sneaks into a criminal mastermind's office and has only minutes to skim his files. How much can he learn? A spy with access to secret government data wants to commit it to memory and destroy the original. How long will it take? These rules explain what characters in **Ascendant** can read, write, memorize, and learn.

Information is measured in SPs. 0 SPs of Information represents a couple words. 5 SPs of Information represents about 50 words, like a typical paragraph. The complete Encyclopedia Britannica contains 25 SPs of Information. (Since clarity and conciseness can vary, some Information might be rated with a higher or lower score in SPs than its word count suggests. An esoteric book filled with aphorisms might have a higher Information score, while a children's book might have a lower score, for instance.)

SP	Digital Information Benchmark
0	8 bytes (10 characters)
15	350 kilobytes (e-book, web-quality image)
19	4 megabytes (4 min mp3 song, print-quality image)
29	4 gigabytes (DVD movie)
32	25 gigabytes (Blu-Ray movie)
37	1 terabyte (100K songs, 310K pictures, or 500 hours of movies)
40	8 terabytes (1 year of Hubble Space Telescope data)
42	32 terabytes (YouTube data per day)
52	32 petabytes (Google data per day)
59	5 exabytes (all words ever spoken by mankind)
61	16 exabytes (total Google data)

Digital Information: SPs of Information can also be expressed digitally in bytes. 0 SPs of Information represents 8 bytes. 10 SPs of Information represents 8 kilobytes, 20 SPs is 8 megabytes, 30 SPs is 8 gigabytes, 40 SPs is 8 terabytes, 50 SPs is 8 petabytes, and 60 SPs is 8 exabytes. Some other benchmarks are noted on the Digital Information Benchmarks table.

Mind, Memory, and Information: The human mind has a total storage capacity of 2.5 petabytes, or 48 SPs of Information. Every few seconds of consciousness (one Page or 0 SPs of Time), the human mind receives and processes about 20 megabytes (21 SP of Information). This is usually not relevant unless Information is being processed, recorded, or transmitted using various Mental Powers.

Structured versus Unstructured Information: Information can be **Structured** or **Unstructured**. Structured Information is composed of clearly defined data types that are easily analyzed and searched by machines. Unstructured Information is everything else. Some Information is both Structured and Unstructured for different purposes. A novel is Structured for purposes of syntactical information ("how many times does the word "Godfather" appear in the eponymous book?") but Unstructured for other purposes ("what is the significance of Michael's marriage to Kate?"). The Structured Data Processing Skill can be used in lieu of INS on Structured Information.

PROCESSING INFORMATION

Information Processing Speed, based on INS, Super-Intelligence, or Data Processing Skill, has the same relationship to Information that Speed has to Distance, and simple arithmetic can be used to determine how much a character can read and comprehend in a given time, or how long it will take to comprehend a given amount of information. The three formula are summarized below.

$$\textbf{INFORMATION PROCESSED} = \text{PROCESSING SPEED} + \text{PROCESSED TIME}$$
$$\textbf{PROCESSING TIME} = \text{INFORMATION} - \text{PROCESSING SPEED}$$
$$\textbf{PROCESSING SPEED} = \text{INFORMATION READ} - \text{PROCESSING TIME}$$

As an Automatic Action, a character can process (e.g. read and comprehend) SPs of Information equal to his SPs of INS in 0 SPs of Time. As an Extended Automatic Action, a character can process SPs of Information equal to his SPs of INS plus the SPs of Time spent reading.

> In one minute (4 SPs) a character with an INS of 3 can process 7 SPs of information, or about 200 words. A genius with an INS of 5 can process 9 SPs of information, or about 800 words, in the same time. Dr. Quantum has a Super-Intelligence of 12 SPs. If she were to read for one hour (10 SPs of Time), she could process 22 SPs of Information. She can digest the U.S. Tax Code over her lunch break!

Visual Information: Characters can process (comprehend) unstructured information conveyed visually much faster than text. Add 15 SPs to the character's INS when processing unstructured visual information. This does not improve processing speed for memorizing or creating visual Information.

> In 12 SPs of Time (4 hours) a character with an INS of 3 can process 3 + 12 + 15 = 30 SPs of Information. That's about the equivalent of watching *The Fellowship of the Ring: Extended Edition*. As text, *The Fellowship of the Ring* is 17 SPs of Information (180,000 words) so it would take 17 – 3 = 14 SPs of Time (16 hours) for the same character to read it.

Fatigue: In the absence of a Power, a character cannot maintain their maximum Processing Speed for long without resting. After 14 SPs of Time spent processing information, the character becomes Fatigued. After 19 SPs of Time spent processing information, the character becomes Exhausted. Reduce the character's Processing Speed by 1 SP when Fatigued and by 2 SPs when Exhausted. Characters with the Tireless perk do not suffer from the Fatigued or Exhausted conditions.

PROCESSING TIME

The Time required to read and comprehend something is equal to its Information in SPs minus the character's INS score.

> For instance, let's say Stronghold stumbles on a secret dossier containing 12 SPs of Information about the Star-Spangled Squadron. If Stronghold has 4 SPs of INS, it will take him 8 SPs of Time (about 15 minutes) to read and comprehend the dossier.

Fatigue: If the Time required is 11 – 14 SPs, increase the Time by an additional 1 SP. If the Time required is 15 SPs or more, increase the Time by an additional 2 SPs. The increased Time represents the loss of speed due to Fatigue and Exhaustion (or due to avoiding fatigue by not working all the time!). Characters with the Tireless perk do not suffer from Fatigue or Exhaustion.

FAST PROCESSING

As a Challenge Action, a character can attempt to process Information more quickly, by skimming, speedreading, or otherwise "getting the gist" of the Information. The Action can be Extended or Instant. The AV is the character's INS plus the Time spent (0 for an Instant Action) and the DV is the SPs of Information – 3 SPs. Don't forget to apply the effects of Fatigue and Exhaustion if the Time spent is more than 10 SPs or 14 SPs respectively. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262).

On a White result, the character fails to comprehend or learn anything. On a Green result, the character comprehends about 10% of the Information (3 SPs less than the total). On a Yellow result, he comprehends about 25% of the Information (2 SPs less than the total). On an Orange result, he comprehends about half of the Information (1 SP less); and on a Red Result he comprehends all the Information.

<div align="center">

FAST PROCESSING:
PROCESSING SPEED + PROCESSING TIME VS. INFORMATION − 3

</div>

MEMORIZING AND WRITING

Sometimes a character will want to do more than just process Information – he will want to completely commit it to memory. Memorization takes considerably more Time than reading: 11 SPs longer, in fact. The equations below can be used to find the Time required to memorize Information, or the amount of Information memorized in a given Time. Apply the Fatigue and Exhaustion conditions as above.

<div align="center">

INFORMATION MEMORIZED = PROCESSING SPEED + MEMORIZATION TIME − 11
MEMORIZATION TIME = INFORMATION MEMORIZED +11 − PROCESSING SPEED

</div>

A Catholic seminarian with an INS of 4 SPs has a copy of the New Testament (16 SPs of Information). The Time required for him to read the New Testament is equal to its Information (16 SPs) minus his INS (4 SPs), or 12 SPs. That is increased by 1 SP due to Fatigue, to 13 SPs, or about 8 hours. If the seminarian wanted to *memorize* the New Testament, the Time required would be its Information plus 11 SPs (27 SPs total) minus his INS (4 SPs) or 23 SPs. That would then be increased by 2 SPs due to Exhaustion, bringing it to 25 SPs - about four years of continuous effort!

Meanwhile, Dr. Quantum, with her Super-Intelligence of 12 SPs, can read the entire New Testament in about a minute (4 SPs of Time). She can memorize it completely in a long weekend (16 SPs of Time). She loses no time to fatigue when reading the New Testament but he does lose 1 SP of Time to fatigue when memorizing it. The Time required was 16 SPs + 11 SPs – 12 SPs, or 15 SPs, which was increased by 1 SP for fatigue.

Writing is slower than reading but faster than memorization. Use the equations below to find the Time required to write a piece of Information, or the amount of Information written in a given Time. Apply the Fatigued and Exhausted conditions where applicable.

<div align="center">

INFORMATION WRITTEN = PROCESSING SPEED + WRITING TIME − 7
WRITING TIME = INFORMATION WRITTEN + 7 − PROCESS SPEED

</div>

Having read the U.S. Tax Code (22 SPs of Information), Dr. Quantum is unimpressed. She decides to re-write the entire Federal tax system based on better economic principles. The time required for her to re-write the U.S. Tax Code is equal to the SPs of Information plus 7 SPs (29 SPs total), minus her Super-Intelligence of 12 SPs, or 17 SPs. The Time required is then increased by 2 SPs due to Exhaustion, bringing it to 19 SPs. After about three weeks of work, she submits her revision to Congress.

FAST MEMORIZATION AND WRITING

As a Challenge Action, a character can attempt to memorize or write Information more quickly. The Action can be Extended or Instant. The AV is the character's INS plus the Time spent (0 for an Instant Action). The DV is the SPs of Information +8 for memorization, or SPs +4 for writing. Don't forget to apply the effects of Fatigue and Exhaustion if the Time spent is more than 10 SPs or 14 SPs respectively.

On a White result, the character fails to memorize or write anything. On a Green result, the character memorizes or writes about 10% of the Information (3 SPs less than the total). On a Yellow result, he memorizes or writes about 25% of the Information (2 SPs less than the total). On an Orange result, he memorizes or writes about half of the Information (1 SP less); and on a Red Result he memorizes or writes all the Information.

FAST MEMORIZATION:
INS (+ TIME) VS. INFORMATION MEMORIZED +8
FAST WRITING:
INS (+ TIME) VS. INFORMATION WRITTEN + 4

Dr. Quantum is re-writing the U.S. Tax Code (22 SPs of Information). She wants to get it done in 5 days (17 SPs of Time). Her AV is 29 - her INS (12 SPs) + her Time spent (17 SPs). It's reduced by 2 SPs to 27 by Exhaustion because she's spending 15 or more SPs of Time. Meanwhile, her DV is 26 (22 SPs of Information + 4). Her RV is +1. She rolls a 42, a Yellow result. She's only written 20 SPs of Information - about 25% of her revised Tax Code.

QUALITY WRITING

Most of the time, all that matters is the quantity of the Information. But sometimes the quality of a character's writing (including screenwriting, playwriting, songwriting, programming, etc.) is relevant. As an Extended Challenge Action, a character can attempt to write high-quality Information suitable for commercial publication. The AV is the character's INS plus the Time spent. The DV is the SPs of Information +7. Don't forget to apply the effects of Fatigue and Exhaustion if the Time spent is more than 10 SPs or 14 SPs respectively.

On a White result, the character fails to produce anything of quality. On a Green result, the character creates workman-like material of mediocre quality. On a Yellow result, the character produces professional work (book, song, etc.) of good quality that audiences would enjoy, albeit nothing of critical acclaim. On an Orange result, the character produces an excellent work that would be well-regarded by critics and fans. On a Red result, the character produces a recording hit, bestseller, or otherwise top-notch work to critical acclaim.

QUALITY WRITING:
INS + TIME VS. INFORMATION WRITTEN + 7

It's July 2011, and the fantasy writer George R.R. Martin has just begun writing *The Winds of Winter*, the sixth book of his bestselling *A Song of Ice and Fire* series. He's aiming for an 800,000-word doorstopper (19 SPs of Information), so his DV for creative writing is 19 + 7 = 26 SPs. George has 7 SPs of Profession (fantasy writer). He's not Tireless, so for a project of this length his score is reduced by 2 to 5 SPs. He spends six months (22 SPs) on the draft to get an AV of 22 + 5 = 27. His RV is +1. On January 2012, George rolls 1d100 on the CHART and gets 45, for a Yellow result. George is really worried his fans won't accept anything less than a Red result, so he throws the draft in the trash and starts over.

He repeats these checks on July 2012, January 2013, July 2013, January 2014, July 2014, January 2015, July 2015, January 2016, July 2016, January 2017, July 2017, January 2018, July 2018, January 2019, July 2019, and January 2020, but he doesn't manage a single Red result. He tells his editors not to worry – the book will be definitely be ready by July 2020. (Editor's Note: It wasn't.)

STRUCTURING INFORMATION BY READING AND WRITING

It takes the same amount of Time to transform Unstructured Information into Structured Information as it would take to first read and then write the Information. This can be done as an Automatic Action or hastily as a Challenge Action, as above.

EARNING & SPENDING MONEY

Money can be measured in SPs. 0 SPs of Money represents a single penny. 10 SPs of Money represents $10. 20 SPs of Money represents $10,000. Every additional 10 SPs of Money is another thousandfold increase, so 30 SPs is $10 million, 40 SPs is $10 billion, and so on.

INCOME OVER TIME

As an Extended Automatic Action, a character can earn SPs of Money equal to his SPs of Income plus Time in SPs spent working.

Fatigue and Exhaustion: In the absence of a Power, a character cannot keep working endlessly without resting. After 14 SPs of Time spent working, the character becomes Fatigued. After 19 SPs of Time spent working, the character becomes Exhausted. Reduce the character's Income by 1 SP when Fatigued and by 2 SPs when Exhausted. Characters with the Tireless perk ignore these conditions.

In one hour (10 SPs) a laborer with 0 SPs of Income can earn 10 SPs of Wealth, or about $10. In a day's work (13 SPs), he can earn (0 + 14 – 1 = 13 SPs of Wealth, or about $80. In a year's work (23 SPs), he can earn (0 + 23 – 2) 21 SPs of Wealth, or about $20,000. Meanwhile, a top attorney with an Income of 7 SPs can earn $1,280 per hour (17 SPs) or $10,000 per day (20 SPs). In a year (23 SPs), the attorney can earn (7 + 23 – 2) 28 SPs of Wealth, or about $2.5 million. The highest paid athlete in the world, Lionel Messi, earns $125 million (34 SPs) per year, so his Income is (34 +2 – 23) 13 SPs.

CASH ON HAND

A character has access to liquid cash equal to his Income +17 SPs. As an Automatic Action, a character can immediately purchase some good or service (such as a car, house, movie tickets, etc.) provided his Income + 17 equals or exceeds the good's or service's Monetary Cost in SPs. Otherwise, purchasing the good or service requires a Challenge Action with an AV equal to the character's Income and a DV equal to its Monetary Cost – 17.

The laborer (0 SPs of Income) could purchase a smartphone (17 SPs) instantly but doesn't have liquid cash for a motorcycle (20 SPs). The lawyer (7 SPs of Income) could buy a sportscar (24 SPs) for cash but couldn't afford to that for a private jet (30 SPs). The world's highest-paid athlete (13 SPs of Income) could instantly acquire a private jet (30 SPs) but isn't liquid enough to buy a $100 million Bel Air mansion (34 SPs) for cash.

Each time a character uses his Income to acquire something of value equal to his Income +17, his Income is temporarily reduced by 1 SP. The penalty is cumulative. The character's Income recovers at a rate of 1 SP per Issue or per 20 SPs of Time, whichever comes first.

HIRING NPCS

Sometimes, wealthy characters may wish to hire NPCs. NPCs can only be hired at the GM's discretion by characters with appropriate Authority, Contacts, and/or Criminal Connections. Hiring an NPC is treated as purchasing an object with an SP Cost equal to the NPC's Income + 21. A large team of NPCs can be hired at a cost equal to the NPC's Income + 21 + the Team bonus granted by a team of that size.

Renard the Fox has an Income of 13 SPs. He can buy objects costing up to (13 + 17) = 30 SPs. He wants to hire some absent-minded professors (p. 473) to work with him on a project. Absent-minded professors have an Income of 6, so the cost to hire a professor is (6 + 21) = 27 SPs. The Fox could hire enough professors to get a Team bonus of (30 – 27) = 3 SPs, or about 7 to 12 professors.

Purchase Cost	Income Loss Recovery Time
Income +16 or less	No Income loss
Income +17	20 SPs (6 weeks)
Income +18	21 SPs (12 weeks)
Income +19	22 SPs (24 weeks)
Income +20	23 SPs (1 year)
Income +21	24 SPs (2 years)
Income +22	25 SPs (4 years)

NET WORTH

A character's net worth is equal to his Income + 22 SPs. Net worth represents the absolute maximum of financial resources the character could bring to bear without bankrupting himself. A character can use his net worth (Income + 22) in lieu of his liquid cash (Income + 17) to purchase a good or service. Doing so reduces the character's Income by 1 SP. This represents the cost of servicing debt while paying for the good or service.

MONEY = INCOME + WORK TIME
CASH ON HAND = INCOME + 17
NET WORTH = INCOME + 22

The character's Income recovers at a rate of 1 SP per 25 SPs of Time. If the good or service has a Monetary Cost more than Income + 17 but less than Income + 22, then the Income recovers at a proportional rate. A purchase costing Income + 21 requires 24 SPs of Time to pay back; a purchase costing Income +20 requires 23 SPs of Time; a purchase costing Income +19 requires 22 SPs of Time; and a purchase costing Income +18 requires 21 SPs of Time.

The laborer (0 SPs of Income) could purchase a new truck (22 SPs) by taking out a loan. His Income would be temporarily reduced by 1 to -1 SPs for future purchases until he's paid off the truck. The world's highest-paid athlete (13 SPs of Income) could borrow funds to purchase a $200 million soccer franchise (35 SPs), reducing his Income to 12 SPs until he's paid off that debt.

INTERACTING WITH NPCS

Not every problem is solved with super-strength or psychic blasts. Sometimes a hero may need to call on the social arts to persuade, seduce, or intimidate one or more NPCs.

For purposes of interaction, every NPC or group of NPCs has an Attitude that indicates how much they feel about the character they're interacting with. There are four Attitudes: Friendly, Indifferent, Avoidant, or Hostile. The GM determines the starting Attitude of a target based on the circumstances, the reputation of the characters, and their own particular campaign and adventure scenario.

★ A **Friendly** NPC actively supports the character or his goals or organization. He might be a fan of the character, a patriotic citizen, or just a benevolent and helpful "good Samaritan."

★ An **Indifferent** NPC may support the character or his organization or goal but is distracted by real-life concerns. He might simply be a disinterested stranger, a clockwatching bureaucrat, bored clerk, etc.

★ An **Avoidant** NPC is selfishly concerned with minimizing personal risk and maximizing personal utility. He might also be a petty bureaucrat who enjoys making people wait, or a curmudgeon who enjoys being difficult.

★ A **Hostile** NPC is actively opposed to the character personally or to his organization, goals, etc.

HAVING FANS

Some ascendants prowl in the darkness, perpetrating their dauntless or dastardly deeds anonymously. Others soar through the headlines of the tabloids as frequently as they fly through the heavens, becoming as famous as actors, musicians, or world leaders. A character's Reputation Attribute measures how celebrated he is. Most people have a Reputation of 3 SPs with about 200 fans.

The Reputation and Crowd Size table shows the fanbase that a character has built based on his SPs of Reputation. A fan is an NPC who recognizes the character by name on sight and has a Friendly Attitude towards them. (Often, it's too friendly.)

Reputation/Crowd Size (SP)	Fanbase/Crowd Size
-4	1
-3	3
-2	6
-1	12
0	25
1	50
2	100
3	200
4	400
5	800
6	1,600
7	3,200
8	6,400
9	12,500
10	25,000
11	50,000
12	100,000
13	200,000
14	400,000
15	800,000
16	1,600,000
17	3,250,000
18	6,500,000
19	13,000,000
20	25,000,000
21	50,000,000
22	100,000,000
23	200,000,000
24	400,000,000
25	800,000,000

A character's Reputation score encompasses his entire network of fans as well as the means by which the character communicates with his fans. Some characters might have a blog, forum, chat server, or social media account through which they talk directly to fans, others might have social media managers who do it for them, or publicists who place stories promoting their brand, or have friends at the networks who invite them as guests on cable talk shows or AM talk radio.

NOTORIETY

Characters with the Notorious Drawback have 1 or more SPs of Notoriety. Notorious characters attract haters, with the number of haters determined by their SPs of Notoriety. A character can have both Reputation and Notoriety, and attract both fans and haters.

ATTRACTING A CROWD

It is both a blessing and curse of being famous that you can attract crowds everywhere you go.

ATTRACTING A SPONTANEOUS CROWD

Anytime a character spends time in a public location, he might attract a spontaneous crowd of fans, onlookers, paparazzi, reporters, and similar NPCs. The crowd's Attitude will be Friendly to the character. (Characters with the Notorious Drawback also attract Hostile crowds, see p. 310).

The Crowd Size at a location, measured in SP, that gathers over the course of a character's public appearance is equal to the character's Reputation + the Time the character spends in a location – 25. The Time until the first fan arrives is equal to 21 - the characters' Reputation. The Crowd Size or Time are modified by the factors below.

CROWD SIZE AT LOCATION = REPUTATION + TIME SPENT AT LOCATION + MODIFIERS – 25
TIME UNTIL FIRST FAN ARRIVES = 21 – REPUTATION – MODIFIERS

Time: After an hour, the crowd churns rather than get larger. The maximum SP score for Time spent at a location is capped at 10 SPs.

Location: The Crowd Size assumes the character is in the core of a densely populated urban area. Reduce the Crowd Size by 3 SP if the character is in a medium-density urban area or a suburban ring around a dense city. Reduce it by 6 SP if the character is in the wide exurban periphery. Reduce it by 9 SP if the character is in the rural countryside. Characters in empty wilderness do not attract crowds, unless they have a large fanbase of animals.

Danger: If the situation is potentially dangerous to bystanders, reduce the Crowd Size by 1 SP. If the situation is definitely dangerous, reduce Crowd Size by 2 SP. If it's potentially deadly, reduce it by 3 SP. If the situation is obviously deadly, reduce it by 4 SP (but if you're famous enough there's always some idiots…).

Interest: If the character begins engaging with his fans (rather than ignore them), increase the Crowd Size by 1 SP. If he begins doing something particularly interesting (such as a flashy display of his powers or a brawl with a rival), increase the Crowd Size by 2 SP.

Weather: In poor weather (cold or rainy), decrease the Crowd Size by 1 SP. In very poor weather (cold and rainy), reduce the crowd size by 2 SP.

Timing: If the character is out during an off-peak time, reduce the crowd size by 2 SP. If the character appears during the least likely time (e.g. the middle of the night at an office building), reduce the Crowd Size by 4 SP.

Region: Some characters have particular areas where they are more famous or notorious based on their heroic or villainous deeds (e.g. "He's big in Europe.") The GM can increase or decrease Crowd Size by up to 2 SP to reflect regional preference or hometown favor.
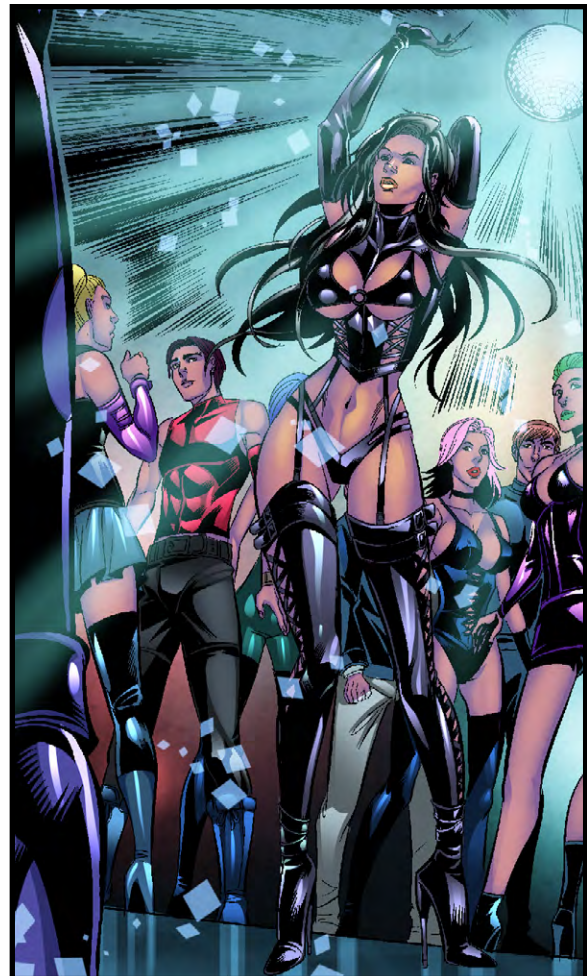
Appearance: If the character has adopted a "secret identity" or is otherwise disguised, the character does not attract a crowd. If the character is simply dressed down or looking unassuming, reduce the size of the crowd by 1 SP. If the character has Sex Appeal or Disturbing Appearance, increase the size of the crowd by 1 SP.

Multiple Characters: If more than one character is present, use the SPs of the character with the highest Reputation. If two characters have the highest Reputation, use their SPs +1.

Notoriety: If a character has 1 SP or more of Notoriety, he may attract a crowd of haters. All of the rules above apply, but the NPCs are Hostile to the character who attracted them, and will attempt to abuse, harass, or even assault him. If both fans and haters are present, the two crowds will clash unless someone influences the crowds into standing down, or separates them physically.

> Over a few years, Airborne has acquired 18 SPs of Reputation, giving him six million dedicated fans. He drops by the Washington Mall to pay his respects to the Founding Fathers. The Time until the first fan arrives is 21 – 18 = 3 SP; 30 seconds after Airborne arrives, somebody wants his autograph. After 15 minutes (8 SP), he is surrounded by a crowd 18 + 8 – 25 = 1 SP, or 25 people. After an hour (10 SPs) at the Mall, he has pulled a crowd of 18 + 10 – 25 = 3 SP, or about 100 people. If he starts signing autographs during the hour, that will jump to 4 SP (200 people). If he starts demonstrating his powers or giving a speech, it'll jump to 5 SP (400 people). If it were a cold and rainy day, the crowd size would be reduced by 2 SP, leaving Airborne with just 25 adulating fans after an hour.

SUMMONING A CROWD DELIBERATELY

A character can summon a crowd to a particular location by announcing they will be speaking, putting on a show, signing autographs, etc. The Crowd Size that a character can deliberately summon is equal to the character's Reputation + Time given as notice – 25.

Tickets: Free or inexpensive events draw the largest crowds. For each SP by which ticket price exceeds 9 SPs ($5), decrease the Crowd Size by 1 SP. (No matter how big a crowd the character attracts, his earnings are determined by his Income Attribute. Characters with very high Reputation and low Income are presumed to have corrupt management and agents or to be bad dealmakers who let booking agents, venues, and staff capture the fees.)

Time: Sufficiently famous heroes don't need much time to get a big crowd. Their appearances become sold out (or the equivalent thereof) very quickly. The maximum SP score for Time is capped at 18 SPs (10 days).

Notoriety: If a character has 1 SP or more of Notoriety, then he will attract a crowd of haters anytime he deliberately attracts a crowd of fans. These haters will protest his appearance, form a picket line, harass and assail his fans. The two crowds may clash unless someone influences the crowds into standing down or separates them physically.

All of the other modifiers (Location, Weather, Danger) apply as above.

> Airborne puts out word through social media that he will be giving a free conference at the Durham Bulls Athletic Park in downtown Durham, NC at the end of next week. That's 18 SPs of advance notice, which is the most he can benefit from. Durham, NC is a medium-density urban area (-3 SPs). Airborne can anticipate a crowd of 18 + 18 – 25 – 3 = 8 SPs, or about 6,400 fans. How embarrassing – he can't fill the 10,000-seat venue. In NYC, he could have attracted 11 SPs, or about 50,000 fans.
>
> Meanwhile, country star Garth Brooks has 180,000,000 fans, giving him a Reputation of 23 SPs. He announces he'll host a free concert in Central Park at Christmas (21 SPs of Time advance notice). How many people will come to his concert? Central Park is a dense urban area (+0 SPs). The weather will be cold (-1 SP). Therefore the audience will be 23 + 18 – 25 – 1 = 15 SP, or about 800,000 people.

INFLUENCING A CROWD

From time to time, a character might need to persuade a crowd. For instance, a hero might need to persuade a foolish crowd of beachgoers enthralled by the majesty of an incoming tsunami that it's time to flee the beach; or convince an angry crowd of rioters on the edge of violence to put away its weapons and talk things through.

ATTITUDE OF CROWDS

Like NPCs, crowds have Attitudes. The GM determines the starting Attitude of a crowd based on the circumstances, the reputation of the characters, and their particular campaign and adventure scenario. The following guidelines apply:

★ A **Friendly** crowd is a gathering of fans in support of the character's activities. A crowd that is spontaneously attracted or summoned by a character is a Friendly crowd.
★ An **Indifferent** crowd is a group that gathered for its own purposes, such as watching a ballgame, seeing a concert, shopping for Christmas presents, etc. Most crowds in most circumstances are Indifferent.
★ An **Avoidant** crowd is a mob that gathered for its own purposes but now wants to disperse or avoid trouble. A panicked throng of moviegoers in a burning theater is an example of an Avoidant crowd.
★ A **Hostile** crowd is a gathering of protestors, activists, or fans of a rival, all actively working against the hero. Characters who suffer the Notorious Drawback will frequently encounter Hostile crowds. Characters who confront a famous and popular NPC may also face Hostile Crowds – the fans of the NPC.

PERSUADING A CROWD

Persuading a crowd to do something is a Challenge Action. The AV is the character's SPs of CHA/Persuasion. If the crowd is Friendly, the character can substitute his SPs of Reputation. If the crowd is Indifferent, he may substitute his SPs of Reputation -1; if Avoidant, Reputation -2. A character cannot use Reputation against Hostile crowds, nor can he use his Notoriety.

The DV is the SPs of Crowd Size + 8. If the crowd is Friendly, decrease the DV by 1. If the crowd is Avoidant, increase it by +1; and if Hostile, by +3.

Persuading a crowd has a Color Threshold for success that depends on what the character is asking of the crowd. A Green or better result suffices if the character wants to excite the crowd about doing what it gathered for without endangering them in any way. Examples would include masters of ceremonies trying to fire up the crowd ("Let's hear a round of applause for Johnny!") and sports coaches getting their athletes pumped up ("Team, I want you to get out there and show them what Steelers are made of!").

A Yellow or better result is required if the character wants the crowd to do something that isn't really what they came there for but is in its rational self-interest. For instance, directing beachgoers to flee from an incoming tsunami or persuading an uncertain crowd on a crashed jetliner to make an orderly escape through the emergency exits would each require Yellow results. Exciting a crowd's proclivities to dangerous levels also requires a Yellow or better result ("You know what them supers done – let's get 'em!").

An Orange or better result is required if the character wants the crowd to do something that isn't what they gathered for and seems dangerous. If a character wants to persuade a crowd of football fans to put down their beer and pretzels and storm the terrorists on the field, he needs an Orange result.

A Red result is required if the character wants the crowd to do something that is the exact opposite of what they came for and seems dangerous to boot. Convincing a platoon of enemy soldiers to join the hero's team would require a Red result.

On a White result, the crowd's Attitude shifts one degree towards Hostile. The character can nevertheless attempt to persuade the crowd again by expending another Challenge Action.

PERSUADE CROWD:
CHA / (REPUTATION + MODIFIER) VS. CROWD SIZE + MODIFIER + 8
DV MODIFIER:
-1 IF CROWD FRIENDLY, +1 IF CROWD AVOIDANT, +3 IF CROWD HOSTILE

Airborne is enjoying the Garth Brooks concert when the Sickle detonates a bomb in Central Park. Panic spreads through the crowd as the flames roar. Nearby, Airborne sees a huge mob of 1500 concertgoers about to stampede into a waiting ambush by the Sickle's minions. He flies over to persuade them to take a longer route that will avoid the ambush. Airborne has 7 SPs of Charisma and 18 SPs of Reputation. Since the crowd is Avoidant, he can use his SPs of Reputation – 2, which gives him an AV of 16. The 1500-person mob has a Crowd Size of 6 SP. The mob came for the concert and now it just wants to get to safety, so it's an Avoidant crowd (+1 DV). The total DV is therefore 6 + 8 + 1 = 15 SP. Airborne's RV is +1. He needs an Orange result, because taking a longer route seems dangerous.

Teaming Up: Characters cannot team up to persuade a crowd. However, they can split the crowd between them, reducing the effective Crowd Size each character has to manage.

INFLUENCING INDIVIDUAL NPCS

Sometimes a hero has to get up close and personal with a particular NPC. Characters can leverage their personal magnetism and their fame and celebrity to try to get their way with NPCs.

REQUESTING A FAVOR

Sometimes a character wants something he isn't really entitled to. A famous model might want to borrow a million-dollar necklace from Cartier. A rock star might want access to the world's civic and corporate leaders to discuss the cause de jour. An ascendant might want a tour of Area 51.

Requesting a favor from an NPC is a Challenge Action requiring a CHA/Persuasion vs. RES Emotion Attack Check. The Color Threshold for success depends on the favor. A Green or better result suffices if the character wants something that is routinely offered to friends, family, or famous people, such as an airline seating upgrade, a table at a hot restaurant without reservations, or a detour around the velvet rope, without putting the target at risk.

A Yellow or better result is required if the character's request carries a modicum of risk for the target if he agrees, balanced by either some compensation for taking the risk or by a chance of blowback for not doing so. Examples might be asking a guard to sign-off on a shipment without calling headquarters ("You don't want to piss off the general with red tape!"); or getting a concierge to arrange for some hookers and blow ("Don't you want me to say nice things about this hotel to my fans?").

An Orange or better result is required if the character's request is obviously risky for the target and the only compensation is idealistic ("you're doing the right thing"). Examples of Orange requests include asking a US National Guard armorer to smuggle automatic weapons off base for a vigilante friend ("I need these guns to take down Sickle") or asking a CSI investigator to let the character onto a sealed crime scene with substantial risk of damage to the evidence ("You know I'm the only one who can find this killer!").

A Red result is required if the character's request would require the target to violate a sworn duty or oath and undertake significant personal risk, and/or otherwise obviously act against his own self-interest. Asking the Secret Service to arrest the President is a Red request.

Favors from Multiple Targets: If a character needs to persuade more than one NPC at once, apply the Multi-Attack Penalty (see p. 391). The Multi-Attack Penalty reduces the AV by 1 for 2-3 targets, by 2 for 4-6 targets, etc.

Principled: Characters with the Principled Perk never do favors that would cause them to violate their Code of Honor or Duty.

Reputation: If the character's Reputation is 5 or more SP greater than the target's Reputation, he gains a +1 bonus to his AV. If 10 or more, he gains a +2 bonus, and so on. Conversely, if the target's Reputation is 5 or more SP greater than the character's Reputation, he gets a +1 bonus to his DV, if 10 or more a +2 bonus, and so on.

Target Attitude: If the NPC is Friendly, decrease the DV by 1. If the NPC is Avoidant, increase it by 1. If the NPC is Hostile, increase it by 3. Do not apply Target Attitude adjustments if the character is using Intimidation.

Target Determination: If the NPC's Determination has been reduced to 0 by Intimidation or other means, reduce the DV by 1.

Teaming Up: Characters cannot team up to request a favor.

Trying Again: A character cannot try again to request a favor from an NPC until he has either befriended or intimidated the NPC or has done the NPC an equivalently valuable favor first ("you owe me").

REQUEST FAVOR FROM NPC:
CHA + MODIFIER VS. RES + MODIFIER
AV MODIFIER:
+1 PER 5 SP CHARACTER REPUTATION > NPC REPUTATION
DV MODIFIER:
-1 IF TARGET FRIENDLY, +1 IF TARGET AVOIDANT, +2 IF TARGET HOSTILE;
+1 PER 5 SP REPUTATION > CHARACTER'S REPUTATION

Airborne needs to persuade Garth Brooks to cancel his upcoming concert until he can stop the Sickle. Airborne has 7 SPs of CHA and 18 SPs of Reputation. Garth Brooks has 5 SPs of CHA and 23 SPs of Reputation. As a patriotic country music star, he's Friendly to Airborne. Airborne's AV is 7. Brook's DV is 5, modified by -1 due to his Attitude and +1 due to his greater Reputation. Therefore the Attack Check's RV is 7 − (5 +1 -1) = +2. If Garth Brooks cancels his concert it will cost him a lot of money, but not doing so could cause a catastrophe. The GM decides it's a Yellow request. Airborne rolls a 27 on the CHART and scores an Orange result. Garth Brooks is grateful for the warning and agrees to cancel the concert.

DEMANDING A FAVOR

If the carrot doesn't work, there's always the stick. Demanding a favor from an NPC is a Challenge Action requiring a CHA/Intimidation vs. RES Emotion Attack Check. The Color Threshold for success is the same as for Requesting a Favor. All of the modifiers above apply except for Target Attitude, which is irrelevant when demanding a favor.

Whether the character succeeds or fails at demanding the favor, the target's attitude shifts to Hostile after the attempt, unless he has already been reduced to a Current Determination of 0 by intimidation or other means.

BEFRIENDING NPCS

A character can attempt to befriend an NPC in order to shift the NPC's Attitude. An Indifferent NPC can become Friendly, while an Avoidant NPC can become Indifferent, or a Hostile NPC Avoidant. A character cannot befriend an NPC he has previously Intimidated. Two different characters may, however, befriend and intimidate the same NPC.

Befriending an NPC is a (CHA/Persuasion + Time) vs. INS +10 Challenge Check. That is, the AV is the character's SPs of CHA or Persuasion plus the SPs of Time spent befriending the NPC; the DV of the Challenge Check is the SPs of the NPC's INS plus 10. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262).

The result of the Challenge Check reveals how successful the befriending was. On a White result, the attempt backfires and the NPC's Attitude shifts away from Friendly by one degree, e.g. an Indifferent NPC becomes Avoidant and an Avoidant NPC becomes Hostile. (If already Hostile the NPC stays Hostile.) On a Green result, there is no effect. On a Yellow or better result, the NPC's Attitude shifts towards Friendly by one degree.

Reputation: If the character's Reputation is 5 or more SP greater than the NPC's Reputation, he gains a +1 bonus to his AV to befriend the NPC. If 10 or more, he gains a +2 bonus, and so on. Conversely, if the NPC's Reputation is 5 or more SP greater than the character's Reputation, he gets a +1 bonus to his DV, if 10 or more a +2 bonus, and so on.

Time: NPCs have lives of their own and generally aren't willing to give PCs that much opportunity to befriend them. An Indifferent NPC will offer the character 8 SPs of Time (15 minutes) of small talk. An Avoidant NPC will offer no more than 4 SPs of Time (a minute). These limits can be bypassed if the character has a pretext to either be in the NPC's presence (e.g. they are working the same shift) or has some means of compelling the NPC to stick around ("I need you to stay at the police station").

Trying Again: After a befriending attempt is resolved, the character can try again if desired simply by allocating more Time and rolling again, provided the character did not receive a White result on the prior Challenge Check. Once a befriending attempt has received a White result, no further attempts are permitted by the character for that NPC.

Teaming Up: Characters cannot team up to befriend NPCs. Only one character may attempt to befriend an NPC at a time. Two different characters may, however, befriend and intimidate at the same time, as explained below.

BEFRIENDING NPC: (CHA + TIME) VS. (NPC INS + 10)
AV MODIFIER: +1 PER 5 SP CHARACTER REPUTATION > NPC REPUTATION
DV MODIFIER: +1 PER 5 SP NPC REPUTATION > CHARACTER'S REPUTATION

INTIMIDATING NPCS

Having a Hostile Attitude means more than vague dislike or aversion, it means actively opposing another character. This Attitude requires a level of commitment that can be disrupted if the NPC's will is broken. In game terms, if a Hostile NPC is reduced to a Current Determination of 0, he immediately becomes merely an Avoidant NPC. Any character reduced to a Determination of 0 is also easier to ask favors from. If a character has Powers such as Emotion Blast or Mental Blast, he may be able to quickly reduce an NPC to a Current Determination of 0 simply by use of his Powers. If not, a character can make an Intimidation attempt.

The character making an Intimidation attempt must allocate 0 SPs or more of Time to the attempt. The character attempting an Intimidation must remain visible and audible to the target of the Intimidation throughout the Time. (If the character is only audible or only visible to the target, an Intimidation is possible but apply a -1 penalty to the AV).

At the conclusion of the allocated Time, the Intimidation attempt is resolved as a CHA/ Intimidation + (Time x2) vs. (Target RES + 10) Emotional Attack. If successful, the Intimidation deals Psychic Determination Damage using the character's RES as the EV. The target cannot Roll with the Attack. Remember to use the RV (Attack) column on the CHART.

The GM can adjust the AV and DV of an Intimidation attempt where appropriate given the circumstances. For instance, a target who knows he will be freed on bail in a few minutes may gain a +1 bonus to his DV, while a target who fears the character already has DNA proof of his criminal behavior might suffer a -1 penalty to his DV.

Reputation: If the character's Reputation/Notoriety is 5 or more SP greater than the NPC's Reputation/Notoriety, he gains a +1 bonus to his AV to intimidate the NPC. If 10 or more, he gains a +2 bonus, and so on. Conversely, if the NPC's Reputation/Notoriety is 5 or more SP greater than the character's Reputation/Notoriety, he gets a +1 bonus to his DV, if 10 or more a +2 bonus, and so on.

Time: NPCs are even less willing to let themselves get threatened than they are willing to chitchat! Unless the character has some means of forcing an NPC to stick around (e.g. he's a prisoner), his Intimidation attempt cannot be more than 2 SP (15 seconds) long.

Trying Again: Once an Intimidation attempt is resolved, the character can conduct another Intimidation attempt if desired until the target's Determination is reduced to 0.

Teaming Up: Characters cannot team up to Intimidate NPCs Only one character may attempt to Intimidate an NPC at a time. Two different characters may, however, Befriend and Intimidate at the same time, as explained below.

Recovery: If an NPC is left alone for a while, he may have an opportunity to recover Determination. See p. 373 for Recovering Determination. When the NPC recovers Determination, his Attitude shifts back to Hostile, unless he has been befriended in the meantime.

INTIMIDATING NPC:
CHA/INTIMIDATION + (TIME X2) VS. NPC CHA + 10 EMOTIONAL ATTACK; USE RES FOR EV
AV MODIFIER:
+1 PER 5 SP CHARACTER REPUTATION > NPC REPUTATION
DV MODIFIER:
+1 PER 5 SP NPC REPUTATION > CHARACTER'S REPUTATION

Let's imagine that Reaver (CHA 8, RES 9, Intimidation 10, Reputation 8) has captured a notorious mobster (RES 5, Reputation 9, Determination 60.) The mobster is a Hostile NPC who won't tell him what he needs to know, so Reaver decides to make an Intimidation attempt. Reaver decides he can break the mobster in just 30 seconds (3 SPs of Time). He dangles the mobster over the balcony of a skyscraper for a bit and says "Do you want to take the fall for these crimes?" Then he resolves the Intimidation attempt as a (CHA + Time x 2) vs (RES + 10) Emotional Attack. The AV is 16 - Reaver's Intimidation of 10 SPs plus twice the Time of 3 SPs. The DV is 15 – the mobster's RES of 5 plus 10. The RV is +1. The Attack's EV is Reaver's RES of 9 SPs, so the Base Damage is 48.

The die roll is a 31, so the result is Yellow, which deals double the Base Damage. The Mobster's Current Determination is reduced by 96 points – more than enough to bring him to 0. "I'll talk! Just don't drop me!" he wails. The mobster is now an Avoidant NPC. Note that Reaver rolled on the RV (Attack) column of the CHART, not the RV Other column, because Intimidation is an Emotional Attack.

TEAMING UP ON NPCS

Two different characters may Befriend and Intimidate an NPC at the same time, effectively playing "good cop, bad cop" on the target. Both the "good cop" and "bad cop" must allocate the same SPs of Time to the effort. (The "bad cop" can have already performed earlier Intimidations to "soften up" the NPC if needed.)

At the end of the time period, the character attempting the Intimidation makes his Attack Check. If the Intimidation attempt is successful in reducing the NPC's Determination to 0, then the NPC immediately shifts from Hostile to Avoidant. The character attempting the Befriending then makes his own Challenge Check and applies the results. This makes it possible for an NPC to be moved from Hostile to Indifferent twice as quickly. The NPC can thereafter be Befriended further.

FIGHTING CRIME

Whether they are world-class detectives examining crime scenes for clues or vigilantes breaking bones to make the bad guys talk, characters in **Ascendant** are often crime fighters.

Antagonists are NPCs who have committed and/or plan to commit one or more acts that the heroes are investigating and/or intending to stop. **Clues** are pieces of information that help lead the PCs to the Antagonists. **Forensic Sites** are special locations in the game world that can reveal Clues if **Investigated**. **Witnesses** are special NPCs that can reveal Clues if **Questioned**.

CLUES

All Clues are pieces of Information (p. 304), but not all pieces of Information are Clues. For instance, the address of a criminal's hideout is a piece of Information and also a Clue, but a city map showing the street address of every building in the city is just a piece of Information. A fingerprint is a piece of Information and a Clue, while the FBI fingerprint database is just Information.

The quantity of Information is measured in SPs, but the quality of Clues is measured with colors – Green, Yellow, Orange, and Red – and the two are not related. A Red Clue could be 0 SPs of Information, such as an embezzler's bank account password; conversely a Green Clue could be many SPs of Information, such as a suspect's datebook. Green Clues tend to be vague hints or minor tidbits of information that only make sense in a larger context. Yellow Clues are strong hints or useful leads to other Forensic Sites or Witnesses. Orange Clues are important pieces of information that can be assembled to solve the mystery, or strong leads to promising Forensic Sites or Witnesses. Red Clues are conclusive answers to questions such as "who are the Antagonists," "where are the Antagonists located," and "what do the Antagonists intend to do next."

The colors designate the color result necessary to discover that Clue from Investigating a Forensic Site or Questioning a Witness. The GM decides the specific nature of each Clue and which Forensic Sites and/or Witnesses can reveal it. Any given Forensic Site or Witness can have Clues in some or all of the colors. When designing crimefighting adventurers for the players, the GM will distribute Clues across various Forensic Sites and Witnesses, then string them together like a scavenger hunt so that the Clues from one Forensic Site or Witness lead to another Forensic Site or Witness until the players are eventually able to deduce the identity, plans, and whereabouts of the Antagonist(s). Rules for the GM can be found in Chapter 9: Gamemastering.

INVESTIGATION OF FORENSIC SITES

Forensic Sites are locations in the game world that can reveal Clues if **Investigated**. For game purposes, a Forensic Site can be the literal scene of a crime, such as a home that was burglarized or an office that was bombed, but it could also be the home or workplace of a suspect or witness. Since Clues are just a special type of Information, a Forensic Site can also just be a repository where useful Information is kept, such as an online database or collection of social media posts; special rules apply in that case (p. 320).

FORENSIC SITE COMPLEXITY

Forensic Sites are described in-game with **Complexity**, which is a rating in SPs that reflects the difficulty in finding Clues there.

The GM determines the Complexity of a Forensic Site. In general, a Forensic Site that covers more area has a higher Complexity than one that is small in size, and a Forensic Site that is cluttered with furniture, bodies, bullets, and other objects has a higher Complexity than one that is less cluttered. Both Area and Clutter can be measured in SPs, as shown on the Area and Clutter table below.

When the total Clutter for an Area is known, and the Forensic Site covers that entire Area, the GM can simply set the Complexity for the Forensic Site to the SPs of Clutter. For instance:

★ If the Metropolitan Museum of Art were blown up in a terrorist attack, the entire Area would be a Forensic Site. The Met has over 1,600,000 items in its collection, giving it a Clutter of 23 SPs. Therefore the Complexity would be 23 SPs.
★ If a small local library was the scene of a shooting spree, the local library would be a Forensic Site. A local library has 16 SPs of Clutter, so the Complexity would be 16 SPs.
★ If a closet were ransacked by a home intruder, the closet would be a Forensic Site. If it were a typical closet, the Clutter would be 10 SPs, and the Complexity would be the same. If it were a heavily cluttered closet, filled with shoes, jackets, boxes, and so on, the Clutter and therefore Complexity would be 11 SPs.

If the Forensic Site covers only part of an Area, the GM can set the Complexity for the Forensic Site as equal to the SPs of Area plus SPs of Clutter per 0 SPs of Area. Clutter per SPs of Area can be calculated as Total Clutter – Total Area.

Imagine the Met was the scene of a shooting spree that took place in a 25,000 square foot exhibit hall. The GM notes that the Forensic Site is 25,000 sf (10 SPs of Area). The Met as a whole is 2,000,000 sf (16 SPs of Area) and has 1,600,000 items in its collection (23 SPs of Clutter), so the Clutter per 0 SPs of Area is 23 – 16 or 7 SPs, representing about 25 objects per 25 square feet. The Complexity of the Forensic Site would be its SPs of Area (10) plus its SPs of Clutter per 0 SPs of Area (7), or 17 SPs. It is much easier to investigate a shooting in one room of the Met then the destruction of the whole museum!

There are, of course, many other factors that might affect a Forensic Site's Complexity, such as the passage of time, the presence of crowds, the impact of weather, and more. A clever criminal who takes appropriate precautions could increase a Forensic Site's Complexity by up to his own INS or Investigation. The GM can and should set the Complexity to an appropriate value keeping in mind the broad guidelines on Clutter and Complexity.

SPs	Area	Benchmark	Clutter	Benchmark
0	25 sf	Toilet Stall	3 small objects	-
1	50 sf	King-Size Bed	6 small objects	-
2	100 sf	Small Bedroom	12 small objects	Possessions in a person's wallet
3	200 sf	Master Bedroom	24 small objects	Polyhedral objects in a gamer's dice bag
4	400 sf	Small Studio Apt.	3 medium objects	Possession's in a person's purse or fanny pack
5	800 sf	One-Bedroom Apt.	6 medium objects	Items in a fast food bag
6	1,600 sf	Three-Bedroom House	12 medium objects	Items on a restaurant table
7	3,200 sf	Five-Bedroom House	25 medium objects	Possessions in a clean car
8	6,400 sf	Mansion, Basketball Court	50 medium objects	Possessions in a messy car
9	12,800 sf	U.S. Bullion Vault at Ft. Knox	100 medium objects	Possessions in a messy van or truck
10	25,000 sf	Bel-Air Mansion	200 medium objects	Possessions in a typical 5' x 5' closet
11	50,000 sf	Football Field, Gates Residence	400 medium objects	Possessions in a cluttered 5' x 5' closet
12	100,000 sf	Manhattan City Block	800 medium objects	Possessions in a spartan one-bedroom apartment
13	200,000 sf	Kennedy Center	1,600 medium objects	Possessions in a minimalist one-bedroom apartment
14	400,000 sf	Lincoln Memorial Pool	3,200 medium objects	Possessions in a typical one-bedroom apartment
15	800,000 sf	Buckingham Palace	6,400 medium objects	Possessions in a cluttered one-bedroom apartment
16	1,600,000 sf	The Pentagon, 35 acres	12,800 medium objects	Books in a typical school library
17	3,200,000 sf	Grand Central Station	25,000 medium objects	Possessions in a large home
18	6,400,000 sf	Disneyland	50,000 medium objects	Merchandise in a gas station convenience store
19	12,800,000 sf	Rural 300-acre farm	100,000 medium objects	Merchandise in a typical grocery store
20	25,000,000 sf	City-state of Monaco or 1 sq. mile	200,000 medium objects	Merchandise in a typical Wal-Mart Superstore
21	50,000,000 sf	Central Park + Adjacent Blocks	400,000 medium objects	Books in the Library of Alexandria
22	100,000,000 sf	Malheur Nat. Park Giant Fungus	800,000 medium objects	Books in a typical university library
23	200,000,000 sf	Nauru Island (8 square miles)	1,600,000 medium objects	Items in the NY Metropolitan Museum collection
24	400,000,000 sf	San Miguel Island (15 sq. miles)	3,200,000 medium objects	Books in the Widener Library
25	800,000,000 sf	St. Thomas Island (32 sq. miles)	6,400,000 medium objects	Half the books in the NY Public Library

Along with its Complexity, a Forensic Site is assigned a list of Clues that can be found in it. A Forensic Site can have just one Green Clue, or multiple Clues of every color, or anything in between, depending on the circumstances

INVESTIGATING A FORENSIC SITE

Investigating involves activities such as analyzing blood spatter; examining corpses; looking for bullets, fingerprints, footprints, gunpowder residue, or dropped articles; collecting tissue samples; and countless other activities familiar from crime drama. Investigating a Forensic Site is an Extended Challenge Action. The character allocates 0 SPs or more of Time to the attempt, then makes an (INS + Time) vs. Complexity Challenge Check. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262). A character can substitute his SPs of Investigation in lieu of INS.

INVESTIGATING FORENSIC SITE:
(INS + TIME) VS. COMPLEXITY

The result of the Challenge Check reveals how successful the Investigation was. On a White result, the character discovers none of the Clues at the Forensic Site.

On a Green result, the character discovers any Green Clues at the Forensic Site. On a Yellow result, the character discovers any Green or Yellow Clues at the Forensic Site. On an Orange result, the character discovers any Green, Yellow, or Orange Clues at the Forensic Site. On a Red result, the character discovers all Clues at the Forensic Site. The number of Clues discovered is, of course, limited to the number at the Forensic Site. Not all Forensic Sites may contain all colors of Clues, and a great roll doesn't permit the PC to find what's not there.

> Detective Rial Porcher, aka Shadowmancer, has 8 SPs of Investigation. He arrives at a library that has been the scene of a terrible homicide. There are desks, tables, chairs, books, bookshelves, blood spatters, and bodies strewn everywhere. The Complexity of the Forensic Site is 16 SPs. Shadowmancer spends 9 SPs of Time (30 minutes) Investigating the Forensic Site, then makes a Challenge Check. His AV is 17 – the sum of his Investigation of 8 and the Time spent of 9 SPs. His DV is 16, the Complexity at the Forensic Site. His RV is therefore +1. He rolls 1d100 and gets a 55, a Green result. At the end of 30 minutes, Shadowmancer has found any Green Clues at the Forensic Site. (Shadowmancer could have taken an automatic Yellow result had he wished, but he was hoping to get a Red Clue.)
>
> Note that a typical detective (with, say, an Investigation of 7 SPs) would have had to spend an hour (10 SPs of Time) to have the same chance of success as Shadowmancer; it literally takes him twice as long. Remember, each point of SP improvement means the character is twice as skilled, fast, clever, etc.

Trying Again: A character may re-investigate a Forensic Site he has already investigated by spending additional SPs of Time and making a subsequent Challenge Check. The Time spent is not cumulative.

Teaming Up: Characters can team up to investigate Forensic Sites following the usual rules (see p. 264).

INVESTIGATING AND INFORMATION

As noted earlier, all Clues are pieces of Information, but not all pieces of Information are Clues. Sometimes a Clue is a small piece of Information stored inside a much larger compilation of Information. In this case, the compilation of Information is the Forensic Site, and the SPs of its Complexity are equal to the SPs of Information.

> A digital photograph (15 SPs of Information) showing the location of a serial killer's latest victim (a Red Clue) is stored inside the serial killer's computer, which has a 25-GB hard drive (32 SP of Information). The serial killer's hard drive is effectively a Forensic Site with a Complexity of 32 SPs.

When examining a Forensic Site, a character can always substitute his Investigation Skill for his INS. However, if a Forensic Site is a database, archive, or other compilation of Information, he can sometimes use the Data Processing Skill instead. Using Data Processing may be preferable if:

★ the character has more SPs of Data Processing than Investigation;
★ the character is examining unstructured visual information and wants to take advantage of the +15 SP bonus (p. 305); or
★ the character is examining structured Information, such as databases, file directors, or spreadsheets, and has access to a computer or similar object (32+ SPs of Structured Data Processing).

A character can use Data Processing on a compilation of unstructured Information when looking for "known unknowns" – specific, concrete, and factual Information. A character must use Investigation if he is looking for "unknown unknowns" that are vague, abstract, value-laden, or susceptible to judgment and interpretation.

A detective has 5 SPs of INS and 7 SPs of Investigation. He is reviewing two hours of CCTV footage (29 SPs of visual and unstructured Information) taken from a bank vault. If he is looking for footage of the robber in the bank vault, that's specific, concrete, and factual information. He can use Data Processing because he knows what he's looking for. It's useful to do this even though he doesn't have the Data Processing Skill, because he gains a +15 SP bonus to his AV for processing visual Information. An AV of 20 is much better than an AV of 7. He can get an RV of 0 in just (29 – 20) 9 SPs of Time, or half an hour.

Conversely, let's consider the same detective is now watching Stanley Kubrick's The Shining (also 29 SPs of visual and unstructured Information) hoping to glean Clues as to how Kubrick faked the moon landing. This is Investigation, not Data Processing. He will need (29 – 7) 22 SPs of Time, or about six months, of reviewing footage and mapping out this manifold conspiracy on his wall.

A character can use Structured Data Processing (usually via an object) on a compilation of structured Information when looking for specific, concrete, and factual Information of the sort that the compilation is structured to provide.

A detective has 5 SPs of INS and 7 SPs of Investigation. He has seized a financier's laptop, which has an enormous spreadsheet of high-frequency stock trades (30 SPs of Structured Information). He needs to find all of the trades involving the GLD exchange traded fund. Fortunately, he has a computer with 32 SPs of Structured Data Processing. It takes 30 – 32 = -2 SPs of Time, or about 1 second, to get a Green result.

Conversely, what if the detective doesn't actually know if the financier did anything wrong, and needs to engage in forensic accounting to look for evidence of money laundering? This is not specific, concrete, or factual information, and he must use Investigation, not Data Processing. It will take 30 – 7 = 23 SPs of Time, or about a year. (In reality there'd be a whole team working on it to reduce the Time. This is why big white-collar crime cases take so long.)

A character can also use Structured Data Processing when he has found a piece of Information (such as a fingerprint) by Investigation and wants to compare it to an available database of similar Information (such as a fingerprint database). He does not need to "investigate" the database.

A fingerprint found at a Forensic Site is compared to the FBI's 350-GB fingerprint database (36 SPs of Structured Information) to identify possible suspects. Assuming he has access to the database, querying it with his laptop will take just 36 – 32 = 4 SPs of Time, or about a minute.

QUESTIONING OF WITNESSES

Witnesses are a special type of NPC that can reveal Clues if **Questioned**. A Witness doesn't necessarily have to be hauled down to a station for police questioning. A hero in her secret identity might sweet-talk the neighborhood cat lady over tea to gain information; the same rules would apply. Questioning Witnesses works similarly to Investigating Forensic Sites.

WITNESS ATTITUDE

As with other NPCs, every Witness has an Attitude:

★ A **Friendly** Witness is one that actively supports the hero's crimefighting efforts ("How can I help, officer?").
★ An **Indifferent** Witness supports crimefighting in general but is distracted by real-life concerns ("I'm late to pick up my kids from daycare, can we keep this short?").
★ An **Avoidant** Witness is one that is concerned with minimizing any personal risk by being a rat, causing trouble, or self-incriminating ("I don't wanna say nothing to get nobody in trouble").
★ A **Hostile** Witness is one that is actively working against the hero's crimefighting ("Rot in hell, do-gooder!"). He might be a friend, family member, or accomplice of an Antagonist, or even an Antagonist himself, or simply someone who is unfriendly to the heroes.

The GM determines the starting Attitude of each Witness based on the context of the crime, the reputation of the heroes, and his particular campaign and adventure scenario.

QUESTIONING WITNESSES

As any police detective will tell you, questioning even a Friendly Witness can be a chore. Witnesses tend to ignore your questions to answer things you didn't ask, digress into irrelevant details, obsess on the wrong information, contradict their own stories, and generally make it quite hard to get to the bottom of what they saw, heard, and experienced.

Therefore, Questioning a Witness is always a Challenge Action. The character allocates 0 SPs or more of Time to the attempt, then makes a (CHA/Interrogation + Time) vs. RES Challenge Check. That is, the AV is the character's SPs of CHA/Interrogation plus the SPs of Time spent Questioning the Witness, while the DV of the Challenge Check is the SPs of the Witness's RES. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262).

The result of the Challenge Check reveals how successful the Questioning was. On a White result, the Witness reveals no clues. On a Green result, the Witness reveals any Green Clues he knows. On a Yellow result, the Witness reveals any Green or Yellow Clues he knows. On an Orange result, the Witness reveals any Green, Yellow, or Orange Clues he knows. On a Red result, the Witness reveals all the Clues he knows. (Remember that not all Witnesses may know Clues of every color; a great roll doesn't cause the NPC to reveal things he doesn't know.)
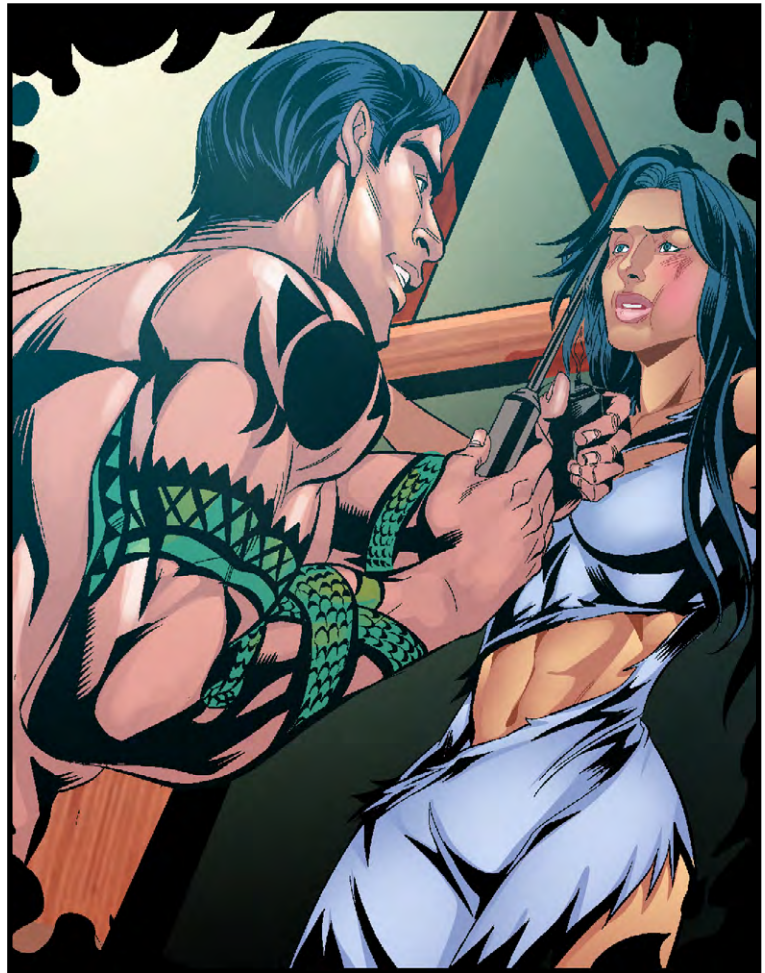
Designer's Note: The rules here allow you to handle questioning witnesses as a mechanical process, like attacking a target. However, some groups might prefer to role-play the back-and-forth questioning between the player (as interrogator) and GM (as Witness). If so then you should have the player make Challenge Checks periodically, adding SPs of Time to the AV as appropriate based on the actual time spent role-playing. To reward attentive role-play, improve a character's color result by one anytime the player asks the right questions, e.g. questions for which the answer is one of the NPC's Clues.

Witness Attitude: If the Witness is Friendly, decrease the DV by +1; f Avoidant, increase it by +1; and if Hostile, by +3.

Witness Determination: If the Witness's Determination has been reduced to 0 by Intimidation or other means, reduce the DV by 1.

Reputation: If the character's Reputation is 5 or more SP greater than the Witness's Reputation, he gains a +1 bonus to his AV to question the Witness. If 10 or more, he gains a +2 bonus, and so on. Conversely, if the NPC's Reputation is 5 or more SP greater than the character's Reputation, he gets a +1 bonus to his DV, if 10 or more a +2 bonus, and so on.

Time: Witnesses are averse to being interrogated for long periods of time. A Friendly Witness cannot be questioned for more than one hour (10 SPs of Time). An Indifferent Witness cannot be questioned for more than 15 minutes (8 SPs of Time). An Avoidant Witness cannot be questioned for more than 4 SPs of Time (a minute). A Hostile Witness cannot be questioned for more than 15 seconds (2 SPs of Time). These limits do not apply if the character has some means of coercing or compelling the Witness to stick around. Coercing or compelling the Witness to stick around shifts their Attitude by one step towards Hostile for each unit of Time.

A Friendly Witness becomes Indifferent after being questioned for one hour (10 SPs) of Time. The newly Indifferent Witness becomes Avoidant after being questions for another 15 minutes (8 SPs) of Time. That Witness becomes Hostile after being questioned for another minute (4 SPs) of Time.

A Witness whose Determination has been reduced to 0 cannot be shifted worse than Avoidant – he's too shaken and intimidated to be actively hostile. Thus an Avoidant Witness with 0 Determination can be questioned as many times as desired, if the interrogator has some way to compel him to stick around.

Trying Again: A character may re-question a Witness he has already investigated simply by allocating more Time and rolling again. However, when the total Time spent interrogating a Witness exceeds the limits above (e.g. 8 SPs for an Indifferent Witness), the Witness's Attitude shifts by one step towards Hostile.

Teaming Up: Characters can team up to question a witness following the usual rules (see p. 264).

QUESTIONING WITNESS:
(CHA + TIME) VS. (WITNESS RES)
AV MODIFIER:
+1 PER 5 SP CHARACTER REPUTATION > NPC REPUTATION
DV MODIFIER:
-1 IF TARGET FRIENDLY, +1 IF AVOIDANT, +3 IF HOSTILE; +1 PER 5 SP REPUTATION > CHARACTER'S REPUTATION

Reaver (CHA 8, INS 8) has captured a mobster (RES 5.) The mobster is a Hostile Witness. Reaver decides to spend a few seconds Questioning the mobster (0 SPs of Time). Reaver's AV is 8, from his CHA of 8 SPs plus his Time spent of 0 SPs. The mobster's DV is 8, from his RES of 5 SPs plus 3 SPs because he is Hostile. Therefore the RV is 0. The die roll is a 57, so the result is White, and Reaver receives no information. Had the mobster been an Avoidant Witness instead of a Hostile Witness, the RV would have been +2, and the result Green.

OTHER INTERACTIONS WITH WITNESSES

Characters can request favors from Witnesses, befriend Witnesses, and intimidate Witnesses using the rules for Influencing Individual NPCs (p. 314). Many Powers are useful when dealing with Witnesses. A character with Emotion Adjustment can make Witnesses agreeable to questions, while a character with Mind Reading can extract Clues directly from the Witness's thoughts.

INTERPRETING CLUES

Sometimes the meaning of a Clue is self-evident. Often, however, a Clue requires additional interpretation. Sometimes a Clue might not even be noticeable without particular Powers. A variety of possibilities are discussed below.

BIOCHEMICAL ANALYSIS REQUIRED

By default a Clue is assumed to be something comprehensible with ordinary literacy. Some Clues, however, require complex biochemical analysis to utilize. The Biochemical Analysis Power (p. 102) can be used to determine possible causes of death, gain a DNA profile on a subject, or screen tissue samples for drugs/toxins/disease, etc. Most characters do not have the Biochemical Analysis Power innately but often can gain access to the Power via a Forensics Lab (p. 231) or other objects.

A detective is investigating the home of a missing person. Unbeknownst to the detective, the missing person was killed in the house; a professional "cleaner" tidied up the crime scene. The detectives gets a lucky Red result on his Investigation Challenge Check and discovers a small amount of dried blood on the underside of a chair glide. He collects the sample and takes it to his local Forensic Lab, where a technician can analyze it using the lab's 8 SPs of Biochemical Analysis. Sequencing DNA with Biochemical Analysis is an Extended Challenge Action with a DV of 22. After 22 − 8 = 14 SPs of Time, or about 16 hours, the technician's RV is +1.

DATA PROCESSING REQUIRED

By default a Clue is assumed to be 0 SPs of Information, such as a suspect's name or a password, or otherwise self-evident enough to require no further thought. However, if a Clue consists of 1 or more SPs of Information, it might itself contain one or more additional Clues that require further effort to discover, creating nested chains of Clues within Clues. Alternatively, the Clue might need to be compared to an existing compilation of Information. Investigation of Information is discussed on p. 320 – p. 321.

> Our detective needs to know where a suspect was on the night of January 16th. He searches the suspect's apartment for Clues and, with an Orange result on an Investigation Challenge Check, discovers a datebook of itineraries hidden in the false drawer of a desk. The datebook has 13 SPs of unstructured Information. The detective now needs to Investigate the datebook.

EXPERTISE REQUIRED

By default a Clue is assumed to be something that a person of average intelligence and education can understand. Sometimes, however, a Clue may require scholarly or professional expertise to evaluate with an Extended Challenge Action against some DV representing the obscure, rare, or specialized nature of the information.

> Now our detective is trying to understand why a museum curator killed himself. He searches the curator's office for Clues and, with a Yellow result on an Investigation Challenge Check, discovers an ancient piece of red pottery painted with strange markings. The GM has determined that understanding what the fragment means requires an Archeology + Time vs. 20 Challenge Check. The detective (with just 4 SPs of INS) doesn't know what to make of the pottery fragment, but he thinks it might be important. He takes it to a renowned university professor with 9 SPs of Archeology. The professor spends a few hours (12 SPs) of Time examining the fragment, then makes a Challenge Check at an RV of 21 – 20 = +1 to identify it. Taking an automatic Yellow success, the professor explains "This is a Proto-Mayan fragment discussing the end of the world. If this fragment is correct, the world ends on December 12 of THIS year."

MATCHING INFORMATION REQUIRED

By default a Clue is assumed to be innately valuable. Sometimes, however, a character may have a Clue (such as a fingerprint) whose value depends on access to a database of similar Clues from prior investigations. If the character himself has such a database, then this is just an Extended Action using Structured Data Processing. See Investigation and Information, p. 320.

> Our hardworking detective has discovered a fingerprint at a crime scene. He happens to have a computer with 32 SPs of Data Processing and a 36 SP database of fingerprints. Querying the database with his laptop will take just 36 – 32 = 4 SPs of Time, or about a minute, after which he'll learn if there's any matches.

If the character has an appropriate type of Authority, he can use his Perk to gain access to the requisite database. Several real-world databases are discussed below. (The GM can make up other law enforcement databases for their own setting, of course.) The Time required for a response depends on how much Authority the character querying the database has, as shown on the table below. Localized queries have a faster turn-around time. Limiting a query to a particular county reduces the response time by 8 SPs, while limiting to just a single state reduces the response time by 4 SPs.

Database	Information	Authority				
		5 CP	**10 CP**	**20 CP**	**40 CP**	**80 CP**
CODIS	41 SP DNA Profiles	18 SPs (10 days)	16 SPs (2.5 days)	14 SPs (16 hours)	12 SPs (4 hours)	10 SPs (1 hour)
IAFIS	36 SP Fingerprints	15 SPs (32 hours)	13 SPs (8 hours)	11 SPs (2 hours)	9 SPs (30 min)	7 SPs (10 min)
NIBIN	38 SP Ballistics	15 SPs (32 hours)	13 SPs (8 hours)	11 SPs (2 hours)	9 SPs (30 min)	7 SPs (10 min)
FACE-SN	43 SP Face Photos	16 SP (2.5 days)	14 SPs (16 hours)	12 SPs (4 hours)	10 SPs (1 hour)	8 SPs (20 min)

★ **CODIS:** The Combined DNA Index System is a 15TB (41 SP) database of over 14.1 million DNA profiles. A character can upload a DNA profile he's collected to CODIS to look for matches.

★ **IAFIS:** The Integrated Automated Fingerprint Identification System is a 350GB (36 SP) database of over 70 million fingerprints, including 73,000 known terrorists. A character can upload the image of a fingerprint he's discovered to IAFIS to look for matches in the database.

★ **NIBN:** The National Integrated Ballistic Information Network is a 2TB database of 16 million images of ballistic evidence. A character can upload photographs of cartridge casings found at a crime scene to NIBN to look for matches.

★ **FACE-SN:** The FBI's Facial Analysis Comparison and Evaluation Services Network is a 52TB (43 SP) network of databases that includes 411.9 million photos drawn from mug shots, state driver's license photos, and other databases. A character can upload a photo of a face to FACE-SN to look for matches.

If a character doesn't have a database and doesn't have the Authority to access one, he can attempt to persuade an NPC with the appropriate Authority to give him access – this would be handled as Requesting a Favor and requires a Yellow result.

A character can use Technology Control to hack into the database and then use Structured Data Processing to extract the information he needs or simply copy the entire database for his own later use. All of the databases above are protected by firewalls and other intrusion countermeasures (7 SPs of Security). If the character is detected, system admins with 7 SPs of INS and a computer with 9 SPs of Network Technology Control will attempt to remove the character from the database and/or use Network Technology Control on his computer to determine his location and identity.

POWERS REQUIRED

By default a Clue is assumed to be something intelligible to ordinary human senses. Sometimes, however, a Clue may require superhuman characteristics to detect. Powers useful to investigators include Blindsight, Microscopic Vision, Ultra-Sensitive Scent, Ultra-Sensitive Touch, and X-Ray Vision. Power requirements can appear in three ways:

Minimum SPs Score Required: Some Clues at a Forensic Site may only be discoverable if a character has a minimum SP score in a particular Power. A minimum SP score bears no necessary relation to the color of the Clue; it may be that a Clue is easy to spot (Green) if you have the right Power. It's also possible for a Clue to be of two different Colors, one with and one without the minimum SP score requirement.

> The GM determines that microscopic drops of blood still linger at a crime scene. To find the droplets, a character investigating the Forensic Site must earn a Red result, or a Yellow result if he has at least 8 SPs of Microscopic Vision.

Power in Lieu of Investigation: Sometimes, the Clues on a Forensic Sites may be entirely invisible to an ordinary investigator, but possibly discoverable by a character with the appropriate Powers. In this case, the character uses the Power in lieu of his Investigation when investigating the Forensic Site. If desired, the GM can allow the player to believe they are using INS/Investigation against a secret DV, but actually calculate the RV and color result based on the character's SPs of Power.

> Hellhound is an ascendant with 7 SPs of Investigation and 11 SPs of Ultra-Sensitive Scent. He is investigating a Forensic Site with a Complexity of 15 SPs. He decides to spend 9 SPs of Time to get an RV of +1. Unbeknownst to him, the only Clues to be found at this Forensic Site are scent traces, and he is actually rolling with an RV of +5. The GM stops him after just 5 SPs of Time and instructs him to roll at +1 RV.

Power and Investigation: Some Forensic Sites might require both investigative prowess and some sort of superhuman ability. In these cases, the AV will be the lesser of the character's INS/Investigation and his Power.

SAVING THE DAY

Superhuman heroes often work as first responders to emergencies. Because of their incredible powers, they can accomplish more than an entire brigade of first responders. These rules cover various Actions related to disarming bombs, fighting fires, diverting asteroids, and many other disasters.

ASTEROID STRIKE

Exceptionally powerful heroes might be called on to stop an asteroid from striking the Earth, either by diverting it or destroying it. Characters will, of course, need Flight, Spaceflight, or Teleport to reach the asteroid as well as Air Supply and Pressure Protection to survive the vacuum of deep space.

ATTRIBUTES OF ASTEROIDS

The danger posed by an asteroid depends on its Speed, Weight, and Distance from Earth when detected. Asteroids can have a Speed of 12 to 18 SPs, with 15 SPs being typical (about 32,000mph). The Weight of asteroids can vary massively. A 60-foot wide asteroid, such as that which struck Chelyabinsk in 2013, has a Weight of 20 SPs. The 200- to 600-foot wide asteroid that caused the Tunguska Impact had a Weight somewhere between 40 and 45 SPs. The 6- to 45-mile wide asteroid that created the Chicxulub crater and annihilated the dinosaurs had a Weight between 47 and 56 SPs. Most asteroids have a TOU equal to 2/3 Weight + 3 and 3 SPs of Invulnerability. Of course, this can vary if it's made of an unusual metal; increase TOU and Invulnerability by 1 or more SPs if so.

Asteroid Attribute	SP Score
Speed	12 - 18
Weight	20 - 56
Toughness	2 x Weight / 3
Protection	3 - 5
Detection Range	30 - 40

Asteroids can come perilously close to Earth before being detected. In the worst case, the asteroid might not be detected until it is only 25 SPs (32,000 miles) away, as was the case for the 160-foot asteroid EF195 which passed Earth in March 2016. An asteroid is more likely to be detected at least 30 SPs (1 million miles) away, and most asteroids will be detected at 35 – 40 SPs. Such vast distances will only be traversable by characters with SPs of Spaceflight., however.

If an asteroid strikes, allocate the sum of its Weight + Speed into SPs of Explosion and SPs of Quake. For a ground strike, the SP can be divided evenly (1/2 to each). For an air detonation, allocate 25% to 33% of the SP to Quake and the remainder to Explosion.

> The Chelyabinsk meteor had a Weight of 20 SPs and a Speed of 15 SPs, for a total of 35 SP. The meteor had an air detonation, so the GM allocates 28% of the SP to Quake (10 SP) and the remainder (25 SP) to Explosion. In the real world, Chelyabinsk released thirty times the energy of the Hiroshima bomb (25 SP) and caused a Richter Scale 2.7 earthquake (10 SP) so these results are quite sound!

GETTING TO AN ASTEROID (SPACE TRAVEL)

Getting off the Earth requires 15 SPs of Flight or Spaceflight or 10 SPs of Teleport (to reach the Karman Line). Once in space, characters can travel freely using SPs of Flight, Spaceflight, or Teleport, or via an emulation of one of these Powers by Cosmic Control, Light Control, Gravity Control, or Telekinesis.

Inertia: Characters can use their Jumping Speed + 6 to push off of objects. The object is simultaneously moved as if it were thrown; subtract 6 from its Weight to reflect zero-G. Characters that move or are moved by Jumping or are forced to move due to Collision (p. 275), Knockback (p. 375), Judo Throw (p. 396), or other causes, continue moving at the same Speed in the same direction until their movement is stopped.

Cosmic Radiation: While traveling in outer space, characters are exposed to constant low-level cosmic radiation. Treat outer space as a Radioactive Site with a Radiation Level of -10 SPs (p. 350).

Heat Transfer: Heat does not transfer via convection or conduction in a vacuum but there is still loss from thermal radiation. Characters are affected by a -6 SP Ultra-Weak Cryogenic Aura, dealing 3 Cryogenic Damage every 6 SP (two minutes).

Air Supply: Since there is no oxygen in outer space, characters must either have the Air Supply Power or wear or travel in an object that affords them this Power, with SPs sufficient for their round-trip travel time (unless it's a suicide mission, of course). If a character's Air Supply is deactivated, he can hold his breath for SPs of Time equal to his SPs of RES (or Breath Control Skill).

When this time elapses, he immediately becomes Unconscious. Thereafter he takes 3 Neural Health Damage per Page until slain or until he can breathe again. A character cannot hold his breath if he has no Pressure Protection. Characters who do not breath (such as Undead) can disregard these concerns, of course.

Pressure Protection: With no air, there's no air pressure in the vacuum. Characters without Pressure Protection are vulnerable to explosive decompression from vacuum exposure. The effects of exposure occur on a Page-by-Page basis, at the start of each of the character's Panels.

★ Page 1 (3 seconds): No effect.
★ Page 2 (7 seconds): Dazed for duration of exposure.
★ Page 3 (10 seconds): Blinded from ebullism for duration of exposure. Dealt 3 Concussive Health Damage from decompression.
★ Page 4 (15 seconds): Dealt 4 Concussive Health Damage from decompression.
★ Page 5 (18 seconds): Staggered for duration of exposure. Dealt 6 Concussive Health Damage from decompression.
★ Page 6 (21 seconds): Dealt 8 Concussive Health Damage from decompression.
★ Page 7 (24 seconds): Overwhelmed for duration of exposure. Dealt 12 Concussive Health Damage from decompression.
★ Page 8 (28 seconds): Dealt 16 Concussive Health Damage from decompression.
★ Page 9 (31 seconds): Unconscious from lack of oxygen for duration of exposure. Dealt 3 Neural Health Damage from lack of oxygen. Dealt 24 Concussive Health Damage from decompression.
★ Page 10 (35 seconds): Dealt 3 Neural Health Damage from lack of oxygen. Dealt 32 Concussive Health Damage from decompression.
★ Each Page thereafter: Dealt 3 Neural Health Damage from lack of oxygen. Dealt Concussive Damage based on an EV equal to Pages of Exposure – 3 from decompression.

Airborne has flown to the International Space Station as part of an anti-asteroid task force. Unfortunately, Maximum Leader has seized control of the Station and blasted Airborne out the airlock. Maximum Leader has 15 SPs of Cosmic Control, which he used to stunt Telekinesis; thus Airborne (with Weight of 3 SPs) is now 12 SPs outside the Station. He doesn't have any Air Supply or any Pressure Protection, so he can't even hold his breath.

Airborne begins to suffer exposure at the start of his next Panel, but there are no immediate effects. Fortunately, Airborne is wearing a rocket pack created by his friend Dr. Quantum, and he uses a Movement Action to fly back to the station. (If he didn't have the rocket pack, then on his Panel he'd move another 12 SPs away from the station.) He doesn't want to breach the station's hull for fear of harming his friends inside, so he uses a Challenge Action to attempt to open the blast door. Airborne's no technician, and he fails.

The next Page Airborne becomes Dazed at the start of his Panel. He tries again to open the blast door and fails. On the third Page, Airborne becomes Blinded (the moisture in his eyes has evaporated) and takes 3 Concussive Damage as his lungs begin to expand. He now has a -4 AV penalty to his Challenge Check on the door, and he fails again. On the fourth Page, he takes 4 Concussive Damage. He tries again to open the door and fails. On the fifth Page, he takes 6 Concussive Damage and becomes Staggered. Now he can't even take Challenge Actions!

By the tenth Page, he has become Unconscious, and suffered a cumulative total of 105 Concussive Damage and 6 Neural Damage. An ordinary man would be dead by now, but since Airborne has 480 Health, he's still alive. He will take 48 Concussive Damage on the eleventh Panel along with 3 Neural Damage, and the amount of Concussive Damage will keep increasing. Eventually his lungs will explode… unless Maximum Leader decides he'd like to play with his toys more before annihilation.

DIVERTING AN ASTEROID

Diverting an asteroid is an Extended Action using MIG similar to stopping a moving object (p. 274), but for two differences. First, the asteroid does not need to be halted, merely changed in trajectory – a considerably easier task. Second, the character has no gravity field within which to exert impetus, so he must supply his own; therefore he uses the lower of his SPs of MIG or Flight/Spaceflight. Characters who use Powers like Telekinesis or Gravity Control in lieu of MIG do not need to have SPs of Flight or Spaceflight, however, as their abilities provide the necessary impetus.

The Time available to divert an asteroid before it impacts is equal to the asteroid's Distance from Earth – the asteroid's Speed. The Time required to divert an asteroid with an Extended Action is equal to one-half the total of its Weight + 17 – the lesser of the character's MIG or Flight/Spaceflight. The Distance the asteroid will travel towards Earth during this Time is equal to its Speed + the Time. If that means the asteroid reaches the Earth (e.g. the Required Time exceeds the Available Time), then the asteroid causes an Explosion and Quake with combined SPs equal to its Weight and Speed… which is quite a lot.

To divert an asteroid with an Extended Challenge Action, the character must make a Challenge Check. The AV is the sum of the lesser of the character's MIG or Flight/Spaceflight + twice the available Time. The DV is the sum of the asteroid's Weight + 17.

If the color result is Green or better, the asteroid moves its Speed over the appropriate SPs of Time and is then diverted. If the color result is White, the asteroid is not diverted, and the character may suffer Damage. The GM should resolve a Collision against the character (see p. 275).

AVAILABLE TIME = DISTANCE TO EARTH − ASTEROID SPEED
REQUIRED TIME = ½ X [ASTEROID WEIGHT +17 − (MIGHT</>FLIGHT)]
DISTANCE CLOSED WITH EARTH = ASTEROID SPEED + REQUIRED TIME
DIVERT ASTEROID:
MIGHT</>FLIGHT + AVAILABLE TIME + AVAILABLE TIME VS. ASTEROID WEIGHT + 17

Asteroid FN762 is on a collision course with Earth. FN762 is a 60-foot wide "city killer" with a Weight of 20 SPs and Speed of 12 SPs. It is at a Distance of 30 SPs from Earth. It will hit Earth in (30 – 12) 18 SPs of Time, or about ten days. The threat is considered catastrophic, so American Eagle (MIG of 15 SPs and Flight of 15 SPs), is dispatched to stop the asteroid. Since he is flying towards the asteroid while it's flying towards him, the Speed at which he approaches it is equal to 15 SPs +1, or 16 SPs. Therefore it takes him (30 – 16) 14 SPs of Time to get there, or about sixteen hours. The asteroid is still 30 SPs from Earth and 18 SPs of Time from impact.

American Eagle takes an Extended Action to divert FN762. The Time required is ½ x [20 + 17 −15] or 11 SPs (about two hours). The Distance the asteroid will travel during this time is 12 (its Speed) + 11 (the Time to divert), or 23 SPs. Since it was 29 SPs away, the Earth is no longer in any danger. Shifting this asteroid's trajectory was no sweat for American Eagle!

What if this had been a Tunguska-type asteroid weighing 40 SP? In that case, the Time required would have been ½ x [40 + 17 – 15] or 21 SPs. With only 18 SPs of Time until impact, American Eagle wouldn't have saved Earth with an Automatic Action. Instead he'd have to use a Challenge Action. His AV would be 15 + 18 + 18 = 47. His DV would be 40 + 17 = 57. With an RV of -10, he's going to be very unlikely to stop the asteroid, even with Hero Points. If the asteroid only weighed 30 SPs, he'd be able to handle it in the time available.

OBLITERATING AN ASTEROID

Sometimes an asteroid is simply too big to diverted. Then there's no choice but to blow it up! As noted above, asteroids typically have TOU equal to 3 + two-thirds their Weight with commensurately high Durability. Most also have 3 SPs of Protection because of their metallic composition. If attacked, an asteroid has an effective VAL and AGI of 0. Because the asteroid has no gravity field holding it in place, it automatically Rolls with any Attack, reducing Damage to the Base.

If an asteroid can be Destroyed in one attack that takes it from its Maximum Durability to a negative value of equal or greater magnitude, then it has been utterly obliterated and poses no further threat. Otherwise, damage is assumed to blow the asteroid into two large chunks (each with Weight equal to the original asteroid's Weight -3 and TOU equal to the original asteroid's SPs -2)

and countless small chunks. The small chunks scatter and pose no further threat to life on Earth, but the large chunks remain on a collision course for Earth. Those chunks must either be diverted, obliterated, or reduced into yet-smaller chunks by repeating the process. A number of repetitions equal to the asteroid's Weight/3 (rounded up) will result in the chunks being reduced to Weight 0.

In the absence of threats (e.g. aliens defending the asteroid), obliterating an asteroid can be handled as an Extended Automatic Action. The Time in SPs required to reduce the size of the asteroid's chunk by 3 SPs is equal to (Toughness/2) – (Effect Value/2) + 2. Since each time the number of chunks doubles their Durability halves, the Time for each repetition stays constant.

> American Eagle knows he has no chance to divert the Tunguska-type asteroid. He decides to smash it down to size with his fists. Using Power Attacks, American Eagle's AV is his VAL of 15 -1 = 14. His DV is 0, so he can automatically strike for a Red result. However, his punches cause the asteroid to roll in space, so the Damage dealt is reduced to a Green result. His EV is his MIG of 15 + 1 = 16, so he deals 512 points of Bludgeoning Damage with every blow. The asteroid's Protection of 3 SPs reduces this by 6 points to 506. Unfortunately, the asteroid has a TOU of 30 SPs, giving it 327,680 Durability. It will take American Eagle (327,680/506) = 648 Pages to reduce the asteroid to a Current Durability of 0, or about 9 SPs of Time. The asteroid will then be in two chunks, each with a Weight of 37 SPs, Toughness of 28 SPs, and 163,840 Durability. After another (163,840/506) + (163,840/506) = 648 Pages, there will be four chunks. Each of these chunks has a Weight of 34 SPs, Toughness of 26 SPs, and 80,000 Durability, and so on. Using the Extended Automatic Action formula, it takes American Eagle (30/2) – (16/2) +2 = 15 – 8 +2 = 9 SPs to break the asteroid into two chunks.

AVALANCHE

An avalanche occurs when a slab of snow, rock, or mud slides down a steep slope. The impact of an avalanche can be immensely destructive, and heroes might have to stop or divert an avalanche in order to save a ski resort or small town.

ATTRIBUTES OF AVALANCHES

Avalanches have various Attributes measured in SPs: Density, Speed, Travel Distance, Width, Volume, Weight, Magnitude, and Duration. An avalanche's Density and Speed are determined by its material – powder snow, wet snow, mud, rock, or debris. An avalanche's Volume, Width, and Travel Distance are determined by its size – small, medium, large, very large, or extreme. Size also modifies the avalanche's Speed.

Note that Volume is the amount of material that slides, Width is the frontage across which the avalanche's material slides, and Travel Distance is the total distance the avalanche's frontage advances. The Avalanche Table below lists the SP scores of common avalanches. Values can vary by +/-1 SP in each category (e.g. a medium avalanche might have a Volume of 7 to 9).

An avalanche's Weight is its Volume plus its Density. An avalanche's Magnitude is equal to its Weight plus its Speed. An avalanche's Duration is a Time in SPs equal to its Travel Distance minus its Speed.

AVALANCHE WEIGHT = AVALANCHE VOLUME + AVALANCHE DENSITY
AVALANCHE MAGNITUDE = AVALANCHE WEIGHT + AVALANCHE SPEED
AVALANCHE DURATION = AVALANCHE TRAVEL DISTANCE – AVALANCHE SPEED

> The sonic boom of a passing jet triggers a very large powder snow avalanche in the Alps. The avalanche's Density is 5 SPs and its Speed is 6 SPs, modified to 7 SPs because it's very large. The Volume of a very large avalanche is 15 SPs, so the avalanche's Weight is 20 SPs. The avalanche's Magnitude is its Weight + Speed, or 27 SPs. The Travel Distance of a very large avalanche is 10 SPs, so the avalanche's Duration is 10 – 7 = 3 SPs of Time, or about 30 seconds.

Material	Density	Speed	Size	Volume	Width	Travel Distance	Speed Mod.
Powder snow	5	6	Small	5	4	3	-2
Wet snow	7	4	Medium	8	5	5	-1
Mud	5	6	Large	11	6	7	0
Rock	7	4	Very Large	15	8	10	+1
Debris	9	2	Extreme	17	10	12	+2

EFFECTS OF AVALANCHES

An avalanche moves its Speed in SPs at the end of each Page. Any character impacted by the avalanche suffers a Ramming Attack by the avalanche. The AV of the Attack Check is the Width/Speed of the avalanche, while the DV is the AGI/Speed of the target. (For static objects, this will be 0). The EV is the equal to the lesser of the avalanche's or the target's Weight plus the avalanche's Speed and Density minus 9.

AVALANCHE DAMAGE = TARGET WEIGHT</>AVALANCHE WEIGHT + AVALANCHE SPEED + AVALANCHE DENSITY − 9

A skier (MIG of 3 SPs, Speed of 5 SPS, Max Health 30) is in the path of a very large Alpine avalanche of powder snow. The AV of the Ramming attack is the avalanche's Width/Speed, or 8 SPs. The DV is the skier's Speed of 5 SPs, so the RV is +3. The GM rolls an 84 on the CHART, yielding a Green result. The skier weighs 3 SPs, while the avalanche's Speed is 7 SPs and its Density is 5 SPs. Therefore the EV is 3 + 7 + 5 − 9 = 6 SPs. The Green result means the skier takes 16 points of Damage. Had the GM rolled a Yellow result, the skier would have taken 32 points of Damage and been rendered Unconscious; on an Orange result, he'd have taken 64 points of Damage and been instantly killed.

Movement from an Avalanche: If the target is instantly Slain or Destroyed by the Damage, then the target's rubble or corpse is carried along with the avalanche for the remaining Duration of the avalanche (e.g. until the avalanche's frontage traverses its Travel Distance).

If the target's Weight is less than the avalanche's Weight, the character is knocked Prone (p. 367) and carried along with the avalanche for the remainder of the avalanche's movement that Page (if any). If the avalanche moves before the character escapes the avalanche, the target continues to be carried along with the avalanche's movement. Each time the avalanche moves after the initial collision, the character suffers Damage as if struck by the avalanche with a Green result.

If the target's Weight is greater than the avalanche's Weight and the target wasn't Destroyed, then the avalanche flows around and over the target, but does not move it.

With a Weight of just 3 SPs, the skier is much lighter than the very large avalanche that just struck him. He is knocked prone and carried along with the avalanche at its Speed of 7 SPs. If the avalanche's Duration hasn't elapsed and the skier hasn't escaped the avalanche by the end of next Page, he'll be carried along another 7 SPs of Distance and suffer another 16 points of Damage.

Burial from an Avalanche: If the avalanche's Width - 4 exceeds the target's Height, then the target is completely buried in snow, mud, or debris. A target buried by an avalanche is Stuck as if a victim of Glue (p. 144) with SPs equal to the avalanche's Width – 4 plus its Density. The target reduces his Jumping Speed and Running Speed by the SPs of the Avalanche Glue. He adds the SPs of the Avalanche Glue to his Weight for purposes of resisting being moved by anything other than the avalanche. On his Panels, the Stuck target can attempt to break free of the avalanche. To break free, the target must expend a Challenge Action and succeed on a MIG vs. Avalanche Glue Attack Check with a Green color result. Since the avalanche is moving, a character can be buried by it while moving with it.

The avalanche's Width is 8 SPs. 8 − 4 is considerably greater than the skier's Height of 0 SPs, so he is buried in snow with SPs of Glue equal to 8 − 4 + 5 = 9 SPs. To break free of the avalanche, the skier must succeed on a MIG vs. 9 Attack Check. If a hero wants to rescue the skier by, e.g. telekinetically lifting him out of the snow, the skier's Weight is increased by 9 SPs.

STOPPING AVALANCHES

A character with Earth Control can stop a mud avalanche, rock avalanche, or debris avalanche. A character with Water Control can stop a snow avalanche or mud avalanche. A character with Ice Control can stop a snow avalanche. A character with Gravity Control or Telekinesis can stop any type of avalanche. A character with Burrowing, Force Control, or Glue might stop an avalanche by using a Power Stunt to emulate one of those Powers.

The Time required to halt the avalanche with an Extended Automatic Action is equal to the avalanche's Magnitude in SPs minus the character's SPs of Power + 7. During this time, the avalanche will travel a Distance equal to its Speed plus 1 SP less than the Time required to halt it.

STOPPING TIME (AVALANCHE) = AVALANCHE MAGNITUDE − (POWER + 7)
STOPPING DISTANCE = AVALANCHE SPEED + TIME -1

To stop an avalanche with an Extended Challenge Action, the character must make a Challenge Check. The AV is the sum of the SPs of Time spent (0 SPs or more) and the character's SPs of Power. The DV is the Avalanche's Magnitude -7. If the color result is Green or better, the avalanche will travel a Distance equal to its Speed plus 1 SP less than the Time required to halt it. If the color result is White, the avalanche is not slowed.

STOPPING AVALANCHE:
POWER + TIME VS. AVALANCHE MAGNITUDE -7
STOPPING DISTANCE = AVALANCHE SPEED + TIME -1

A powder snow avalanche is heading towards a ski lodge. The avalanche's Magnitude is 27 SPs. Its Speed is 7 SP. Its Duration is 3 SPs. It is 10 SPs (a mile) from the ski lodge, so it will strike in 10 − 7 = 3 SPs of Time, within the Duration. Fortunately, Icicle (12 SPs of Ice Control) happened to be on vacation at the ski lodge and decides to stop the avalanche.

As an Extended Automatic Action, Icicle's Stopping Time is 27 − (12 + 7) = 8 SPs; too long, he only has 3 SPs of Time. As an Extended Challenge Action, Icicle's AV is 12 + 3 vs. (27 − 7) or 15 vs. 20, giving him a -5 RV. That's not good odds but with some Hero Points it might be doable.

MELTING, DRYING, AND FREEZING AVALANCHES

A character with Fire Control could melt a snow avalanche into water vapor or dry out a mud avalanche so it stops sliding. A character with Ice Control could freeze a snow avalanche in place. Such efforts effectively reduce the Weight of the avalanche.

As an Extended Automatic Action, the character can reduce the Weight of the avalanche. The Time required to melt the avalanche is equal to the character's SPs of Power minus the avalanche's SPs of Weight.

WEIGHT REDUCTION TIME (AVALANCHE) = AVALANCHE WEIGHT − POWER

As an Extended Challenge Action, the character can attempt to melt, free, or dry the avalanche more quickly. The AV is the Time spent plus the character's SPs of Power. The DV is the Weight of the avalanche − 3. On a White result, there is no effect. On a Green result, the avalanche's Weight is reduced by 1. On a Yellow result, the avalanche's Weight is reduced by 2. On an Orange result the avalanche's Weight is reduced to half its SP value or by 3, whichever is greater. On Red, the avalanche's Weight is reduced to 0.

MELT/FREEZE/DRY AVALANCHE: POWER + TIME VS. AVALANCHE WEIGHT -7

What if Icicle were wanted to freeze the snow avalanche rather than stop it? The avalanche has 20 SPs of Weight and he has 12 SPs of Power, so it would take 20 − 12 = 8 SPs of Time to freeze it in place. That's way too long! He instead attempts an Extended Challenge Action using the available 3 SPs of Time. His AV is 12 + 3 = 15. His DV is 20 − 3 = 17. His RV is therefore -2. That's a much better RV than he has for attempting to stop the avalanche. However, to have a noticeable impact he'll need at least an Orange result (bringing the avalanche's Weight to 10 SPs) or Red (bringing it to 0 SPs).

BOMB THREAT

In real life, most explosive devices are improvised constructions that are handled by simply moving them to a safe location before blowing them up or by using a small shaped charge to safely detonate them in place. In comic books, however, bombs are typically sophisticated devices rigged to blow if moved that must be defused and disarmed under severe time pressure.

ATTRIBUTES OF BOMBS

All bombs are rated with SPs of Triggered Self-Range Explosion, Weight, Toughness, Durability, and Security. A bomb's SPs of Explosion could range from 8 (for a 0.2kg hand grenade) to 27 (for the 60,000lbs 50MT Tsar Bomba). Damage Type is usually Concussive Thermal. Unless a bomb is an Invention (p. 168), a conventional bomb's Explosion cannot exceed its Weight by more than 12 SPs, while an atomic bomb's Explosion cannot exceed its Weight by more than 16 SPs. A bomb's Toughness will be its Weight/3 +4 SPs (or less). Its Durability is based on its Toughness. A bomb's Security is typically between 3 and 9 if it's an object; if an Invention, its Security is equal to its inventor's SPs of INS. Security determines how difficult it is to disarm and dispose of the bomb.

A bomb's trigger mechanism must be defined. Possible triggers include:

★ A remote control (rated in SPs of Radio Communication) that can be activated to detonate the bomb.
★ A countdown timer (rated in SPs of Time) that activates the bomb when it finishes its countdown.
★ A motion detector that detonates the bomb if it anyone approaches within a particular Distance in SPs (usually 0 SPs).
★ A pressure plate that detonates the bomb if it is touched with more than a particular Weight in SPs (usually -4 SPs).
★ An accelerometer that detonates the bomb if it is moved over a particular Speed in SPs (usually 0 SPs).
★ A deadman's switch that detonates the bomb if it takes damage (usually 5 or more points).

EFFECTS OF BOMBS

A bomb attacks every character within a radius equal to the SPs of Self-Range Explosion divided by 2. Make an Explosion vs. AGI/Speed Attack Check against each target to determine the color result of the effect. Use the bomb's SPs of Explosion as the Effect Value. For purposes of both the Acting Value and Effect Value, reduce the SPs of Explosion by 2 SPs per every 1 full SP of distance between the center of the Explosion and the target.

When dealing with very large Explosions affecting nameless victims, vehicles, buildings, and other unspecified targets, the following guidelines can be used to assess overall casualties and destruction without having to roll a lot of dice.

For purposes of these guidelines, "unprotected personnel" are ordinary people with 3 SPs of MIG caught without cover. "Small vehicles" are coupes and sedans weighing 6 to 7 SPs. "Large vehicles" are SUVS, trucks, buses, and other vehicles weighing 7 to 8 SPs. "Huge vehicles" are bulldozers, big rigs, and passenger buses weighing 9 to 11 SPs. "Small buildings" are wood-framed residential buildings weighing up to 14 SPs. "Large buildings" are multi-story steel-and-concrete structures weighing up to 18 SPs.

★ **1 SP:** 25% of unprotected personnel are wounded. 67% of vehicles and buildings have minor damage such as broken windows.
★ **2 SP:** 35% of unprotected personnel are wounded. All small vehicles are lightly damaged. All other vehicles and all buildings have minor damage such as broken windows.
★ **3 SPs:** 50% of unprotected personnel are wounded. All small vehicles are lightly damaged. All other vehicles and all buildings have minor damage such as broken windows.
★ **4 SPs:** 2% of unprotected personnel are dead, 10% are unconscious, and 55% are wounded. All small vehicles are moderately damaged while all large or huge vehicles and all buildings are lightly damaged.

★ **5 SPs:** 3% of unprotected personnel are dead, 20% are unconscious, and the remainder are wounded. All small vehicles are moderately damaged while all large or huge vehicles and all buildings are lightly damaged.

★ **6 SPs:** 35% of unprotected personnel are dead, 40% are unconscious, and the rest are wounded. All small vehicles are heavily damaged. Large vehicles are moderately damaged. Huge vehicles, small buildings, and large buildings are lightly damaged.

★ **7 SPs:** 55% of unprotected personnel are dead and the rest are unconscious. All small vehicles are wrecked. Large vehicles are moderately damaged. Huge vehicles, small buildings, and large buildings are lightly damaged.

★ **8 SPs:** 98% of unprotected personnel are dead. All small and medium vehicles are wrecked (0 Durability), while large vehicles are heavily damaged. All small buildings are moderately damaged while large buildings are lightly damaged.

★ **9 SPs:** All unprotected personnel are dead. All small and medium vehicles are completely destroyed. All large vehicles are wrecked. All huge vehicles and small buildings are heavily damaged. All large buildings are moderately damaged.

★ **10 SPs:** All unprotected personnel are dead. All small and large vehicles are completely destroyed; even huge vehicles are wrecked. All small buildings are partially collapsed and uninhabitable. All large buildings are heavily damaged. Large naval vessels such as yachts have hull breaches and take in water.

★ **11 - 12 SPs:** All unprotected personnel are dead, their bodies unrecognizable except by dental records. All small buildings are flattened while all large buildings are extremely damaged. Small, large, and even huge vehicles are completely destroyed. Large naval vessels are blasted apart and immediately begin to sink.

★ **13 - 14 SPs:** All unprotected personnel are reduced to cremated ashes. All small buildings and all vehicles are utterly destroyed. All large buildings are partially collapsed and uninhabitable. If the buildings are skyscrapers, they are visibly falling apart and in imminent danger of toppling over.

★ **15 – 16 SPs:** All small buildings are reduced to dust and fragments. All large buildings are flattened. If the buildings are skyscrapers, they collapse in a freefalling tower of fire and dust.

★ **17 – 18 SPs:** All modern buildings are flattened. Sturdy medieval castles and cathedrals are moderately damaged. Huge naval vessels such as carriers, cruiser liners, and container ships have hull breaches and take in water.

★ **19 – 20 SPs:** All modern buildings of any size are flattened, and their rubble strewn as dust and fragments everywhere. Sturdy medieval castles and cathedrals are partially collapsed and uninhabitable. Huge naval vessels are blasted apart and immediately begin to sink.

★ **21 – 22 SPs:** Even the sturdiest medieval castles and cathedrals are flattened into fragments of scorched and burned rock. Modern buildings are utterly reduced to dust. Huge naval vessels are reduced to molten slag that boils the sea. Personnel leave behind shadow-like silhouettes.

★ **23 SPs or more:** The 3-million-ton Great Pyramid of Giza is reduced to ash and cinder. So is everything else.

FINDING A BOMB

If a bomb has been hidden, it can be found by investigating the location as if it were a Forensic Site (p. 318). Investigating a site is an Extended Challenge Action that uses the character's SPs of INS and Time spent as the AV and the site's Complexity as the DV. Subtract the bomb's Weight from the site's Complexity to reflect the fact that bigger bombs are easier to find. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262). Most bombs can be found on a Green result, but the GM can impose a higher color threshold for a cleverly hidden bomb.

EXAMINING A BOMB

Once a bomb has been found, it has to be examined to discover its Attributes. Examining a bomb is an Extended Challenge Action that uses the character's SPs of INS and Time spent as the AV and the bomb's Security as the DV. On a White result, the character learns nothing about the bomb. On any other result, the character learns the bomb's explosive power (SPs of Explosion) and the number and type of triggers it has.

DISARMING TRIGGERS

Each trigger must be disarmed before the bomb can be disposed of. Disarming a trigger is an Extended Challenge Action. The character must have the Multitool Perk or an object with the Perk in order to make the attempt. Use the character's SPs of INS and the SPs of Time spent as the AV. Use the bomb's SPs of Security + 3 as the DV. On a White result, the bomb detonates. On any other result, that trigger is disarmed.

Each trigger system must be disarmed separately. While two or more triggers are active, the systems interact with each other to increase the Color Threshold necessary for success on the Challenge Check. If there are two active triggers, the bomb detonates on a Green or White result. If there are three or more active triggers, the bomb detonates on a Yellow, Green, or White result.

DISPOSING OF BOMBS

Once a bomb's triggers are all disarmed, it can be disposed of. Disposing of a bomb is an Extended Challenge Action. Use the character's SPs of INS and the SPs of Time spent as the AV. Use the bomb's SPs of Security + 3 as the DV. On a White result, the bomb detonates. On any other result, the bomb is Destroyed.

CUTTING THE RED WIRE

"Cutting the red wire" means disabling all the triggers and disposing of the bomb all at once through guesswork and risk-taking. A character can cut the red wire as an INS vs. Security Challenge Action. The character must have the Multitool Perk or an object with the Perk in order to make the attempt. If the Check succeeds with a Red result, the bomb is disarmed and Destroyed. On any other result, the bomb immediately detonates!

USING POWERS TO HANDLE BOMBS

Some Powers can be extraordinarily useful in dealing with bomb threats. Some suggestions include:

★ A character with Fire Control can take a Power Stunt to emulate INS when disposing of a conventional bomb by, e.g., using his Power to render its explosive material inert.
★ A character with Radiation Control can take a Power Stunt to emulate INS when disposing of an atomic bomb.
★ A character with Probability Control can take a Power Stunt to emulate INS when cutting the red wire, to represent a lucky snip of the fuse.
★ A character with Time Control confronted by a bomb with a countdown timer can take a Power Stunt to slow down the countdown, adding additional SPs of Time for another character to disarm and dispose of it. (No Power Stunt would be required for the character to slow down Time while he personally disarmed and deactivated it.)
★ A character with Technology Control can disarm and dispose a bomb remotely using his Power.
★ A character can use Scry and Telekinesis together to disarm triggers and dispose of bombs from a safe distance.
★ A character can use Ranged Spherical Impermeable Forcefield can contain or reduce the destruction caused by the bomb's detonation.
★ A character can use Shrinking Ray or Shrinking Touch to reduce a bomb to tiny size and make it easier to carry to a safe location.
★ A character can use Blindsight, Ultra-Sensitive Scent, or Ultra-Sensitive Touch in lieu of INS when searching for a bomb. In certain cases using a Transmitting Blindsight might backfire – if a bomb is triggered by a particular type of signal.
★ Depending on the nature of the bomb, a character might be able to add his SPs of Microscopic Vision, Ultra-Sensitive Touch, or X-Ray Vision to his INS when disarming the security systems or deactivating the device.

DISEASE OUTBREAK

The greatest villain of history is the microbe. Nothing has ended more lives than infectious disease. The bubonic plague annihilated one-third of Europe; smallpox destroyed the Native civilizations of America; the Spanish Flu killed more people than World War I; and when this book is written, most of the world was shut down from COVID-19. Despite our vaccines and antibiotics, modern-day travel speeds and high population density make the possibility of mass casualties from a pandemic all too plausible. Should such an event occur in a world of superpowers, ascendants might be dispatched to deal with the challenge.

ATTRIBUTES OF DISEASES

Every disease is assigned a Type (bacterial, fungal, parasitic, prion, or viral) and a Transmission Mode (direct, droplet, airborne, waterborne, or vector-borne). Each disease is then rated in six Attributes measured with SPs: **Infectivity**, **Pathogenicity**, **Incubation Period**, **Morbidity Period**, and **Convalescence Period**. Each disease also has a **Virulence** rated with a color and a list of **Symptoms**

Caused. Some diseases are noted as **Complex**, meaning they are more difficult to treat and cure. Finally, diseases have a CP cost for use when creating them with Pathogen Synthesis Power.

Infectivity determines the likelihood that a creature exposed to the disease's Transmission Mode is infected. Pathogenicity determines whether an infected creature becomes symptomatic. Virulence indicates the likelihood that a symptomatic creature will have a morbid case of the illness. Such creatures will either be Slain or will gain permanent Conditions such as Blinded or suffer Drawbacks such as Disturbing Appearance. The range of outcomes is noted in parentheses after the Virulence. Some diseases may have different outcomes for different color results.

Incubation Period is the Time in SPs after exposure that symptoms manifest. Morbidity Period is the Time in SPs after symptoms manifest at which a patient with a morbid case of the illness suffers the relevant outcome. Convalescence Period is the Time in SPs after symptoms manifest that the creature recovers. Symptoms Caused indicates the effects on a creature who becomes symptomatic. Symptoms are usually Conditions such as Dazed or Exhausted, but can sometimes be Powers, Perks, or Drawbacks.

The Disease Catalog lists the Attributes of many real-world and fictional diseases.

EFFECTS OF DISEASES

There are five main Transmission Modes: Direct (exchange of bodily fluids), Droplet (inhaling infected fluids), Airborne (breathing infected air), Waterborne (drinking infected water), and Vector-borne (bitten by carrier). Some diseases have multiple Transmission Modes. Anytime a creature gets exposed to a disease's Transmission Mode, the GM should secretly make a Challenge Check. The AV is the disease's Infectivity. The DV is based on the circumstances of exposure, as shown on the Exposure to Disease table. If the Check's result is White, the creature is not infected. If the Check's result is Green or better, the creature is infected. He gains the Condition Infected (disease name).

Exposure to Disease	DV
Total (bitten multiple times by vectors, intimate contact with patient, bathed in contaminated water)	0
Severe (splattered with blood, bitten by vectors, caregiving to patient, drank contaminated water)	1
Heavy (touched by vectors, worked alongside patient, searched infected body, splashed in face with contaminated water)	2
Moderate (general contact with vectors, sat in same room as patient, touched infected body, splashed with water)	3
Light (entered area where infections have occurred, worked in same office as sneezing patient, touched same objects)	4

Infected creatures do not display any symptoms until in-game time equal to the Incubation Period has passed. At that point, the GM should secretly make a Pathogenicity vs. MIG Attack Check for each infected creature. If the Check's result is White, the creature has mild symptoms with no mechanical effect in game (he might still feel a bit woeful and self-pitying from the sniffles, of course). The creature can spend Hero Points on the Check if desired, despite not knowing the RV.

If the Check's result is Green or better, the creature gains the disease's Symptomatic condition, recorded as "Symptomatic (disease name)". When a creature gains a disease's Symptomatic condition, all Symptoms Caused by the disease begin to apply to him. The Symptoms continue until in-game time equal to the Convalescence Period has passed, at which point the Symptomatic condition ends.

If the Check's result meets the color threshold of the disease's Virulence, the creature gains the disease's Morbid condition for that color, recorded as "Morbid (disease name, condition caused by that color result)". When a creature gains a disease's Morbid condition, all Symptoms Caused by the disease begin to apply to him. When in-game Time equal to the Morbidity Period has passed, he gains all conditions caused by Virulence of the relevant color result. If the creature is still alive, the Symptoms continue until in-game time equal to the Convalescence Period has passed, at which point the Symptomatic condition ends. Any Conditions caused by the Morbid condition do not end, however.

A creature who has the Infected, Symptomatic, or Morbid conditions can infect others by Direct, Airborne, or Droplet transmission. Water-borne and Vector-borne diseases cannot be transmitted creature-to-creature.

TRANSMISSION:
INFECTIVITY VS. EXPOSURE TO DISEASE

PATHOGENICITY (ATTACK):
PATHOGENICITY VS. MIG; IF COLOR RESULT => VIRULENCE THRESHOLD, DISEASE IS MORBID

Smallpox has a Droplet Transmission Vector. Its Attributes are 4 SPs of Infectivity, 6 SPs of Pathogenicity, Virulence Orange (Slain)/Yellow (Disturbing Appearance), 17 SPs of Incubation Period (5 days), 18 SPs of Morbidity Period (10 days), and 19 SPs of Convalescence Period (20 days). Its Symptoms Caused are Exhausted, Prone, and Staggered conditions.

Warp (5 SPs of MIG) discovers a corpse. Turning it over, he sees the corpse's face is riddled with strange pockmarks. He spends 15 minutes (8 SPs of Time) searching the corpse for clues. Unbeknownst to Warp, the deceased died of smallpox, and he has now Heavily Exposed himself to the disease. The GM secretly makes a Challenge Check using smallpox's 4 SPs of Infectivity as the AV. The DV for Heavy Exposure is 2. With an RV of +2, the GM rolls a 78 and scores a Yellow result. Warp gains the Infected condition. (Had Warp visited the crime scene without touching the corpse, his exposure would only have been Light, and the RV would have been 0. A roll of 78 wouldn't have infected him.)

Because he became Infected, the GM makes another Challenge Check 5 days later, at the end of the Incubation Period, to see if he is Symptomatic. The AV is smallpox's Pathogenicity of 6 SPs, while the DV is his MIG of 5 SPs, so the RV is +1. The GM rolls a 41, scoring a Green result. Warp gains the Symptomatic (smallpox) condition, which causes the Exhausted, Prone, and Staggered conditions as symptoms. These conditions all last until the end of the 19 SPs of Convalescence Period (20 days).

Had the GM rolled a 30, they'd have scored a Yellow result. A Yellow result would have met smallpox's Virulence (Yellow) threshold, so Warp would have gained the Morbid (smallpox, Disturbing Appearance) condition. Morbid (smallpox) would immediately cause him to suffer the Exhausted, Prone, and Staggered conditions. 18 SPs of Time (10 days) after becoming symptomatic, he'd have permanently become disfigured by the pox. 19 SPs of Time (20 days) after becoming symptomatic, the Symptomatic condition would end, and with it the Exhausted, Prone, and Staggered conditions it was causing; but the Disturbing Appearance Drawback would remain permanently.

Had the GM rolled a 10, they'd have scored an Orange result. This would have met smallpox's Virulence (Orange) threshold, meaning that Warp would have gained the Morbid (smallpox, Slain) condition. 18 SPs of Time (10 days) after becoming symptomatic, he'd have died.

Air Filtration: If a creature protected by Air Filtration is exposed to airborne or droplet transmission of disease, his SPs of Air Filtration add to his DV against Infectivity.

Air Supply: A creature breathing using Air Supply cannot be affected by Airborne or Droplet transmission while the Power is activated.

Regeneration: Creatures with Regeneration reduce Incubation Period, Morbidity Period, and Convalescence Period by the SPs of their Power. Fast-healing creatures will tend to get sick more quickly and either die or recover more quickly. (The same thing is true of children, who arguably have 1 SP of Regeneration since they heal faster than grown-ups…)

SPREAD OF A DISEASE

Every disease outbreak begins with a Patient Zero – the first person to contract the disease, rated as 0 SPs of Patient Population. The disease thereafter spreads, with the SPs of Patient Population increasing by the disease's Infectivity every Incubation Period. (If calculating the spread of a disease over a period of Time less than the Incubation Period, reduce Infectivity by 1 SP per point less Time.)

SP	Patient Population
0	1 (Patient Zero)
1	2
2	4
3	8
4	16
5	32
6	64
7	128
8	250
9	500
10	1,000
11	2,000
12	4,000
13	8,000
14	16,000
15	32,000
16	64,000
17	128,000
18	250,000
19	500,000
20	1,000,000

Smallpox has broken out in Capital City. Smallpox has an Infectivity of 3 SPs and an Incubation Period of 18 SPs (10 days). On day 0, the Patient Population is 0 SPs (Patient Zero). On day 10, the Patient Population is 3 SPs (8 patients). On day 20, the Patient Population is 6 SPs (64 patients). On day 30, the Patient Population is 9 SPs (500 patients). On day 40, it's 12 SPs (4,000 patients). On day 50, it's 15 SPs (32,000 patients). On day 60, it's 18 SPs (250,000 patients).

To determine fatalities from an untreated pandemic, consult the CHART. Use an Attack RV equal to the disease's Pathogenicity – 3 and find the percentage chance of a result meeting the Virulence threshold. That's the percentage of patients who die of the disease.

> Smallpox has a Pathogenicity of 6 SPs and an Orange Virulence. Consulting the CHART, the GM finds the row for an Attack RV of RV of 6 – 3 = 3. The GM sees that an Orange+ result occurs on a roll of 37 or less. Therefore 37% of the Patient Population will die. If smallpox had the Green Virulence of pneumonic plague or filoviral hemorrhagic fever, then 99% of the Patient Population would die.

CALLING ON PUBLIC HEALTH ORGANIZATIONS

If the heroes encounter an unexpected disease outbreak (perhaps spread by a villain with Pathogen Synthesis), they may attempt to persuade the CDC, WHO, or other public health organizations to get involved. Characters will either need to have Authority Perk of 40+ CP or must succeed in requesting a favor from an NPC (by default, Avoidant with 5 SPs of RES). Thereafter the organization will assign a team to the task.

If the disease has only spread in foreign countries, the team will consist of 4-6 NPCs led by a physician with 7 SPs of Medicine to the task. If the disease is spreading in the organization's home country, the team will consist of 26-50 NPCs led by a physician with 8 SPs of Medicine. If the disease has become a global pandemic, a worldwide task force of 801 – 1,600 NPCs led by a physician with 9 SPs of Medicine. All teams will use virology labs (p. 231) with 9 SPs of Augmentative Medicine and 10 SPs of Methodical Biochemical Analysis. The table below indicates the resulting AVs. Ascendants are often individually as effective as entire teams of ordinary researchers, and where appropriate can form teams or task forces to buttress the AV for the Challenge Check.

Disease Prevalence	Team Bonus	Medicine SPs (+Aug)	Medicine AV	Biochem Analysis SPs	Biochem Analysis AV
Foreign Pandemic	+2	7 (+1)	10	10 (capped 8)	10
Domestic Pandemic	+5	8 (+1)	14	10 (capped 9)	14
Global Pandemic	+10	9 (+1)	20	10	20

> **Designer's Note:** 130,000 medical scientists were employed in the US in 2018. ClinicalTrials.gov, the US national registry of clinical trials, shows that around 25,000 studies begin and end each year, for a total of 5 medical scientists per study. During the COVID-19 pandemic, over 200 clinical trials were held simultaneously, suggesting about 1,000 medical scientists were working. The Manhattan Project in World War II had about 3,000 scientists for a +11 bonus (see p. 264). We conclude that a Task Force bonus of +10 to +11 seems to be the real-world limit for coordinated research on difficult tasks.

IDENTIFYING A DISEASE

Before an infectious disease can be cured, the infectious agent must be identified through laboratory tests on blood, tissue, and saliva samples from patients. The character or team must have access to field-testing equipment, including a set of syringes, swabs, slides, droppers, petri dishes with culture, test tubes (represented by the Multitool Perk).

Identifying a disease is an Extended Challenge Action. The AV equals the identifying character's SPs of Biochemical Analysis + Time spent running tests on the samples. The DV for a known disease is 20. The DV for an unknown disease equals the disease's Pathogenicity + Incubation Period + 10. Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262). Teaming Up On Actions (p. 264) are often used in identifying a disease.

A disease is considered "known" if the character has analyzed it before using his own Power, or if it is known to contemporary science and the character has access to the following Powers and Skills: Memory (37 SPs), Microscopic Vision (10 SPs), Radio Communication (5 SPs), and Structured Data Processing (32 SPs). While objects like a laptop are usually used to gain access to these Powers and Skills, a super-genius with Microscopic Vision and incredible Memory could in theory sequence DNA from memory, etc.

For a known disease, a Green or better result identifies the disease's Type, Transmission Method, Symptoms Caused, and all of its Attribute scores. For an unknown disease, the color result determines what's learned. On a Green or better result, the character has identified the disease's Transmission Method and Symptoms Caused. On a Yellow result, he has also learned the disease's Infectivity and Incubation Period. On an Orange or better result, he has identified the disease's Type and isolated the specific microbe responsible; work on a cure is now possible. On a Red or better result, he has learned the disease's Pathogenicity, Virulence, Morbidity Period, and Convalescence Period.

IDENTIFY KNOWN DISEASE:
BIOCHEMICAL ANALYSIS + TIME VS. 20

IDENTIFY UNKNOWN DISEASE:
BIOCHEMICAL ANALYSIS + TIME VS. PATHOGENICITY + INCUBATION PERIOD + 10; +3 IF COMPLEX

Warp presents himself to 12Sigma, who has an advanced virology laboratory (12 SPs of Methodical Biochemical Analysis). He spends 15 minutes (8 SPs of Time) running tests on Warp and then attempts to identify the disease. Since smallpox is a known disease, his DV is just 20. With an AV of 8 + 12 = 20, he has an RV of +0 and gets an automatic Green success.

What if Warp actually had brainpox, a (fictional) unknown disease with the same Attributes as smallpox? In that case the DV would be 6 (Pathogenicity) + 18 (Incubation Period) + 10 = 34. 12Sigma's Challenge Check would have had an RV of -15 and he'd have failed. The failure itself would have indicated to him it was an unknown disease and perhaps prompted another attempt with more SPs of Time invested, and perhaps some Hero Points.

12Sigma calls the CDC and successfully requests a favor from the Deputy Director for Infectious Diseases. The CDC assigns a team to identify the cause of Warp's illness. Since Warp got ill in the US, the CDC assigns a 50-person Team with an effective 14 SPs of Biochemical Analysis and 14 SPs of INS. Since they need an RV of +1 to isolate the microbes, the chief researcher indicates it will likely take 34 – 14 +1 = 21 SPs of Time, or about three months.

Designer's Note: Historically it took about 3 months (21 SPs) for researchers to identify the Ebola virus. The Ebola identification was made by 9 field researchers working on site in Africa; 9 SPs of Biochemical Analysis + 3 SPs from the Team bonus + 21 SPs from Time gave them an AV of 33. Ebola has a Pathogenicity of 5 SPs and Incubation Period of 17 SPs, for a DV of 5 + 17 + 10 = 32. The researchers therefore had an RV of 33 – 32 = +1 and took an automatic Yellow success. It took 12 months (23 SPs) for a multinational effort by future Nobel prize winners to identify HIV (DV 40). 10 SPs of Biochemical Analysis + 8 SPs from a few hundred researchers + 23 SPs from Time would be sufficient for an RV of +1.

DEVELOPING A TREATMENT

Once a disease has been identified (on a Green+ for a known disease or Yellow+ for an unknown disease), a treatment can be devised. Developing a treatment is an Extended Challenge Action. The researching character must choose the type of treatment and the SPs of Power he wants it to have. Most real-world treatments have 4 to 6 SPs. Treatments are Pharmaceutical Objects that grant the subject variants of the Hyper-Immune System Power. For game purposes, the types of treatments are:

★ *Vaccine:* A Pharmaceutical Object that grants Preventative Hyper-Immune System (specific disease) to creatures that aren't already Infected by that disease.
★ *Antibiotic:* A Pharmaceutical Object that grants Alleviative Hyper-Immune System (specific bacterial disease) to creatures that are already Infected or Symptomatic with the disease.
★ *Antifungal:* A Pharmaceutical Object that grants Alleviative Hyper-Immune System (specific fungal disease) to creatures that are already Infected or Symptomatic with the disease.
★ *Antiparasitic:* A Pharmaceutical Object that grants Alleviative Hyper-Immune System (specific parasitic disease) to creatures that are already Infected or Symptomatic with the disease.
★ *Antiprion:* A Pharmaceutical Object that grants Alleviative Hyper-Immune System (specific prion disease) to creatures that are already Infected or Symptomatic with the disease.
★ *Antiviral:* A Pharmaceutical Object that grants Alleviative Hyper-Immune System (specific viral disease) to creatures that are already Infected or Symptomatic with the disease.
★ *Monoclonal Antibody:* A Pharmaceutical Object that grants Hyper-Immune System (specific disease of any type) to creatures that are already Infected or Symptomatic with the disease.

The AV equals the researching character's INS + Time spent on research. The DV is equal to the sum of the SPs of the treatment and the disease's Cost/5. (If the disease is Complex, use Cost/4 instead.) Remember that if the character spends 1 or more SPs of Time on an Extended Challenge Action, his RV is capped at +1 (see p. 262). The researching character(s) must have (personally or through objects) CP of Pathogen Synthesis at least equal to the disease's Cost.

The type of treatment determines the color threshold for success. An antibiotic, antifungal, bacterial vaccine, or fungal vaccine requires a Green result. An antiparasitic, antiviral, parasitic vaccine, or viral vaccine requires a Yellow result. An antiprion or prion vaccine requires an Orange result. A monoclonal antibody requires a Red result.

DEVELOP TREATMENT:
INS + TIME VS. DISEASE COST/5 (OR COMPLEX DISEASE COST/4) + TREATMENT SPS
TREATMENT HAS 6 SPS: INCREASE/DECREASE DV BY +1/-1 PER +1/-1 SP

By the time the disease has been identified, brainpox is spreading widely. A massive global Task Force of biologists, doctors, and other researchers has been deployed to find a vaccine with 6 SPs of Preventative Hyper-Immune System (brainpox). The Task Force's effective INS is 20. The cost of brainpox is 182 CP, so the DV for the vaccine is 6 + 182/5 = 42. The Task Force spends 24 months working on the vaccine (23 SPs of Time), securing an AV of 44, for an RV of +1. Since they just need a Yellow result for a viral vaccine, they take the automatic success.

If brainpox were a Complex disease, the DV for the vaccine would be 6 + 182/4 = 51. The Time to cure the disease would be measured in decades, not months.

Designer's Note: The time to develop a treatment does not include the 12 to 24 months of testing that are required to for the safety of the public. We assume that if ascendants have been called in, the red tape has been cut already. During the COVID-19 pandemic, the first vaccine was developed just 42 days (20 SPs) after the after the genetic sequence of SARS-CoV-2 was released in January. SARS2 has a cost of 163 CP, so the DV to create a 6 SP vaccine would be 163/5 + 6 or 39. Assuming an AV of 20 from a global task force and 20 SPs of Time, that yields an RV of 20+20 − 39 = +1, which is what's needed for an automatic Yellow success. (Sadly in real life the first vaccine didn't work. They must have rolled a White result.)

Some diseases have already been cured. In these cases, stopping the pandemic is primarily a matter of provisioning health care logistically and will be handled by bodies such as the CDC and WHO. The Disease Catalog designates which diseases already have treatments, and these treatments can be found in the Object Catalog's Pharmaceutical Object section.

USING POWERS TO FIGHT PANDEMICS

Obviously the most important Powers used in fighting pandemics are Biochemical Analysis (to identify them) and Pathogen Synthesis (to create cures). Most characters, lacking these Powers, will use objects such as a Virology Lab (p. 231) to access them.

A character with Invention can develop a virology lab with SPs of Biochemical Analysis greater than those available from real-world virology labs (10 SPs). Once a treatment is invented, he can directly develop Pharmaceutical Objects with SPs of Hyper-Immune System to treat the illness or create an Invention capable of curing the disease directly via Healing. Remember that only Inventions created within the real-world limits on objects (p. 226) can be mass produced (p. 170).

A character with Ultra-Sensitive Scent can detect whether a target creature is suffering from a disease. Resolve the attempt as an Ultra-Sensitive Scent vs. 9 Challenge Check. On a Green result, the character knows if the target is unwell. On a Yellow or better result, the character knows the specific illness that the target suffers. The character might be able to detect someone who is immune to the disease (see below) or sniff out flora that contains chemical compounds useful in fighting the illness.

A character with Healing can cure a disease in a patient as an Extended Automatic Action. The Time required is the disease's Convalescence Period – the character's SPs of Healing and the target's SPs of Regeneration (if any). The character and target may expend Hero Points to reduce the Time further. While the target is actively been healed, he is relieved of the disease's Symptoms, and Time under the healing character's care does not count towards Morbidity Period. The Healing Power doesn't scale in the face of massive pandemics but can be useful in stopping an outbreak before it becomes a pandemic.

A character with Hyper-Immune System that protects against the disease in question could provide his blood and tissue to researchers working on a cure, thereby adding his SPs of Hyper-Immune System to the researcher's AV to develop the cure. (If the character's Power is Preventative, the blood can only be used for vaccines and if Alleviative, only for various antimicrobials.)

Even if none of the characters has Hyper-Immune System, the heroes might be sent on a Mission to find or secure such a person – an "immune carrier" whose blood can cure the disease, simulated with SPs of Hyper-Immune System (specific disease).

DISEASE CATALOG

The diseases below are presented in order of CP cost, from least expensive to most expensive. All of the diseases are based on real-world illnesses, with two exceptions: Eglebia and Cortico-Deficiency Rage Virus. Eglebia is a fictional bioweapon with a particularly lethal combination of infectivity, pathogenicity, and virulence. Cortico-Deficiency Rage Virus is a rapid-onset "zombie" virus that could bring about doomsday in just 28 days.

Blastomycosis: Fungal, Droplet Transmission (spores), Infectivity 1, Pathogenicity 4, Virulence Red (Slain), Incubation Period 20 (6 weeks), Morbidity Period 22 (6 months), Convalescence Period 22 (6 months), Symptoms Caused – Dazed, Fatigued; Cost 74 CP. Treatment: Broad-Spectrum Antifungal.

Cryptococcal Meningitis: Fungal, Droplet Transmission (spores), Infectivity 1, Pathogenicity 1, Virulence Yellow (Slain), Incubation Period 20 SPs (6 weeks), Morbidity Period 22 SPs (6 months), Convalescence Period 22 SPs (6 months), Symptoms Caused – Exhausted, Staggered; Cost 99 CP. Treatment: Broad-spectrum Antifungal.

Naegleria (Brain-Eating Amoeba): Complex Parasitic, Vector-borne Transmission, Infectivity 0, Pathogenicity 1, Virulence Green (Slain), Incubation Period 17 (5 days), Morbidity Period 17 SPs (5 days), Convalescence Period 18 SPs (10 days), Symptoms Caused – Disoriented (SEV 1), Exhausted, Staggered; Cost 100 CP. Treatment: No current treatments.

Onchocerciasis (River Blindness): Complex Parasitic, Vector-borne Transmission, Infectivity 2, Pathogenicity 4, Virulence Red (Blindness) / Orange (Disturbing Appearance), Incubation Period 22 SPs (6 months), Morbidity Period 24 SPs (2 years), Convalescence Period 27 SPs (16 years), Symptoms Caused – Compromised Immune System; Cost 112 CP. Treatment: Disease-specific Antiparasitic.

HIV: Complex Viral, Direct Transmission, Infectivity 2, Pathogenicity 5, Virulence Yellow (Slain), Incubation Period 25 (5 years), Morbidity Period 25 (5 years), Convalescence Period 29 (80 years), Symptoms Caused – Compromised Immune System, Sickly; Cost 125 CP. Treatment: Disease-specific Antiviral.

Common Cold: Complex Viral, Direct/Droplet Transmission, Infectivity 3, Pathogenicity 6, Virulence None, Incubation Period 16 (2.5 days), Morbidity Period N/A, Convalescence Period 18 (10 days), Symptoms Caused - Dazed, Fatigue; Cost 127 CP. Treatment: No current treatments.

Necrotizing Fasciitis (Flesh-Eating Bacteria): Complex Bacterial, Direct Transmission, Infectivity 0, Pathogenicity 7, Virulence Red (Slain) / Orange (Missing Limb) / Yellow (Missing Hand), Incubation Period 16 (2.5 days), Morbidity Period 14 (16 hours), Convalescence Period 18 SPs (6 weeks), Symptoms Caused – Exhausted, Prone, Staggered; Cost 128 CP. Treatment: No current treatments.

Seasonal Flu: Viral, Direct/Droplet Transmission, Infectivity 2, Pathogenicity 5, Virulence Red (Slain), Incubation Period 16 (2.5 days), Morbidity Period 17 (5 days), Convalescence Period 18 (10 days), Symptoms Caused - Exhausted, Prone, Staggered; Cost 157 CP. Treatment: Vaccine, Disease-specific Antiviral.

Filoviral Hemorrhagic Fever: Complex Viral, Direct Transmission, Infectivity 1, Pathogenicity 5, Virulence Green (Slain), Incubation Period 17 (5 days), Morbidity Period 18 (10 days), Convalescence Period 19 (20 days), Symptoms Caused - Exhausted, Prone, Staggered; Cost 160 CP. Treatment: No current treatments.

Bubonic Plague: Bacterial, Vector-borne Transmission, Infectivity 2, Pathogenicity 4, Virulence Yellow (Slain), Incubation Period 16 (2.5 days), Morbidity Period 15 (36 hours), Convalescence Period 18 SPs (10 Days), Symptoms Caused - Exhausted, Prone, Staggered; Cost 162 CP. Treatment: Vaccine, Broad-spectrum Antibiotic.

SARS2: Viral, All Modes Transmission, Infectivity 3, Pathogenicity 3, Virulence Red (Slain) / Orange (Easily Winded), Incubation Period 18 (10 days), Morbidity Period 18 (10 days), Convalescence Period 19 (20 days); Symptoms Caused - Exhausted, Prone, Staggered; Cost 163 CP. Treatment: No current treatments.

Spanish Flu: Viral, Direct/Droplet Transmission, Infectivity 2, Pathogenicity 6, Virulence Red (Slain), Incubation Period 16 (2.5 days), Morbidity Period 17 (5 days), Convalescence Period 18 (10 days), Symptoms Caused - Exhausted, Prone, Staggered; Cost 167 CP. Treatment: Vaccine, Disease-specific Antiviral.

Malaria: Complex Parasitic, Vector-borne Transmission, Infectivity 4, Pathogenicity 4, Virulence Red (Slain), Incubation Period 18 (10 days), Morbidity Period 19 (20 days), Convalescence Period 19 (20 days), Symptoms Caused – Exhausted, Prone, Staggered; Cost 168 CP. Treatment: Vaccine, Disease-specific Antiparasitic.

Septicemic Plague: Bacterial, Direct/Vector-borne Transmission, Infectivity 2, Pathogenicity 4, Virulence Green (Slain), Incubation Period 16 (2.5 days), Morbidity Period 15 (36 hours), Convalescence Period 18 SPs (10 Days), Symptoms Caused - Exhausted, Prone, Staggered; Cost 172 CP. Treatment: Vaccine, Broad-spectrum Antibiotic.

Smallpox: Viral, Direct/Droplet Transmission, Infectivity 3, Pathogenicity 6, Virulence Orange (Slain) / Yellow (Disturbing Appearance), Incubation Period 18 (10 days), Morbidity Period 18 (10 days), Convalescence Period 19 (20 days); Symptoms Caused - Exhausted, Prone, Staggered; Cost 182 CP. Treatment: Vaccine.

Hemorrhagic Smallpox: Viral, Direct/Droplet Transmission, Infectivity 3, Pathogenicity 5, Virulence Green (Slain), Incubation Period 17 (5 days), Morbidity Period 17 (5 days), Convalescence Period 19 (20 days), Symptoms Caused – Exhausted, Prone, Staggered; Cost 185 CP. Treatment: Vaccine.

Pneumonic Plague: Bacterial, Direct/Droplet/Vector-borne Transmission, Infectivity 3, Pathogenicity 4, Virulence Green (Slain), Incubation Period 16 (2.5 days), Morbidity Period 15 (36 hours), Convalescence Period 18 SPs (10 Days), Symptoms Caused - Exhausted, Prone, Staggered; Cost 187 CP. Treatment: Vaccine, Broad-spectrum Antibiotic.

Eglebia: Complex Viral, Direct/Droplet Transmission, Infectivity 3, Pathogenicity 6, Virulence Green (Slain), Incubation Period 16 (2.5 days), Morbidity Period 15 (36 hours), Convalescence Period 18 (10 days), Condition Caused - Exhausted, Prone, Staggered; Cost 207 CP. Treatment: No current treatments.

Cortico-Deficiency Rage Virus: Complex Viral, Direct Transmission, Infectivity 3, Pathogenicity 10, Virulence Green (Slain), Incubation Period 3 (30 seconds), Morbidity Period 21 (3 months), Convalescence Period 21 (3 months), Symptoms Caused - Super-Strength +1, Super-Stamina +1, Physical Invulnerability +1, Tireless, Emotional (wildly angry); Cost 251 CP. Treatment: No current treatments.

EARTHQUAKE

An earthquake is a sudden shaking, trembling, or vibration of the earth due to movement of the earth's crust. In the real world, earthquakes can be caused by a release of stress along geologic fault lines or by volcanic explosions. In the world of **Ascendant**, earthquakes can be artificially triggered by use of Quake or by the movement of a giant character such as a kaiju.

ATTRIBUTES OF EARTHQUAKES

Earthquakes are measured in Magnitude and Duration. The Magnitude of an earthquake is rated on the Richter Scale in the real-world, and in an equivalent SP value for game purposes. The Duration is measured in SPs of Time and Pages in combat.

Natural events can create an earthquake with a Magnitude and Duration in the ranges shown on the table below. The values for Magnitude can vary through the full range (e.g. a 6.7 Richter earthquake might be 20 SPs or a 9.6 Richter earthquake might be 27 SPs). The values for Duration can be adjusted by +/-2 SPs. All other things being equal, earthquakes of larger Magnitude have longer Duration.

A character with the Quake Power can create an earthquake with a Magnitude equal to the SPs of Power and a Duration equal to the Time the character with the Power spends sustaining it. For details on resolving earthquakes in personal combat, see p. 153.

A character with a Weight of 13 SPs (100 tons) or more automatically creates an earthquake when it takes a Movement Action. The Magnitude of the earthquake is equal to the character's Weight/2 – 6. The Duration of the earthquake is equal to Time spent moving.

A kaiju weighing 24 SP would create a 24/2 – 6 = 6 SP earthquake with every Movement Action. That's around Richter Scale 2!

EFFECTS OF EARTHQUAKES

An earthquake attacks each Page with the Quake Power at its Magnitude in SP for its entire Duration. To help the GM quantify what that means, the table shows the likely damage inflicted at various radii from the epicenter.

★ The Shake Zone is the radius in SPs from the epicenter at which some property damage occurs due to violent shaking.
★ The Damage Zone is the radius from the epicenter at which all small buildings are damaged or wrecked, and some large buildings are damaged. Sporadic fires plague the zone. Fallen power lines disable electricity throughout the Zone. 1% of the residents are dead, 2% are unconscious, and 5% are wounded but conscious.
★ The Wreckage Zone is the radius at which all small buildings are wrecked, and all large buildings are damaged or wrecked. Fires are widespread and virtually all power lines are disrupted in the zone. 5% of the residents are dead, 10% are unconscious, and 20% are wounded but conscious.
★ The Destruction Zone is the radius at which all small buildings are destroyed, and all large buildings are destroyed or wrecked. 10% of the residents are dead, 20% are unconscious, and 40% are wounded but conscious.

The damage is shown as of the end of the earthquake's Duration; if the earthquake is stopped beforehand, damage will be proportionally less within each zone. If Duration is adjusted from the baseline, adjust the radius of the zones by 1 SP per 2 SP adjustment to Duration.

Magnitude (Richter)	Magnitude (SP)	Duration (SP)	Duration (Pages)	Shake Zone	Damage Zone	Wreckage Zone	Destruction Zone
5	16	0 (3s)	1 Page	10 (1 mile)	6 (100 yards)	4 (25 yards)	3 (40 feet)
6	19	1 (7s)	2 Pages	12 (4 miles)	9 (1/2 mile)	7 (200 yards)	6 (100 yards)
7	21	2 (15s)	4 Pages	14 (15 miles)	11 (2 miles)	9 (1/2 mile)	8 (1/4 mile)
8	24	3 (30s)	8 Pages	16 (60 miles)	13 (8 miles)	12 (4 miles)	11 (2 miles)
9	26	4 (1m)	16 Pages	17 (120 miles)	15 (30 miles)	14 (15 miles)	13 (8 miles)
10	28	5 (2m)	32 Pages	18 (240 miles)	17 (120 miles)	16 (60 miles)	15 (30 miles)

> The sinister villain who calls himself Maximum Leader has planted a doomsday device called "The Deplatformer" in Mussel Rock Park on the San Andreas Fault line. When activated, the Deplatformer will trigger a 9.0-magnitude (26 SP) quake that will shake for a full minute. Its 8-mile Destruction Zone will cover the entire Bay Area from Mussel Rock Park east to South San Francisco, north to the Golden Gate Bridge, and south to San Mateo. Its 15-mile Wreckage Zone will devastate Alameda, Redwood City, and Half-Moon Bay.

STOPPING EARTHQUAKES

A characters with Earth Control can suppress an earthquake at its source. A character with Explosion or Quake could use a Power Stunt to emulate Earth Control by e.g. detonating a shockwave that destructively interferes with the seismic waves of the earthquake.

As an Extended Automatic Action, the character with Earth Control can suppress an earthquake if he is in Range of the epicenter. The Time required to reduce the Magnitude to 0 is equal to the character's SPs of Power minus the earthquake's SPs of Magnitude. The character must continue the Action through the Duration of the quake.

TIME TO STOP EARTHQUAKE = QUAKE MAGNITUDE − EARTH CONTROL

As an Extended Challenge Action, the character can attempt to suppress an earthquake more quickly. The AV is the Time spent plus the character's SPs of Power. The DV is the Magnitude of the earthquake – 3. On a White result, there is no effect. On a Green result, the earthquake's Magnitude is reduced by 1. On a Yellow result, the earthquake's Magnitude is reduced by 2. On an Orange result the earthquake's Magnitude is reduced to 3 or half its SP value, whichever is greater. On a Red result, the earthquake's Magnitude is reduced to 0. The Check must be repeated each Page of the quake's Duration, e.g. tremors on subsequent Pages must be suppressed separately.

STOPPING EARTHQUAKE:
TIME + EARTH CONTROL VS. QUAKE MAGNITUDE − 3

If a character is forewarned that an earthquake is imminent (by seismologists detecting early tremors, for instance), he can begin to suppress the earthquake before its Duration begins.

> The Graniteer is at the epicenter of The Deplatformer when it goes off. He has 12 SPs of Earth Control. If he takes an Extended Automatic Action to suppress the tremors, he'd need (26 – 12) 14 SPs of Time – that's longer than the Duration of the quake! It'll be over before he's had any effect. If he takes an Extended Challenge Action for 3 SPs of Time, he'd be making a Challenge Check with an AV of 15 and a DV of 23, for a -8 RV. That's not too good, either, unless he has a high Resolve and a lot of Hero Points.
>
> What if the earthquake were a natural quake that resulted from slowly building pressure? Assume the Graniteer were warned a day (15 SPs) ahead of time by a plucky seismologist that the "Big One" was going to blow. In that case, he could suppress the earthquake with time to spare.

Earthquakes of 19 SPs or more will usually be too powerful for any ascendant to entirely stop without advance notice. Characters can instead suppress the tremors in their local area. Calculate the Magnitude at the character's location by subtracting 1.5 times the Distance from the epicenter and apply the mechanics above. The area protected by the character will be the character's SPs of Power minus the Magnitude suppressed. Outside of this area, the character's suppression will fall off at a rate of 3 SPs per 2 SPs of Distance.

> Imagine that the Graniteer were having a coffee at a café in the Mission District when The Deplatformer goes off a distance of 12 miles away (14 SPs). The Magnitude in SPs of the earthquake that strikes the Mission District is 26 – (14 x 1.5) = 7 SPs. He takes an Automatic Action to suppress the tremors around himself to 0 SPs. The effect shields an area within a radius of (12 – 7) = 5 SPs, or about 150 feet. At 7 SPs away from the Graniteer, the earth is shaking with a Magnitude of 3 SPs. At 9 SPs (a half mile) from the Graniteer, the tremors have a Magnitude of 5 SPs, and at 11 SPs (2 miles), the tremors are back to their maximum of 7 SPs. The Graniteer may continue to expend an Automatic Action each Page for the entire Duration of the quake (16 Pages) to keep the local area protected.

Characters might be also be faced with challenges such as stabilizing collapsing buildings, carrying bystanders to safety, putting out fires triggered by the earthquake, or shielding an area from a tsunami. These challenges should be handled using the other rules in this chapter.

PREDICTING AN EARTHQUAKE

As an Automatic Action, a character with All-Frequency Hearing, Blindsight, or Earth Control can predict a natural earthquake before it happens from the rumbles of its foreshocks. (An earthquake triggered by a character using Quake cannot be detected). To find out how many SPs of advance warning a character receives, add the Earthquake's Magnitude to the character's SPs of Power, then subtract 1.5 x his Distance from the epicenter.

As a Challenge Action, a character with an appropriate power can predict a natural earthquake by making a successful Challenge Check. Use the character's SPs of Power as the AV. Calculate the DV by adding 1.5 x the Distance to the epicenter + the Time until the earthquake – the earthquake's Magnitude.

PREDICT QUAKE:
EARTH CONTROL VS. (DISTANCE X 1.5) + TIME TO QUAKE

When a character predicts an earthquake while standing atop its epicenter, he learns the exact Magnitude of the earthquake and the Time until it triggers. If he predicts an earthquake from any other location, the character only learns the direction to the epicenter and its Magnitude. He does not know exactly when and where it will strike, although this can be deduced by triangulating from different points.

> Imagine that the Big One is hitting San Francisco due to natural forces instead of due to Maximum Leader's Deplatformer device. Let's assume it still has 26 SPs of Magnitude. The Graniteer has 12 SPs of Earth Control. If he's vacationing in San Francisco, 14 SPs of Distance from the epicenter of the Big One, how much advance warning will he have? 26 + 12 – (1.5 x 14) = 38 – 21 = 17 SPs, or about 5 days. If the earthquake will happen on Sunday, he'll notice the first foreshocks on Wednesday.

FIRE

ATTRIBUTES OF FIRES

The extent of a fire is described by its Volume, measured in SPs. If an entire house is engulfed in flames, the fire has a Volume of 8 SPs (about 32,000 cubic feet). A 5-square mile wildfire with 30-foot flames has a Volume of 25 SPs (about 4.2 million cubic feet).

The energy of a fire is rated with Intensity, also measured in SPs. The Fire Intensity table shows the range of values for common types of fires. A typical house fire has an Intensity of 4 to 5 SPs. Terrible California wildfires have an Intensity of 6 – 10 SPs. A thermobaric firestorm triggered by a fuel-air explosive has an Intensity of 12 SPs. A nuclear fire has an Intensity of 15 SPs or more.

A fire's Magnitude is the sum of its Volume and Intensity. If not put out, a fire tends to increase its Magnitude by 2 every 3 SPs of Time. Any time Magnitude is increased or decrease by 1 or more SPs, Volume and Intensity must also increase or decrease. The GM allocates odd SP as they deem appropriate, e.g. is the fire lessening in extent or ferocity. Typically they increase in equal proportion, although house fires typically do not exceed an Intensity of 5 SPs and thereafter the fire just spreads (only Volume increases).

Fire	Intensity
Kitchen fire	3
House fire, typical	4
House fire, blazing	5
Wildfire, 5-foot tall flames	6
Wildfire, 30-foot tall flames	7
Wildfire, 50-foot tall flames	8
Wildfire, 150-foot tall flames	10
Thermobaric firestorm	12
Nuclear fire	15

A fire with Volume of 8 SPs and Intensity of 7 SPs has a Magnitude of 15 SPs. If its Magnitude is reduced to 11 SPs, then its Volume is reduced to 6 SPs and its Intensity to 5 SPs.

Large fires are best handled as a series of smaller fires of lesser Volume. For instance, a fire with 12 SPs of Volume that is wrecking a suburban cul-de-sac could be handled as two fires with 11 SPs of Volume each, four fires with 10 SPs of Volume each, eight fires with 9 SPs of Volume each, and so on.

FIRE MAGNITUDE:
FIRE VOLUME + FIRE INTENSITY

EFFECTS OF FIRES

Effect on Characters: The heat from a fire creates a Special Thermal Fog (p. 143) with SPs equal to the fire's Intensity that affects all characters within the fire's Volume of the Fire. Thermal Protection reduces the Thermal Fog's damage as usual. Because the Fog has the Special modifier, targets that are damaged by it begin Burning with an SEV equal to the fire's Intensity – 1 when they leave the fire on their Panel. (See p 347 for Special Effects.)

The smoke from a fire creates a Special Toxic Fog with SPs equal to the fire's Intensity – 3. It affects all characters within the fire's Volume unless they are holding their breath or breathing using Air Supply. Toxic Protection reduces this damage as usual. Because the Fog has the Special modifiers, characters that are Damaged by it gain the Poisoned condition with an SEV equal to the fire's Intensity – 4 when they leave the fire on their Panel. Fire created by igniting pure air with Fire Control does not produce smoke and does not cause a Special Toxic Fog.

If a burning building is wrecked (reduced to 0 Durability or less), it begins to collapse. If a character ends his Panel in a collapsing building, the GM should make 6 vs. AGI/Speed Attack Checks against the character. On a Green or better result, the character suffers Bludgeoning Damage using 7 as the EV (representing a chunk of rock with Weight 0 and Speed 6) from collapsing debris.

To reduce Thermal Damage, a character in a burning building can take cover in a safe spot that is not yet on fire. A closet with a heavy door offers 1 to 3 SPs of Thermal Protection. A parent can shelter a child with his body to offer SPs of Protection equal to his Weight. A firefighter's fire-retardant suit offers 5 SPs of Thermal Protection. A firefighter's entry suit (used for entry into extreme heat requiring protection from total flame engulfment) offers 8 SPs of Thermal Protection.

To reduce Toxic Damage, a character can fall Prone and crawl under the smoke and cover his nose and mouth with a damp cloth. Crawling under the smoke offers 1 SP of Toxic Protection and a damp cloth offers an additional 1 SP of Toxic Protection.

To reduce Bludgeoning Damage, a character can seek out a secure location that is not yet collapsing, gaining 2 to 5 SP of Bludgeoning Protection from intact ceilings, hardwood furniture, and so on.

Effect on Structures: Structures suffer Thermal Damage from a Special Thermal Fog with SPs equal to the fire's Intensity. Damage is reduced by the structure's Thermal Protection. To reflect the effect of the fire's volume on structural integrity, increase both the SPs of Fog and the SPs of Protection by 2/3 the fire's Volume (see p. 372). Depending on the type of building and the material used to construct it, structures typically have between 0 and 3 SPs of Thermal Protection. The Thermal Protection of Structures table (based on real-world data) shows the thermal protection of various structures by class and construction materials.

★ Class I structures: aircraft hangars, cereal mills, distilleries, grain elevators, explosives factories, lumberyards, oil refineries, plastics factories, sawmills, and other structures.
★ Class II structures: auditoriums, barns, feed stores, freight terminals, paper mills, repair garages, rubber factories, theaters, warehouses, and wharves.
★ Class III structures: clothing factories, dairy barns, farm sheds, laundromats, machine shops, printing plants, restaurants, and unoccupied buildings.
★ Class IV structures: armories, bakeries, barber shops, canneries, municipal buildings, and parking garages.
★ Class V structures: apartments, churches, fire stations, hospitals, houses, hotels and motels, libraries, museums, nursing homes, offices, prisons, schools.

Structure Class	Fire Resistant (reinforced concrete)	Noncombustible (brick/concrete/metal/stone)	Ordinary (masonry + wood)	Combustible (wood frame)
Class I	1	1	0	0
Class II	2	1	1	0
Class III	2	1	1	0
Class IV	2	2	1	1
Class V	3	2	2	1

A reinforced concrete hospital is a Class V structure with fire-resistant construction, so it has 3 SPs of Thermal Protection. A masonry and wood house is a Class V structure with ordinary construction, so it has 2 SPs of Thermal Protection. A wooden grain elevator is a Class I structure with combustible construction, so it has 0 SPs of Thermal Protection.

Rather than calculate Damage to the structure, the GM can calculate the Time required for it to burn down. The Time in SPs for a structure to be wrecked by the flame (0 Durability) is shown in the formula below. Use the initial Intensity and Magnitude of the fire. A structure's Toughness is usually (2/3 x Weight) + 2 and a structure's Weight is usually Volume + 6.

$$\text{TIME (WRECK)} = 2 + \text{STRUCTURE TOUGHNESS}/2 + \text{THERMAL PROTECTION}/2 - \text{FIRE INTENSITY}/2 - \text{FIRE VOLUME}/3$$

$$\text{TIME (BURNED OUT)} = 3 + \text{STRUCTURE TOUGHNESS}/2 + \text{THERMAL PROTECTION}/2 - \text{FIRE INTENSITY}/2 - \text{FIRE VOLUME}/3$$

A typical house is a masonry and wood Class V structure with a Weight of 14 SP, a Toughness of 11 SPs, and a Thermal Protection of 2 SPs. How long will it take to burn down completely from a kitchen fire that starts with 3 SPs of Intensity and 1 SP of Volume? 3 + (11/2) + (2/2) - (3/2) – (1/3) = 7.67, rounding to 8 SPs of Time, or about 10 minutes.

The Empire State Building is a noncombustible Class V building with a Weight of 25 SPs, a Toughness of 18 SPs, and a Thermal Protection of 2 SPs. How long will it take the same kitchen fire to consume the skyscraper? The Time will be 3 + (18/2) + (2/2) – (3/2) – (1/3) = 3 + 9 + 1 – 1.5 – 0.33 = 11.17, rounding to 2 hours.

RESCUING VICTIMS

Based on real-world data, about 50% of the residents of a burning building get out. If the building has an insufficient number of doors or is not up to code, only 25% will escape, while if the building has 21st century fire alarms and exits, up to 75% will escape. For simplicity, assume any residents who could escape have done so by the time the heroes arrive. Any remaining residents are assumed to be in a temporarily safe spot but trapped. Would-be rescuers will have to travel to rescue each victim, suffering Thermal Damage for each Panel they end in the fire. As a structure burns down, any victims inside perish in proportion – when a structure is wrecked, half the victims have died, and so on.

FIGHTING FIRE WITH WATER

Water is the most common weapon used to fight fire. A character with Water Control can use the Power to spray a fire with water, while a character with Telekinesis or Super-Strength could carry a water tower over the fire and pour its contents onto the inferno.

As an Extended Action, a character can put out a fire by spraying water on it for 0 SPs or more of Time. The Time required is equal to the fire's Magnitude minus the Weight of water sprayed every Page (0 SPs of Time). If the fire is burning a structure, subtract the structure's SPs of Thermal Protection. The Volume of water required is equal to the Weight in SPs – 8.

Source	Volume	Weight
Fire Hydrant, 1500 gallons per minute	-4 SPs/Page	4 SPs/Page
Fire Engine, 1500 gallons	1 SP	9 SPs
Backyard Pool, 30K gallons	5 SPs	13 SPs
Rooftop Water Tower, 10K gallons	4 SPs	12 SPs
Olympic Pool, 660K gallons	9 SPs	17 SPs
Freestanding Water Tower, 1M gallons	10 SPs	18 SPs
Hoover Dam Reservoir	32 SPs	40 Sps

TIME TO EXTINGUISH FIRE = FIRE MAGNITUDE − WEIGHT OF WATER (+ THERMAL PROTECTION)

VOLUME OF WATER = WEIGHT OF WATER − 8

As an Extended Challenge Action, a character can attempt to put out a fire more quickly. The AV is the Time spent extinguishing the fire plus the Weight of water brought every Page. The DV is the Magnitude of the fire -3 minus any Thermal Protection. On a White result, there is no effect. On a Green result, the fire's Intensity is reduced by 1. On a Yellow result, the fire's Intensity is reduced by 2. On an Orange result the fire's Intensity is reduced to half its SP value or by 3, whichever is greater. On a Red result, the fire's Intensity is reduced to 0.

EXTINGUISHING FIRE:
TIME + WEIGHT OF WATER VS. FIRE MAGNITUDE − 3 (- THERMAL PROTECTION)

The Hydrologist has 8 SPs of Water Control. He arrives at the scene of a blazing house. The house has 2 SPs of Thermal Protection. The Volume of the fire is 8 SPs while the Intensity is 4 SPs, giving it a Magnitude of 12 SPs. Using his Water Control, the Hydrologist can deliver water weighing 8 SPs each Page (0 SPs of Time). How long will it take him to extinguish the fire? The Time will be 12 − (8 + 2) = 2 SPs, or about 15 seconds.

Next he rushes to a skyscraper transformed into a towering inferno. The fire has an Intensity of 6 SPs and Volume of 18 SPs, for a Magnitude of 24 SPs, while the structure has 2 SPs of Thermal Protection. It will take 24 – (8 + 2) = 14 SPs, or about 8 hours. That's too long – hundreds of innocents will die. The Hydrologist attempts an Extended Challenge Action, spending 1 hour (10 SPs) of Time. His AV is 18 (10 SPs of Time + 8 SPs of Water Weight). His DV is 19 (the fire's Magnitude -3 – 2 SPs of Thermal Protection), so his RV is -1. He rolls a 21, a Green result on the Chart. He has reduced the fire's Magnitude from 24 to 23. The GM reduces the fire's Intensity from 6 to 5.

Availability of Water: How much water is available will depend on the location of the fire. The Water Source table shows the Volume and Weight of common water sources found in cities and towns. The values listed are total, except for fire hydrants, which are per page. A character with Water Control can move water with a Weight in SPs equal to his Power, so if sufficient water is available, the Weight of water used each Page will just equal SPs of Power.

FIGHTING FIRE WITH FIRE

As an Automatic Action, a character with Fire Control can extinguish a fire with a Magnitude equal to or less than his SPs of Fire Control. As an Extended Action, a character with Fire Control can extinguish a fire of greater Magnitude by using his Power for 0 SPs or more of Time. The Time required is equal to the fire's Magnitude minus character's SPs of Fire Control.

EXTINGUISH FIRE AS AUTOMATIC ACTION IF FIRE CONTROL => FIRE MAGNITUDE
TIME (EXTINGUISH) = FIRE MAGNITUDE – FIRE CONTROL

Burning Man arrives at the scene. He has 12 SPs of Fire Control. The fire ravaging the skyscraper currently has a Volume of 17 SPs, and Intensity of 6 SPs, for a Magnitude of 23 SPs. If he wants to extinguish the Fire, it will take 23 – 12 = 11 SPs, or about 2 hours.

A character can also increase or decrease the Magnitude of a fire rather than extinguish it. The Time required to increase a fire's Magnitude by 1 SP is equal to the Time required to extinguish it. The Time required to decrease a fire's Magnitude by 1 SP is equal to the Time required to extinguish it -1. In either case, the character can choose whether to change Intensity or Volume.

TIME (INCREASE MAGNITUDE BY 1 SP) = FIRE MAGNITUDE – FIRE CONTROL
TIME (DECREASE MAGNITUDE BY 1 SP) = (FIRE MAGNITUDE -1) – FIRE CONTROL

If Burning Man wants to extinguish just the top half of the skyscraper, reducing the Volume by 1 SP from 17 SPs to 16 SPs, then the Time required is [(23 – 1) – 12] = 10 SPs, or 1 hour. Similarly, if Burning Man wants to reduce the Intensity of the Fire from 6 SPs to 5 SPs, the Time required would also be [(23 -1) – 12] = 10 SPs, or 1 hour.

If, when increasing the Magnitude of a Fire, the Time required is less than 0, then the character can actually increase the fire's Magnitude by SPs equal to the negative SPs of Time with an Automatic Action.

Let's say Burning Man encountered a fire with a Magnitude of 10 SPs. Since the fire's Magnitude is less than his Fire Control, he could extinguish the fire as an Automatic Action. If he wanted to increase the fire's Magnitude, the Time required would be [(10) – 12] = -2 SPs. Since the Time required is less than 0, he can change the fire's Magnitude by +2 SPs as an Automatic Action.

As an Extended Challenge Action, the character can attempt to put out a fire more quickly. The AV is the Time spent extinguishing the fire plus the SPs of Fire Control. The DV is the Magnitude of the fire minus 3. On a White result, there is no effect. On a Green result, the fire's Intensity is reduced by 1. On a Yellow result, the fire's Intensity is reduced by 2. On an Orange result the fire's Intensity is reduced to half its SP value or by 3, whichever is greater. On a Red result, the fire's Intensity is reduced to 0.

EXTINGUISHING FIRE:
TIME + FIRE CONTROL VS. FIRE MAGNITUDE – 3

Burning Man needs to reduce the Intensity of the fire ravaging the skyscraper and he doesn't have hours to do it. He attempts an Extended Challenge Action, spending 9 SPs of Time (about 30 minutes). His AV is (9 + 12) 21. His DV is 20 (the fire's Magnitude of 23 minus 3). Therefore, his RV is +1. He rolls a 15 on the CHART, an Orange result. He reduces the fire's Magnitude by half, from 23 to 12. The GM reduces the fire's Intensity to 4 SPs and its Volume to 8 SPs – it is now down to the size of a house fire.

FIGHTING FIRE WITH AIR OR EARTH

As a Power Stunt, Air Control could be used in lieu of Fire Control. Instead of directly manipulating the fire, the character can manipulate its oxygen intake, either starving it off oxygen to reduce its Intensity or Volume or feeding it oxygen to increase it. The same rules apply. Similarly Earth Control could be used in lieu of Water Control as a Power Stunt to attempt to snuff out the fire with noncombustible dirt.

Designer's Note: The data in this section was largely drawn from the National Fire Protection Association's Firewise guidelines. You can find the real-world data here: https://www.nfpa.org/assets/gallery/firewise/operationWater/index.htm

HOSTAGE NEGOTIATION

Charismatic or psychic ascendants might be called on during a hostage crisis to negotiate the release of prisoners.

ATTRIBUTES OF THE HOSTAGE TAKER

Hostage takers are NPCs and have Primary Attributes and possibly Powers and Skills. In addition, hostage takers have an Attitude – either Indifferent, Avoidant, or Hostile (see p. 310). Most hostage takers begin negotiations with a Hostile attitude.

Hostage takers typically have a list of demands, a time by which the demands must be met, and a threat if their demands are not met yet. For instance, a hostage taker who has seized a bus of school children might demand that comrades of his be released from prison within 8 hours (13 SPs of Time) or he will begin shooting the victims. When the Time elapses or if the hostage taker ends negotiations, he will begin carrying out his threat.

NEGOTIATING WITH THE HOSTAGE TAKER

Hostage negotiation is handled using the rules for interacting with NPCs. Except as noted below, all of those rules apply (such as using Skills, making Team Attacks, and so on).

Getting the hostage taker to release his hostages and turn himself should be resolved as a series of requests for favors. Each favor requires a different color threshold to achieve, as shown on the Hostage Negotiations table.

Favor	Color Threshold
Speak to negotiator	Green
Temporarily cease harming hostages	Green
Release a single hostage in exchange for a small demand	Yellow
Release a single hostage as a show of good faith	Orange
Release all the hostages	Red
Turn himself in	Red

Of course, rather than negotiate (or while others are negotiating), characters can use force to take out the hostage taker. This is simply a combat (see p. 363).

USING POWERS TO HANDLE HOSTAGE TAKERS

Mental Powers are very valuable when dealing with hostage takers. Less subtle Powers will be useful if negotiations fail…

★ A character can use Mind Domination to simply force the hostage taker to do what he wills.
★ A character can use Emotion Blast or Mental Blast to quickly reduce a hostage taker to a Current Determination of 0 simply by use of his Powers.

★ A character can use Emotion Adjustment to make the hostage taker more agreeable to negotiations.
★ A character can use Illusion to make it seem like a particular demand has been met or that the circumstances of the negotiation are worse for the hostage taker than he believes.

NUCLEAR DISASTER

Being a first responder to a nuclear disaster has historically led to death. Sometimes it is a quick death from nuclear fire, sometimes a slow and agonizing death from radiation sickness, and sometimes a glacial wasting away from cancer. Despite, or perhaps because of, the horrors of nuclear fallout, ascendants might be called on to shut down a nuclear reaction, seal off a reactor core, or otherwise absorb doses of radiation that would be lethal in ordinary men.

ATTRIBUTES OF RADIATION

When a nuclear disaster occurs, the location affected becomes a radioactive site. Radioactive sites have three Attributes: Volume, Radiation Level, and Magnitude, all rated in SPs. Volume measures the cubic footage of the affected site. Radiation Level is a measure of ionizing radiation in the area, with 0 SPs of Radiation Level meaning that anything in the area suffers 150 rems of radiation exposure every 10 SPs of Time (one hour). Magnitude is simply the sum of Radiation Level and Volume.

The highest Radiation Levels tend to be found at or near the epicenter of the nuclear disaster, with progressively lower Radiation Levels at distance from the center. The Radiation Levels found at Chernobyl can serve as a useful benchmark.

★ Radiation Level of 8 SPs at the reactor core
★ Radiation Level of 7 SPs at the "Elephant's Foot" (melted slag)
★ Radiation Level of 6 SPs at the debris field around Unit 4
★ Radiation Level of 5 SPs in the Level 25 feedwater room's water
★ Radiation Level of 4 SPs in the Level 0 turbine hall
★ Radiation Level of -5 SPs in the control room

Rems	Radiation (SP)	Loss (Points)
4,800,000	15	16,000
2,400,000	14	8,000
1,200,000	13	4,000
600,000	12	2,000
300,000	11	1,000
144,000	10	500
72,000	9	256
36,000	8	128
18,000	7	64
9,000	6	32
4,500	5	16
2,250	4	8
1125	3	4
650	2	2
325	1	1
150	0	1*
75	-1	0
35	-2	0
20	-3	0
10	-4	0
5	-5	0
		*Health lost on White result only

EFFECTS OF RADIATION

When a creature spends time in a radioactive site, he risks becoming sick from radiation. To calculate the SPs of Radiation Exposure, add the Background Radiation in SPs + Time spent in SPs then subtract the character's SPs of Ionizing Protection +10. If the total is 0 SPs or more, the creature gains the Radiation Sickness condition. If a creature accumulates 0 SPs or more of Radiation Exposure from spending Time in areas with different Radiation Levels, use the higher value +1.

Creatures with Radiation Sickness waste away over time. Each time a creature with Radiation Sickness is eligible to recover Health (usually every 15 SPs of Time), the creature must make a MIG vs. Radiation Exposure Challenge Check first.

On any result except Red, the creature's Maximum Health is reduced by the amount determined by cross-referencing his SPs of Radiation Sickness and the number on the Loss column of the Radiation Exposure table. (The foregoing notwithstanding, Radiation Exposure of 0 SPs only does Damage on White results). If the creature's Maximum Health is equal in magnitude to the negative of his Maximum Health, he is slain. If Maximum Health is 0 or less, he is Unconscious.

On a Red result, the Radiation Sickness ends. Once a creature's Radiation Sickness ends, any lost Maximum Health thereafter recovers at the same rate as his Current Health. A creature does not recover Current Health until his Radiation Sickness ends.

$$\textbf{RADIATION EXPOSURE} = \text{BACKGROUND RADIATION} + \text{TIME} - (\text{IONIZING PROTECTION} + 10)$$
$$\text{IF RADIATION EXPOSURE} >= 0, \text{CREATURE GAINS RADIATION SICKNESS CONDITION}$$

RADIATION SICKNESS:
MIG VS. RADIATION EXPOSURE

Avangard (MIG of 14 SPs, Health of 1280) and a reactor technician (MIG of 3 SPs, Health of 30) have to enter the reactor core to prevent a nuclear meltdown. The radiation level in the reactor core is 36,000 rems per hour, for 8 SPs of Background Radiation. It takes the duo a total of 2 minutes (5 SPs of Time) to finish their work in the core. Their Radiation Exposure is 8 + 5 − 10 = 3 SPs. Both gain the Radiation Sickness condition. They've each suffered about 1,200 rems of radiation. 1,000 rems is a fatal dose for a man.

Neither Avangard nor the technician have any SPs of Regeneration, so the first effects of the Radiation Sickness show up after 15 SPs of Time (about a day). Each character must make a MIG vs. Radiation Exposure Challenge Check. Avangard's Check is resolved with an RV of 14 − 3 = 11, so he gets an automatic Red result and shrugs off the Radiation Sickness.

The technician is not so lucky. His MIG is only 3, so his RV is 0. To shake off the Radiation Sickness, he needs a Red result, and his roll of 48 only earns a Green. His Maximum Health is reduced from 30 to 26. Assuming he does not roll a Red result (1% chance), this process continues every 15 SPs as the technician slowly wastes away to 22, 18, 14, 10, 6, 4, and 2, slipping into unconsciousness. His deterioration continues, with Maximum Health dropping to -2, -6, -10, -14, -18, -22, and - 26. Finally, it drops to -30 and he dies.

What if the technician miraculously rolled a Red result on his last Challenge Check? His Radiation Sickness condition would end. He'd begin to recover his Maximum Health. With MIG of 3, he'd regain 6 points of Health each time he recovered, being back to his Maximum Health after ten recoveries.

Note that creatures with the Regeneration Power recover Health more often and as a result the effects of Radiation Sickness will strike much more quickly. Radiation harms cells that reproduce rapidly much more than cells that reproduce slowly or not at all, and creatures with Regeneration have cells that reproduce quite rapidly indeed.

DECONTAMINATING A RADIOACTIVE SITE

As an Extended Action, a character with Radiation Control can decontaminate a radioactive site directly if the source of the radiation is within Range and LOS. (A character with Time Control could use a Power Stunt to emulate Radiation Control by speeding up the rate of radioactive decay.) The Time required to reduce the Magnitude of the radioactive site to 0 is equal to the radioactive site's SPs of Magnitude minus the character's SPs of Power.

As an Extended Challenge Action, the character can attempt to reduce the Radiation Level more quickly. The AV is the Time spent plus the character's SPs of Power. The DV is the Magnitude of the radioactive site − 3. On a White result, there is no effect. On a Green result, the site's Magnitude is reduced by 1. On a Yellow result, the site's Magnitude is reduced by 2. On an Orange result the site's Magnitude is reduced to half its SP value. On a Red result, the site's Magnitude is reduced to 0.

Note that because LOS is required on the source of the radiation, a character cannot control radiation from outside the site if the source is inside of a reactor chamber or similar sealed environment. While the character is cleansing the radioactive site, he suffers Radiation Exposure based on the Time spent + Radiation Level − 1, modified by Ionizing Protection as normal. (The -1 modifier reflects the fact that the radiation level is decreasing throughout the time period.)

$$\textbf{TIME (DECONTAMINATE)} = \text{RADIATION MAGNITUDE} - \text{RADIATION CONTROL}$$

DECONTAMINATE RADIOACTIVE SITE:
RADIATION CONTROL + TIME VS. RADIATION MAGNITUDE − 3

$$\textbf{RADIATION EXPOSURE (DURING DECONTAMINATION)} = \text{TIME SPENT} + \text{RADIATION LEVEL -1}$$
$$- (\text{IONIZING PROTECTION} + 10)$$

CONTAINING A RADIOACTIVE SITE

A radioactive site can be contained with earth using Earth Control. The Weight of earth required is equal to the radioactive site's Magnitude. Containing a radioactive site does not decontaminate it, but it does prevent it from spreading its radiation into groundwater or atmosphere. Since a character with Earth Control can move a Weight of earth equal to his SPs of Power every 0 SPs of Time, the Time for the character to contain the site using an Extended Automatic Action is equal to the SPs of Radiation Magnitude minus his SPs of Power.

As an Extended Challenge Action, the character can attempt to contain the radioactive site more quickly. The AV is the Time spent plus the character's SPs of Power. The DV is the Magnitude of the radioactive site – 3. On a White result, there is no effect. On a Green result, 1 SP of Volume is contained. On a Yellow result, 2 SPs of Volume are contained. On an Orange result, half of the Volume is contained. On a Red result, the entire site is contained.

WEIGHT OF EARTH (CONTAIN RADIOACTIVE SITE) = RADIATION MAGNITUDE
TIME (CONTAIN) = RADIATION MAGNITUDE – EARTH CONTROL
CONTAIN RADIOACTIVE SITE:
EARTH CONTROL + TIME VS. RADIATION MAGNITUDE – 3

Reactor 4 is a radioactive site with a Radiation Level of 8 SPS and a Volume of 16 SPs (about 14 million cubic feet), for a Magnitude of 24 SPs. The containment engineers at the site estimate it will take over 200 days and 2,500 trucks to cart in enough concrete to seal the reactor. The Graniteer is called in to speed up the process. He has 12 SPs of Earth Control, so it will take him just 24 – 12 = 12 SPs, or about four hours.

TORNADO

ATTRIBUTES OF TORNADOES

The real-world Fujitsu scale rates tornados from F0 (gale) to F5 (incredible) based on wind speed and destructiveness. In game, tornados are measured with SPs in Volume, Height, Path Width, Path Length, Duration, Wind Speed, Wind Strength, and Magnitude. Volume is the total air mass of the tornado's column. Height is the vertical length of the tornado's column, from the ground to the cumulonimbus clouds overhead. Path Width is the diameter of the tornado's column. Path Length is the total distance over which the tornado's column touches the ground. Duration is the total time the tornado's column touches the ground. Wind Speed is the sustained rate of the tornado's winds. Wind Strength is a measure of how much the tornado's winds can lift and throw. Magnitude is the sum of tornado's Wind Strength plus Volume.

Values can vary by +/-1 SP in each category except Volume. Volume can vary by +/-3. If Duration is raised/lowered, Path Length must also be raised/lowered (and vice versa). If Height is raised/lowered, Volume must be raised/lowered (and vice versa). If Path Width is raised/lowered, Volume must be raised/lowered by 2 (and vice versa).

Category	Magnitude	Volume	Height	Path Width	Path Length	Duration	Wind Speed	Wind Strength
F0	12	10 (128K cf)	7 (640 ft)	2 (20 ft)	8 (1/4 mi)	5 (2m)	5 (40mph)	2 (pick up animals)
F1	20	15 (4M cf)	8 (1/4 mi)	4 (80 ft)	10 (1 mi)	6 (4m)	6 (75mph)	5 (throw motorcycles)
F2	28	20 (131M cf)	9 (1/2 mi)	6 (320 ft)	12 (4 mi)	7 (8m)	7 (125mph)	8 (throw cars)
F3	35	24 (2B cf)	9 (1/2 mi)	8 (1/4 mi)	14 (15 mi)	8 (0.25h)	8 (200mph)	11 (topple trains)
F4	42	28 (32B cf)	9 (1/2 mi)	10 (1 mi)	16 (60 mi)	9 (0.5h)	8 (250mph)	14 (lift houses)
F5	48	31 (256B cf)	10 (1 mi)	11 (2 mi)	18 (250 mi)	10 (1h)	8 (300mph)	17 (topple skyscrapers)

EFFECTS OF TORNADOS

A tornado moves its Wind Speed in SPs at the end of each Page. Any character impacted by the tornado suffers a Ramming Attack by the tornado. The AV of the Attack Check is the Path Width/Wind Speed of the tornado, while the DV is the AGI/Speed of the target. (For Static Objects, this will be 0). The EV is the equal to the Wind Strength of the tornado. The fierce winds deal Bludgeoning Lacerating Penetrating Damage.

If the tornado's Wind Strength is greater than the target's Weight and it scored a Green or better result with its Ramming Attack, the tornado throws the target in a random direction. Roll 1d12 to determine the clock direction the target is flung in, with "6" being to the rear of the tornado. The target is thrown a Distance equal to the tornado's Wind Strength – the target's Weight, and suffers Bludgeoning Damage upon impact with the ground or another target as if struck by the tornado with a Green result.

If the target's Weight is greater than the tornado's Wind Strength but it was instantly Slain or Destroyed by the Damage, then the target's rubble or corpse is flung in small chunks in every direction. If the target's Weight is greater than the tornado's Wind Strength and the target wasn't Destroyed, then the tornado moves over the target, but does not move it. If the tornado's path width is sufficiently large, it may still be atop the target on the following Page and deal Damage again.

STOPPING TORNADOS

As an Automatic Action, a character with Air Control or Weather Control can calm a tornado with a Magnitude equal to or less than his SPs of Power. As an Extended Action, a character with Air Control or Weather Control can calm a tornado of greater Magnitude by using his Power for 0 SPs or more of Time. The Time required is equal to the tornado's Magnitude minus character's SPs of Power.

CHANGE IN TORNADO VOLUME = AIR CONTROL/WEATHER CONTROL - TORNADO MAGNITUDE
CHANGE IN TORNADO WIND STRENGTH = AIR CONTROL/WEATHER CONTROL – TORNADO MAGNITUDE
CHANGE IN TORNADO MAGNITUDE = AIR CONTROL/WEATHER CONTROL – TORNADO MAGNITUDE

A character can also increase or decrease the Magnitude of a tornado rather than calm it. The Time required to increase a tornado's Magnitude by 1 SP is equal to the Time required to calm it. The Time required to decrease a tornado's Magnitude by 1 SP is equal to the Time required to calm it -1. In either case, the character can choose whether to change Wind Strength or Volume.

TIME (INCREASE MAGNITUDE BY 1 SP) = TORNADO MAGNITUDE – AIR CONTROL /WEATHER CONTROL
TIME (DECREASE MAGNITUDE BY 1 SP) = (TORNADO MAGNITUDE -1) – AIR CONTROL/WEATHER CONTROL

As an Extended Challenge Action, the character can attempt to calm a tornado more quickly. The AV is the Time spent calming the tornado plus the SPs of the Power used. The DV is the Magnitude of the tornado minus 3. On a White result, there is no effect. On a Green result, the tornado's Magnitude is reduced by 1. On a Yellow result, the tornado's Magnitude is reduced by 2. On an Orange result the tornado's Magnitude is reduced to half its SP value or by 3, whichever is greater. On a Red result, the tornado's Magnitude is reduced to 0.

CALMING TORNADO:
TIME + AIR CONTROL/WEATHER CONTROL VS. TORNADO MAGNITUDE – 3

TSUNAMI

Tsunami are seismic sea waves caused by submarine earthquakes, coastal landslides, or volcanic eruptions. The point at which a tsunami emanates is called its epicenter. Tsunami travel from their epicenter across an ocean at 500mph, stopping only when they hit a coastline. As they reach land, they lose speed but gain tremendous height. A tsunami in the deep ocean will pass unnoticed as a wave of less than 5 feet height, but a tsunami hitting a coast can be 5 to 1500 feet tall. A tsunami can affect hundreds or even thousands of miles of coastline.

ATTRIBUTES OF TSUNAMI

Tsunami have four Attributes: Wave Height, Ocean Speed, Landfall Speed, and Duration. Wave Height ranges from 0 SP (5 feet) to 8 SP (1500 feet). Ocean Speed averages 9 SP (500mph). Landfall Speed ranges from 4 SP (15mph) to 7 SP (90mph) depending on the depth of the water. Duration ranges from 7 SP (4minutes) to 8 SP (16 minutes). Duration is divided into Advance and Retreat phases, as the tsunami rolls in and then recedes.

These Attributes can combine in various ways at various locations depending on the distance from the epicenter of the tsunami, the power of the tsunami's trigger, the depth of the water, the shape of the coastline, and other factors. The table below is illustrative of some possible combinations but virtually any other combination is possible.

Note that a tsunami does not have a Wave Width. A tsunami is always a wide as the length of coastline it is striking at any time. For instance, if a tsunami strikes an island that is one mile in diameter (10 SP), the tsunami would hit the island at every point, while to the left and right of the island the tsunami would continue on.

Category	Wave Height	Ocean Speed	Landfall Speed	Advance Duration	Retreat Duration
Big Wave	0 (5 feet)	9 (500mph)	4 (15mph)	6 (2 minutes)	6 (2 minutes)
Tidal Wave	2 (20 feet)	9 (500mph)	5 (15mph)	7 (4 minutes)	7 (4 minutes)
Tsunami	4 (80 feet)	9 (500mph)	5 (30mph)	7 (4 minutes)	7 (4 minutes)
Super-Tsunami	6 (300 feet)	9 (500mph)	5 (30mph)	8 (8 minutes)	8 (8 minutes)
Mega-Tsunami	8 (1500 feet)	9 (500mph)	6 (60mph)	8 (8 minutes)	8 (8 minutes)

TRAVEL TIME OF A TSUNAMI

To determine how long it will take a tsunami to reach a particular point, calculate the Travel Time based on the Distance from the epicenter of the tsunami minus the Ocean Speed.

A 9.2 earthquake off the coast of Okinawa triggers a tsunami with an Ocean Speed of 9 SPs. It is 500 miles (19 SPs) to Shanghai and 4,000 miles to Brisbane (22 SPs). It will take 10 SPs (1 hour) for the tsunami to hit Shanghai and 13 SPs (8 hours) to hit Brisbane.

EFFECTS OF A TSUNAMI

When it reaches the coast, a tsunami moves its Landfall Speed in SPs at the end of each Page. Any character impacted by the tsunami suffers a Ramming Attack. The AV of the Attack Check is the Wave Height/Landfall Speed of the tsunami while the DV is the AGI/Speed of the target. (For Static Objects, this will be 0). The EV is the equal to the sum of the tsunami's Landfall Speed and Wave Height.

TSUNAMI RAMMING ATTACK:
WAVE HEIGHT/LANDFALL SPEED VS. AGI/SPEED
TSUNAMI EV:
LANDFALL SPEED + WAVE HEIGHT

A tsunami continues to advance every Page for its Advance Duration. The total Distance it will advance is equal to its Landfall Speed + Advance Duration. Reduce the Wave Height by 1 SP after 1 SP of Time (2 Pages), by 2 after 2 SP of Time (4 Pages), continuing until it reaches a minimum Wave Height of 0 SPs or the Advance Duration ends.

A tsunami with a Wave Height of 4 SPs, Landfall Speed of 5 SPs and Advance Duration of 7 SPs will advance 12 SPs inland, a distance of about 4 miles. After 1 SP of Time (7 seconds), its Wave Height will be reduced to 3 SP. After 2 SPs of Time (15 seconds), its Wave Height will drop to 2 SP. After 4 SPs of Time (a minute), its Wave Height will drop to 0 SPs. It will stay at 0 SPs until the Advance Duration expires.

Once the Advance Direction expires, the tsunami then changes direction and moves back towards the ocean. It will travel at its Landfall Speed with a Wave Height of 0 SPs, making Ramming Attacks on any targets in its path as above.

Movement from Tsunami: Targets in the path of a tsunami are often carried long distances. If the target is instantly Slain or Destroyed by the tsunami, then the target's rubble or corpse is carried along with the tsunami for the remaining Duration. If the target is an object affixed to the ground and it wasn't Destroyed, then the tsunami flows around and over the target, but does not move it. It does not take further damage from the wave's advance but will be damaged again during its retreat.

If the target is an unfixed object with a Weight equal to or less than the tsunami's current Wave Height plus Landfall Speed, it is carried along with the tsunami for the remainder of the tsunami's movement that Page (if any), and each Page thereafter until the Wave Height plus Landfall Speed is less than the target's Weight. Each time the tsunami moves the target, it suffers additional Damage as if struck by the tsunami with a Green result.

If the target is a character (including characters steering vehicles) and the tsunami scored a White result with its Ramming Attack, then the target is carried along with the tsunami for the remainder of the tsunami's movement that Page minus any SPs of Immovability. Thereafter the target continues to be moved by the tsunami but can himself move on his Panel at his Swimming Speed or can fly or jump out of the water or otherwise escape. He does not take additional Damage from the tsunami.

If the target is a character and the tsunami scored a Green or better result with its Ramming Attack, the target is carried along with the tsunami for the remainder of the tsunami's movement that Page and each Page thereafter for the Duration or until the target escapes. The water is considered to be a Hazardous Environment with a Hazardousness equal to the Wave Speed; the target in the water is at risk of drowning (p. 293) and takes additional Damage each Page as if struck by the tsunami with a Green result.

STOPPING A TSUNAMI

Not even the most powerful ascendant can save everyone from a tsunami, but an ascendant in the right place at the right time can make a meaningful difference. Useful Powers include Water Control to stop the waves and Earth Control to build dikes. Air Control and Weather Control could emulate Water Control with a Power Stunt while Force Control, Gravity Control, or Telekinesis could emulate Earth Control.

Water Control: A character with Water Control can protect a stretch of coastline from a tsunami by pushing the water back as it surges forward. As an Extended Automatic Action, a character can protect a Length of coastline equal to his SPs of Water Control minus the tsunami's Wave Height and Landfall Speed. The character must maintain the Automatic Action for the entire Duration of the tsunami.

COASTLINE LENGTH PROTECTED = WATER CONTROL – (TSUNAMI WAVE HEIGHT + LANDFALL SPEED)

A tidal wave with a Wave Height of 2 SPs and Landfall Speed of 5 SPs is striking Laguna Beach. The Hydrologist (8 SPs of Water Control) notices his girlfriend is playing beach volleyball as the wave advances and decides to save her. He can shield a Length of coastline equal to 8 – (2 + 5) = 1 SP, or about 10 feet – that's enough to protect his girlfriend and her three other bikini-clad friends. The tidal wave advances inexorably up the beach everywhere else. The Hydrologist must continue to expand an Automatic Action each Page until 7 SPs of Time have passed and the tsunami ends.

As a Challenge Action, the character can attempt to protect a longer Length of coastline. Use the character's SPs of Water Control as the AV for the Challenge Check. Use the sum of the Wave Height, Landfall Speed, and Length as the DV for the Challenge Check.

On a White result, the tsunami surges through despite his power. On a Green or better result, the character temporarily holds back the tsunami. He holds it back for 0 SPs (1 Page) on a Green result; for 1 SP (2 Pages) on a Yellow result; for 2 SP (4 Pages) on an Orange result; and for 3 SP (8 Pages) on a Red result. Thereafter the character can allow the tsunami to strike or take an additional Challenge Action to make another Check to continue to hold off the tsunami.

PROTECT COASTLINE:
WATER CONTROL VS. (TSUNAMI WAVE HEIGHT + LANDFALL SPEED + COASTLINE LENGTH)

Assume the Hydrologist decided to protect 40 feet of the beach (3 SPs) by taking a Challenge Action. The Challenge Check would have an AV of 8 and a DV of 5 + 2 + 3 = 10, for an RV of -2.

Earth Control: As an Extended Automatic Action, a character with Earth Control can build a dike. The character can construct a dike with a Length equal to his SPs of Earth Control plus Time spent minus the Dike Height and Density of the material used. The dike's Toughness will equal the Density of the material used. The character can increase Toughness by decreasing Length and vice versus on a 1 for 1 basis.

The character chooses the Dike Height when he builds it. The Density of the dike depend on the material the character uses – in most cases the Density will be 8 SPs, but a character protecting Manhattan might use the island's granite bedrock (Density 10 SPs) instead.

When the tsunami strikes, it automatically fails if the Wave Height exceeds the Dike Height. Otherwise, make a Ramming Attack Check against the dike (as above). Treat the dike's SPs of Density as SPs of Protection against the tsunami's Damage. If the dike has at least 1 Durability remaining after the attack, it holds off the tsunami.

PROTECT COASTLINE:
WATER CONTROL VS. (TSUNAMI WAVE HEIGHT + LANDFALL SPEED + COASTLINE LENGTH)

The Graniteer has 12 SPs of Earth Control. He is put in charge of defending a 1-mile (10 SP) stretch of coast encompassing Brisbane Airport. He has 13 SPs (8 hours) until the tsunami strikes. He decides to build his dike with a Height of 4 SPs, sufficient to stop 80-foot waves. He uses packed rock torn from the coast (Density of 8 SPs). His dike can have a Length of (12 + 13 − 8 − 4) 13 SPs and Toughness of 8 SPs. He only needs to protect 10 SPs of coastline, so he reduces the Length to 10 SPs to give the dike a Toughness of 11 SPs. It has a Durability of 480 and Protection of 32.

The tsunami hits with a Wave Height of 4 SPs and a Landfall Speed of 5 SPs. The tsunami's Ramming Attack strikes with an AV of 5. Since the dike is immobile, its DV is 0. The RV is +5. The GM rolls an 89 on the Attack Check and scores an Orange Result. The EV is the sum of Wave Height and Landfall Speed (9 SPs), so the tsunami deals 192 points of Damage to the dyke. The dyke has 32 points of Protection from its Density, so 160 points of Damage gets through. That's not enough to break the dyke – it holds!

What if the tsunami had a Landfall Speed of 6 SPs and had scored a Red result? With a Red result on an EV of 10 SPs, it would have dealt 512 points of Damage. That would be enough to reduce the dike to a Durability of 0, and the tsunami would have broken through.

VOLCANO

A volcano is a cyst in the earth's crust from which lava, ash, and hot gases flow or are ejected during an eruption. Small volcanos are not uncommon but also not particularly dangerous. Mega-colossal volcanoes such as Yellowstone may erupt only once every million years, but when they do, they change the world.

VEI	Magnitude	Plume Height	Ejecta Volume	Duration	Famous Examples
0 (Effusive)	16	6 (300 ft)	8	7 – 10	-
1 (Gentle)	18	8 (1000 ft)	11	8 – 11	-
2 (Explosive)	20	9 (3000 ft)	15	9 – 12	-
3 (Catastrophic)	22	11 (2 miles)	18	10 – 13	Nevado del Ruiz (1985)
4 (Cataclysmic)	24	13 (8 miles)	21	11 – 14	Grímsvötn (2011)
5 (Paroxysmic)	26	14 (16 miles)	25	12 – 15	Vesuvius (79 AD), St. Helens (1980)
6 (Colossal)	28	15 (25 miles)	28	13 – 16	Krakatoa (1883 AD), Pinatubo (1991 AD)
7 (Super-Colossal)	30	15 (30 miles)	31	14 – 17	Thera (1620 BC), Tambora (1815 AD)
8 (Mega-Colossal)	32	15 (35 miles)	35	15 – 18	Yellowstone (630,000 BC)

ATTRIBUTES OF VOLCANOS

Volcanos have three Attributes: Magnitude, Plume Height, Ejecta Volume, and Duration. In the real world, Magnitude is measured with the Volcanic Explosivity Index, which is converted into SPs on the table below. Plume Height, Ejecta Volume, and Duration are measured in SPs and determined by Magnitude. All values can vary by +/-1 SP in each category.

Volcanic eruptions actually last 40 to 60 days on average. However, the so-called paroxysmal phase, when the volcano is at its most dangerous, is much shorter. The Duration values below cover only the paroxysmal phase of the eruption. The less turbulent phases before and after the paroxysmal phase can be simulated with lower-Magnitude eruptions.

EFFECTS OF VOLCANOS

A volcano affects the characters and objects around it in four ways. First, the eruption expels enormous amounts of ash into the atmosphere. Second, the explosion propels volcanic bombs of molten rock that explode from gas pressure as they cool. Third, pyroclastic surges of volcanic gas, ash, pumice, and hot lava race downhill. Finally, slow-moving lava flows destroy everything in their path. Each has its own effects. Not every type of volcanic eruption has all four components and volcanos are classified according to which effects they produce. "Icelandic" and "Hawaiian" eruptions only have ash ejection and lava flows. "Strombolian" and "Vulcanian" eruptions have ash ejection, volcanic bombs, and lava flows. Pelean and Plinian eruptions are the most dangerous and have ash ejection, volcanic bombs, pyroclastic surges, and lava flows.

While ash ejection tends to be constant throughout the Duration, the other effects tend to occur in periodic spasms of violence. An eruption (of any Magnitude) will have between three and six spasms, as determined by the GM. Each spasm will include at least one instance of each effect of that type of volcano, as determined by the GM. The total Volume of lava flows and pyroclastic surges caused by each spasm of the volcano should be equal to or less than its Ejecta Volume - 3. (Remember that SPs don't add linearly.)

Mt. Vesuvius has violent awakened and exploded in a paroxysmic Plinian eruption! As a paroxysmic (VEI 5) eruption, the volcano has a Magnitude of 26 SPs, a Plume Height of 14 SPs, Ejecta Volume of 25 SPs. The GM decides on a Duration of 13 SPs (8 hours) with five spasms. He decides the volcano will erupt at 3:00PM, with the first spasm at 3:00PM, the second at 5:00PM, the third at 7:00PM, the fourth at 9:00PM, and the fifth at 11:00PM. Since it's a Plinian eruption, each spasm will include at least one volcanic bombfall, one lava flow, and one pyroclastic surge. The Volume of each effect must be equal to or less than 25 -3 = 22 SPs. The GM decides on lava flows with 8 SPs of Intensity and 22 SPs of Volume and pyroclastic surges with 7 SPs of Intensity and 21 SPs of Volume.

VOLCANIC BOMBFALL

Volcanic bombs are ejected during the explosion and propelled on ballistic trajectories hundreds or even thousands of feet from the volcano. Volcanic bombfalls have three Attributes: Bombfall Radius and Bombfall Duration. Bombfall Radius is the distance from the epicenter of the eruption at which bombs fall. Bombfall Duration is the length of Time each bombfall lasts. Radius and Duration can be +/-2 in each category due to e.g. wind speed, angle of ejection, etc.

VEI	Bombfall Radius	Bombfall Duration	Pages/Bomb (Chance per Page)	Cumulative Damage	Effect of Cumulative Damage
0 (Effusive)	8 (1/4 mile)	8 (15 min)	256 (1%)	16	Small vehicles lightly damaged.
1 (Gentle)	9 (1/2 mile)	8 (15 min)	128 (1%)	32	Small vehicles moderate damaged.
2 (Explosive)	10 (1 mile)	9 (30 min)	64 (2%)	128	Small vehicles badly damaged or wrecked.
3 (Catastrophic)	11 (2 miles)	9 (30 min)	32 (3%)	256	Small & large vehicles wrecked. Huge vehicles & small buildings wrecked.
4 (Cataclysmic)	12 (4 miles)	10 (1 hour)	32 (3%)	512	Small and large vehicles destroyed. Huge vehicles and small buildings wrecked.
5 (Paroxysmic)	13 (8 miles)	10 (1 hour)	8 (12%)	2,048	All vehicles and small buildings destroyed. Large buildings wrecked.
6 (Colossal)	14 (16 miles)	11 (2 hours)	8 (12%)	4,096	All vehicles and all buildings destroyed.
7 (Super-Colossal)	15 (32 miles)	11 (2 hours)	4 (25%)	8,192	All vehicles and all buildings utterly obliterated.
8 (Mega-Colossal)	16 (64 miles)	12 (4 hours)	2 (50%)	32,768	Virtually everything utterly obliterated.

For the course of the Duration, volcanic bombs may strike anything and anyone within the Bombfall Radius. The Pages/Bomb column indicates the frequency at which a bomb will strike any given five-foot by five-foot (0 SP) Area; and show (in parentheses) the percentage chance of a bomb falling on a given 0 SP-Area in any given Page of combat. When bomb falls on an area, it attacks any character in the area. The AV of the bomb's attack is 3 while the DV is the target's AGI/Speed.

The smallest volcanic bombs, about the size of baseballs, can travel for miles, but closer to the epicenter of the explosion much larger bombs can fall. Therefore the EV for any bomb attack is 6 at the Bombfall Radius but increases by 1 SP per SP of distance closer to the volcano's epicenter. The Weight of the bomb falling on any given 0 SP-Area is equal to the EV of the bomb minus 7. (Sometimes the bombs might actually consist of several rocks of lighter weight but for game purposes we treat all the various rocks hitting a given Area as a single bomb.) The Damage Type is always Bludgeoning Thermal.

BOMBFALL ATTACK: 3 VS. AGI/SPEED
EV (BOMBFALL) = 7 + (BOMBFALL RADIUS − DISTANCE FROM EPICENTER)
BOMB WEIGHT = EV − 7

During its first spasm, Mt. Vesuvius begins ejecting volcanic bombs in a 13 SP (8 mile) radius around its epicenter. The city of Naples is 12 SP (6 miles) away. Each five-foot by five-foot (0 SP) Area of Naples has a 12% chance per Page of being struck by a bomb. Each of the bombs that fall on Naples has an EV of 6 + (13 - 12) = 7 SPs, and a Weight of 7 − 7 = 0 SPs (25 lbs). At the GM's discretion, the attacks could represent a landfall by a single 25-lb volcanic bomb or a cluster of 50 baseball-sized half-pound bombs, or anything in between.

The Cumulative Damage column indicates how much Damage a static object positioned at the Bombfall Radius is projected to take. The Damage increases by 1 SP of VEI per SP of distance closer to the volcano's epicenter. The Effect of Cumulative Damage indicates what happens to static objects positioned at the Bombfall Radius. The effects will be worse closer to the epicenter.

The Cumulative Damage from Mt. Vesuvius's volcanic bombfall is 2,048 points at the Bombfall Radius of 13 SPs. However, Naples is only 12 SPs from Mt. Vesuvius, so the Damage is increased by 1 SP to 4,096 points. Looking at the Effects of Cumulative Damage table, the GM notes that all vehicles and small buildings are destroyed. He guesses that about 50% of large buildings in Naples are destroyed.

STOPPING VOLCANIC BOMBFALL

Volcanic bombs can be dealt with in myriad ways.

★ One or more particular bombfall attacks on important locations could be deflected with Deflection (especially with the Projectable Multi-Target modifier), blocked by a Forcefield (especially with the Projectable or Shaped modifier), or stopped by an object created with Force Control.

★ Bomb falls might be shot out of the sky with Blast or destroyed as they arrive with an Aura. Volcanic bombs have AGI 0 and Speed 7. Their Toughness is equal to 2/3 x Weight + 4. Their Height is equal to (Weight − 9) / 3. For instance, a bomb with a Weight of -1 has a Toughness of 3 (and hence a Durability of 30). It has a Height of (-1 − 9)/3 = -3 SPs, or about 6".

★ Bombs might be diverted to another area with Air Control, Gust, Telekinesis, or Weather Control. When diverting falling bombs, add together the SPs of Area protected to the Weight of bombs falling per 0-SP Area; that's the SPs of Air Control or Telekinesis, etc.) required to move the bombs a distance of 0 SPs.

LAVA FLOWS

A lava flow is a slow-moving column of molten rock (temperature 600 to 1200 F) that travels downhill from the point of the eruption. Lava flows destroy virtually everything in their path but move so slowly that human beings can usually avoid them. (The fastest-recorded advance of a lava flow was the 1950 Mauna Loa eruption, when the frontage advanced at 6mph.)

Lava flows have nine Attributes measured in SP: Intensity, Width, Depth, Travel Distance, Volume, Weight, Speed, Magnitude, and Duration. Intensity measures how hot the lava is. Width is the frontage of the lava flow. Travel Distance is the total distance the flow's frontage advances. Depth is the vertical thickness of the lava flow. Volume is the sum of Width, Travel Distance, and Depth. Weight is Volume + 10 SPs (all lava has a Density of 10 SPs). Speed is the velocity of the frontage of the lava flow. Magnitude is the lava flow's Weight + Speed. Duration is its Travel Distance – Speed. The Laval Flow Table below lists the SP scores of a range of lava flows. Values except Speed can vary by +/-1 SP in each category. Speed can vary by up to +/-2 SP (-1 to 3).

LAVA FLOW MAGNITUDE = FLOW WEIGHT + FLOW SPEED
LAVA FLOW DURATION = FLOW TRAVEL DISTANCE – FLOW SPEED

Intensity	Width	Depth	Travel Distance	Volume	Weight	Speed
7	6 (300 feet)	0 (5 feet)	10 (1 mile)	16 (8M cf)	26 (800K tons)	1 (2mph)
7	7 (600 feet)	1 (10 feet)	11 (2 miles)	19 (65M cf)	29 (6M tons)	1 (2mph)
7	8 (1/4 mile)	2 (20 feet)	12 (4 miles	22 (524M cf)	32 (50M tons)	1 (2mph)
8	9 (1/2 mile)	3 (40 feet)	13 (8 miles)	25 (4B cf)	35 (400M tons)	1 (2mph)
8	10 (1 mile)	4 (80 feet)	14 (16 miles)	28 (32B cf)	38 (3B tons)	1 (2mph)

EFFECTS OF LAVA FLOWS

A lava flow is similar to an avalanche. It travels its Speed in SPs at the end of each Page, and it makes a Ramming Attack against targets it impacts. The AV of the Attack Check is the Width of the lava flow, while the DV is the AGI/Speed of the target. (For static objects, this will be 0). The EV is the equal to the lesser of the lava flow's or the target's Weight plus the lava flow's Speed. The Damage Type is Bludgeoning Thermal.

The lava flow carries or flows around the target exactly like an avalanche of the same Weight. It buries targets if its Depth exceeds the target's Height, rendering the target Stuck as if a victim of Glue with SPs equal to the lava flow's Depth.

In addition, targets that end their Panel in a lava flow are burned as if in a fire (e.g. a Special Thermal Aura). They automatically suffer Thermal Damage from a Green Attack using the lava flow's Intensity as the EV. Thermal Protection reduces this damage as usual. When they exit the flow, they gain the Burning condition with SEV equal to the flow's Intensity – 1.

LAVA FLOW RAMMING ATTACK:
FLOW WIDTH VS. TARGET AGI/SPEED
LAVA FLOW DAMAGE (IMPACT) = TARGET WEIGHT</>FLOW WEIGHT + FLOW SPEED
LAVA FLOW DAMAGE (BURNING) = INTENSITY
SUFFER BURNING CONDITION ON EXIT
MOVEMENT AND BURIAL AS AVALANCHE (USE DEPTH AS GLUE)

STOPPING LAVA FLOWS

A character with Earth Control, Gravity Control, or Telekinesis can stop a lava flow. A character with Burrowing, Force Control, or Glue might stop a lava flow by using a Power Stunt to emulate one of those Powers. The Extended Automatic Actions and Extended Challenge Actions are identical to those for avalanches (p. 330).

STOPPING TIME (LAVA FLOW) = LAVA FLOW MAGNITUDE – (POWER + 7)
STOPPING LAVA FLOW:
POWER + TIME VS. LAVA FLOW MAGNITUDE -7
STOPPING DISTANCE = LAVA FLOW SPEED + TIME -1

COOLING LAVA FLOWS

Pumping water onto a lava flow can cool the lava below its melting point. The Weight of water required to cool a lava flow is equal to its Weight +1. As an Extended Action, a character can cool a lava flow by spraying water on it for 0 SPs or more of Time. The Time required to cool a lava flow with an Extended Action is equal to the flow's Weight +1 minus the Weight of water sprayed every Page (0 SPs of Time).

As an Extended Challenge Action, a character can attempt to cool lava more quickly. The AV is the Time spent cooling the lava plus the Weight of water brought every Page. The DV is the Weight of the lava flow -2. On a White result, there is no effect. On a Green result, the lava flow's Weight is reduced by 1. On a Yellow result, the flow's Weight is reduced by 2. On an Orange result the flow's Weight is reduced to half its SP value or by 3, whichever is greater. On a Red result, the flow's Weight is reduced to 0.

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WEIGHT OF WATER = LAVA FLOW WEIGHT +1

TIME TO COOL LAVA = LAVA FLOW WEIGHT +1 − WEIGHT OF WATER

EXTINGUISHING FIRE:

TIME + WEIGHT OF WATER VS. FIRE MAGNITUDE − 3 (- THERMAL PROTECTION)

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A character can use Fire Control to directly cool a lava flow, substituting his SPs of Fire Control for the Weight of water.

DIVERTING LAVA FLOWS

As an Extended Automatic Action, a character with Earth Control can divert a lava flow by building earthworks such as barriers, canals, or dikes. The character can construct earthworks with a Width equal to his SPs of Earth Control plus Time spent minus the earthwork's Depth and the Density of the material used. The earthwork's Toughness will equal the Density of the material used. The character can increase Toughness by decreasing Width and vice versus on a 1 for 1 basis.

The character chooses the earthwork's Width, Depth, and Toughness when he builds it. The earthwork's Width must be greater than the Width of the lava flow or the Width of the site to be protected by the earthworks. Its Depth must be greater than the Depth of the lava flow or the lava will spill over it. The Density of the earthwork depend on the material the character uses – in most cases the Density will be 8 to 10 SPs.

When the lava flow hits the earthwork, make a Lava Flow Width vs. 0 Ramming Attack Check against the earthwork. Use the lava flow's Flow Weight + Flow Speed as the EV. Treat the earthwork's SPs of Density as SPs of Protection against the lava flow's Damage. If the earthwork has at least 1 Durability remaining after the attack, it diverts the lava flow.

<div align="center">

EARTHWORK WIDTH = EARTH CONTROL + TIME − (EARTHWORK DEPTH + EARTHWORK DENSITY)

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PYROCLASTIC SURGES

A pyroclastic surge is a fast-moving mass of volcanic gas, ash, pumice, and hot lava that races downhill destroying everything in its path. The heat of a pyroclastic surge ranges from 390 F to 1300 F, while the speed can be over 500mph. Pyroclastic surges have the same Attributes as lava flows but a very different range of values. A pyroclastic surge's combination of boulder-sized rocks, poisonous fumes, and incinerating heat make it the deadliest effect of a volcano.

Pyroclastic surges have nine Attributes measured in SP: Intensity, Width, Depth, Travel Distance, Volume, Weight, Speed, Magnitude, and Duration. Intensity measures how hot pyroclastic mass is. Width is the frontage of the surge. Travel Distance is the total distance the surge's frontage advances. Depth is the vertical thickness of the surge. Volume is the sum of Width, Travel Distance, and Depth. Weight is Volume + 6 SPs (representing the surge's mix of gas, ash, pumice, and lava). Speed is the velocity of the frontage of the surge. Magnitude is the surge's Weight + Speed. Duration is its Travel Distance – Speed.

The Pyroclastic Surge Table below lists the SP scores of a range of surges. Values except Speed can vary by +/-1 SP in each category. Speed can be any value from 5 to 9 SPs without regard to the other Attributes.

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PYROCLASTIC SURGE MAGNITUDE = SURGE WEIGHT + SURGE SPEED

PYROCLASTIC SURGE DURATION = SURGE TRAVEL DISTANCE − SURGE SPEED

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Intensity	Width	Depth	Travel Distance	Volume	Weight	Speed
6	5 (150 feet)	1 (20 feet)	11 (2 miles)	17 (16M cf)	23 (100k tons)	5 (30mph)
7	7 (600 feet)	2 (20 feet)	12 (4 miles	21 (250M cf)	27 (1.6M tons)	6 (60mph)
7	9 (2 miles)	3 (40 feet)	13 (8 miles)	25 (4B cf)	31 (25M tons)	7 (120mph)
8	11 (4 miles)	5 (80 feet)	14 (16 miles)	30 (120B cf)	36 (800M tons)	8 (240mph)
8	14 (15 miles)	7 (640 feet)	15 (32 miles)	36 (8B cf)	42 (50B tons)	9 (500mph)

> **Designer's Note:** For reasons of simplicity (a phrase rarely used in this book…) we have lumped pyroclastic flows and pyroclastic surges into one category, although technically they vary in density. We're sorry for letting all of our volcanologist readers down.

EFFECTS OF PYROCLASTIC SURGE

Like a lava flow, a pyroclastic surge travels its Speed in SPs at the end of each Page, and it makes a Ramming Attack against targets it impacts. The AV of the Attack Check is the Width/Speed of the pyroclastic surge, while the DV is the AGI/Speed of the target. (For Static Objects, this will be 0). The EV is the equal to the lesser of the surge's or the target's Weight plus the surge's Speed. The Damage Type is Bludgeoning Thermal.

The pyroclastic surge carries or flows around the target exactly like an avalanche of the same Weight. It buries targets if its Depth exceeds the target's Height, rendering the target Stuck as if a victim of Glue with SPs equal to the surge's Depth.

In addition, targets that end their Panel in a pyroclastic surge suffer damage from heat and smoke. The heat creates a Special Thermal Aura (p. 137) with SPs equal to the Surge's Intensity -2 that affects all characters within it. Thermal Protection reduces the Aura's damage as usual. Targets that are damaged by the surge's heat begin Burning with an SEV equal to the surge's Intensity – 3 when they leave the surge. The smoke creates a Special Toxic Inhalation Aura with SPs equal to the surge's Intensity – 2. It affects all characters within the surge unless they are holding their breath or breathing using Air Supply. Toxic Protection reduces this damage as usual. Targets that are Damaged by it gain the Poisoned condition with an SEV equal to the surge's Intensity – 3 when they leave the surge.

PYROCLASTIC SURGE RAMMING ATTACK:
FLOW WIDTH/FLOW SPEED VS. TARGET AGI/SPEED
PYROCLASTIC SURGE DAMAGE (IMPACT) = TARGET WEIGHT</>FLOW WEIGHT + FLOW SPEED
PYROCLASTIC SURGE DAMAGE (SPECIAL THERMAL AURA) = INTENSITY - 2
PYROCLASTIC SURGE DAMAGE (SPECIAL TOXIC INHALATION AURA) = INTENSITY -2
SUFFER BURNING AND POISONED CONDITIONS ON EXIT; SEV = INTENSITY – 3
MOVEMENT AND BURIAL AS AVALANCHE (USE DEPTH AS GLUE)

STOPPING PYROCLASTIC SURGES

A character with Air Control, Gravity Control, or Telekinesis can stop a pyroclastic surge. The Extended Automatic Actions and Extended Challenge Actions are identical to those for avalanches (p. 330) and lava flows.

STOPPING TIME (PYROCLASTIC SURGE) = PYROCLASTIC SURGE MAGNITUDE – (POWER + 7)
STOPPING PYROCLASTIC SURGE: POWER + TIME VS. PYROCLASTIC MAGNITUDE -7
STOPPING DISTANCE = PYROCLASTIC SURGE SPEED + TIME -1

COOLING PYROCLASTIC SURGES

Pyroclastic surges move too fast to be cooled with water. A character can still use Fire Control to directly cool a pyroclastic surge; if so, use the rules for lava flows, above.

DIVERTING PYROCLASTIC SURGES

Pyroclastic surges cannot be diverted with earthworks, as they are largely hot gas and ash and simply flow over any obstacles. They can be diverted with Air Control, however. The Distance that the surge can be diverted in a Page is equal to the character's SPs of Air Control minus the surge's Magnitude.

<p align="center">DIVERGENCE DISTANCE (PYROCLASTIC SURGE) = PYROCLASTIC SURGE MAGNITUDE – POWER</p>

SUPPRESSING VOLCANOS

With an explosive power that rivals or exceeds a thermonuclear bomb, a volcano is not easy for even the most powerful ascendant to deal with. As an Automatic Action, a character with Fire Control can suppress a volcanic eruption with a Magnitude equal to or less than his SPs of Fire Control. As an Extended Action, a character with Fire Control can suppress a volcanic eruption of greater Magnitude by using his Power for 0 SPs or more of Time. The Time required is equal to the volcano's Magnitude minus character's SPs of Fire Control.

<p align="center">SUPPRESS VOLCANO AS AUTOMATIC ACTION IF FIRE CONTROL => VOLCANO MAGNITUDE</p>

<p align="center">TIME (SUPPRESS VOLCANO) = VOLCANO MAGNITUDE – FIRE CONTROL</p>

As an Extended Challenge Action, the character can attempt to suppress a volcano more quickly. The AV is the Time spent suppressing the volcano plus the SPs of the Power used. The DV is the Magnitude of the volcano minus 3. On a White result, there is no effect. On a Green result, the volcano's Magnitude is reduced by 1. On a Yellow result, the volcano's Magnitude is reduced by 2. On an Orange result the volcano's Magnitude is reduced to half its SP value or by 3, whichever is greater. On a Red result, the volcano's Magnitude is reduced to 0.

For every 2 SP that Magnitude is reduced, Ejecta Volume is reduced by 3 SP. Any remaining pyroclastic surges and lava flows are reduced in Volume by 1 SP per SP of Ejecta Volume reduction. Other Attributes should be reduced with Volume, as shown on the associated tables for lava flows and pyroclastic surges.

<p align="center">SUPPRESSING VOLCANO:</p>

<p align="center">TIME + FIRE CONTROL VS. VOLCANO DURATION + VOLCANO MAGNITUDE – 3</p>

<p align="center">REDUCE EJECTA VOLUME AND VARIOUS EFFECT VOLUME BY 3 SP PER 2 SP OF MAGNITUDE REDUCTION</p>

> Burning Man has flown to Italy to try to suppress the eruption of Mt. Vesuvius. He has 12 SPs of Fire Control. The eruption has a Magnitude of 26 SPs and Ejecta Volume of 25 SPs. Its spewing lava flows with 22 SPs of Volume and pyroclastic surges with 21 SPs of Volume. The volcano has just had its first paroxysmal spasm and the volcanologists on hand tell Burning Man the next spasm is likely to come within 2 hours (11 SPs).
>
> The ascendant spends those 2 hours suppressing the heat of Mt. Vesuvius. The AV for his Challenge Check is his 12 SPs of Power and 11 SPs of Time, 23 total. The DV is the volcano's Magnitude of 26 – 3 = 23. Therefore the RV is 0. He rolls a 25 and gets a Yellow result, so the volcano's Magnitude is reduced by 2 to 24 SPs. That in turn reduces its Ejecta Volume to 22 SPs and reduces the Volume of the lava flows to 19 SPs and pyroclastic surges to 18 SPs.
>
> After temporarily fleeing from the surge of fire, Burning Man returns and spends another 2 hours suppressing the volcano. Now the AV for his Challenge Check is 23 while the DV is only 21, so his RV is +2. He rolls a 15 and gets an Orange result. That reduces Vesuvius's Magnitude from 24 to 12 SPs, which reduces its Ejecta Volume by (12/2 x 3) 18 SPs down to 4 SPs. The lava flow is reduced to 1 SP of Volume and the pyroclastic surge to 0 SP of Volume. The catastrophic eruption has been reduced down to a mere smolder.

CHAPTER 8: COMBAT

When heroes meet villains on the streets, it typically results in **combat**. Using the following rules, you can resolve any and every type of combat, whether it's a brawl between bruisers or a telekinetic ping-pong of flying cars or a mental duel between psychics.

PAGES AND PANELS

Combat is resolved in a series of sequential segments called **Pages** (named for the pages of a comic book). Each Page of combat lasts 0 SPs of time, or approximately 3.5 seconds. During each Page of combat, each character gets one **Panel**, a turn during which he has an opportunity to take Actions. Thus a Page consists of several Panels (one per character) and an entire combat might consist of several Pages.

INITIATIVE

At the beginning of every Page of combat, each of the participating characters rolls 1d10 and adds the result to his Initiative Attribute to determine his **Initiative Total** for that Page. The character with the highest Initiative Total gets to take the first Panel during that Page, the character with the second highest total gets to take the second Panel, and so on.

If two or more character's Initiative Totals are tied, the character with the highest Initiative Attribute is considered to have the greater total, then the second highest, and so on. If one or more characters are still tied, the tied characters should roll a 1d6 as a tiebreaker, with the character getting the higher d6 result considered to have the greater Initiative Total. If necessary, re-roll the tiebreaker until the ties are broken.

A character can voluntarily delay taking his Panel until a lower Initiative Total if desired. If a character who delays taking his Panel wishes to act on the same Initiative Total as another character, whichever had the greater Initiative Total can choose to take his Panel before or after the other. Characters never interrupt each other during their Panel except when taking a Reserve Action. If two characters both want to delay until after the other, the character with the greater Initiative Total can choose who goes first.

ACTIONS

All Actions in combat are Instant Actions. When it is a character's Panel in the Page, he can perform up to three Actions. However, only one of the three Actions can be a Challenge Action (the other two must be Automatic Actions) and only one of three can be a Movement Action (the other two must be Stationary Actions). If a character takes a Challenge Movement Action, his other two Actions would both have to be Stationary Automatic Actions. A character does not have to take all three Actions if the player would prefer not to. A character can perform his three Actions in any order. Characters who are Dazed, Staggered, or Overwhelmed lose some or all of their Actions (see p. 370).

On his Panel, Stronghold might jump off a balcony (a Movement Action), pick up a manhole cover (an Automatic Action), and attempt to slam Avangard in the face with the manhole cover (a Challenge Action). But Stronghold could not jump off the balcony, punch Avangard, and then jump back up on the balcony, because that would be two Movement Actions. Likewise, Stronghold could not jump off the balcony and punch Avangard twice, because that would be two Challenge Actions. But Stronghold could change the order of his Automatic Action, Movement Action, and Challenge Action. He could grab the deck furniture on the balcony (an Automatic Action), throw the furniture at Avangard (a Challenge Action), and then jump up to the roof (a Movement Action), because Actions can be taken in any order.

RESERVING AN ACTION

Rather than undertake all three Actions on his Panel, a character may decide to **Reserve** one Action. The Reserved Action can be of any type. When the character Reserves an Action, he must specify what the Action will be and the **Trigger** that, if it occurred, will result in him taking it. If the Trigger occurs before the character's next Panel, the Reserve Action takes place. If the Trigger does not occur before his next Panel, the Reserve Action is lost. A character can delay taking his Panel in order to keep a Reserve Action.

A Reserve Action can interrupt another character's Movement Action but not another character's Challenge Action. Therefore it must be clear whether its Trigger occurs just before or just after the other character's Challenge Action. If a Reserve Action Triggers just before another character's Challenge Action, and causes new circumstances to arise that make the other character's Challenge Action impossible, then that character can choose a different Action instead – he doesn't "lose" his opportunity to take some sort of Action.

Let's return to Stronghold's encounter with Avangard. Imagine that Avangard's Panel had taken place earlier in the Page, and that Avangard had Reserved a Melee Attack to punch Stronghold with the Trigger "If Stronghold gets near enough for me to punch". As soon as Stronghold jumps down off the balcony next to Avangard (Stronghold's Movement Action), Avangard's Reserve Action Triggers, and he makes his Attack. After Avangard's Reserve Action is resolved, Stronghold continues with the last two Actions of his Panel.

Since Reserve Actions and Initiative are crucial to comic book action, let's consider some other alternatives.

What if Stronghold had stayed on the balcony, grabbed the deck furniture, and thrown it at Avangard? In that case, Avangard's Reserve Action would never have Triggered.

What if Avangard had Reserved a Movement Action to fly away with the Trigger "if Stronghold starts to attack me"? Let's assume that Stronghold jumps down from the balcony next to American Eagle. No Trigger. He picks up the manhole cover. No Trigger. He starts to slam it into Avangard – Trigger! Avangard now takes his Reserve Action and flies away. Stronghold cannot slam the manhole cover into Avangard (a Melee Attack) because he's not next to him anymore. But he doesn't lose the Action, he just can't use it to do what he initially wanted. Instead Stronghold might decide to throw the manhole cover instead (a Ranged Attack), or attack another nearby character, etc.

RESERVING AN ACTION TO ATTACK WHILE MOVING

When a character expends a Movement Action, he can reserve a Challenge Action to take place at a pre-defined point of the Movement Action, essentially interrupting his own Movement Action on his own Panel. After the Challenge Action, the character completes his declared Movement Action. A character cannot change his Movement Action based on the result of his Challenge Action or change his Challenge Action if his Movement Action triggers an opponent's reserve action or other change in circumstances. See Reserving Actions (p. 364) in the Combat chapter.

Aurora's current boyfriend, Chad, is clinging on to the railing at the top of the Empire State Building Observation Deck. The villainous Maximum Leader leers at her from the safety of the balcony. Aurora expends a Movement Action to zoom past the Empire State Building, reserving a Challenge Action to grab Chad on the way past. Unfortunately Maximum Leader has reserved a Challenge Action to grab Chad if Aurora approaches within 3 SPs. When the superheroine reaches a Distance of 3 SPs from her boyfriend, Maximum Leader makes an easily successful Wrestling Attack, grabbing Chad off the railing and into his clutches. The GM rules that Aurora can still attempt to grab Chad, but it now counts as a Disarm of Maximum Leader. Sadly, Aurora fails the Attack Check. She now completes her planned Movement Action and flies past the building. Chad blames Aurora for abandoning him and later becomes one of Maximum Leader's most nefarious henchmen.

EXAMPLES OF ACTIONS

The following examples will serve to illustrate the common range of activities covered by different Actions during combat. The Actions chapter has details on many other Actions.

AUTOMATIC ACTION

★ Activate a Power, Skill, or Perk that specifies that it requires an Automatic Action.
★ Draw or sheathe an object in a scabbard, holster, or pocket.
★ Pick up, pull, push, or drag a Stationary object (subject to character's MIG).
★ Hit the dirt (drop Prone) or stand up from being Prone.
★ Kneel, or stand up from Kneeling.
★ Open a door, press a button, or otherwise perform some tasks that requires about 1 second.

CHALLENGE ACTION

★ Activate or maintain a Power, Skill, or Perk that specifies that it requires a Challenge Action.
★ Melee Attack: Punch, kick, or otherwise slug a target .
★ Emotional Attack: Intimidate or coerce a target.
★ Mental Attack: Confuse or deceive a target.
★ Ranged Attack: Blast, shoot, or otherwise fire at a target, or throw an object at a target.

MOVEMENT ACTION

★ Fly: Fly in any direction a distance equal to your Flight Speed in SPs.
★ Leap: Leap in any direction a distance equal to your Jumping Speed in SPs.
★ Run: Move a distance equal to your Running Speed in SPs.
★ Swim: Swim a distance equal to your Swimming Speed in SPs.
★ Teleport: Teleport a distance equal to your Teleportation Range in SPs.

CHALLENGE MOVEMENT ACTION

★ Ramming Attack: Fly, leap, run, or otherwise slam directly into a target within a distance equal to your Speed in SPs.
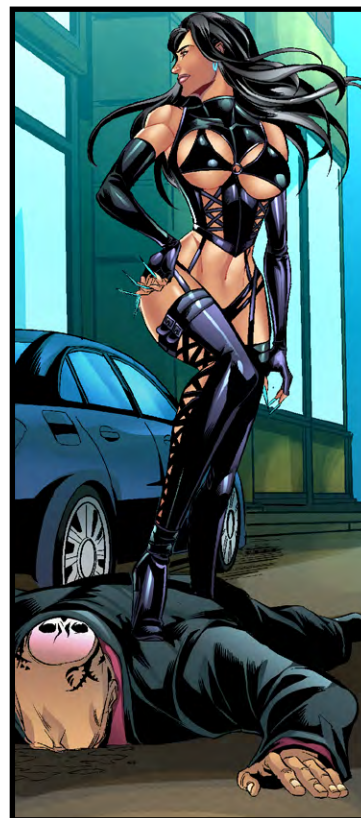
MOVEMENT

A character can move around the battlefield by expending a Movement Action on his Panel. When he does, the character can move a distance equal to his SPs of Speed. Some types of movement have special rules, described under the Power that grants the Speed (p. 128). The Actions chapter offers rules for movement in hazardous conditions (p. 282), movement from falling (p. 288), and involuntarily movement caused by collisions and disasters (p. 275). Some Special Effects can also cause movement (p. 374).

It is the GM's responsibility to track the position of the various characters involved in a combat. For small combats with just a few combatants, the GM can usually track these positions verbally, narrating them for the players in a "theater of the mind". For more complex combats, the GM might want to sketch a quick map of the battlefield and track the location of each participant with a symbol or mark. Alternatively the GM can set up a diorama, detailed map, or playmat that illustrates the battlefield, and then use miniature figures or tokens to show the location of each character.

When using maps of the battlefield, the GM can (if desired) segment the map into 50-yard by 50-yard rectangular **Battle Areas**. Geographically, a Battle Area would cover approximately one-half a city block, half a football field, or a half-acre suburban lot. 35 Battle Areas would be a bit over a mile. Mechanically, each Battle Area covers 5 SPs of distance, which cleanly correlates to character's movement measured in SPs. The Battle Area Movement table shows how many Battle Areas a character can travel using a Movement Action or shoot using a Ranged Attack based on their Speed or Power SPs. This can help quickly resolve questions of range and speed.

Speed /Range	Battle Areas
5 or less	1
6	2
7	4
8	8
9	16
10	32
11	64
12	128
13	256
14	512
15	1,024

Helen Killer's speed is 5 SPs. If she undertakes a Movement Action on her Panel, she can move 1 Battle Area or about a half-block. American Eagle's speed is 15 SPs. If he undertakes a Movement Action on his Panel he can move 1,024 Battle Areas, or about 30 miles.

HITTING THE DIRT AND TAKING A KNEE

A character may hit the dirt or take a knee as an Automatic Action, gaining the **Prone** or **Kneeling** condition respectively. The primary advantage of these conditions is that they reduce a character's Height by 1 or more SPs, making him harder to Spot and increasing the Minimum DV of Ranged Attacks against him.

While Prone, a character temporarily reduces his VAL, Height, Running Speed, and Jumping Speed by 2 SPs. He gains a +1 AV when making Ranged Shooting Attacks due to his ability to stabilize his weapon. The condition ends when he rises to kneeling or standing with an automatic action.

While Kneeling, a character temporarily reduces his VAL and Height by 1 SP. The condition ends if he goes Prone or stands up with an automatic action. He can also end the condition as part of a Movement Action at no penalty.

Characters who become Unconscious automatically become Prone, and some other Powers and Special Effects can cause a character to involuntarily become Prone. All the usual effects apply. In addition, the character drops anything he was holding in his hands.

MINOR MOVEMENT

If a character wants to undertake minor movement that requires traveling less than 0 SP, it costs an Automatic Action. Typical examples include drawing or sheathing an object in a scabbard, holster, or pocket; opening a door, pressing a button, or pulling a level; picking up an object; or taking up a position as crew of a weapon or vehicle.

On Stiletto's panel, she uses her Movement Action to run at her Speed (6 SPs) to a nearby HMMVW. She uses an Automatic Action to open the door to the HMMVW. She uses her third Action as an Automatic Action to enter the vehicle and crew the HMMVW's .50 caliber machinegun.
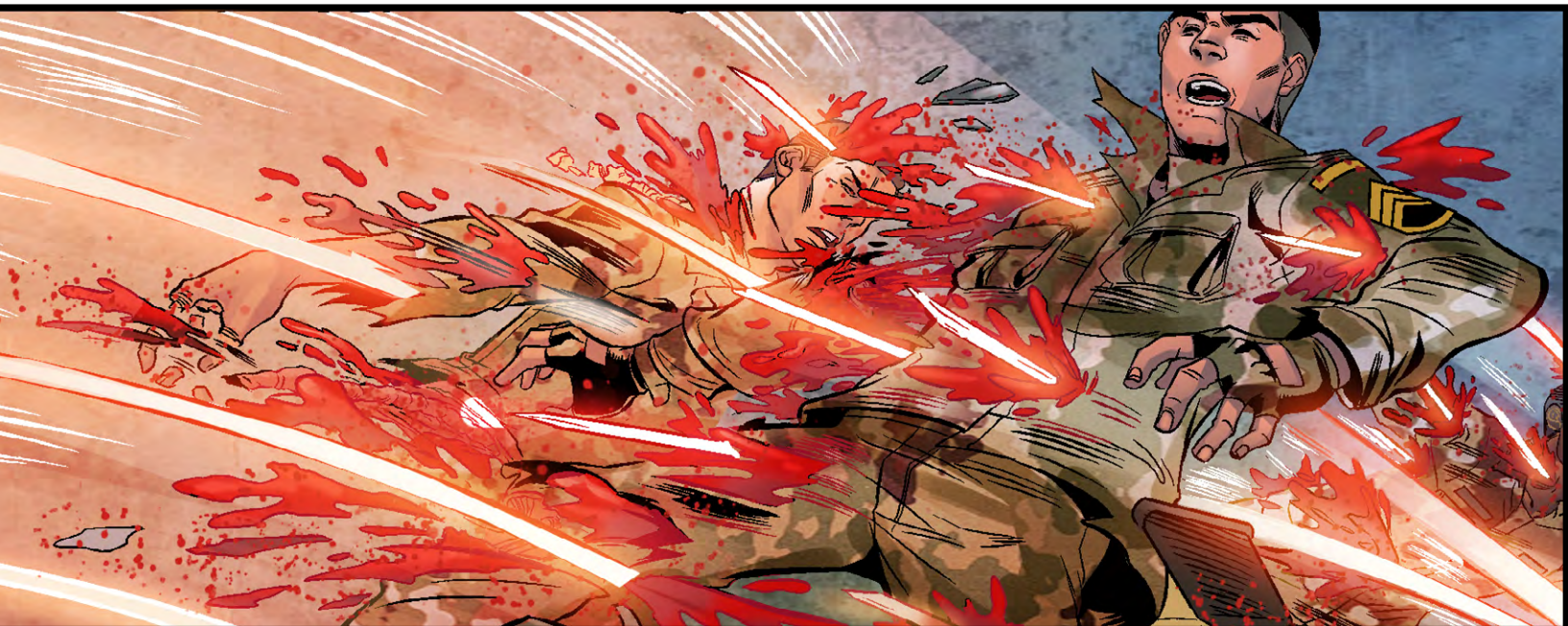
ATTACKS

Often a character will expend his Challenge Action on his Panel to make an **Attack**. Whether using a punch, a kick, a gun, or a fancy Power, an Attack is always a Challenge. Like all Challenges, an Attack has an Acting Value, a Difficulty Value, and a Resolution Value, which are used to resolve an Attack Check (a kind of Challenge Check) on the CHART. The Acting and Difficulty Values of an Attack will vary based on the Method used to Attack, the Attributes of the character, and the target of the Attack. See Methods of Attack (p. 379).

Once the AV and DV are known, the player making the Attack calculates its Resolution Value by subtracting the DV from the AV. Once the **RV** has been calculated, the player consults the CHART, rolls 1d100, and cross-indexes the row matching the number they rolled with the column matching his RV. (Remember that Attacks use the RV (Attacks) column on the CHART, where the maximum RV is capped at 7 and the minimum RV is capped at -7.) The color of that point reveals the result of the Attack Check, which is then applied to the target.

A White result indicates that the Attack missed the target or otherwise had no effect at all. A result of Green or better means the character attacked successfully. Usually this means the target is dealt Damage, but there might be other special effect instead of or in addition to Damage, depending on the type of Attack. In some cases, further die rolls might be needed to resolve the effects. If the result of the Attack Check was lower than the AV of the Attack, a **Special Effect** may also occur (see below).

DAMAGE

Effect Value	Base/Green	Yellow	Orange	Red
1	3	6	12	24
2	4	8	16	32
3	6	12	24	48
4	8	16	32	64
5	12	24	48	96
6	16	32	64	128
7	24	48	96	192
8	32	64	128	256
9	48	96	192	384
10	64	128	256	512
11	96	192	384	768
12	128	256	512	1,024
13	192	384	768	1,520
14	256	512	1,024	2,048
15	384	768	1,536	3,040
16	512	1,024	2,048	4,096
17	768	1,536	3,072	6,144
18	1,024	2,048	4,096	8,192
19	1,536	3,072	6,144	12,288
20	2,048	4,096	8,192	16,384
21	3,072	6,144	12,288	24,576
22	4,096	8,192	16,384	32,768
23	6,144	12,288	24,576	49,152
24	8,192	16,384	32,768	65,536

In most cases, a successful Attack deals **Damage**. Damage, like Health, is a number, not a Supermetric. Damage is derived from the SPs of the **Effect Value (EV)** of the Attack. (Some Attacks may trigger certain Special Effects in lieu of or addition to Damage; these are discussed later on.)

The EV is determined by the method used to Attack. For instance, for a punch the EV is usually MIG. For a blast with a superpower, the EV is usually the Power used to make the Attack. The Damage table shows the **Base Damage** inflicted by an Attack based on the Attack's EV. Damage is then modified by the Color Result of the Attack. The Color Result may be modified if the target **Rolls with the Attack** (described below).

If the Color Result of the Attack's Attack Check was Green, the Attack deals its Base Damage to the target. A Yellow result deals double the Attack's Base Damage to the target. An Orange result deals quadruple the Attack's Base Damage and Red result deals octuple its Base Damage to the target.

The exact effect of Damage depends on the Attack Method used. Most Attacks reduce the target's Current Health by the Damage dealt, but some reduce the target's Current Determination by the Damage dealt.

Let's return to our earlier example, when Stiletto struck Stronghold for throwing her cigarettes in the toilet and scored a Yellow result. Stiletto uses her 12 SPs of Strike as the EV of her Attack. Therefore her Attack has a Base Damage of 128 points. Since she has scored a Yellow result on the Attack's Attack Check, the Attack deals double the Base Damage, or 256 points. Stronghold's Current Health is reduced by 256 points. Since Stronghold has a Health of 1920, he is just a bit scratched. If Stiletto had been an ordinary woman (MIG 3) she only would have dealt 12 Damage Points and Stronghold would hardly have been phased by her at all. If Stiletto had scored a Red result on Stronghold, she would have dealt a staggering 1,024 points of Damage – he'd have felt that!

DAMAGE TYPE

Different methods of Attack deal damage in different ways. **Damage Type** is a descriptor that summarizes the particular means by which harm is caused in the target. The following Damage Types are found in ***Ascendant***:

★ *Annihilating:* damage caused by the target's conversion into energy or similar effects.
★ *Bludgeoning:* damage from bashing attacks with punches, baseball bats, and other blunt objects.
★ *Concussive:* damage from explosive shockwaves such as those caused by dynamite or grenades.
★ *Corrosive:* damage from chemical burns such as those caused by acids, bases, and other corrosive substances.
★ *Cosmic:* damage from arcane, eldritch, or quantum forces that directly assault the nature of reality.
★ *Cryogenic:* damage from freezing with resulting tissue crystallization in the target, such as frostbite.
★ *Electrical:* damage from high voltage current that disrupts heartbeat and body rhythm.
★ *Ionizing:* damage from radiation that ionizes electrons within the cells or structure of its target.
★ *Neural:* damage that directly affects the brain and nervous system of the target.
★ *Lacerating:* damage from slashing attacks with swords, knives, claws, or other edged objects.
★ *Penetrating:* damage from stabbing attacks with arrows, bullets, spears, or other pointed objects.
★ *Psychic:* damage that directly affects the mind of the target, usually via paranormal means.
★ *Thermal:* damage from light and heat such as fire, lasers, and plasma that directly burns or melts its target.
★ *Toxic:* damage from a harmful substance that affects the target at a molecular level.

Any particular Attack has at least one Damage Type, but it may have two or more. For instance, a lightning bolt might have both the Electrical and Thermal Type. For most Attacks, Damage Type is not important. A character who takes 48 points of Damage reduces his Current Health by 48 points, regardless of whether he was struck by a light pole (Bludgeoning), shot (Penetrating) or electrocuted (Electrical). Damage Type becomes important when the target of an Attack has Protection against some but not all Types of Damage.

PROTECTION

Some characters may have **Protection** from a Power such as Armor, Forcefield, or Shield. Protection may be universal (all Damage), or it may be limited to one or more Types of Damage. When Protection applies, it reduces the total Damage dealt by an Attack by an amount determined by the SPs of the Protection, to a minimum of 0. If Damage dealt by an Attack has two or more Types, use the target's lowest Protection against the Types. Reducing an attack's Damage to 0 can prevent Special Effects from triggering (p. 374) and cause Collisions to be Inelastic rather than Elastic (p. 276), among other things.

The Protection by SP table shows the amount of Damage that each SP score of Protection reduces.

Protection SPs	Protection
1	3
2	4
3	6
4	8
5	12
6	16
7	24
8	32
9	48
10	64
11	96
12	128
13	192
14	256
15	384
16	512
17	768
18	1,024
19	1,536
20	2,048
21	3,072
22	4,096
23	6,144
24	8,192

> Let's return to our prior example, in which Stiletto has slashed Stronghold for 256 points of Damage. Stronghold is protected by 10 SPs of Invulnerability. This affords him 64 points of Protection. Instead of 256 points of Damage, he only takes 192 points of Damage. A bit later in the fight, Stronghold's Invulnerability has increased to 13 SPs. Stiletto hits him again, and this time she scores a Green result, dealing 128 points of Damage. Now Stronghold takes no Damage from her second punch because his Invulnerability reduces the Damage to 0. If Stiletto had scored a Red result on her second Attack, and dealt 1,024 points of Damage, then Stronghold would suffer 1,024 − 192 = 832 points of Damage.

Some types of Protection can themselves suffer Damage and be rendered inactive or broken. For instance, a Forcefield has both Protection and Durability. Each time the Forcefield provides 1 or more points of Protection, its Durability is reduced by that amount. When the Forcefield's Durability is reduced to 0, the Forcefield deactivates and affords no Protection thereafter. The specific details of each type of Protection are discussed in Powers & Skills.

ROLLING WITH THE ATTACK

Targets struck by some Attack Methods can reduce the amount of Damage they suffer by **Rolling with the Attack**. A character who is being punched might literally be rolling with the punch, moving his body backward to avoid taking the full brunt of the impact. Other examples of Rolling with the Attack include diving away from an explosion, performing a stop-drop-roll to put out a flame, and so on.

The effect of Rolling with an Attack is to reduce the Color Result by either one, two, or three colors (target's choice). An Attack's Color Result cannot be reduced to less than Green. The target must spend 1 Hero Point for each reduction in Color Result. (If the target is a crewed object, then a character belonging to the crew must spend 1 Hero Point for each reduction in Color result.)

The more the target reduces the Color Result, the worse the **Condition** he ends up in from Rolling with the Attack. If the target Rolls with an Attack and reduces the Color Result by one color, he is **Dazed**. On his next Panel, he can only take two Actions, only one of which can be a Challenge Action (even if he has, e.g., Extra Attacks). If the target reduces the Color Result by two colors, he is **Staggered**. He can only take one Action on his next Panel, and it cannot be a Challenge Action. If the target reduces the Color Result by three colors, he is **Overwhelmed**. He cannot take any Actions on his next Panel. In addition, most Powers with a Sustained duration deactivate if a character becomes Overwhelmed. The character's Condition lasts until the end of his next Panel.

If a character is already Dazed, Staggered, or Overwhelmed, his Condition worsens. A Dazed character who reduces an Attack by one Color Result becomes Staggered. A Dazed character who reduces an Attack by two Color Results becomes Overwhelmed. A Staggered character who reduces an Attack by one Color Result becomes Overwhelmed. Once Overwhelmed, a character can continue to Roll with Attacks but must expend 2 Hero Points for each step by which he reduces the Color Result.

Once again let's return to the brawl between Stiletto and Stronghold. Stiletto has struck Stronghold with a Red result to deal 1,024 points of Damage. Rather than suffer the Damage (which exceeds his Protection of 192 points), Stronghold decides to Roll with the Attack, reducing it by three Color Results, from Red to Green. (He would like to reduce it to White, but this is not possible.) This brings the Attack's Damage down to 128 points, which Stronghold's Invulnerability reduces to 0. However, Stronghold must spend 3 Hero Points and is now Overwhelmed. On his next Panel, he cannot take any Actions.

Rolling to Avoid Special Effects: Rolling with an Attack will prevent a Special Effect from triggering if it prevents the target rolling with the attack from losing Health or Durability. It's thus an especially good idea to Roll with the Attack if a Special Effect is about to go off and you can reduce the Damage to a value less than your Protection.

WHO CAN ROLL WITH WHAT ATTACKS?

Except as otherwise noted, any character can Roll with any Attack. The important exceptions to this are:

★ A creature without any Hero Points cannot Roll with any Attacks.
★ A creature who is Held, Pinned, Paralyzed, or Unconscious cannot Roll with any Attacks.
★ A creature cannot use Rolling with the Attack to reduce Damage from Intimidation.
★ An object without any Hero Points itself that is crewed by characters without any Hero Points cannot Roll with Any Attacks.
★ An object that is Held, Pinned, Toppled, Wrecked, or Destroyed cannot Roll with any Attacks.
★ An object cannot Roll with an Attack if the object does not have an Attribute granting a DV against that Attack. For instance, a jet fighter without a VAL Attribute cannot Roll with a VAL vs. VAL Melee Attack.
★ A character using the Protector Perk to block an entire Explosion with his body cannot Roll with the Attack.
★ A character using the Sacrificer Perk to have an ally or bystander take Damage in lieu of himself cannot Roll with the Attack, but the ally or bystander can.
★ A character cannot Roll with an Attack by an opponent that has Clambered onto him.

DESPERATE DAMAGE REDUCTION

A character who has just been dealt Damage sufficient to slay him can immediately expend Hero Points to reduce the Damage as if he had an additional layer of Protection with SPs equal to the Hero Points spent. The character cannot spend more Hero Points than the minimum number required to avoid being slain. A character does not have to be conscious or aware of the Attack to use Hero Points for desperate damage reduction, but the decision to spend the Hero Points must be made immediately (e.g. before the attacking character's next Action).

EFFECT OF DAMAGE

A character whose Current Determination is reduced to 0 is **Overwhelmed** until his Determination is increased above 0. While Overwhelmed, the character cannot take any Actions on his Panel. Current Determination cannot be reduced below 0.

A character whose Current Health is reduced to 0 or less becomes **Unconscious** until his Health is increased above 0. As soon as a character becomes Unconscious, he drops Prone. Any Powers he was sustaining automatically deactivate, and he drops anything he was holding in his hands. An Unconscious character cannot take any Actions and cannot claim LOS or Earshot on any targets. He cannot be the target of Emotional Attacks, but he can be targeted by Melee, Mental, Ranged, Wrestling, and Ramming Attacks. He is considered to have an AGI, VAL, MIG, INS, RES, and Speed of 0 for purposes of DV to such Attacks. An Unconscious character cannot Roll with Attacks. The Condition ends when his Health is increased above 0 or he becomes Slain.

A character whose Current Health is reduced to a negative value greater in magnitude than half of his Maximum Health is **Seriously Injured**. A Seriously Injured character is Dazed and Exhausted while the Condition lasts. He can ignore the Dazed condition for one Page by spending a Hero Point. He can ignore the Exhausted condition for one Page by spending two Hero Points; or ignore both Conditions for one Page by spending three Hero Points. The Condition(s) resume(s) on the subsequent Page, although he can spend Hero Points again to ignore the Condition(s) if they are available. The Seriously Injured condition and its sub-Conditions end when he heals (see below) or he becomes Slain.

A character whose Current Health is reduced to a negative value greater in magnitude to his Maximum Health is **Slain**. A Slain character becomes a Static Object (i.e. a corpse). If relevant, the corpse has a Height and Weight equal to the slain character's Height and Weight and a Toughness equal to the slain character's Weight divided by 3 (rounded down) plus 2.

A thug has 4 SPs of MIG and a Maximum Health of 40. He has 1 SPs of Height and 3 SPs of Weight. If Stronghold hits the thug for 192 points of damage, the thug is reduced to a Current Health of -152. That's a negative value greater in magnitude (152) than his Maximum Health (40), so the thug is slain. The slain thug becomes a Static Object with a Height of 1 SP and a Weight of 3 SPs. The corpse has a Toughness of (3/3 + 2) 3 SPs, giving it a Maximum Durability of 30. Stronghold could use an Automatic Action to pick up the corpse and later throw it, use it for Cover, etc.

DAMAGE FROM NONLETHAL ATTACKS

If an Attack has the Nonlethal modifier (e.g. Nonlethal Blast) or is a Nonlethal Trick Attack, then it cannot reduce the target's Current Health below 0 except through Special Effects (p. 374).

DAMAGE FROM EXTENDED AURAS, DAMAGING FOGS, AND INTENSE EXPLOSIONS ON LARGE TARGETS (OPTIONAL)

An Extended Aura, Damaging Fog, or Intense Explosion can simultaneously deal damage to every point on a target in its area of effect at its full Effect Value. A large target therefore should take more damage from these effects. To apply this rule, increase the EV of the Power by 2 SPs per 3 SPs of the target's Volume, up to the maximum Volume affected by the Power. Because the target's Protection protects at every point, increase the SPs of Protection by the same amount.

A house has 12 SPs of Toughness, 9 SPs of Volume, and 2 SPs of Concussive Thermal Resistance. It has Durability 640 and Protection 4. It is struck by an Intense Concussive Thermal Explosion with an EV of 6 SPs, a Radius of (6/2) = 3 SPs, and a Volume of (3 + 3 + 3 + 2) = 11 SPs. A 6 SP Explosion normally deals 16 Damage, but because the house has 9 SPs of Volume, it takes more. The Explosion's DV is increased by (2 x 9/3) 6 SP to 12 SP, so it deals 128 Damage. The house's Resistance is increased by 6 SP to 8 SP, so it has 32 Protection. The house takes 128 – 32 = 96 Damage. Note that the ratio of Damage/Protection stayed the same – 16 vs. 4 and 128 vs. 32.

Designer's Note: We included this rule because **Ascendant** is a physics-based game but made it optional because it rarely comes up. It almost never applies to characters except for the occasional target with 4 SPs or more of Growth. It may matter when bombarding large buildings or vehicles. However, most Damaging Fogs don't damage objects, and Extended Auras and Intense Explosions are rare. The only place it typically applies is when buildings are on fire – and the formula for determining how long it takes for a building to burn down (Time = 2 + Structure Toughness/2 + Thermal Protection/2 – Fire Intensity/2 – Fire Volume/3) already takes this rule into account.

RECOVERY FROM DAMAGE

Time heals all wounds. A character increases his Current Health by his **Health Recovery Rate** every 15 SPs of Time (24 hours). A character increases his Current Determination by his **Determination Recovery Rate** every 13 SPs of Time (8 hours). A character cannot recover more Health than his Maximum Health or more Determination than his Maximum Determination.

A character's Health Recovery Rate is determined by his MIG/Super-Stamina and his Determination Recovery Rate is determined by his RES/Super-Fortitude. See the Recovery Rate table for the exact details. (The values should be familiar, as they match those seen on the USPA table.) However, a Seriously Injured character reduces his Recovery Rate by 2 SP.

MIG/RES SPs	Recovery Rate
1	3
2	4
3	6
4	8
5	12
6	16
7	24
8	32
9	48
10	64
11	96
12	128
13	192
14	256
15	384

> Levitee has a Super-Stamina of 10 SPs and a Maximum Health of 320. His Health Recovery Rate is 64. In a fight with his arch-rival Depravitee, he is reduced to -12 Current Health and knocked unconscious. After 24 hours (15 SPS of Time), he increases his Current Health by his Health Recovery Rate, bringing it to 52. He is now conscious. If Levitee had been Seriously Injured, his Healthy Recovery Rate would drop to 32. After 15 SPs of Time, he'd only be at 20 Current Health.

Damage to Objects does not heal and instead must be repaired. See Repairing Damage to Objects (p. 221).

HEROIC RECOVERY

At the end of his Panel, a character can spend 1 or more Hero Points to reduce the Time required for his next recovery of either Health or Determination by 1 SP per Hero Point. If the Time is reduced to 0, the character increases his Current Health or Determination by his Recovery Rate immediately.

> Levitee has just been knocked unconscious with -12 Current Health. On his next Panel, he cannot take any Actions, so he just lies there making sad noises and flicking his flippers. At the end of his Panel, he expends 15 Hero Points, reducing the Time required for his next recovery of Health to 0 SPs of Time. He immediately increases his Current Health by 64 and regains consciousness.

POWERS AND RECOVERY

Characters with the Regeneration and Resilience Powers automatically reduce the Time required to recover Health or Determination by their SPs of Power. If the Time is reduced to 0 or less, the character increases his Current Health or Determination by his Recovery Rate at the end of his Panel on every Page of combat (or, outside of combat, every 0 SPs of Time). If the Time is reduced to a negative value, the character receives additional Recoveries at the end of his Panel (two Recoveries at -1, four at -2, eight at -3, etc.)

> If Levitee had 5 SPs of Regeneration, he would increase his Current Health by 64 every 10 SPs of Time (1 hour). He would only need to spend 10 Hero Points to increase his Current Health by 64 at the end of his Panel.
>
> If he had 15 SPs of Regeneration, he would increase his Current Health by 64 at the end of his Panel on every Page of combat or every 0 SPs of Time without needing to spend Hero Points at all!

Characters with the Healing Power can trigger Health Recovery in a target by taking an Extended Automatic Action to heal them. When the Action is completed, the target increases his Current Health by his Health Recovery Rate.

RECOVERY FROM SERIOUS INJURY

It takes 22 SPs of Time (24 weeks) for a character to recover from being Seriously Injured. A character with Regeneration reduces the Time required to heal from being Seriously Injured by his SPs of Power. If the Time is reduced to 0 or less, the character heals from being Seriously Injured at the end of his Panel!

> If Levitee had 10 SPs of Regeneration, he would heal from a Serious Injury in 22 – 10 = 12 SPs of Time (2 hours).

The recovery time can be reduced if the character receives medical treatment. Offering medical treatment is an Extended Challenge Action. The AV is equal to the medic's SPs of INS + the Time he spends working on the injured character, to a maximum of 13 SPs of Time. The DV is equal to the EV of the Attack that Seriously Injured the character + 1 per SP of Time over 10 SPs (one hour) since the injury occurred. Count the Time from when medical treatment begins.

On a White result, the medical treatment offers no benefit. On any other result, the medical treatment reduces the recovery time. A Green result reduces Time to recover by 1 SP, a Yellow result by 2 SP, an Orange result by 3 SP, and a Red result by 4 SP.

> Levitee becomes Seriously Injured by Helen Killer (Strike of 13 SPs). He is rushed by ambulance to surgery. Due to traffic it takes him 2 hours (11 SPs of Time) to arrive. His sidekick, Dr. Sheba, meets him there. Dr. Sheba has 7 SPs of Medicine and spends fifteen minutes (8 SPs of Time) stitching Levitee's wounds. The AV is 8 + 7 = 15 and the DV is 13 + 1 = 14, for an RV of +1. Dr. Sheba rolls a 31 and scores a Yellow result. Instead of needing 22 SPs of Time to recover, Levitee will only need 20 SPs of Time (6 weeks).

SPECIAL EFFECTS FROM ATTACKS

The sheer impact of a super-strong blow can send a target flying through the air. A blast of fire can ignite flammable objects. These and other events are known as **Special Effects**. A Special Effect can occur when an Attack reduces the target's Health/Durability or Determination by at least one point *and* the die roll is equal to or less than the Acting Value of the Attack. Special Effects depend on the value of the Power that triggered the Special Effect, referred to as the **Special Effect Value** or **SEV**. The SEV of an Attack is equal to the Effect Value – 1.

If a character has Protection against the Damage Type that dealt the Special Effect, the SEV may be reduced before its effects are applied. If a character's Protection is equal to or greater than the SEV, the SEV is reduced to 0. If his Protection is less than, but within 2 SPs of, the SEV, the SEV is reduced by 1. If his Protection is more than 2 SPs less than the SEV, it does not reduce the SEV. Protection does not thereafter reduce the damage or effects caused by the SEV. The foregoing notwithstanding, Protection does not reduce Knock Back.

The exact nature of the Special Effect depends on the Damage Type used to make the Attack. If an Attack has two or more Damage Types, it inflicts just one Special Effect at a time, chosen by the Attacker when he rolls the Special Effect. For instance, an incendiary bullet with Penetrating and Thermal Damage can inflict either a Burning or Bleeding Special Effect, as the Attacker chooses. If a target is immune to the Special Effects of one Damage Type but not the other, the target suffers the Special Effect of the Damage Type it is vulnerable to.

ANNIHILATING & COSMIC DAMAGE TYPE: DISINTEGRATION

The target's atomic structure begins to collapse, placing it at risk of **Disintegration**. The target must make an immediate MIG vs. SEV Challenge Check. On a White color result, the target is reduced to his constituent elementary particles and annihilated. On any other result, the character is unaffected. A character with SPs of the appropriate (Annihilating or Cosmic) Protection equal to or greater than the SEV is immune to this Special Effect.

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Damage Type	Special Effect
Annihilating	Disintegration: target must make MIG vs. SEV Challenge Check or be obliterated
Bludgeoning	Knock Back: target knocked back a Distance equal to SEV - 2 - Weight
Concussive	Knock Back: target knocked back a Distance equal to SEV - 2 - Weight
Cosmic	Disintegration: target must make MIG vs. SEV Challenge Check or be obliterated
Corrosive	Corroding: target takes damage each Panel with SEV as EV, SEV decreases by 1 per Panel
Cryogenic	Frozen: target reduces Speed and Initiative by SEV, SEV decreased by 1 per Panel
Electrical	Disrupted: target reduces Initiative by SEV and loses 1 Action if MIG < SEV; SEV decreased by 1 per Panel
Ionizing	Disrupted: target reduces Initiative by SEV and loses 1 Action if MIG < SEV; SEV decreased by 1 per Panel
Lacerating	Bleeding: target takes damage each Panel with SEV as EV, SEV decreases by 1 per Panel
Neural	Disoriented: target reduces Initiative by SEV and loses 1 Action if RES < SEV; SEV decreased by 1 per Panel
Penetrating	Bleeding: target takes damage each Panel with SEV as EV, SEV decreases by 1 per Panel
Psychic	Disoriented: target reduces Initiative by SEV and loses 1 Action if RES < SEV; SEV decreased by 1 per Panel
Thermal	Burning: target takes damage each Panel with SEV as EV, SEV decreases by 1 per Panel
Toxic	Poisoned: target takes damage each Panel with SEV as EV, SEV decreases by 1 per Panel

BLUDGEONING & CONCUSSIVE DAMAGE TYPE: KNOCK BACK

The target falls Prone and is **Knocked Back** as if by a Gust with SPs equal to the Attack's Special Effect Value – 2. (The reduction in SPs represents the fact that much of the kinetic energy of the Attack is lost to deformation, heat, noise, etc.) If a target is Knocked Back a distance of 0 SPs, he is simply knocked Prone. If a target is Knocked Back a distance of - 1 SPs or less, he ignores the Special Effect entirely. The effects of the Knock Back are identical to those from a Gust (p. 145).

CORROSIVE DAMAGE TYPE: CORRODING

The target's body begins to dissolve or melt from the chemicals, gaining the **Corroding** condition. At the end of each of his Panels, a Corroding character suffers Damage as if from a Green result on a Corrosive Attack with an Effect Value equal to the SEV, then reduces the SEV by 1. When the SEV is reduced to 0, the chemical has evaporated or oxidized and the Condition ends.

Anyone with Water Control or similar Powers with SPs can attempt to reduce the SEV of the Corroding condition; handle as if putting out a fire with a Magnitude equal to the current SEV. A Corroding character who can fully immerse himself in water can automatically wash the corrosive agent off and end the Condition as an Automatic Action. Otherwise, the Corroding character can attempt to wipe off the acid as a Challenge Action. The character makes an AGI vs. SEV Challenge Check and reduces the SEV of the Corrosive condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result.

It's Melting: The wearer or crew of a Corroding object can attempt to neutralize the acid with an INS vs. SEV Challenge Check.

CRYOGENIC DAMAGE TYPE: FROZEN

The target is chilled to the core, gaining the **Frozen** condition. While Frozen, the character reduces both his Initiative and Speed by the SEV of the Attack. At the end of each of his Panels, the character reduces the SEV by 1. When the SEV is reduced to 0, the character's body temperature has normalized and the Condition ends.

Anyone with Fire Control or similar powers can automatically warm the Frozen character; handle as if putting out a fire with a Magnitude equal to the current SEV.

ELECTRICAL & IONIZING DAMAGE: DISRUPTED

The target is shocked by the high energy attack, gaining the **Disrupted** condition. While Disrupted, the character reduces his Initiative by the SEV of the Attack (to a minimum of 0). In addition, if the SEV exceeds the target's MIG, the target loses one Action on his Panel. At the end of each of his Panels, the character reduces the SEV by 1. When the SEV is reduced to 0, the character regains his physical equilibrium and the Condition ends. At the start of his Panel, a character with Resilience automatically reduces the SEV of the Disrupted condition by his SPs of Resilience.

It's Fried: Objects treat all Electrical and Ionizing Damage as Nonlethal. It can reduce the object to a Current Durability of 0 but no lower. Objects are immune to the Disoriented condition unless they are Autonomous.

Radiation Exposure (Optional): When a character suffers a Special Effect from Ionizing Damage, he suffers Radiation Exposure with SPs equal to the SEV/2 + 5. Radiation exposure has horrific long-term effects on characters. See Radiation Exposure (p. 350) for more details.

LACERATING & PENETRATING DAMAGE TYPE: BLEEDING

The target is bloodily injured, gaining the **Bleeding** condition. At the end of each of his Panels, a Bleeding creature suffers Damage as if from a Green result on a Lacerating or Penetrating Attack (as per the original Attack) with an Effect Value equal to the SEV, then reduces the SEV by 1. When the SEV is reduced to 0, the wound has clotted and the Condition ends.

At the start of his Panel, a creature with Regeneration automatically reduces the SEV of the Bleeding condition by his SPs of Regeneration. An ascendant with the Healing Power can reduce the SEV of the Bleeding condition by his SPs of Power as an Automatic Action.

The creature or an ally can attempt to bind the wound as a Challenge Action. The creature or ally makes an INS v. SEV Challenge Check and reduces the SEV of the Bleeding condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result.

It Doesn't Bleed: Objects replace the Bleeding condition with the Leaking condition (loss of hydraulic fluid, motor oil, coolant, etc.) The effects are the same. The wearer or crew of the object can attempt to plug the leak as a Challenge Action with an INS vs. SEV Challenge Check, as above. The wearer or crew must have the Multitool perk or an object with that Perk in order to make the attempt.

NEURAL & PSYCHIC DAMAGE TYPE: DISORIENTED

The target is confused and stunned by the attack, gaining the **Disoriented** condition. While Disoriented, the target reduces his Initiative by the SEV of the Attack (to a minimum of 0). In addition, if the SEV of the Attack exceeds the target's RES, the target loses one Action on his Panel. At the end of each of his Panels, the creature reduces the SEV by 1. When the SEV is reduced to 0, the creature regains his mental equilibrium and the Condition ends. At the start of his Panel, a creature with Resilience automatically reduces the SEV of the Disoriented condition by his SPs of Resilience.

It Has no Soul: Objects are immune to the Neural and Psychic Damage Types and suffer neither Damage nor Special Effects from it.

THERMAL DAMAGE TYPE: BURNING

The target catches fire, gaining the **Burning** condition. At the end of each of his Panels, a Burning character suffers Damage as if from a Green result on a Thermal Attack with an Effect Value equal to the SEV, then reduces the SEV by 1. When the SEV is reduced to 0, the flames die out and the Condition ends.

Anyone with Air Control, Fire Control, or similar Powers can attempt to extinguish the flames; handle as if putting out a fire with a Magnitude equal to the current SEV. A Burning character who can fully immerse himself in water can automatically end the Condition as an Automatic Action. Otherwise, the Burning character can attempt to extinguish the flames through stop-drop-and-roll as a Challenge Action. The character makes an AGI vs. SEV Challenge Check and reduces the SEV of the Burning condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result.

It's on Fire: The wearer or Crew of a Burning object can attempt to extinguish the flames through damage control with an INS vs. SEV Challenge Check.

TOXIC DAMAGE TYPE: POISONED

The target has suffered an envenomed or infectious injury, gaining the **Poisoned** condition. At the end of each of his Panels, a Poisoned creature suffers Damage as if from a Green result on a Toxic Attack with an Effect Value equal to the SEV, then reduces the SEV by 1. When the SEV is reduced to 0, the poison has worked through the target's system and the Condition ends.

At the start of his Panel, a creature with Regeneration automatically reduces the SEV of the Poisoned condition by his SPs of Regeneration. An ascendant with the Healing Power can reduce the SEV of the Poisoned condition by his SPs of Power as an Automatic Action.

The creature or an ally can attempt to extract the poison as a Challenge Action. The creature or ally makes an INS v. SEV Challenge Check and reduces the SEV of the Poisoned condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result.

It Doesn't Breathe: Objects are immune to the Toxic Damage Type and suffer neither Damage nor Special Effects from it.

RANGE, LINE OF SIGHT, AND MINIMUM RANGED DV

Some Attacks require that the target be in **Range** and **Line of Sight** of the attacker. Some Attacks also face a **Minimum Ranged DV**. These factors are summarized below. More details can be found in the Spotting, Listening, Hiding & Sneaking section (p. 297).

RANGE

Actual Range is the physical distance between a character and another character, object, or other target. **Effective Range** is the Actual Range as modified by powers such as Telescopic Sight. **Passive Spotting Range** is the distance at which a character can see a target with a Height of 0 SPs in the absence of cover or obscuring conditions. In the absence of Powers, Passive Spotting Range is 8 SPs. **Max Attack Range** is the maximum Range at which a character can make a Ranged Attack.

A target is in Range of an attacker if the Actual Range between them is equal to or less than the Max Attack Range in SPs. Most Ranged Attacks, Emotional Attacks, and Mental Attacks have an Attack Range equal to the SPs of the Power used to make the Attack. Most Melee Attacks and Wrestling Attacks have a Max Attack Range equal to the character's Height. Since most characters have a Height of 0 SPs, their Melee Attack Range is 0 SPs. (Characters with certain Powers such as Stretching may have a longer Attack Range.)

LINE OF SIGHT

A character has Line of Sight (LOS) to a target if his Vision Clarity against the target is 0 SPs or more. Vision Clarity equals the character's Passive Spotting Range plus the target's Height minus the Effective Range to the target. If the target has Cover or Obscurity, the SPs of Cover and/or Obscurity are subtracted from the character's Vision Clarity. The maximum Effective Range at which a character can claim Line of Sight is his Passive Spotting Range plus the target's Height minus its Cover and Obscurity. An Action is not required to claim LOS on a target.

ATTACKS WITHOUT LINE OF SIGHT

From time to time, a character may be unable to claim Line of Sight on a target but nevertheless wish to somehow attack the target. The following rules apply.

Blind Melee or Wrestling Attack: If a character knows a target is within 0 SPs but cannot claim Line of Sight because he is Blinded for any reason (e.g., the attacker is suffering a Special Effect, the target is Invisible, or Obscurity makes it impossible to spot), the character can attempt a Blinded Melee or Wrestling Attack. He suffers a -2 penalty to AV.

Blind Ranged Attack: If a target is within Earshot (or other sense) but not Line of Sight, a character can attempt a Blinded Ranged Attack. He suffers a -4 penalty to AV.

Indirect Ranged Attack: If a character knows the location of a target but cannot claim Line of Sight because of the target's Height or intervening Cover or Obscurity, the character can attempt an Indirect Ranged Attack with a hurled object or Power with the Indirect modifier. A character making an Indirect Ranged Attack does not suffer the AV penalty for making a Blinded Attack but might suffer other penalties. See p. 382.

MINIMUM RANGED DV

Attacking at Range can make hitting targets more difficult. The **Minimum DV** of most Ranged Attacks is equal to the Effective Range to the target - the target's Height + the target's Cover + the target's Obscurity.

A police officer is equipped with a 9mm pistol. The pistol is an object with 6 SPs of Penetrating Blast. The pistol has a Max Attack Range of 6 SPs, meaning it can be used to make Ranged Attacks at targets within 6 SPs of distance (320 feet) or less.

His target is a crook (Height of 0 SPs) at a distance of 4 SPs (80 feet). The crook is crouched behind a low wall that covers him from the chest down (3 SPs of Cover). It's broad daylight, with 0 SPs of Obscurity. Is the crook in Range? Yes, the distance to the target is just 4 SPs, well under the 9mm pistol's Max Attack Range of 6 SPs.

Can the police officer claim LOS on the crook? He can claim LOS on a target within a distance of Passive Spotting Range + target's Height – target's Cover – target's Obscurity. That means the police officer can claim LOS on the crook out to 8 + 0 – 3 - 0 = 5 SPs. Since the crook is only 4 SPs away, he can claim LOS on the crook.

But that doesn't make the Cover worthless! The Minimum DV of the police officer's Ranged Attack is the Effective Range to the target (4 SPs) - the target's Height (0 SPs) + the target's Cover (3 SPs) + the target's Obscurity (0 SPs). That means the Minimum Ranged DV is 4 + 3 = 7 SPs. Since the crook probably only had an AGI of 3 or 4, this is a big advantage for the bad guy!

If the police officer's 9mm pistol were equipped with a telescopic sight rated at 2 SPs, the Effective Range to the crook would be 2 SPs instead of 4 SPs, and the Minimum Ranged DV would be 5 instead of 7.

Firing Through Cover: When making a Ranged Attack against a target, a character can choose to shoot through rather than around the target's Cover. In this case, the target's SPs of Cover are not added to the attacker's Minimum Ranged DV. Instead, the Cover's SPs of Toughness are applied as SPs of Protection against any Damage dealt. Note that if a target has Total Cover, the attacker will not have LOS so firing through Cover counts as a Blind Ranged Attack.

The police officer notices that the wall the crook is standing behind is made of thin plywood (2 SPs of Toughness). He decides to just shoot through the Cover. This reduces his Minimum Ranged DV to 4, making his attack much easier! The police officer has 4 SPs of Projectile Weapons, so his RV is 4 – 4 = 0. He rolls a 48 on the CHART and scores a Green result. His EV is his pistol's 6 SPs of Blast, so he deals 16 points of Damage to the crook's Health. Because he shot through the wall, however, the crook gains 2 SPs of Protection, which reduces Damage by 4 to 12.

What if the crook had Total Cover from the wall? In that case, the police officer would have to make a Blind Ranged Attack, reducing his AV from 4 to 0. The DV would still be 4, so the RV would be -4. If the officer managed to roll well enough to hit the crook, Damage would be reduced by the wall as above.

Minimum Ranged DV of Area of Effect Attacks: When a Ranged Attack affects an area instead of or in addition to a single target, the attack is always directed at a specific spot on the target or in space. Therefore, the target's Height is not added to the Minimum Ranged DV. The Height of the target is taken into account by the fact that if the Attack scatters, it might still hit.

Burning Man makes a Ranged Attack at a kaiju (Height of 6 SPs) that is 9 SPs away. If he uses Thermal Blast, his Minimum Ranged DV is 9 – 6 = 3. If he misses, he misses the kaiju. If he uses Continuous Thermal Blast or Targeted Explosion, he is targeting a point on the kaiju's body. The Minimum Ranged DV is therefore 9 rather than 3, but if he misses the attack scatters based on the point he was aiming at.

The equations for Range and LOS are summarized below:

ACTUAL RANGE = DISTANCE IN SPS FROM ATTACKER TO TARGET

EFFECTIVE RANGE = ACTUAL RANGE – SPS OF TELESCOPIC SIGHT POWER

PASSIVE SPOTTING RANGE = 8 SPS

MAX ATTACK RANGE = SPS OF POWER (FOR MOST RANGED ATTACKS), 0 (FOR MOST MELEE ATTACKS)

MAXIMUM EFFECTIVE RANGE OF LOS = PASSIVE SPOTTING DISTANCE + TARGET HEIGHT – TARGET COVER – TARGET OBSCURITY

MINIMUM RANGED ATTACK DV = EFFECTIVE RANGE – TARGET HEIGHT + TARGET COVER + TARGET OBSCURITY

BLINDED MELEE/WRESTLING ATTACK AV = AV – 2

BLINDED RANGED ATTACK AV = AV – 4

METHODS OF ATTACK

There are many methods of attacking in *Ascendant*, ranging from punching a villain in the face to blasting them with a bolt of power to shattering their sanity with psionics. The **Method of Attack** will determine the Acting Value, Difficulty Value, Effect Value, and Damage Type of the attack. Certain Powers and Skills can modify a character's AV or DV when making one of the various types of Attacks. These effects are detailed in the description of the Power.

RANGED ATTACK

Ranged Attacks encompass the various means of physical combat at a distance, including blasting force or fire with a Power (**Blasting**), hurling an object (**Hurling**), or shooting firearms (**Shooting**). In order to make a Ranged Attack, the character must have (or wield an object that has) an appropriate Power or must have picked up an object he can throw. The target of the Ranged Attack must be in Range (p. 377) and should be in Line of Sight (p. 377). If the target is not in LOS, see Attacks without Line of Sight (p. 377).

The AV of a Ranged Attack is usually the attacking character's AGI, and the DV is usually the opponent's AGI. To resolve a Ranged Attack, the attacker makes an AGI vs AGI Attack Check. Some Powers may permit Ranged Attacks using different AVs or DVs. For instance, Telekinesis allows a character to make an INS vs AGI Ranged Attack. Unless otherwise noted, all of the usual rules for Ranged Attacks still apply, including Range, Line of Sight, and Minimum Ranged DV.

Minimum DV: Ranged Attacks have a Minimum Ranged DV (p. 378) equal to the Effective Range to the target - the target's Height + the target's Cover + the target's Obscurity.

MINIMUM RANGED DV = EFFECTIVE RANGE – HEIGHT + COVER + OBSCURITY

A Ranged Attack at a Range of 5 SPs (160 feet) against a mouse with a Height of -4 SPs (3" long) and no Cover or Obscurity has a Minimum Ranged Attack DV of 9 SPs, even though a mouse only has an AGI of 4.

Maximum DV (AGI): Anytime a target defends against a Ranged Attack using its AGI (or AGI substitute) as the DV, the AGI cannot exceed a value of 17 – (2 x Height) SPs. This rule does not apply when Deflection is used as the DV. Maximum DV rarely makes a difference for characters (who usually have a Height of 0 SP), but it means that a massive vehicle such as an aircraft carrier (Height of 6 SPs) cannot have an AGI of more than (17 – 12) 5 SPs. Even the best pilot in the world can't make an aircraft carrier as hard to hit as a bumblebee. Maximum DV does not apply to Targeted Area of Effect Attacks, which already take Height into account.

MAXIMUM DV (AGI) = 17 – (2 X HEIGHT)

TARGETED AREA OF EFFECT ATTACKS

When characters hurl big objects or use Powers like Targeted Explosion, their Ranged Attacks can damage not just the original target but all characters in the surrounding area of effect. The original target of the Attack can be a character, object, or point in space. The Attack is resolved with the usual AV and DV (usually AGI vs. AGI/Minimum DV). However, the target's Height is not added to the Minimum Ranged DV or applied towards Maximum DV. The Height of the target is accounted for by the fact that if the Attack scatters, it might still hit the target.

If the initial Ranged Attack Check succeeds, the target is damaged or affected based on the Color Result achieved. The area of effect is then placed with the target at its center.

If the initial Ranged Attack Check fails, the Attack **scatters** in a random direction some Distance from the target. To determine direction, roll 1d12; the Attack scatters in that clock direction (with "6" meaning back towards the Attacker). The Distance in SPs by which the Attack scatters is equal to the number of RV by which the Check missed a Green result. If the attack scatters in such a way that the original target still ends up in the area of effect, the original target is damaged or affected as if a Green result had been scored. If the attack scatters in such a way that the original target is excluded from the area of effect, it is not affected.

After the location of the area of effect is determined, resolve the effect on any other characters in the area according to the rules for that Power.

TARGETED AREA OF EFFECT ATTACK:
AGI VS. AGI/MINIMUM DV, IGNORING TARGET HEIGHT FOR PURPOSES OF MINIMUM DV
GREEN OR BETTER RESULT, TARGET DAMAGED BASED OR EFFECTED BASED ON COLOR RESULT
WHITE RESULT, SCATTER:
1D12 FOR CLOCK DIRECTION; DISTANCE = # OF RV BY WHICH CHECK FAILED;
IF TARGET STILL IN AREA OF EFFECT, SUFFERS GREEN RESULT
RESOLVE EFFECTS ON OTHER CHARACTERS IN AREA OF EFFECT

Stronghold fires a grenade from a grenade launcher (Targeted Explosion of 8 SPs) at the middle of a platoon of 40 Russian mercenaries a quarter mile away (a Range of 8 SPs). He's just aiming at a point in space, no particular trooper. The minimum DV is equal to the Effective Range, or 8. Stronghold's AGI is 5, so the RV of his Attack is -3. He makes a Shooting Ranged Attack Check and rolls a 41, a White Result. Consulting the CHART, the GM sees that if Stronghold had an RV of 0, he'd have achieved a Green result. Therefore the grenade scatters by [0 – (-3)] = 3 SPs, about 40 feet.

The GM rolls 1d12 and gets a 9, meaning that the grenade is scattering to Stronghold's left. The grenade has 8 SPs of Explosion, enough to affect all targets within 4 SPs; about half the troopers are still close enough to be affected. Each affected trooper is attacked by the grenade. The AV is equal to the grenade's 8 SPs of Explosion while the DV is equal to the trooper's 4 SPs of AGI and Speed, for an RV of +4. Note that this is considerably better than Stronghold's original RV of -3 to launch the grenade in the first place. Blowing up the bad guys is easy if you can manage to lob the grenade to their area!

Later, Stronghold encounters another formation of troops just 5 SPs (160 feet) away. An enemy commander is standing in the middle of the formation barking orders. Stronghold decides to launch a grenade directly at the commander. His AV is his AGI of 5. His DV is the greater of the commander's AGI (6 SPs) or the Minimum Ranged DV (5 SPs), so it's 6 SPs. His RV is -1. He rolls a 44 on the CHART, scoring a White result. The GM notes that if Stronghold had an RV of 0, he'd have achieved a Green result. Therefore the grenade scatters by [0 – (-1)] = 1 SP, or about 10 feet. Since the commander is still in the grenade's area of effect, he is damaged as if Stronghold had achieved a Green color result. The other mercenaries are now attacked by the grenade as above.

BLASTING RANGED ATTACK

The Attack's Max Attack Range is usually the SPs of Power. The Damage Type depends on the Power used to make the Blasting Ranged Attack. The Effect Value is the SPs of the Power used to make the Attack.

BLASTING RANGED ATTACK:
AGI VS. AGI/MINIMUM RANGED DV; USE POWER FOR EV

Indirect Blasting Attack: A Blasting Attack can only be Indirect if the Power used has the Indirect modifier. See Indirect Ranged Attacks, below.

SHOOTING RANGED ATTACK

The Attack's Max Attack Range is the Blast (or other Power) SPs of the object used to make the Shooting Ranged Attack. Shooting Ranged Attacks typically deal Penetrating Damage, although some unusual weapons might deal another Damage Type (such as a flamethrower that deals Thermal Damage). The Effect Value is the Blast (or other Power) SPs of the object used to make the Shooting Ranged Attack.

SHOOTING RANGED ATTACK:
AGI VS. AGI/MINIMUM RANGED DV; USE OBJECT'S POWER FOR EV

Indirect Shooting Attacks: A Shooting Attack can only be Indirect if the object used has an appropriate Power with the Indirect modifier. An AK-47 cannot be used to make an Indirect Shooting Attack but a mortar can be. See Indirect Ranged Attacks, below.

HURLING RANGED ATTACK

The Attack's Max Attack Range is usually the attacker's SPs of MIG minus the object's Weight. The Damaging Type depends on the object, as noted below. The Effect Value is equal to the sum of the hurled object's Weight and Speed. Typically (but not always) this is equal to the MIG of the character hurling the object; but if e.g. an object was hurled with Telekinesis then the Effect Value will be equal to the character's SPs of Telekinesis, and if the object had a Weight of less than 0 SPs, it will deal less (see p. 278).

HURLING RANGED ATTACK:
AGI VS. AGI/MINIMUM DV; USE WEIGHT + SPEED FOR EV

Damage Type by Object: Most objects deal Bludgeoning Damage, but this can vary by object. For instance, a light pole might deal Penetrating Damage if hurled like a spear, and a shuriken might deal Lacerating Damage. A character might even use the same sort of object in different ways. For instance, a character might hurl a light pole like a spear to deal Penetrating Damage against one target, then hurl another light pole like a spinning stick to deal Bludgeoning Damage in an area of effect. The GM makes the ultimate determination on the Damage Type dealt by an object.

Hurling Big Objects: When a character hurls big objects, resolve the action as a Targeted Area of Effect Attack. The area of effect for a big object is usually a circle with a diameter equal to its Height. The GM makes the ultimate determination on the area of effect for oddly shaped objects. After the location of the area of effect is determined and effects are applied to the original target, any other objects or characters within the area of effect are attacked using the hurled object's Height (or Length)as the AV, the targets' AGI/Speed as the DV, and the hurled object's Weight + Speed as the Effect Value. A character cannot Multi-Attack when hurling big objects.

HURLING RANGED ATTACK (BIG OBJECT):
AGI VS. AGI/MINIMUM DV; USE WEIGHT + SPEED FOR EV; IF MISS, SCATTER;
THEN MAKE OBJECT HEIGHT VS. AGI/SPEED ATTACK ON ALL TARGETS IN AREA OF EFFECT

Jack Hammer is confronted by a pack of three thugs in a 12-foot-wide (1 SP) alleyway. He picks up a trash dumpster (Weight of 7 SPs, Height of 1 SP) and chucks it at the thug in the center. The GM rules that the dumpster will strike a circle with a diameter equal to its Height (1 SP). Jack Hammer has 5 SPs of AGI, while the thugs have 4 SPs of AGI and Speed each. He makes an AGI vs. AGI/Minimum DV Attack Check against the thug in the center. Jack Hammer's AV is his AGI of 5. The Range is only 1 SP, so the DV is the thug's AGI of 4. With an RV of +1, Jack Hammer rolls a 33 and scores a Yellow result. The thug is hit. The Effect Value is Jack Hammer's MIG of 8 SPs, so he deals 32 x2 = 64 points of Bludgeoning Damage, easily knocking out the thug. (Technically the Effect Value is the dumpster's Weight of 7 SPs and its Speed of 1 SP but that happens to equal Jack Hammer's MIG because Object Speed = MIG - Weight.)

Jack Hammer now gets to make an Attack Check against each of the other two thugs in the area of effect, using the dumpster's Height as the AV and the thug's AGI/Speed as the DV. The dumpster's Height is 1 SP, so his AV is just 1. His RV is therefore -3. He rolls a 16 (Green) and 71 (White). The second thug is struck for 32 points of Damage while the third thug is missed.

What if Jack Hammer had rolled a 71 on his initial Attack Check? In that case he'd have missed and had to roll for scatter (see above). What if the thugs were ascendants with 7 SPs of Running? In that case, his initial Attack against the center thug would still have had an RV of +1 (AGI of 5 vs. AGI of 4), but the Attack Checks against the other thugs in the area would have had an RV of -6 (Object Height of 1 vs. Speed of 7). Speed protects characters and objects against area of effect attacks, as they can dive out of the way.

Indirect Hurling Attacks: All Hurling Ranged Attacks can be Indirect if desired. However, the Effect Value is reduced by 1 for an Indirect Hurling Attack, as part of the object's Speed is orthogonal to the target. (E.g. it hurts more to get hit head-on by a line drive than at an angle by a fly ball.) See Indirect Ranged Attacks, below.

Jack Hammer is confronting BFF. If Jack Hammer (MIG of 8 SPs) picks up a motorcycle (Weight of 5 SPs) and hurls it directly at the villain, the motorcycle will travel at a Speed of 8-5 = 3 SPs and therefore have an Effect Value of (5 + 3) = 8 SPs. However, if BFF is cowering behind a wall and Jack Hammer tosses the motorcycle over the wall as an Indirect Hurling Attack, then the motorcycle will only have an Effect Value of (8 – 1) = 7 SPs of Damage if it hits.

INDIRECT RANGED ATTACKS

An attacker can conduct an **Indirect Ranged Attack** against the target using any hurled object or any Power with the Indirect modifier. The advantage of an Indirect Ranged Attack is that the attacker does not necessarily need to have a Line of Sight and can ignore the target's Cover for purposes of Minimum Ranged DV. An Indirect Ranged Attack can be either **Self-Guided**, **Guided**, or **Unguided**.

Self-Guided: A Self-Guided Indirect Ranged Attack is aimed at a target which is in Max Attack Range and LOS. A Self-Guided Indirect Ranged Attack is useful when attacking targets who have partial Cover.

Imagine that Jack Hammer (AGI of 5 SPs, MIG of 8 SPs) is confronting BFF (AGI of 4 SPs, Height of 0 SPs). BFF is 40 feet (3 SPs) away and cowering behind a low concrete wall that grants him 4 SPs of Cover. Jack Hammer has Line of Sight on BFF since BFF doesn't have Total Cover.

If Jack Hammer picks up a motorcycle (Weight of 5 SPs and 1 SP) and hurls it at the villain, his DV will be the greater of BFF's AGI of 4 or the Minimum Ranged DV. Since BFF is 3 SPs of Distance away and has 4 SPs of Cover, the Minimum Ranged DV of 7. Given Jack Hammer's AV of 5, that would result in an RV of -2 – that's a difficult shot.

If Jack Hammer makes an Indirect Hurling Ranged Attack, he can ignore BFF's Cover, reducing the DV to just 4, granting him an RV of +1 instead of -2. The trade-off is that an Indirect Hurling Ranged Attack will reduce his Effect Value by 1 SP, from 8 to 7 SPs.

Guided: A Guided Indirect Ranged Attack is aimed at a target to which an allied character, known as a **spotter**, has Line of Sight. To qualify as a spotter, the ally must spend an Automatic Action during the Page somehow signaling the location of the target before the attacker makes his Attack. If the target moves after the spotter signals its location, the opportunity for Guided Indirect Ranged Attack is lost. The target must be in Max Attack Range of the attacker. The attacker suffers a -2 penalty to his AV. However, the Minimum Ranged DV is calculated based on the spotter's Attributes and position.

Imagine that Jack Hammer does not have Line of Sight on BFF and cannot make a Self-Guided Indirect Ranged Attack. Fortunately, Levitee is on top of a nearby building staring down at BFF from 80 feet (4 SPs) away. On Levitee's Panel, he uses an Automatic Action to radio Jack Hammer with BFF's location. On Jack Hammer's Panel he makes a Guided Indirect Hurling Ranged Attack at BFF. The Minimum Ranged DV is now based on Levitee's position. BFF is actually a bit further away from Levitee than he is from Jack Hammer (4 SPs instead of 3 SPs) but he has no Cover against Levitee (0 SPs); the Minimum Ranged DV is therefore 4 SPs. Jack Hammer's AV is his AGI of 5 SPs – 2 because he's making a Guided Indirect Ranged Attack. The final RV is therefore -1.

What if BFF had run away after Levitee radioed his position and before Jack Hammer had hurled the motorcycle? In that case, Jack Hammer could not have made a Guided Indirect Ranged Attack. For this reason, it's often good for allies to coordinate their Panels by Reserving Actions.

Unguided: An Unguided Indirect Ranged Attack is simply aimed at a target with a known, but not visible, location. The target must still be in Max Attack Range. When making an Unguided Indirect Ranged Attack, the attacker must be either using a Power that can have an area of effect or hurling an object large enough to have an area of effect. In either case, he suffers a -4 penalty to his AV.

BFF is once again cowering behind a tall wall that grants him 5 SPs of Cover against Jack Hammer. This time, however, Levitee is nowhere to be found. Jack Hammer can hear BFF frantically screaming into his mobile phone for help, so he knows he's there, but he can't claim LOS on the grifter, and he doesn't have a spotter. Jack Hammer decides to throw the motorcycle anyway. The GM decides that the motorcycle (Height of 1 SP) is sufficiently large enough to grant an area of effect, so Jack Hammer is able to make an Unguided Indirect Ranged Attack. As before, Jack Hammer can ignore BFF's Cover, reducing the DV to just 4. But now Jack Hammer suffers a -4 penalty to his AV, reducing it to 1. His RV is therefore -3.

Note that if Jack Hammer had missed when he threw the motorcycle in any of these examples, the GM could have checked for scatter to see if it landed on bystanders or even on Jack Hammer himself.

MELEE ATTACK

Melee Attacks involve strikes with fists, feet, or other body parts (**Unarmed**), or strikes with objects such as baseball bats, knives, swords, or lamp poles (**Armed**). The Acting Value of a Melee Attack is the attacking character's VAL. The Difficulty Value of a Melee Attack is usually the opponent's VAL. To resolve a Melee Attack, the attacker makes a VAL vs VAL Attack Check.

The target of the Melee Attack must be in Max Attack Range (p. 377). Melee Attack Range for characters is usually equal to the Attacker's SPs of Height; since most characters have a Height of 0 SPs, most Melee Attacks are restricted to 0 SPs. If a character has a Height of 1 SP or more, he can make Melee Attacks at an Attack Range equal to his Height, and certain Powers may permit Melee Attacks at a longer Attack Range.

The target of the Melee Attack should be in Line of Sight (p. 377). If the target is not in LOS, see Attacks without Line of Sight (p. 377).

UNARMED MELEE ATTACK

Unarmed Melee Attacks deal Bludgeoning Damage to the opponent using the character's MIG (or MIG substitute) as the Effect Value.

UNARMED MELEE ATTACK:
VAL VS. VAL; USE MIG FOR EV

ARMED MELEE ATTACK

Armed Melee Attacks inflict Damage to the opponent based on the device or object the character has armed himself with. For instance, a character wielding a baseball bat deals Bludgeoning Damage, a character wielding a chainsaw deals Lacerating Damage, and a character wielding a spear deals Penetrating Damage. If the character is wielding a device or object with SPs of Strike, the Effect Value of the Attack is the device or object's SPs of Strike. Devices or objects with SPs of Strike are not damaged when used.

Sometimes a character may use an everyday object like a telephone pole, garbage can lid, or door as a weapon. Since these objects lack any SPs of Strike, the Effect Value of the Attack is just the character's MIG. If the object has a Height greater than the character's Height, however, the object increases the character's Melee Attack Range by 1 SP (as if it had the Long Reach modifier). After the object is used, it becomes Wrecked by the Attack and cannot be used for subsequent attacks.

ARMED MELEE ATTACK:
VAL VS. VAL; USE MIG OR STRIKE FOR EV

American Eagle has a MIG of 15 SPs and a Height of 0 SPs. Normally his Melee Attack Range is 0 SPs. A nearby passenger bus has a Height of 2 SPs and a Toughness of 10 SPs. If he picks up the bus and uses it to make an Armed Melee Attack, his Melee Attack Range is increased by 1 to 1 SP. After he makes the Attack, the bus is Wrecked and cannot be used for another Attack.

Designer's Note: If necessary, you can determine the exact effect on a Static Object used as a weapon by applying the Damage dealt by each Attack it is used for against its own Current Durability. Most superhumans who pick up objects as weapons have such high MIG that they'll Wreck whatever they fight with, so it's usually not worth tracking in detail.

MELEE AREA OF EFFECT ATTACKS

Characters with a Height of 5 SPs or more are so large that their Melee Attacks can damage not just the original target but all characters in the surrounding area of effect. The original target of the Attack can be a character, object, or point in space. The Attack is resolved with the usual AV and DV (usually VAL vs. VAL). A Melee Area of Effect Attack cannot be a Multi-Attack, but the attacker can choose between the two at his option.

A giant encountering five heroes might make a Melee Area of Effect Attack (stomping on them) or a Multi-Attack (flicking them with his five fingers or sweeping with his club). He could not, however, attempt a Multi-Attack and Area of Effect Attack at the same time.

The area of effect for a Melee Area of Effect Attack is usually a circle with a diameter equal to the character's Height – 4 (representing the area of his fist, palm, shin, heel, or weapon head). The GM makes the ultimate determination on the area of effect if the character is fighting with an oddly shaped object.

After the location of the area of effect is determined and effects are applied to the original target, any other objects or characters within the area of effect are attacked using the character's Height-4 as the AV, the targets' VAL/Speed as the DV, and the character's MIG or Strike as the EV.

MELEE AREA OF EFFECT ATTACK:
VAL VS. VAL; USE MIG OR STRIKE FOR EV; IF MISS, SCATTER;
THEN MAKE CHARACTER HEIGHT -4 VS. VAL/SPEED ATTACK ON ALL TARGETS IN AREA OF EFFECT

A 640-foot kaiju has a VAL of 8 SPs, a MIG of 20 SPs, and a Height of 7 SPs. A squad of 8 infantry soldiers have taken up firing positions behind an overturned bus about 250 feet (6 SPs) away. The kaiju is annoyed at their pinpricking bursts and decides to stomp on them. The soldiers are easily within the kaiju's 7 SP Max Attack Range for its Melee Attack. The kaiju makes a Melee Area of Effect Attack against the soldier in the middle of the formation. The soldier has a VAL of 4, so the kaiju attacks with an RV of +4. It rolls an 81 and scores a Yellow result, dealing 4096 points of Bludgeoning Damage, squashing the trooper like a bug. Now the kaiju attacks everything else in a circle with a diameter of Height – 4 SPs; in this case 3 SPs, or about 40 feet. That's more than enough to encompass all of the soldiers and the bus as well.

The kaiju's AV is 3. The soldiers' DV is their VAL/Speed of 4, while the bus's DV is its VAL/Speed of 0 (since it's Toppled and Stationary). The kaiju has an RV of -1 vs the soldiers and +3 vs the bus. It rolls an 83 on the CHART, achieving a White result on the soldiers and a Green result on the bus. The soldiers manage to dive out of the way of its titanic foot, but the bus takes 2048 points of Bludgeoning Damage and is wrecked.

EMOTIONAL ATTACK

Emotional Attacks include fear, coercion, intimidation, and other attempts to directly affect a target's emotional state. In order to make an Emotional Attack, a character must have (or wield an object that has) an appropriate Power or Skill that affords him the opportunity to do so. Unless otherwise noted, the target of the Emotional Attack must be in Range and should be in Line of Sight; If the target is not in LOS, see Attacks without Line of Sight (p. 377).

The AV of an Emotional Attack is usually the attacking character's CHA, and the DV is usually the opponent's RES. There is no Minimum Ranged DV. To resolve an Emotional Attack, the attacker makes a CHA vs. RES Attack Check. The Damage Type and Effect Value both depend on the Power or Skill used to make the Emotional Attack.

EMOTIONAL ATTACK:
CHA VS. RES; USE POWER OR SKILL FOR EV

MENTAL ATTACK

Mental Attacks include any sort of attempt to confuse, deceive, exhaust, feint, trick, overwhelm, or otherwise directly affect an opponent's mental state. In order to make a Mental Attack, a character must have (or wield an object that has) an appropriate Power or Skill that affords him the opportunity to do so. Unless otherwise noted, the target of the Mental Attack must be in Range and should be in Line of Sight; if the target is not in LOS, see Attacks without Line of Sight (p. 377).

The AV of a Mental Attack is usually the attacking character's INS, and the DV is usually the opponent's RES. There is no Minimum Ranged DV. To resolve a Mental Attack, the attacker makes an INS vs. RES Attack Check. The Damage Type and Effect Value both depend on the Power or Skill used to make the Mental Attack.

MENTAL ATTACK:
INS VS. RES; USE POWER OR SKILL FOR EV

RAMMING ATTACK

Ramming Attacks include any sort of full-body rush such as a charge, ram, or tackle. Unintentional Collisions are also resolved as Ramming Attacks (see p. 275). A Ramming Attack is a Challenge Movement Action during which the character must move at least 2 SPs (20 feet) or more of distance in a straight line and finish his Movement Action within 0 SPs of distance of the target he is ramming. The character must have Line of Sight on the target of his Ramming Attack for his entire Movement Action.

The AV of a Ramming Attack is the attacking character's AGI, and the DV is the better of the opponent's AGI or Speed. To resolve a Ramming Attack, the attacker makes an AGI vs. AGI/Speed Attack Check.

A Ramming Attack deals Bludgeoning Concussive Damage to both the attacker and the opponent. For a head-on ram, the Effect Value against each character is equal to the other character's Weight plus the greater of the attacker or opponent's Speed. (If the Attributes are equal, use the equal value +1). The maximum amount of Damage a character can sustain from a Ramming Attack is equal to the amount sufficient to instantly slay or destroy the other character involved.

If the attacker hits the opponent from the side, use the attacker's Speed. If the attacker hits the opponent from behind, use the attacker's Speed -1. Lose 1 Hero Point if you make a crude joke while ramming the opponent from behind.

If a Ramming Attack misses, the GM should roll for Scatter (p. 380). If the result of the Scatter puts another character in the character's path, resolve that as a Collision (e.g. an involuntary Ramming Attack).

RAMMING ATTACK:
AGI VS. AGI/SPEED

RAMMING ATTACK DAMAGE (HEAD ON):
ATTACKER SPEED/OPPONENT SPEED + OTHER CHARACTER'S WEIGHT

RAMMING ATTACK DAMAGE (SIDESWIPE):
ATTACKER SPEED + OTHER CHARACTER'S WEIGHT

RAMMING ATTACK DAMAGE (REAR):
ATTACKER SPEED -1 + OTHER CHARACTER'S WEIGHT

MOVEMENT AFTER RAMMING

Since Ramming Attacks are essentially intentional Collisions, they can result in characters being knocked Prone or flung about the battlefield. There are three possible outcomes to a successful Ramming Attack: an Elastic Collision; an Inelastic Collision; and a Breakthrough. These rules are repeated below for convenience. See p. 275 for gameplay examples of Collisions.

Elastic Collision: When a Ramming Attack results in no damage being dealt to either the attacker or the opponent, then it is considered to be an Elastic Collision and the attacker and opponent bounce off each other.

If the attacker's Weight is less than the opponent's Weight, he is knocked back a distance equal to the greater of his Speed or his opponent's Speed. If the attacker's Weight is greater than the opponent's Weight, the opponent bounces off the attacker a distance equal to the greater of their Speeds. If the attacker's Weight equals the opponent's Weight, the attacker is knocked back a distance equal to the opponent's Speed and the opponent is knocked back a distance equal to the attacker's Speed.

ELASTIC COLLISION (ATTACKER WEIGHT < OPPONENT WEIGHT):
ATTACKER KNOCKED BACK BY OPPONENT SPEED/ATTACKER SPEED

ELASTIC COLLISION (ATTACKER WEIGHT > OPPONENT WEIGHT):
OPPONENT KNOCKED BACK BY OPPONENT/ATTACKER SPEED

ELASTIC COLLISION (ATTACKER WEIGHT = OPPONENT WEIGHT): ATTACKER KNOCKED BACK BY OPPONENT SPEED; OPPONENT KNOCKED BACK BY ATTACKER SPEED

Inelastic Collision: When a Ramming Attack results in damage to either the attacker or opponent, it is considered to be an Inelastic Collision and the attacker and/or opponent might be knocked Prone. (Objects are Toppled rather than knocked Prone.)

If the attacker's Weight is less than the opponent's Weight, the Collision results in the attacker being knocked Prone. If the attacker's Weight is greater than the opponent's Weight, the opponent is knocked Prone. If the attacker's Weight equals the opponent's Weight, then either both or neither are knocked Prone (attacker's choice).

INELASTIC COLLISION (ATTACKER WEIGHT < OBJECT WEIGHT):
ATTACKER KNOCKED PRONE

INELASTIC COLLISION (ATTACKER WEIGHT > OPPONENT WEIGHT):
OPPONENT KNOCKED PRONE

IMPACT (ATTACKER WEIGHT= OPPONENT WEIGHT):
ATTACKER AND OPPONENT BOTH OR NEITHER KNOCKED PRONE
(ATTACKER'S CHOICE)

Breakthrough: When a Ramming Attack results in either the attacker or opponent being Destroyed or Slain, it is considered a Breakthrough and the attacker might get to keep moving.

If the opponent is Slain or Destroyed by the Ramming Attack, the opponent explodes in an impressive shower of gore and the attacker can continue to move at his current Speed -2 (if he has not yet moved his new maximum permitted distance). If the attacker is instantly killed by the Ramming Attack, the opponent breaks through the character. This still produces an impressive shower of gore but since it's not the opponent's Panel he doesn't move yet.

KNOCK BACKS FROM RAMMING

If an attacker rolls particularly well, he might trigger a Knock Back Special Effect with a Ramming Attack. Because a Special Effect only triggers when the target loses at least one point of Health or Durability, Elastic Collisions never trigger Knock Back. Likewise, if the target is destroyed, Knock Back is irrelevant, as it has been reduced to a pasty smear or flying fragments. Thus, only when the Ramming Attack resulted in an Inelastic Collisions is a Special Effect meaningful. If a Ramming Attack triggers a Knock Back Special Effect, ignore the normal Inelastic Collision result and apply the Knock Back Special Effect instead. This outcome represents a "partially elastic, partially inelastic" impact.

RAMMING AREA OF EFFECT ATTACKS

Characters with a Height of 2 SPs or more are so large that their Ramming Attacks affect can damage not just the original target but all characters in the surrounding area of effect. The original target of the Attack can be a character, object, or point in space. The Attack is resolved with the usual AV and DV (usually AGI vs. AGI/Speed). A Ramming Area of Effect Attack cannot be a Multi-Attack, but the attacker can choose between the two at his option.

The area of effect for a Ramming Area of Effect Attack is usually a circle with a diameter equal to the character's Height – 1 (representing his width relative to his height, since most characters are taller than they are wide). The GM makes the ultimate determination on the area of effect if the character is oddly shaped.

After the location of the area of effect is determined and effects are applied to the original target, any other objects or characters within the area of effect are attacked using the character's Height-1 as the AV and the targets' AGI/Speed as the DV. The Effect Value is calculated as for an ordinary Ram. The attacker takes damage separately from every target he affects with his Ram. If he Rolls with the Attack, he reduces all Damage by the same number of color stages. He only achieves a Breakthrough if the original target is instantly Destroyed or Slain and every other target is at least Knocked Down.

RAMMING AREA OF EFFECT ATTACK:
AGI VS. AGI/SPEED; USE EV AS ABOVE; IF MISS, SCATTER;
THEN MAKE CHARACTER HEIGHT -1 VS. AGI/SPEED ATTACK ON ALL TARGETS IN AREA OF EFFECT

A 640-foot kaiju has AGI of 3 SPs, MIG of 20 SPs, Invulnerability of 20 SPs, Speed of 5 SPs, Weight of 24 SPs, and Height of 7 SPs. 160 feet away (5 SPs), the city gives way to the tree-covered vistas of Central Park, where a large crowd of innocent bystanders is snapping selfies with the looming kaiju. The bystanders have 3 SPs in all Attributes, with 30 Health.

The kaiju makes a Ramming Area of Effect Attack using its AGI of 3 SPs as the AV. It picks a lovely oak tree in the park, near the middle of the crowd, as its target. The oak tree has 0 SPs of AGI and Speed, 7 SPs of TOU, 11 SPs of Weight, and 3 SPs of Bludgeoning Protection. The kaiju attacks with an RV of +3. It rolls a 10 and scores a Red result. The EV for the Attack is the sum of the kaiju's Weight and the kaiju's Speed, or 24 + 5 = 29 SPs. That's literally off the chart (393,216 Bludgeoning Damage, to be specific). The tree can't Roll with the Attack (since it's a Static Object) so it takes full damage, and really, what difference would it make if it could? With 7 SPs of TOU, the tree only has a Durability of 120; it is instantly Destroyed in a spray of splintering wood.

Now the kaiju attacks everything else in a circle with a diameter of Height – 1 SPs; in this case 6 SPs, or about 320 feet. Given the population density of Manhattan crowds, the GM estimates that's about 20 more oak trees and 500 bystanders. The kaiju's AV is its Height -1, or 6. The innocent bystanders' DV is their AGI/Speed of 3, while all the trees have DVs of 0. The kaiju has an RV of +3 vs the bystanders and +6 vs all the trees. It rolls a 47 on the CHART, achieving a Yellow result on the bystanders and a Red result on the trees. The EV is the same as above. All the trees are Destroyed and all the people are Slain. A 100,000-square foot area of Central Park is turned into a crater.

What about the kaiju? It takes Damage from the oak trees and bystanders it crushed. However, the maximum amount of Damage a character can sustain from a Ramming Attack is equal to the amount sufficient to instantly slay or destroy the other character involved. With a Durability of 120, each tree is destroyed by 240 points of Damage, which isn't enough to break through the Kaiju's 2,048 points of Protection. The 500 bystanders, of course, are equally harmless. The kaiju is no more affected than a man is when he walks on grass.

WRESTLING ATTACK

Wrestling Attacks involve grabs, grapples, holds, and other wrestling maneuvers. A character can only make a Wrestling Attack on an opponent in LOS who is within his Wrestling Attack Range. Wrestling Attack Range for characters is usually equal to the Attacker's SPs of Height; since most characters have a Height of 0 SPs, most Wrestling Attacks are restricted to 0 SPs. If a character has a Height of 1 SP or more, he can make Wrestling Attacks at an Attack Range equal to his Height, and certain Powers may permit Wrestling Attacks at a longer Attack Range.

The Acting Value of a Wrestling Attack is the attacking character's VAL. The Difficulty Value of a Wrestling Attack is the opponent's choice of his VAL, MIG, or Weight + Speed. To resolve a Wrestling Attack, the attacker makes a VAL vs VAL/MIG/Weight + Speed Attack Check.

WRESTLING ATTACK: VAL VS. VAL/MIG/(WEIGHT + SPEED); CONDITION BASED ON COLOR RESULT

Wrestling Attacks cause Conditions instead of Damage. On a White result, the attack fails. On a Green result, the opponent is **Engaged** and the attacker is **Engaging**. On a Yellow result, the opponent is **Grappled** and the attacker is **Grappling**. On an Orange result, the opponent is **Held** and the attacker is **Holding**. On a Red result, the opponent is **Pinned** and the attacker is **Pinning**.

Engaged: An Engaged opponent has become entangled in close combat with the Engaging attacker. Until the Conditions end, the following effects apply:

★ The attacker is considered to be Encumbered as if he were carrying an object with a Weight equal to the greater of the opponent's MIG or Weight + Speed. If the attacker's Encumbered Speed is 1 SP or more, the attacker may take a Movement Action while carrying the opponent with him. If the attacker's Encumbered Speed is reduced to 0 or less, the attacker must relinquish his grapple and end the Conditions in order to take a Movement Action.

★ The opponent is also considered to be Encumbered as if he were carrying an object with a Weight equal to the greater of the attacker's MIG or the attacker's Weight + Speed. If the opponent's Encumbered Speed is 1 SP or more, the opponent may take a Movement Action while carrying the attacker along with him. If the attacker does not wish to move with the opponent, the attacker can relinquish his grip and end the Condition instead. If the opponent's Encumbered Speed is reduced to 0 or less, he cannot take a Movement Action.

★ If the opponent's Encumbered Speed is reduced to 0 or less, he cannot make Melee Attacks or Wrestling Attacks at any characters other than the attacker.

★ Any Ranged Attacks against either the attacker or the opponent by any other characters suffer a -2 penalty to their AV due to the difficulty in distinguishing the two targets. (The GM may waive this penalty if the character has some Power that would permit him to easily distinguish the targets with aimed fire.)

Grappled: A Grappled opponent has been grabbed by the Grappling character. The attacker's advantageous position now permits him to leverage his raw physical power. Until the Conditions end, the following effects apply:

★ The attacker is Engaging and the opponent is Engaged (i.e. all of the rules above apply).

★ The attacker may use MIG/VAL as the AV for any Melee or Wrestling Attacks against the opponent, and as the DV for any Melee or Wrestling Attacks by the opponent. The attacker may also use his MIG/VAL as the DV against Ranged Attacks by the grappled opponent.

★ If the attacker makes a Sweep or Judo Throw Trick Attack (see p. 395) against the opponent, he reduces the Color Threshold of success he needs by one color (e.g. he can Sweep on Green and Throw on Yellow).

★ The opponent cannot make Melee Attacks or Wrestling Attacks at any characters other than the attacker. If the opponent's Encumbered Speed is reduced to 0 or less, he also cannot make Ranged Attacks at any opponents other than the attacker.
★ If the opponent had previously been Engaging, Grappling, Holding, or Pinning another character, those Conditions end as the opponent must now deal with the attacker's wrestling maneuvers. (So, for instance, a hero could free an innocent bystander who is being held in the clutches of a villain by scoring a Grappled result on the villain on a Wrestling Attack.)

Held: A Held opponent has been firmly grappled by the Holding character. The opponent no longer has the mobility to use his reflexes and training and must rely on raw strength in the fight. Until the Condition ends, the following effects apply:

★ The attacker is Grappling and the opponent is Grappled (i.e. all of the rules above apply).
★ If the Holding attacker makes a Sweep or Judo Throw Trick Attack against the Held opponent, he reduces the Color Threshold of success by two colors. If the character's Encumbered Speed is 1 or more, and the opponent's Encumbered Speed is 0 or less, the character can Sweep and Judo Throw the target as if it were Stationary.
★ The opponent must use VAL</>MIG as the AV for any Melee or Wrestling Attacks targeting the attacker and as the DV for any Melee or Wrestling Attacks by the attacker.
★ The opponent cannot make Ranged Attacks at any targets other than the attacker. If the opponent's Encumbered Speed is reduced to 0 or less, the opponent cannot make Ranged Attacks at all.

Pinned: A Pinned opponent is rendered almost helpless by the Pinning character. The opponent is easily stabbed, punched, slapped, and lacks the mobility to avoid damage. Until the Condition ends, the following effects apply:

★ The attacker is Holding and the opponent is Held (i.e. all of the rules above apply).
★ The opponent cannot take any Challenge Action except to attempt to Escape (see below). This Condition does not apply to Challenge Actions made using Additional Limbs.
★ The opponent's Gliding Speed, Jumping Speed, Running Speed, Swinglining Speed, Swimming Speed, and/or Winged Flight Speed is reduced to 0 SPs prior to calculating Encumbrance. Other Speeds (such as ordinary Flight) are not reduced. This Condition does not apply if the opponent's Height exceeds the attacker's Height by 2 SPs or more.
★ If the opponent's Encumbered Speed is reduced to 0 or less, the opponent cannot Roll with Attacks that hit him.
★ If the opponent's Encumbered Speed is reduced to 0 or less, his VAL and AGI are considered 0 for purposes of Melee and Ranged Attacks against him.

SPECIAL EFFECTS FROM WRESTLING ATTACKS

Because they deal no Damage, Wrestling Attacks never trigger Special Effects.

WRESTLING AN ENGAGED, GRAPPLED, HELD, OR PINNED OPPONENT

Even if an attacker has already succeeded at a Wrestling Attack against a target, he can make additional Wrestling Attacks later in the hopes of improving the Condition. Such subsequent Wrestling Attacks can improve the existing Condition, but not worsen it.

ESCAPE

An **Escape** is a Challenge Action that attempts to end a Condition imposed by a Wrestling Attack. The Acting Value of an Escape is the escaping character's choice of MIG or VAL. The Difficulty Value of an Escape is the opponent's choice of MIG or VAL. To resolve an Escape, the escaping character makes a MIG/VAL vs MIG/VAL Attack Check.

ESCAPE: MIG/VAL VS. MIG/VAL: CONDITION BASED ON COLOR RESULT

Escapes end Conditions instead of causing Damage. On a White result, the escaping character has failed to escape. On a Green result, the character can end an Engaged condition, or reduce a Grappled, Held, or Pinned condition by one step (Grappled to Engaged, Held to Grappled, etc.). On a Yellow result, the character can end an Engaged or Grappled condition, or reduce a Held or Pinned condition by two steps. On an Orange result, the character can end an Engaged, Grappled, or Held condition, or reduce a Pinned condition to Engaged. On a Red result, the character can end an Engaged, Grappled, Held, or Pinned condition.

COMBAT MANEUVERS

FAST ATTACK

A **Fast Attack** is any Melee or Ranged Attack that aims for speed rather than power. It's more likely to hit but it deals less damage. In a boxing match, it's the lightning-fast jab. In a gunfight it's the snapshot at center-of-mass. When a character makes a Fast Attack, his Acting Value is increased by 1 SP, but his Effect Value is decreased by 1 SP. The Combat Maneuver Perk permits characters to learn Fast Attacks with even bigger trade-offs (+2/-2 or +4/-4).

> If Stiletto (who has VAL of 14 SPs and Strike of 12 SPs) makes a Fast Melee Attack, her Acting Value will be 15 (her VAL of 14 + 1) while her Effect Value will be 11 (her Strike of 12 – 1).

POWER ATTACK

A **Power Attack** is the opposite of a Fast Attack – it's any Melee or Ranged Attack that prioritizes power over speed. It's less likely to hit, but if it does it will deal more damage. In a boxing match, a Power Attack would be a haymaker. In a gunfight, it would be a targeted shot to the head. When a character makes a Power Attack, his Effect Value is increased by 1 SP, but his Acting Value is decreased by 1 SP. The Combat Maneuver Perk permits characters to learn Power Attacks with even bigger trade-offs (+2/-2 or +4/-4).

> If Stiletto makes a Power Melee Attack, her Acting Value will be 13 (her VAL of 14 – 1) while her Effect Value will be 13 (her Strike of 12 + 1).

MULTI-ATTACK

A **Multi-Attack** is an Attack that targets more than one opponent. When a character makes a Multi-Attack, his AV and his EV are both decreased by 1 or more SPs, depending on the number of opponents he attacks. In exchange, the effects of the Multi-Attack are applied to all of the targeted opponents.

A character can attack as many opponents as desired, but all opponents must be within Range (and, if appropriate, Line of Sight) and he is not permitted to attack so many opponents that the Multi-Attack penalty would reduce his RV to -7 or less. If the opponents targeted by a Multi-Attack have different DVs, the highest DV of any character attacked is used as the DV of the Multi-Attack. A character cannot make a

Number	Multi-Attack Penalty
2-3	-1
4-6	-2
7-12	-3
13-25	-4
26-50	-5
51-100	-6
101-200	-7
201-400	-8
401-800	-9
801-1,600	-10
1,601-3,200	-11
3,201-6,400	-12

Wrestling Attack as a Multi-Attack unless he has a Power that permits it. Some Powers or objects may be restricted in their ability to make Multi-Attacks. For instance, a sniper rifle might have No Multi-Attack Penetrating Blast.

> As an example of a Multi-Attack, let's imagine that Stiletto (VAL of 14 SPs and Strike of 12 SPs,) is surrounded by two dozen cartel assassins (each with DV 7 and 60 Current Health). She could attack one assassin with an RV of +7 and deal 128 or more Damage, but that would be both overkill and a waste of an opportunity to dispatch many of the assassins at once. Therefore she makes a Multi-Attack against the 12 nearest assassins. This imposes a -3 penalty on her AV (reducing it from 14 to 11) and EV (reducing it from 12 to 9). She makes her Melee Attack with an RV of +4. For her Attack Check, she rolls 1d100 and gets a 72, for a Yellow result. That means she deals 48 x 2 = 96 Damage to 12 of the 24 assassins. The assassins are ordinary humans without Hero Points, so they cannot Roll with the Attack; all of the ones she struck are reduced to -36 Current Health and Unconscious.

Some Attacks have no EV. If this is the case, when Multi-Attacking, double the Multi-Attack Penalty to the AV. Examples of cases where this applies include Disarm Trick Attacks, Sweep Trick Attacks, and Wrestling Attacks.

NONLETHAL ATTACK

Many heroes have an aversion to killing. A Nonlethal Attack allows a character to pull his punches or aim for nonlethal locations to avoid killing his foe. A character can make a Nonlethal Attack if the Attack uses MIG, Blast, Strike, or Mind Blast as the Effect Value, but not Explosion, Fog, or Life Drain.

An attacker suffers no AV penalty for making a Nonlethal Melee, Ramming, or Wrestling Attack, nor for making any Nonlethal Attack dealing Bludgeoning Damage. An attacker making any other type of Nonlethal Attack suffers a -1 AV penalty. If a character succeeds on a Nonlethal Attack, he cannot reduce his target's Current Health to less than 0. However, he can still cause Special Effects, so there is a risk of accidentally killing a target.

> Stiletto slashes a thug with her eponymous nails (12 SPs of Penetrating Lacerating Strike, Base Damage 128). Her VAL is 14 SPs and the thug's VAL is only 3 SPs, so she has an RV of +11. The thug only has a Health of 30. She wants to keep him alive for questioning, so she decides to make a Nonlethal Attack. She rolls an 04 on the CHART, a Red result! That deals 128 x 8 = 1,024 Penetrating Lacerating Damage to the thug. Normally that would instantly slay him, but since she declared a Nonlethal Attack the thug's Current Health is just reduced to 0. Unfortunately, her roll of 04 is also below her AV, which means she has triggered a Bleeding special effect with an SEV of 11 SPs. At the end of his Panel, the thug bleeds out, reducing his Current Health to -96. Her "prisoner" dies messily.

> **Designer's Note:** The Gamemastering Chapter has rules for adjusting the game's Combat Lethality that can make Nonlethal Attacks more accessible or even the default for all Attacks. See p. 442 – p. 444 for details.

SURPRISE ATTACK

A Surprise Attack is an attack against a target who is either **Totally Surprised** or **Partially Surprised**.

A Totally Surprised target is completely unaware of his attacker, meaning the attacker is out of both Line of Sight and Earshot of the target, and the target has no other means of detecting the attacker. A Surprise Attack on a Totally Surprised target has a DV of 0. (A Ranged Attack against a Totally Surprised target still has a Minimum Ranged DV, however.) If a Totally Surprised target has Intuitive Combat Sense, he can use his SPs of Power as the DV but otherwise he cannot use any Powers to increase his DV when Totally Surprised.

A target who cannot see his attacker (the attacker is outside LOS) but can hear him (the attacker is within Earshot) or otherwise detect him (through, e.g. Ultra-Sensitive Smell) is **Partially Surprised**. A Partially Surprised target has a -2 penalty to his DV against

the Surprise Attack, to a minimum DV of 0 or the Minimum Ranged DV. The Partially Surprised target can freely use Powers that increase his DV such as Combat Sense and Deflection.

Number	Team Attack Bonus
2-3	+1
4-6	+2
7-12	+3
13-25	+4
26-50	+5
51-100	+6
101-200	+7
201-400	+8
401-800	+9
801-1,600	+10
1,601-3,200	+11
3,201-6,400	+12

TOTALLY SURPRISED:
TARGET DV = 0 / MINIMUM RANGED DV

PARTIALLY SURPRISED:
TARGET DV = BASE DV -2 / 0 / MINIMUM RANGED DV

Blindsight and Surprise: Since Blindsight grants LOS regardless of Obscurity, Cover, (most) Invisibility, or Stealth, a target with this Power is rarely surprised by an attacker within Range of his Blindsight unless the attacker has somehow blocked the Blindsight. A target with Blindsight who is attacked from outside the Range of his Power is considered only Partially Surprised (as he is still able to detect the incoming blast or projectile when it enters his Blindsight's Range).

TEAM ATTACK

A **Team Attack** is the opposite of a Multi-Attack: It's when multiple attackers team up to target just one opponent. Typically a Team Attack gets set-up by having one or more characters with high Initiative Reserve their Challenge Action with a trigger that they will make a Team Attack when other specified character(s) declare a Team Attack. In any Team Attack, one attacker is the Lead Attacker and the other attackers are Supporting Attackers. The Lead Attacker is chosen by the characters participating in the Team Attack; if they do not agree, a Team Attack does not occur and each character's Attack should be resolved independently instead in order of Initiative.

A Team Attack can include as many attackers as desired, but all attackers must be within Range (and, if appropriate, Line of Sight) of the target. In addition, to participate in a Team Attack, a character's Effect Value for the Attack cannot be more than 4 SPs lower than the SPs of Protection enjoyed by the target against the Attack. (Simply put, if you have no possible way to hurt a target, you can't Team Attack him.)

To resolve a Team Attack, the Lead Attacker makes the Attack Check, increasing his AV and his EV by 1 or more SPs, depending on the number of characters participating in the Team Attack. The Supporting Attackers do not make Attack Checks or deal Damage apart from the Damage dealt by the Lead Attacker - the effects of their efforts are reflected in the AV and EV bonus.

Let's return to Stiletto. She's just dispatched 12 of the 24 assassins, but another 12 remain. They decide to perform a Team Attack on Stiletto. One assassin serves as Lead Attacker while the other 11 serve as Supporting Attackers. The Lead Attacker has a Marksmanship of 7 and an assault rifle with 7 SPs of Blast. Having 12 characters participate in the Team Attack affords him a +3 bonus, so both his AV and EV are 10. Stiletto's AGI is 14, so the assassins are still attacking her with an RV of -4. The Lead Attacker rolls 1d100 for his Attack Check and scores a lucky 11, a Green result. Therefore the Team Attack deals 64 Damage to her – ouch!

Team Wrestling Attacks: Sometimes a team of characters might want to team up on a target to attempt to grapple him or otherwise prevent his escape. A Team Wrestling Attack follows all of the rules for Wrestling Attacks and all of the rules above. When an Engaged, Grabbed, Held, or Pinned condition is established by a Team Wrestling Attack, the Lead Attacker and the Supporting Attackers all gain the Engaging, Grabbing, Holding, or Pinning condition. The Lead Attacker's MIG is used for purposes of determining what movement is permitted. Add the Team Attack bonus to the Leader Attacker's MIG for all purposes related to Wrestling Attacks and Escapes. If the Lead Attacker ends the Condition, the Condition ends for all Supporting Attackers. If one or more Supporting Attackers end the Condition (by relinquishing their hold and moving away, or getting knocked out, or so on), then the Team Attack bonus is reduced accordingly.

TRICK ATTACK

A **Trick Attack** is a combat maneuver in which the attacker seeks to achieve an effect other than, or in addition to, Damage. Trick Attacks often have higher Color Thresholds than ordinary Attacks, requiring Yellow, Orange, or even Red success to achieve the desired effect. A character can combine a Trick Attack with a Fast Attack or Power Attack of the appropriate type, except on a Disarm or Sweep.

ARMOR BYPASS

An Armor Bypass is a VAL vs. VAL Melee Trick Attack or AGI vs. AGI/Minimum DV Ranged Trick Attack that targets a weak point in armor. The DV of the Attack is increased by the Protection of the target. If the Attack succeeds, the Protection does not apply. An Armor Bypass only works against objects or characters afforded Protection by objects. An Armor Bypass cannot bypass the Protection afforded to a character by his Powers (including by a character using Devices) unless the character has a Power Flaw or Vulnerable State that makes this possible. Armor Bypass is primarily used by highly skilled ascendants confronting well-armored minions.

BREACH

A Breach is a VAL vs. VAL Melee Trick Attack or AGI vs. AGI/Minimum DV Ranged Trick Attack that targets an entryway into an object with an Interior Capacity of 0 or more SPs. If successful, the Breach breaks open a hatch, porthole, window, door, etc., allowing characters within 0 SPs of the object to enter the Area of the Interior Crew Capacity as an Automatic Action. For a Breach to succeed, the entryway must be dealt enough damage to be Destroyed. For Attributes of various entryways, see Breaking & Entering (p. 294).

> Airborne wants to tear off the hatch to an M1A2. Airborne has 11 SPs of MIG and 9 SPs of VAL. The M1A2 has no SPs of VAL. Its hatch has 6 SPs of Toughness and 6 SPs of Bludgeoning Resistance, giving it 80 Durability and 16 Protection. Airborne attacks with an AV of 9 against a DV of 0, getting an RV of +9. He scores an automatic Red result. The Effect Value for his attack is 11 SPs, so he deals 96 x 8 = 768 points of Damage. That's more than enough to Destroy the hatch! The hatch flies off the tank.

The target of a Breach is usually Stationary (has a VAL of 0, an AGI of 0, and has not taken a Movement Action on its most recent Panel or been moved by another character either this Page or the prior Page). If the target is not Stationary, the character must make a successful Clamber (see below) before he can Breach it using a Melee Trick Attack.

> If the M1A2 were moving, Airborne would have to Clamber onto it before he could Breach it in melee. This will not be very difficult, but it will require a Challenge Action on his Panel.

CLAMBER

A Clamber is an AGI vs. AGI/Speed Ramming Trick Attack that targets a large target. If the Clamber is successful, the character has climbed onto the target. The color result indicates how long the character can remain on the target before attempting another Clamber. On a Green result, the character can hang for 0 SPs of Time (one Page, until the end of his next Panel); on a Yellow result, for 1 SP (2 Pages); on an Orange result, for 2 SP (4 Pages); and on a Red result, for 3 SP (8 Pages).

> A Somalian technical filled with terrorists is racing down a desert highway blasting a .50 caliber machinegun at Stronghold. He wants to jump onto the bed of the pick-up truck so he can tear the terrorists apart. This is a Clamber using Stronghold's AGI of 5 SPs as the AV and the technical's Running Speed of 6 SPs as the DV. Stronghold spends 3 Hero Points to take a +2 RV on the CHART. He rolls a 47, scoring a Yellow result. He will be able to stay on the technical for 2 Pages.

If the target is an object with an Exterior Capacity, the character who has clambered onto the object can enter the Area of the Exterior Capacity as part of the Clamber. He can thereafter stay as long as desired without having to check again, unless he is dislodged.

> Since Stronghold has landed on a pick-up truck with an Exterior Capacity (the cargo bed of the truck behind the cab), he can freely enter that Area as part of his Clamber. If he does, then he can stay on the pick-up until he's dislodged. On the other hand, if Stronghold were to land on the roof of the cab of the technical, then he'd be outside the Exterior Capacity of the truck and the 2-Page limit from his Yellow result would apply.

If the target is Stationary (e.g. it has a has a VAL of 0, an AGI of 0, and has not taken a Movement Action on its most recent Panel or been moved by another character either this Page or the prior Page) a character can Clamber onto it with an Automatic Action if already at 0 SPs distance or with a Movement Action if not.

> If the pick-up truck were parked, Stronghold would not have to make a Clamber Trick Attack to get into the bed. He'd just have to take a Movement Action to jump into the back of the truck.

A characters with Wall-Crawling can Clamber using his SPs of Wall-Crawling in lieu of his SPs of AGI. Once he successfully clambers onto a moving target, he can stay on it as long as desired unless he is dislodged.

> If Stronghold were temporarily imbued with the power of a radioactive spider, he could stay on the cab of the pick-up truck until he was dislodged, without regard to the color result of his Clamber.

For purposes of clamber, a large target is any character that has a Height at least 2 SP greater than the character's Height or an object with an Interior Capacity large enough for the character to enter the object. Characters of similar Height cannot Clamber onto each other – such efforts devolve into ordinary Wrestling Attacks. Clambering onto small Static Objects (such as jumping atop a flagpole) is Perilous Jumping (see p. 285).

A target cannot Roll with the Attack of a character that has Clambered onto it.

DISARM

A Disarm is a VAL vs. VAL Melee Trick Attack or AGI vs. AGI/Minimum DV Ranged Trick Attack that targets a character carrying an item (such as a Device, Invention, or Object). Use the target character's VAL or AGI to determine the DV but use the item's Height to determine the Minimum Ranged DV. If successful, the Disarm forces the target character to drop the item. The color result required is determined by the way the item is carried. If the item is carried in one hand (like a sword or pistol), a Yellow or better result is required. If the item is carried in two hands or strapped to the arm like a shield, an Orange or better result is required. If the item is carried in a pocket or worn as jewelry, a Red result is required. The item is dropped at a point of the attacker's choice within his own Melee Attack Range from the target. A Disarm does not deal any Damage. A character cannot combine a Fast Attack with a Disarm.

DISLODGE

A Dislodge is a VAL/AGI/Speed vs. VAL/MIG Melee Trick Attack by a large character that targets a character which has Clambered onto it (or gotten into the Area of an object's External Capacity). If the Dislodge succeeds, the target loses its grip and is flung 0 SPs in the direction opposite the Dislodging character's movement. The target is dealt Bludgeoning Damage at the Trick Attack's color result using the Dislodging character's Speed + Height as the Effect Value. If multiple characters have Clambered onto a character or are in the Area of the object's External Capacity, then the Dislodge targets all of those characters simultaneously.

> Stronghold has just landed in the bed of a technical to attack a machinegun and its two-man crew there. The driver of the technical decides to Dislodge Stronghold. He accelerates, swerves, and then slams on the brakes, etc. Unfortunately, his Dislodge attempt also targets his allies on the machinegun. The driver's AV is the technical's Speed of 6 SPs. Stronghold's DV is his MIG of 15 SPs, while the gunner's DV is his MIG of 4 SPs. The driver is at -9 RV versus Stronghold, but +2 RV versus his allies! He rolls a 31, yielding a White result against Stronghold but a Yellow result against the gunners. The gunners are hurled from the pick-up, suffering 24 x 2 = 48 points of Bludgeoning Damage from a Yellow Attack with an EV of (6 + 1) = 7 SPs.

A characters with Immovability or Wall-Crawling can add his SPs of Power to his SPs of AGI/MIG to resist a Dislodge.

GOAD

A Goad is a CHA vs. INS/RES Trick Attack that attempts to provoke a target into an unwise action. The target of the Goad must be within Earshot of the character making the Goad. When a character makes a Goad, he must state what Action he is attempting to Goad the target into taking, as well as a Reserve Action on his part that will trigger if the target takes that Action. (Note that a Goad is an exception to the normal limit on Reserving actions, as it uses a Challenge Action that allows for a chance to Reserve a Challenge Action.) A Goad cannot be used against objects.

The color result required is determined by the nature of the Actions. A Green result is required if the character is attempting to Goad the target into taking an Automatic Action. A Yellow result is required if the character is attempting to Goad the target into taking a Movement Action. An Orange result is required if the character is attempting to Goad the target into taking a Challenge Action. A Red result is required if the character is attempting to Goad the target into no action at all (e.g. just be gawking or wasting time). If the character making the Goad wants to Reserve a Challenge Action, the color threshold is increased by one degree (e.g. from Yellow to Orange). If the Goad succeeds, then on its next Panel, the target must either take the Action it was Goaded into or it loses Current Determination as if it had been hit by a Green Emotional Attack using the Goading character's SPs of RES as the Effect Value. A Principled character cannot be Goaded into breaking his Code of Honor or Duty.

> Khepri has Eye Contact Paralysis. He is facing Airborne, who has closed his eyes to avoid Khepri's Power. Khepri decides to Goad Airborne into opening his eyes (an Automatic Action); if he does so, he will make a Paralysis attack on Airborne (a Challenge Action). "Open your eyes now and face your destroyer!" Khepri's color threshold is Yellow for this attempt. His CHA is 7 while Airborne's RES is 9, so his RV is -2. He rolls a 13, a Yellow result, so he succeeds! On his next Panel, Airborne must either open his eyes (triggering Khepri's Paralysis) or he must lose 24 Determination to resist the Goading.

JUDO THROW

A Judo Throw is a VAL vs. VAL/Weight Melee Trick Attack. If the Judo Throw succeeds with an Orange result or better, the target takes Base Damage as he is knocked Prone and thrown 0 SPs of distance in a direction chosen by the attacker. If it succeeds on a Red result, the target is knocked prone, takes Base Damage, and is thrown a Distance in SPs equal to the attacker's EV minus the target's Weight, to a minimum of 0 SPs. The target adds his SPs of Immovability to his DV.

A character can only make a Judo Throw against an object if his MIG exceeds the object's Weight. Objects are immune to the Prone condition, so the object is Toppled instead. An object that is Toppled has rolled over on its side or back. For most objects, the effects are as per the Paralyzed condition until the object is set upright. Static Objects, and most Crewed Objects, cannot choose to end the condition on their own; they must be set upright with a character whose MIG exceeds its Weight. An Autonomous or Crewed Object with AGI and INS Attributes and Super-Strength greater than its own Weight can stand back up like a character.

A character does not need to make a Judo Throw to pick up and throw a Stationary target whose Weight is less than or equal to his MIG – he can simply pick up the object as an Automatic Action and then throw it or set it down thereafter with a subsequent Action. When he sets it down, he can set it down either upright or Toppled.

MICROSCOPIC INSERTION

A Microscopic Insertion is an AGI vs. AGI/Bombproofing/Pressure Protection/Speed Ramming Trick Attack during which a smaller character attempts to penetrate into a much larger target. (Lose 1 Hero Point if you went there.) In order to make a Microscopic Insertion, the attacker must be at least 6 SPs of Height shorter than the target and must have a Speed at least equal to the target's Height. Microscopic Insertion relies on entering via air passages, pores, and other orifices, so the target character may add his SPs of Air Filtration to the DV. If the Microscopic Insertion is successful, the attacker has penetrated into the interior of the target. If the target is an object with Interior Capacity, the attacker can enter its Interior Capacity if desired. Otherwise, the attacker is assumed to be "in the guts" of the target – body cavities, blood vessels, or digestive organs for a living creature or fuel cylinders, ventilation shafts, engine blocks, and so on for an object.

Once inside the target, the attacker can treat the target's DV as 0 for purposes of any Ranged, Melee, or Ramming Attacks. If inside an Autonomous or Crewed object, the attacker may make Well-Placed Shots to disable parts of the object. The target receives no Protection from Absorption Fields, Forcefields, Mind Fields, or Shields, but usually retains any Protection from Invulnerability or Resistance except if provided by an external device or object. The target can still Roll with Attacks made by the inserted attacker. (Usually this means the target is violently rolling and twisting around while screaming "it's inside me!")

An attacker inserted into a living creature will encounter 9 SPs of Obscurity from lack of light, body fluid, etc. He will suffer 6 SPs of Hazardousness when moving due to the target's cilia, bodily fluids, and other disturbances. Outside of the target's lungs, the attacker will need to either have Air Supply or to hold his breath. The areas of the body the attacker can explore are based on his Height relative to the target's Height.

★ 6-7 SPs smaller: The attacker can enter through any orifice and move through its sinus cavity, ear canal, esophagus, intestines, and/or urethra.
★ 8-9 SPs smaller: As above, and the attacker can also enter via open wounds and move through the target's arteries and veins.
★ 10-11 SPs smaller: As above, and the attacker can also move through the alveoli (lung membranes).
★ 12-13 SPs smaller: As above, and the attacker can enter via pores on the skin.
★ 14-18 SPs smaller: As above, and the attacker can move throughout the capillaries of the entire circulatory system.
★ 19-24 SPs smaller: As above, and the attacker can move along nerve fibers.
★ 25+ SPs smaller: The attacker can freely enter anywhere on the body by penetrating cell walls and move throughout.

An attacker who penetrates into the interior of a target and then uses Growth or deactivates Shrinking will deal and suffer a lot of damage. The attacker and the target are dealt Bludgeoning Damage as if the attacker had scored a Red result on a Ramming Attack with an EV equal to his change in Height minus the target's Height. Neither attacker nor target can Roll with this attack.

The Shrink (Height 0 SPs, Health 960) reduces himself to a Height of -15 SPs and inserts himself into the engine of an M1A1 tank (Height 1 SP, Durability 640). The Shrink then deactivates Shrinking, instantly growing to a Height of 0 SPs. The Shrink and the M1A1 tank suffer damage from as if from a Red result on a Ramming Attack with an EV of [(15-0) – 1] = 14 SPs. That's 2048 Bludgeoning Damage! Since it's a Ramming Attack, the damage is capped at the lesser of the amount needed to slay or destroy either character. The tank is destroyed after suffering 1280 damage, and the Shrink is dealt 1280 damage, reducing his Current Health to -320.

Designer's Note: Anyone who has seen *Innerspace* or *Honey, I Shrunk the Kids* will have no trouble imagining other gameplay possibilities for characters of microscopic size. We don't have space to explore the possibilities in these core rules, but we encourage GMs to be creative. This Trick Attack is just a sample of what microscopic gameplay might be like.

SUNDER

A Sunder is a VAL vs. VAL Melee Trick Attack or an AGI vs. AGI/Minimum DV Ranged Trick Attack that targets an item (such as a Device, Invention, or Object) that a character is wearing or carrying instead of the character himself. Use the target character's VAL or AGI to determine the DV but use the item's Height to determine the Minimum Ranged DV.

The color result required to succeed on a Sunder is determined by the way the item is carried. If the item is carried in one hand (like a sword or pistol), or worn over the whole body, a Yellow or better result is required. If the item is carried in two hands or strapped to the arm like a shield, an Orange or better result is required. If the item is carried in a pocket or worn as jewelry, a Red result is required. An item that provides SPs of Invulnerability, Resistance, or Shield to its user cannot be targeted by a Sunder Attack by a Damage Type it protects against.

If a Sunder succeeds, the item is damaged as if the Attacker had achieved a Green result. If a Sunder misses, but it would have hit the character carrying the item, treat it as a successful Attack on the character carrying the object but reduce the color result by one step.

A strange amulet has turned Dr. Quantum into a villain. Stiletto decides to destroy the amulet with a well-aimed shot with a sniper rifle. Stiletto has 14 SPs of AGI. Dr. Quantum doesn't currently have her Deflection active, so she has to rely on her 5 SPs of AGI. Stiletto is a mile away (10 SPs of Distance) but using a sight with 3 SPs of Telescopic Vision, so the Effective Range between them is 10 -3 = 7 SPs. Dr. Quantum has a Height of 0 SPs, so her Minimum DV against him is 7 - 0 = 7 SPs; she could shoot Dr. Quantum with an RV of +3. Unfortunately, the amulet is only 3" tall (Height of -4 SPs). Therefore her Minimum DV is actually 7 – (-4) = 11 SPs to make her Sunder. She needs a Red result. Her RV is 14 – 11 = +3, so it's doable. She rolls on the CHART and scores a 47, a Yellow result. She misses! Worse, a 47 would have scored a Red result against Dr. Quantum, so Stiletto deals damage to her accidentally, treating it as an Orange result (e.g. one step less).

SUPPRESSION

A Suppression is an AGI vs. RES + Cover/AGI + Cover/Minimum Ranged DV Ranged Trick Attack or VAL vs. RES/VAL Melee Trick Attack that attempts to overwhelm the target with fear and shock. Minimum Ranged DV does not apply to Ranged Suppression if the Power used to make the Suppression is capable of Multi-Attack. If the Attack is successful, a Suppression deals damage by color result to the target's Determination instead of to its Health. Since it's hard to suppress someone who is invulnerable to an attack, reduce the Damage dealt by the target's Protection against the Attack's Damage Type. The target can Roll with the Attack if desired to reduce Damage. Suppressions cannot deal Special Effects. A Suppression can be used in conjunction with any of the appropriate Combat Maneuvers.

A US Army Ranger (Marksmanship of 7 SPs) is confronting a terrorist (RES 4) at a Range of 200 yards (7 SPs). The terrorist is prone (reducing Height to -2 SPs) behind a low wall (3 SPs of Cover). The soldier's Minimum Ranged DV is 7 – (-2) + 3 = 12, giving him an RV of -5. Rather than waste ammunition missing, he instead uses Suppression. His AV remains 7. His DV is now 4 (the terrorist's RES) + 3 (his cover), or 7, giving him an RV of 0. By laying down suppressive fire, he can reduce the terrorist's Determination to 0, leaving him Overwhelmed and clearing the way for a close assault.

SWEEP

A Sweep is a VAL vs. VAL/Weight Melee Trick Attack. If the Sweep succeeds with a Yellow result or better, the target is knocked Prone. A Sweep does not deal any Damage. A character cannot combine a Fast Attack with a Sweep. The target adds his SPs of Immovability to his DV. Objects are immune to the Prone condition. However, if the attacker's MIG exceeds the object's Weight, the object can be Toppled instead (as per Judo Throw above). A character does not need to Sweep a Stationary target whose Weight is less than or equal to his MIG. He can render it Prone or Toppled as an Automatic Action.

WELL-PLACED SHOT

A Well-Placed Shot is a VAL vs. VAL Melee Trick Attack or AGI vs. AGI/Minimum Ranged DV Ranged Attack that targets a specific part of an autonomous or crewed object. When the Well-Placed Shot is declared, the attacker must designate the part of the object to be targeted. The GM then assesses which Powers (if any) that can be affected if that part is damaged or destroyed and the color result required to hit that part.

The Power(s) that can be affected are determined by the choice of part. For instance, targeting a car's tires affects its Running while targeting an airplane's cockpit affects its Internal Capacity and Low-Pressure Protection. The color result required to hit is determined by how well the part of the object is protected. If the part is visible on the exterior of an object (such as the tires of a car), a Yellow or better result is required. If the part is visible on the interior of the object (such as a steering wheel of a car), an Orange or better result is required. If the part is hidden in the interior of the object (such as the engine of a car), a Red result is required.

If the Well-Placed Shot hits, the object suffers Base Damage from the Well-Placed Shot based on its EV. The attacker then makes another Attack Check. The Check uses the EV of the original Attack as the AV and the greater of the SPs of affected Power or the object's Protection as the DV. On a Green result, the target loses 1 SP from the affected Power. On a Yellow result, the target loses 2 SP. On an Orange result, the target loses half the Power's SP value or 3 SPS, whichever is greater. On a Red result, the target loses all the affected Power's SP. If the Power is reduced to 0 SP, the target can no longer use the Power. The target recovers 1 SP of the affected Power each time it is repaired.

CHAPTER 9: GAMEMASTERING

This Chapter is intended to help you start running games using *Ascendant*. Just as a field manual offers tactical doctrine to guide a junior officer in his first battles, this Chapter offers guidelines to aid the inexperienced GM in prepping and running his games. If you're an experienced GM, feel free to ignore any and all of these guidelines and run the game in whatever way best suits your preferences. (Of course, if you're experienced, you didn't need the rules to tell you that!)

SCENES, ISSUES, ARCS, AND SERIES

In *Ascendant*, a session of play is called an **Issue**. Each Issue is divided up into one or more **Scenes** that take place at a particular **Location** in the game world. The Scene is the basic building block of play. If a battle, car chase, natural disaster or other action sequence occurs during a Scene, that Scene will be further divided into a sequence of Pages and Panels. Each Scene typically lasts for thirty minutes to an hour of real-world time (the time in game can vary tremendously), while an Issue usually lasts between three and five hours. There are thus anywhere from three to ten Scenes in a typical Issue, with five to seven Scenes being average.

A collection of one or more Issues forms an **Arc**, which typically involves discovering and confronting a set of antagonists and either solving a crime, averting a crisis, or completing a mission of some sort. A typical Arc lasts from four to six Issues. A collection of one or more Arcs forms a **Series**, or campaign. A typical Series covers from four to six Arcs, or about twenty to thirty Issues. Since most groups play either weekly or every other week, a Series corresponds to about six months to a year of play.

Running a Series that features superhuman protagonists can be intimidating for even a seasoned GM. Unlike fantasy or science-fiction RPGs, there's no easy way to create a sandbox of dungeons or planets to explore, and when characters can fly at the speed of sound or teleport around the globe, predicting where they may go or what they might do can be nigh impossible. But there's a way to tackle it, and it starts with organization.

Designer's Note: Here and there in this Chapter, we're going to offer some optional rules you can apply to modify the tone of your campaign. These rules are often introduced in the context of a comic book "age". The ages are the Golden Age (1938-1956), Silver Age (1956-1970), Bronze Age (1970-1985), Iron or Modern Age (1985-2010), and Steel or Postmodern Age (2011-2020). Each age had its own distinct "feel" which is instantly recognizable to fans of comic books. The Golden Age was filled with iconic heroes of modest power doing daring deeds in our real world. The Silver Age had incredibly powerful characters matched with light, breezy, and often goofy storylines. The Bronze Age retained the aesthetics of the Silver Age but saw superheroes begin to confront real-world issues such as drug use, Vietnam, and pollution. The Iron Age grew even darker, and anti-heroes in truly dystopian settings became the norm, illustrated with highly sexualized and violent art. The Steel Age is the current era; it is characterized by reboots and revisions of established settings that replace or revise old characters, and by deconstructions of comic book worlds for a world of social media, corporate power, and internet celebrity. (The default setting of **Ascendant** is of the latter sort.)

ORGANIZATIONS

The easiest way to get your Series going is to set up the heroes as operatives for an **Organization** that calls on them to perform various crimefighting, paramilitary, or intelligence activities. These might be real-world organizations such as the UN, FBI, or US Army, or fictional organizations specific to your comic book world.

Of course, it isn't strictly necessary, in either the game rules or the comic book world, for the heroes to belong to an Organization. Many comic book heroes operate independently as vigilantes. But having the heroes work for an Organization makes it much easier for the GM to create and run the Series. An Organization can:

★ Assign Missions to the heroes at the start of each Issue. "We need you to infiltrate the hideout of the Yakuza in Capital City."
★ Provide a headquarters where the heroes plan, rest, and re-equip. "Let's head back to base!"
★ Offer back-up if the heroes ask for help. "Dispatch, we need a Rapid Response Team pronto!"
★ Justify the addition of new heroes if one of the player characters dies or otherwise leaves the campaign. "Everyone mourns the loss of Sergeant Steel, but we have to move on. Going forward your Incident Team has been assigned Golden Lion as a replacement…"
★ Enforce limits on the behavior of the heroes so that the Series doesn't become impossible to manage. "You've been assigned to protect New York! Let the West Coast team take care of LA."

In some Series, the Organization might remain the centerpiece of the entire campaign. In other Series, the heroes might be kicked out of their Organization, or leave to start their own, or discover that they've been the bad guys all along and join the opposing Organization.

ATTRIBUTES OF ORGANIZATIONS

Organizations are abstract conglomerates of characters and objects in the game world. Like characters and objects, organizations have Attributes: Personnel, Funds, Facilities, and Reputation. Like other Attributes in Ascendant, they are rated in SP and bought with CP.

SP	Funds	Benchmark	Personnel	Benchmark	Facilities	Benchmark
1	2¢ ($40K annual)	Sole Proprietor (Handyman)	1	Sole Proprietor	50 sf	Office Cubicle
2	4¢ ($80K annual)	Sole Proprietor (Plumber)	2	2-Officer Police Partnership	100 sf	Teenager's Bedroom
3	8¢ ($160K annual)	Sole Proprietor (Lawyer)	4	US Army Fireteam	200 sf	Master Bedroom
4	16¢ ($320K annual)	Sole Proprietor (Physician)	8	US Army Squad	400 sf	Two-Car Garage
5	32¢ ($640K annual)	Private Dental Practice	15	Merchant Marine Crew	800 sf	Large Basement
6	64¢ ($1.3M annual)	Small Town Police Department	30	US Army Platoon	1,600 sf	3BR House
7	$1.25 ($2.6M annual)	Rural County Sheriff Department	60	NY Fire Department Station	3,200 sf	Private Clinic
8	$2.50 ($5M annual)	Small-Market Newspaper	120	US Army Company	6,400 sf	NY Fire Station (avg.)
9	$5 ($10M annual)	Public School	250	LAPD Metropolitan Division	12,800 sf	US Bullion Vault
10	$10 ($20M annual)	Local TV Station	500	US Army Battalion	25K sf	Bel-Air Mansion
11	$20 ($41M annual)	Small Town Government	1,000	Small City Police Dept.	50K sf (1 acre)	Gates Residence
12	$40 ($82M annual)	Small Hospital	2,000	US Army Brigade	100K sf (2 acres)	Walmart (avg.)
13	$80 ($164M annual)	Medium Hospital	4,000	US Marshalls Service	200K sf (5 acres)	US Capitol
14	$160 ($328M annual)	Large Hospital	8,000	US Secret Service	400K sf (9 acres)	DoD Facility (avg.)
15	$320 ($655M annual)	Small City Govt. (250K pop)	16,000	LAPD, NASA, US Division	800K sf (18 acres)	Buckingham Palace
16	$640 ($1.3B annual)	Ford Foundation, LAPD	32,000	CIA (est.), FBI, UN, US Corps	1.6M sf (36 acres)	NY Fire Depart. (all)
17	$1,280 ($2.6B annual)	Large City Govt., Secret Service	64,000	NY Police Department	3.2M sf (73 acres)	Googleplex
18	$2,500 ($5.2B annual)	NYPD, Harvard University, UN	128,000	US Army Infantry	6.4M sf (146 acres)	Forbidden City
19	$5,000 ($10.4B annual)	CIA, FBI, Avg. US State Govt.	256,000	US Navy, US Air Force	13M sf (292 acres)	Tesla Gigafactory
20	$10,000 ($21B annual)	Rothschild Family	512,000	Amazon, US Postal Service	25M sf (1 sq mi)	City-state of Monaco
21	$20,000 ($42B annual)	NASA, American Express	1,024,000	US Army	50M sf (2 sq mi)	SubTropolis
22	$40,000 ($84B annual)	Dell, IBM, NYC Government	2,048,000	Chinese PLA, Wal-Mart	100M sf (4 sq mi)	Volkswagen Plant
23	$80,000 ($168b annual)	AT&T, Chevron, Ford, US Navy	4,096,000	US Department of Defense	200M sf (7 sq mi)	Cambridge, Mass.
24	$160,000 ($335B annual)	Apple, California Government	8,000,000	US Federal Government	400M sf (14 sq mi)	Great Wall of China
25	$320,000 ($670B annual)	US Dept. of Defense, Wal-Mart	16,000,000	Chinese Gov. + SOE	800M sf (29 sq mi)	Walmart (all)
26	$640,000 ($1.3T annual)	US Fed. Govt. "Missing Money"	32,000,000	US Governments (total)	1.6B sf (57 sq mi)	DoD Facilities (all)
27	$1,280,000 ($2.7T annual)	US Federal Entitlements Budget	64,000,000	Entire WW1 Militaries	3.2B sf (116 sq mi)	Mammoth Caves
28	$2,560,000 ($5.4T annual)	US Federal Government Budget	128,000,000	US Households	6.4B sf (230 sq mi)	Chicago City
29	$,5120,000 ($11T annual)	China National GDP (nominal)	256,000,000	US Adult Population	13B sf (460 sq mi)	Los Angeles City
30	$10,240,000 ($22T annual)	US National GDP (nominal)	512,000,000	EU Adult Population	26B sf (920 sq mi)	Tokyo Metropolis

PERSONNEL

Personnel measures how many soldiers, sailors, first responders, employees, or other staff the organization can field. The Personnel Attribute has a Base Score of 0, a Base Cost of 160 CP and a Variable Cost of 80 CP per SP.

The numerical value associated with an organization's SP of Personnel isn't just a headcount – it's also the organization's Challenge Rating budget. The budget can be "spent" on NPCs of various Challenge Rating. In a criminal, military, or police organization, 50%-75% of the organization's personnel will be ordinary humans with 200 CP and Challenge Ratings of 0.75 each. 10% - 25% of the personnel will be trained infantry, made men, patrol officers, with 240 CP and Challenge Rating of 1 each. The remainder of the organization's personnel will be more powerful characters or crewed objects.

VALUE OF PERSONNEL SCORE = CHALLENGE RATING BUDGET

The US Department of Defense has approximately 4.1 million military and civilian employees and contractors, giving it 23 SPs of Personnel. That costs 160 + (80 x 23) = 2,000 CP.

The US Army has 21 SPs of Personnel, costing 1,840 CP, and giving it 1,024,000 personnel and a Challenge Rating Budget of 1,024,000. 85% of its personnel are support staff (CR 0.75 each), costing 652,800 from its Challenge Rating Budget. The other 15%, or 153,600 soldiers, are combat arms troops (CR 1 each), costing 153,600 from its Challenge Rating Budget.

The remaining 217,600 of its Challenge Rating budget is taken up by crewed vehicles. For instance, it has 1260 M1 Abrams tanks, each with a Challenge Rating of 30, costing 37,800 from its Challenge Rating budget.

FUNDS

Funds measures the amount of money that circulates through the organization every 0 SPs of Time. Funds is identical to Income for characters. A government organization's annual budget, excluding debt financing, is equal to its Funds +21. A business organization's annual revenue is equal to its Funds +21. For ease of reference, the annual funds are noted in parentheses on the table above. An organization's Funds Attribute has a Base Score equal to the organization's SPs of Personnel, which covers the costs of the organization's staff at median wage levels. Each additional SP costs 80 CP. An organization can have Funds lower than its Personnel, thereby fielding poorly-paid and poorly-equipped operatives; reduce the cost by 80 CP per SP in this case.

An organization's Funds can be used to purchase objects just like a character's Income (p. 308). A typical frontline fighter for an organization (e.g. NPC with Challenge Rating 1) will be equipped with objects worth up to (Funds – Personnel) + 19 SPs. The maximum value of any one object owned by an organization should be equal to or less than its Funds + 17 SPs. It can have no more than 10 – 12 such objects total.

EQUIPMENT PER NPC = FUNDS – PERSONNEL + 19
MAXIMUM OBJECT VALUE = FUNDS + 17

The US DoD's annual personnel budget is $143 billion (23 SPs), which matches its 23 SPs of Personnel. However, its total annual budget is $693 billion, giving it 25 SPs of Funds. The Funds Attribute costs an additional (25 – 23) x 80 = 160 CP.

The US Army has 21 SPs of Personnel and 23 SPs of Funds ($182 billion annually). Its Funds Attribute also costs (23 – 21) x 80 = 160 CP. A combat soldier for the US Army can have (23 – 21) + 19 = 21 SPs worth of equipment, or about $20,000 worth. (In fact, a real-world infantryman's equipment costs $17,500 per solider.) The most expensive object in the Army's arsenal would be worth 23 + 17 = 40 SPs, or about $10 billion.

As it happens, the real-world US Army tends to buy a lot of less expensive stuff. But its sister service, the US Navy, also has 23 SPs of Funds ($194 billion annually), and its most expensive weapon is the new Gerald Ford-class supercarrier, coming in at $13 billion (40 SPs). Overall it has 10 supercarriers.

FACILITIES

Facilities measures the square footage (Area) of the organization's worldwide buildings. An organization's Facilities Attribute has a Base Cost of 1 CP and a Base Score equal to its SPs of Personnel. It costs 2 CP for one additional SP; 5 CP for 2 additional CP; 10 CP for 3 additional SP; 20 CP for 4 additional SP; 40 CP for 5 additional SP; 80 CP for 6 additional SP; and an additional 80 CP per each additional SP thereafter.

An organization's Facilities indicates the square footage of all the buildings it owns and operates. The Facilities Attribute can be divided into two other scores, Number of Locations and Average Size per Location, using the formula Facilities = Number of Locations + Average Size per Location. The Average Size and Number of Locations table shows the values for each SP.

Facilities located in rural areas also include land with additional SPs of Area equal to Facilities + 9. Facilities in suburban areas also include land with an Area equal to Facilities +3. Facilities in urban areas include no additional land.

SP	No. of Locations	Average Size
0	1	25 sf
1	2	50 sf
2	4	100 sf
3	8	200 sf
4	15	400 sf
5	30	800 sf
6	60	1,600 sf
7	120	3,200 sf
8	250	6,400 sf
9	500	12,800 sf
10	1,000	25K sf
11	2,000	50K sf (1 acre)
12	4,000	100K sf (2 acres)
13	8,000	200K sf (5 acres)
14	16,000	400K sf (9 acres)
15	32,000	800K sf (18 acres)
16	64,000	1.6M sf (36 acres)
17	128,000	3.2M sf (73 acres)
18	250,000	6.4M sf (146 acres)
19	500,000	12.8M sf (292 acres)
20	1,000,000	25M sf (1 sq mi)

FACILITIES = NO. OF LOCATIONS + AVERAGE SIZE PER LOCATION
AREA (RURAL LAND) = FACILITIES + 9
AREA (SUBURBAN LAND) = FACILITIES + 3

The DoD owns or operates 2.3 billion square footage of buildings (26 SPs of Facilities). By spending 1 CP, it got its Base Score for Facilities of 23 SP; for another 10 CP, it took the 3 additional SP. Therefore the Facilities Attribute costs 11 CP. The Facilities are in rural locations, giving it 42,000 square miles of land (26 + 9 = 35 SP).

The DoD has 4,775 locations around the world. Consulting the No. of Locations column on the table, we see this is 12 SPs. Therefore we know that each of its locations has about 26 – 12 = 14 SP or 400,000 square feet. (If you do the exact math, it works out 480,000 sf per facility.)

There are 221 fire stations in New York City, giving it 8 SPs on the Number of Locations column. A typical 3-bay fire station is 90 feet long and 60 feet wide, giving it 8 SPs of Average Size. Therefore the New York Fire Department has 8 + 8 = 16 SPs of Facilities. With 12,000 employees, the Fire Department has 15 SPs of Personnel, so 16 SPs of Facilities gives it room for staff and equipment.

REPUTATION

Reputation measures the popularity and repute of the organization. Reputation equals the organization's SP of Personnel. Changing Reputation in either direction costs 40 CP per SP.

The DoD has a default Reputation of 23 SPs. It has about 200,000,000 fans. To make the DoD a secret organization that no one had ever heard of, it would cost an additional 23 x 40 = 920 CP to reduce its Reputation to 0 SP.

PERKS AND DRAWBACK OF ORGANIZATIONS

Most Perks and Drawbacks are irrelevant to organizations, but a few can be selected.

PERKS

Authority: When an organization selects this Perk, it means one or more members of the organization have legal rights that are not extended to ordinary citizens. The Base Cost of the Perk determines how much Authority the leader of the organization has. Other members of the organization are delegated some fraction of this power.

> As an organization, the US Department of Defense has 40 SPs of Authority. It is headed by the Secretary of Defense, a cabinet-level position in the US government.

Note that Authority does not necessarily entail fiscal resources, personnel, etc. It is a measure of legal right, not economic power. Obviously, however, Authority becomes relatively less expensive as an organization becomes more powerful.

> Apple has 24 SP of Funding, but it only has 5 CP of Authority. It's a multinational corporation with all the benefits that entails (limited liability protection, tax benefits, etc.) But Apple can't arrest someone or field its own air force. Conversely, the FBI has 19 SP of Funding but has invested 20 CP into Authority.

Criminal Connections: The organization has shady ties to the underworld. The organization can use its Funds to purchase goods and services from the black market that would be illegal given its Authority.

DRAWBACKS

Dark Secret: The organization itself has done things which are out of step with its stated values or organizational reputation. If the Dark Secret is publicly exposed, the organization must immediately buy off the Dark Secret, either by reducing its SPs of Reputation or by taking the Hunted drawback at an equivalent CP value. The organization's leader should have the Dark Secret drawback, but junior members don't need to.

Duty: The organization and its members have legal obligations to fulfill certain functions or roles. All characters who belong to the organization should select the Duty drawback at a level commensurate with their rank and responsibilities.

Hunted: The organization has powerful enemies that seek to arrest, capture, or kill its members. The enemies of the organization are committed, numerous, and at least as powerful as the organization itself. All characters who belong the organization should select the Hunted drawback at an equal level.

Notorious: The organization is well-known but widely despised. All characters who belong to the organization should select the Notorious drawback, too.

SUBSIDIARY ORGANIZATIONS

An organization may consist of several **subsidiary organizations**. Each **subsidiary** is a smaller organization that is part of, and controlled by, the larger organization. In the examples above, the US Army is (for game purposes) a subsidiary of US Department of Defense. An organization can be divided into two subsidiaries that are each worth 80 CP less than itself, four subsidiaries that are worth 160 CP less than itself, eight subsidiaries that are worth 240 CP less than itself, and so on. Subsidiaries can themselves be divided and sub-divided as much as desired. This allows the GM to build out organizations at whatever level of subsidiarity the characters are most likely to interact with.

> The Department of Defense has 23 SPs of Personnel, 25 SPs of Funds, 26 SPs of Facilities, and 23 SPs of Reputation, costing 2,171 CP. It has the Authority Perk (40 CP) and the Duty Drawback (10 CP), for a total cost of 2,201 CP.

For game purposes, the DoD is divided into four subsidiaries – the US Army, the US Navy, the US Air Force, and the Pentagon (representing all joint or other expenses and personnel). Each of those subsidiaries must have a CP cost of 2,201 – 160 = 2,041 CP or less.

The US Army has 21 SPs of Personnel, 23 SPs of Funds, 24 SPs of Facilities, and 23 SPs of Reputation, costing 2,011 CP. It has the Authority Perk (30 CP) and the Duty Drawback (10 CP), for a total cost of 2,031 CP. Note that the US Army's Authority Perk has fewer CP than that of the Department of Defense, representing that its leader (the Secretary of the Army) takes orders from the Secretary of Defense.

MEMBERSHIP IN AN ORGANIZATION

Being a member of an organization does not cost a character any CP, except to the extent that he is able to benefit from the organization's Attributes or Perks and offset by the extent that he is afflicted by the organization's Drawbacks. To the extent he does benefit or suffer from being part of an organization, the character should count the CP cost or CP refund against his total.

When a Series begins with the characters working for an Organization, you should inform the players of which Perks and Drawbacks they should purchase to represent their affiliation with that Organization. We recommend matching the cost of the Perks with the refund of the Drawbacks so that it's a net zero effect on the player's character build.

The GM is setting up a Series in which all of the player characters will be students at a school for young ascendants. She tells each player to take 10 CP of Contact (representing Professor Chi, their mentor) and 1 CP of Headquarters (the areas of the school they use), as well as 2 CP of Code of Honor (the student honor code), 2 CP of Dependent (younger students they have to protect), 2 CP of Notorious (resulting in 1 SP of Notoriety) and 5 CP of Hunted (an anti-ascendant hate group). The total cost is 10 + 1 – 2 – 2 -2 – 5 = 0 CP.

If a character is afforded an opportunity to join an organization during an Issue, always tell the player the CP cost of joining and the Perks they'll receive from joining the organization. Only tell him the Drawbacks he'd know about – an organization might be less than forthright with a new recruit. The player will know (from the cheap CP cost to join the organization) that something is fishy but won't be sure of what.

Airborne is a 610-CP character with a Power Limit of 20 and Challenge Rating of 30. He is invited by the CIA to lead a covert team of 5 secret agents. He would gain 10 CP of Authority ("license to kill"). With a Power Limit of 20, leading 5 secret agents counts as 20 CP of Minions. He would also gain access to a 6,500-square foot training camp in the American heartland, which counts as 5 CP of Headquarters. On the downside, he would be afflicted with 5 CP of Dark Secret ("leads a wetwork team"), 5 CP of Hunted ("wanted by enemies of the Agency"), and 10 CP of Duty ("protect and serve America"). Overall, becoming a CIA team leader would cost him 15 CP.

What if Airborne were simply offered official sanction by the Agency in exchange for taking missions for it, with access to the training facilities as a safehouse? In this case he would get 10 CP of Authority and 5 CP of Headquarters in exchange for 10 CP of Duty and 5 CP of Hunted. Now joining the CIA would cost him 15 – 15 = 0 CP.

What do things look like from the CIA's vantage point? The Agency has 16 SPs of Personnel, granting it a budget of 16,000 points of Challenge Rating to apply towards various personnel. With a Challenge Rating of 30, Airborne would cost the Agency just a small fraction of its Challenge Rating budget. Put another way, from the CIA's perspective, Airborne would be one of *its* Minions.

A member of an organization can use the organization's Reputation in lieu of his own Reputation when the following criteria apply. First, the character must be publicly known to be a member of the organization, in a uniform of the organization, or able to display credentials of the organization. Second, the situation must be one where the organization has appropriate Authority. Third, the character must explicitly reference the organization. ("Stop, Police!")

Airborne wants to persuade a Senator to give him access to certain classified Congressional records. This is requesting a favor. When requesting a favor, a character benefits if his Reputation exceeds that of the target he is requesting the favor from. If Airborne has CIA credentials, and says that he needs the records for Agency business, he could use the CIA's Reputation in lieu of his own. On the other hand, if he is a fully covert agent without any way to prove he works for the CIA, he couldn't do so. He also couldn't use the CIA's Reputation to convince a magistrate to reduce child support payments, as that's not a situation where the CIA has Authority.

ORGANIZATION CATALOG

The following organizations are presented for use in your campaign. Dreadnaught Security and the Star-Spangled Squadron are designed to be good choices for Series, with Dreadnaught aimed at characters of 480-720 CP and the Squadron aimed at 721-1000 CP.

STAR-SPANGLED SQUADRON

Personnel: 14 (8,000 CR) **Funds:** 18 ($5B annual)
Facilities: 17 (75 acres) **Reputation:** 22 (100M fans)
Perks: Authority (combined law enforcement and military)
Drawbacks: Dark Secret (Project Ascension), Duty, Hunted (Exodus), Notorious 19 (12M haters)

Publicly, the Star-Spangled Squadron is America's premier team of ascendant heroes. The funds to create the Squadron were allocated by the Homeland Emergency Response Oversight (HERO) bill in 2018, and it began operations in January 2019. Officially designated the National Crisis Response Squadron (NCRS), the Star-Spangled Squadron is legally part of the U.S. Coast Guard's Deployable Operations Group, which also oversees the Coast Guard's Port Security Units, Tactical Law Enforcement Teams, Maritime Safety and Security Teams, Helicopter Interdiction Squadron, and the National Strike Force (NSF). The Coast Guard is the only branch of the U.S. Armed Forces within the Department of Homeland Security. It operates as a law enforcement agency, member of the U.S. Intelligence Community, and first responder during natural disasters, making it a natural home for a superhero team.

Personnel: Rear Admiral Gary D. Hawkins commands the Deployable Operations Group, while Captain Robert Anderson commands the Squadron itself. Dr. Michael Croft, who discovered the existence of metaplasts and the genes which activate them, serves as Chief Science Officer for the Squadron. The Squadron has a total of 3,660 ordinary personnel, mostly uniformed and civilian Coast Guard personnel, with 2,720 administrative, analysis, marketing, legal, public affairs, scientific, and support staff and 940 security personnel.

The last six personnel are the Squadron's ascendants: William Goddard ("American Eagle"), Brittney Sinclair ("Aurora"), Harumi Maeda ("Dr. Quantum"), Ed Henning ("Stronghold"), Angela Lopez ("Stiletto"), and Jackson Reed ("Warp"). Eventually, Hawkins and Anderson aim to have three six-member teams functioning with the Squadron. However, recruitment of new members has been slow as only the most powerful military-grade ascendants can pass the stringent physical, psychological, and mental examinations and interviews required to join the Star-Spangled Squadron. (In game terms, eligible ascendants must have Challenge Rating of at least 120).

Facilities: The Star-Spangled Squadron has three major facilities totaling approximately 75 acres:

★ *Fort Constitution:* The 260-acre Constitution Island is located on the east side of the Hudson River opposite the U.S. Military Academy at West Point. A 50-acre facility on the island serves as the Squadron's Atlantic headquarters. It contains barracks, laboratories, proving grounds, training facilities, and workshops. 1,760 personnel work here.
★ *Fort Alcatraz:* The 22-acre former island prison has been converted into the Squadron's Pacific headquarters. 340 personnel work here. No ascendants have been permanently stationed here but facilities are ready when a Pacific team is assembled.
★ *Fort Leavenworth:* The Squadron's midwestern headquarters was erected on the site of the former Munson Army Health Center, which was destroyed six years prior in the Leavenworth Incident. The 5-acre facility houses 1,560 personnel.

Funds: Given its relatively small size, the Star-Spangled Squadron is quite well-funded. On a per capita basis, the Squadron's security personnel are more than four times better equipped than a typical US Army soldier, with $80,000 of personal equipment each. The Squadron has 2 jumbo jets, 16 heavy transport helicopters, 16 light transport helicopters, and countless smaller vehicles, weapons, and equipment. The Squadron can reliably secure objects with a cost of 35 SPs or less.

Dark Secret: The Star-Spangled Squadron is actually the military and law enforcement arm of the U.S. government's secretive Project Ascension, itself a continuation of the TRADOC Future Soldier Program (FUSOP). In 2011 FUSOP began testing experimental performance-enhancing drugs on inmates from the US Disciplinary Barracks at Ft. Leavenworth. In December 2012, these tests resulted in the creation of Manticore, a monstrous ascendant who murdered and maimed scores of base personnel until he was incapacitated by a Hellfire missile. The US Army covered up the so-called "Leavenworth Incident" and the FUSOP program was transferred from TRADOC to DARPA under a new code name, Project Ascension. Project Ascension continued its work at Guantanamo Bay, working with 82 test subjects; notably subject #1 was Manticore and subject #14 was Helen Killer.

In June 2018, Manticore led a prison breakout; 25 of the test subjects were slain in the fighting, and 50 escaped. Manticore flew to Atlanta, where he was defeated by American Eagle. The Battle of Atlanta revealed the existence of ascendants to the world, and the Star-Spangled Squadron was created in its aftermath.

Evidence of the Squadron's secretive origins were distributed on WikiLeaks in August 2020, but so far government counter-propaganda efforts have persuaded most Americans that the leaks are fake or at least exaggerated. If the American people became convinced that the U.S. government had known about ascendants for a decade and was directly responsible for both Leavenworth and Atlanta casualties, public opinion would doubtlessly turn hostile towards the Squadron and to all ascendants.

Current Situation: The Squadron is temporarily in disarray. Dr. Quantum, Stronghold, and Warp were critically injured in fighting with Exodus in July 2020 and have not been deployed since; American Eagle has left Earth; and Stiletto has seemingly deserted from the team. This has left Aurora as the only active member. At present she is being used as a goodwill ambassador and spokesmodel while the military leadership scrambles to recruit and train new members. Note that the Squadron's Personnel score above assumes the current roster is reactivated or replaced and that 12 more members with an average Challenge Rating 120 each are recruited.

> **Designer's Note:** Is the Star-Spangled Squadron a force for good, despite its unpleasant origins? Is it a necessary evil, as the only way to defend America from ascendant threats? Or is it a sinister government task force with ill intentions? We leave it to the GM to decide based on their personal taste and predilections.

CHURCH OF ASCENSION

Personnel: 15 (16,000 CR)   **Funds:** 16 ($1.3B annual)
Facilities: 16 (36 acres)   **Reputation:** 21 (55M fans)
Perks: Authority (not-for-profit church)
Drawbacks: Dark Secret (Project Ascension), Notorious 19 (10M haters)

The Church of Ascension was founded in July 2018 by Dr. Kaya Ramakananda, a PhD from Stanford University in biophysics who had previously worked for DARPA in human performance research. The Church teaches that by combining the ancient lore of the *Visuddhimagga* with the latest in Western technology, they can help ordinary people to discover their *Siddhis*, or superpowers. These claims have made the Church of Ascension the fastest-growing religion in the world.

Personnel: Just two years after its founding, it has over 400,000 disciples and 55 million fans on social media. Its "StartAscending" app is one of the hottest apps on both Android and iPhone. The Church has popularized the term "ascendant" to refer to human beings with extraordinary capabilities.

Facilities: The Church operates 120 facilities globally, with 50 inside of the United States, 30 within India, 20 within the European Union, and the remainder scattered in wealthy cities of varying nations. A standard 12,800-sf facility features a "meditation lab" with biofeedback machines and binaural beat brainwave trainers; a "yoga lodge" for physical training; and a "nootropical bar" with brain-enhancing supplement smoothies. The Church's concrete-and-glass headquarters in midtown Atlanta are four times larger (50,000 square feet) and include a small museum devoted to the Battle of Atlanta and the rise of ascendants as well as the Church's administrative offices.

Funds: The Church of Ascension is operated as a 501(c)(3) tax-empty organization. Ostensibly, it derives its funds from donations by wealthy donors and fees for services provided to its members. Secretly, it receives generous funding from the U.S. and Indian governments. The Church owns two private jets and can acquire non-military objects with a cost of 34 SPs or less.

Dark Secret: Unbeknownst to most of its members, the Church of Ascension is secretly a joint venture between the U.S. government's Project Ascension and the Indian government's Siddhi Protocol. Evidence of the Church of Ascension's ties to the U.S. and Indian governments was distributed on WikiLeaks in August 2020, but so far government counter-propaganda efforts have persuaded most Americans that the leaks are fake or at least exaggerated.

Ramakananda created the Church in coordination with colleagues in Mumbai in the aftermath of the Battle of Atlanta. The Church was established to achieve three things: first, to identify military-grade ascendants for its government sponsors; second, to instill pro-social behavior in recently ascended humans by teaching such principles as benevolence and duty; and third, to reduce resentment against the ascendant by offering a believable way for ordinary people to become superhuman (in the same way the average citizen of the U.S. accepts inequalities in wealth because he believes it's possible with a lot of hard work and a little luck he could strike it rich, too).

Although the Church is arguably operating under false pretenses (its goals are not spiritual), its teachings are actually effective in helping unleash extraordinary abilities in those with latent potential. In the mid-2010s, Project Ascension's researchers had discovered that all ascendants had certain genes expressed which caused their cells to develop unique organelles called metaplasts. These metaplasts extracted energy from the Zero-Point Field and made it available for bio-energetic processes, much as chloroplasts extract solar energy for use by plants cells. With additional research, Project Ascension learned that epigenetic processes could cause the metaplastic genes to express. One such process was focused meditation, an area in which the Indian government's Siddhi Protocol had gained substantial insights. The combination of Project Ascension's experiments in nootropic drugs and the Siddhi Protocol's work in meditative practice was hybridized into the Church's teachings.

Current Situation: The Church faces other, more public problems. It has lost its most famous member, Dr. Sung Jun-Han (12Sigma), who is presumed dead after the fateful crash of the Sigma 12 spacecraft at Point Nemo in July 2020. This has left the Church reeling. It's widely rumored that Ramakananda knows what really happened, and her unwillingness to address the matter has fueled anger among her rank-and-file.

DREADNAUGHT SECURITY, INC.

Personnel: 11 (1,000 CR) **Funds:** 13 ($325M annual)
Facilities: 17 (72 acres) **Reputation:** 17 (2.5M fans)
Perks: Authority (private police company)
Drawbacks: Duty, Notorious 14 (400,000 haters)

Dreadnaught Security Inc. is a private police company that offers a 24/7 on-call team of ascendant security operatives to high value clients across the United States. Founded by former FBI special agent Ian Donahue, it started operations in Raleigh, NC in June 2019. North Carolina might seem like a strange place for a superpowered security company, since it has no metropolises like Chicago or New York and relatively small-scale crime. What the state did have, however, was a then-unique Company Police Act that permitted private police to make arrests and write citations for violations of the law the same as any municipal police officer, with jurisdiction when they are on property that they own and control or have been contracted to protect by the owner, or when they are in continuous pursuit for a crime that was committed in their jurisdiction or investigating a crime that occurred in their jurisdiction.

Dreadnaught quickly signed sixteen high value clients in the state, and its success in protecting its wards from ascendant-related crime earned it national acclaim. Donahue parleyed his success into a lobbying campaign that targeted state lawmakers in high-crime areas. By September 2019, 22 other states had passed private police legislation modeled after North Carolina's Company Police Act, and Dreadnaught Security was doing business in all of them.

Personnel: Dreadnaught's most powerful operative is Airborne (610 CP, Challenge Rating 30), a photogenic veteran of Afghanistan and Iraq whose patriotic service record helped make private policing palatable to conservative legislators. The remainder of the company's 100 ascendant operatives have between 440 and 600 CP, with Challenge Ratings between 6 and 20. A single Dreadnaught operative is typically as powerful as an US Army squad or a Police SWAT Team, and more than enough to handle routine police matters and street-level ascendant criminals. In addition to these superpowered personnel, Dreadnaught employs 120 uniformed police officers and 140 office personnel across its various facilities. Company President Ian Donahue is a cunning businessman and experienced agent, but he is not himself an ascendant.

Facilities: The company has a huge 50-acre facility in the Research Triangle Park with a proving ground, firing range, training camp, barracks, and corporate headquarters. It has management offices in 22 states where it can legally operate: Alabama, California, Connecticut, Delaware, Florida, Georgia, Indiana, Illinois, Louisiana, Massachusetts, Maryland, Minnesota, Mississippi, Missouri, New Jersey, New York, Pennsylvania, Rhode Island, South Carolina, Washington, and Virginia.

Funds: As a for-profit business, Dreadnaught's funds come from its business operations. The company prides itself on paying its operatives well and equipping them with top-of-the-line gear. Its uniformed officers are as well-armed as any SWAT team in the country, while elite personnel such as Airborne have access to private military hardware. The company has 2 main battle tanks and 4 scout helicopters in reserve at its headquarters, along with 8 infantry fighting vehicles, 30 armored transport trucks, and 100 police cruisers deployed to work in its various jurisdictions. Dreadnaught Inc. can reliably secure objects with a cost of 30 SPs or less.

Current Situation: Crime is skyrocketing around the country, and Dreadnaught Security is having trouble keeping up with the demand. As more and more humans emerge as ascendants, Dreadnaught more and more often finds itself confronting villains that can equal or exceed its operatives in power. However, Dreadnaught has no one with the raw power to match Exodus or its ilk. Donahue is deeply concerned about this "ascendant arms race" and is actively looking for more powerful talent to join his company. In the meantime, the current operatives are overworked and increasingly outmatched.

EXODUS

Personnel: 15 (16,000 CR)   **Funds:** 15 ($650M annual)
Facilities: 15 (18 acres)   **Reputation:** 15 (1M fans)
Perks: Criminal Connections
Drawbacks: Hunted (by everyone), Notorious 20 (25M haters)

Exodus is a loosely organized ideological movement that urges those gifted with superpowers to "exit humanity" in favor of a new ascendant identity. Exodus rose to prominence in the aftermath of Maximum Leader's speech before the UN on 10 February 2020, when he called for ascendants worldwide to join him. Many members of Exodus began to claim his island of Nauru to be their "homeland," and the more violent among them began to take steps to punish the national governments that had refused to recognize Nauru's sovereignty.

On 18 April 2020, the Department of Homeland Security officially listed Exodus as a terrorist organization after a rash of violent crimes by the group that targeted institutions and individuals critical of ascendants. The American cells of Exodus responded by increasing their terror spree. Their reprisal campaign culminated on 19 July in a pitched battle when the Star-Spangled Squadron and Exodus ascendants fought at the headquarters of American Citizens Against Vigilantism (ACAV). While the Squadron succeeding in driving off the terrorists, Dr. Quantum, Stronghold, and Warp were left in critical condition. Exodus claimed a moral victory and authorities fear it has more than made good its casualties with new recruits.

Personnel: Exodus is a decentralized organization that operates as a largely leaderless network of autonomous cells. Maximum Leader is unquestionably the most powerful and influential member of the organization, and often dubbed the "head" of Exodus, but he largely inspires rather than commands the other members. Like Al-Qaeda and ISIS before it, Exodus coordinates its actions ideologically rather than hierarchically. It is believed to have 10,000 members worldwide, the vast majority of whom have very limited superpowers. Many of its members are societal outcasts for whom a superpower, however trivial, is their sole claim to superiority over the people who have ostracized them. Although no match for military-grade ascendants in a stand-up fight, these broken individuals can pose a grave threat when used in terror attacks against civilians. That is not to say that Exodus has no truly superhuman members – it does, with Maximum Leader foremost among them. The most powerful 12 of these reside on the island of Nauru, where they serve as a strategic deterrent for nations that might take umbrage at a sovereign state of superhumans.

Facilities: As a clandestine organization, Exodus has little in the way of proper facilities. The exception is on the island of Nauru, where it operates a 9-acre training camp. Formerly known as Pleasant Island, Nauru is an island country in Micronesia situated between Tuvalu, the Solomon Islands, Papua New Guinea, and the Marshal Islands. With a territory of only 8.1 square miles and a population of 10,670 residents, Nauru is the third-smallest country in the world behind Vatican City and Monaco. Nauru was conquered in a coup d'état by Maximum Leader on 26 April 2019. Prior to the coup, Nauru's largest source of revenue came from the Nauru Regional Processing Center, which imprisoned illegal immigrants on behalf of Australia starting in 2001 and began to house ascendant detainees in 2018. These criminal ascendants were recruited into Exodus when Maximum Leader seized the island.

Funds: According to US intelligence sources, Exodus has five major sources of funding:

★ Aid payments to Nauru from foreign governments offered in exchange for Exodus limiting its operations in their territory;
★ Donations from supporters of the movement, often through not-for-profit front organizations;
★ Export of phosphates from deposits on Nauru mined with slave labor;
★ Kidnapping, ransomware, murder-for-hire, and other mercenary criminal enterprise;
★ Sale of high-tech inventions on the black market to criminal cartels and rogue nations worldwide.

With approximately $650 million in annual revenue, it is one of the best-funded terrorist groups in the world, comparable to ISIS when it controlled 60% of the oil supply of Syria. Exodus has connections into rogue nations, state sponsors of terrorism, and criminal cartels around the world, and can reliably secure contraband, military hardware, government secrets, or anything else with a cost of 32 SPs or less.

Current Situation: Having secured a base on Nauru and scored a major propaganda victory over the Star-Spangled Squadron in Washington D.C., Exodus seems to be a greater threat than ever. Maximum Leader claims to only want a homeland for ascendants to develop their powers in peace and argues that Exodus's members are freedom fighters in the vein of the IRA and PLO. But many national leaders fear that granting Exodus the sovereignty it demands will lead to a new world order that puts ascendants in charge.

FĒI JIÀN ("SOARING SABERS")

Personnel: 14 (8,000 CR)   **Funds:** 16 ($1.2B annual)
Facilities: 17 (75 acres)   **Reputation:** 23 (200M fans)
Perks: Authority (combined law enforcement and military)
Drawbacks: Dark Secret (covert ops), Duty, Notorious 20 (25M haters)

The world was introduced to the Fēi jiàn ("Soaring Sabers") at a National Day military parade held in Beijing on October 1, 2020. Part of the People's Liberation Army's Beijing Military Region Special Forces Unit, the Soaring Sabers are considered to be among the most powerful military-grade ascendants fielded by any country.

Personnel: The leader of Fēi jiàn is Jiàn Shèng ("Sword Master"). Sword Master is a hero with two forms. In one form, he is a man named Liáng Xù who wields the legendary sword Gān Jiàng; in the other she is a woman named Zhù Yuè who wields the legendary sword Mò Yé. Liáng and Zhù were once a married couple; the pair died together in an archeological accident while seeking the legendary swords in China's remote mountains and were somehow reborn. The full extent of Sword Master's powers is unknown in the West, but the gestalt hero is said to be able to summon "a rain of swords and a storm of butterflies." There are five other prominent members of the Soaring Sabers:

★ Xiǎo Yáo Zi ("Universe Wanderer") can summon a battleship-sized leviathan and a jetliner-sized eagle.
★ Yè Huo ("Karma Fire") is an avatar of the legendary phoenix protected by a fiery aura and regenerative healing.
★ Jūn Shī ("Strategist"), master of the I Ching, can change the topography of battlefields and invent machines and weapons.
★ Zhàn Shén ("War-God") can transform into the powerful form of the bull-headed god of war, Chī Yóu.
★ Huó Fó ("Living Buddha") is a devout monk who has mastered the magical and martial arts.

Sword Master, Universe Wanderer, Karma Fire, and Strategist are Han Chinese, while War-God is Miao and Living Buddha is Tibetan. The CCP directs substantial effort towards highlighting the deeds of the latter two heroes in order to curry international favor. Within China, however, Sword Master and Karma Fire are the most popular of the heroes. An entire series of light novels has grown up depicting a love quadrangle between Sword Master's two forms, Karma Fire, and Strategist.

In addition to these elite ascendants, the Soaring Sabers field an entire company of 120 military-grade ascendants equipped for airmobile special operations. No other organization on Earth can field a comparable force. Unlike the Western powers, which have allowed many ascendants to operate in private organizations due to concerns for liberty and privacy, China has conscripted the vast majority of its most powerful superhumans into government service.

The Soaring Sabers enjoy support from a veritable army of 2,260 administrative, analysis, marketing, legal, public affairs, scientific, and technical staff that ensure that they want for nothing.

Facilities: The Soaring Sabers occupy a 40-acre facility at the Beijing Shahezhen Air Base, north of the capital. Sword Master and the other five elite ascendants, 60 military-grade ascendants, and 1,200 support personnel operate from a compound that includes barracks, laboratories, proving grounds, training facilities, and workshops. Each of China's six other Military Regions has a smaller facility (approximately 6 acres) with a squad of 10 Soaring Sabers and approximately 175 support staff.

Funds: China considers ascendant soldiers to be a strategic mandate on a level with nuclear weapons, stealth technology, and aircraft carriers. The Soaring Sabers are very well-equipped, with $40,000 of personal equipment each. Their most important asset are a squadron of nine special forces heavy transport helicopters that are used to swiftly move the Soaring Sabers wherever they are needed. Fēi jiàn can reliably secure objects with a cost of 34 SPs or less.

Dark Secret: The Chinese Communist Party has covertly deployed the Soaring Sabers for its own ends, with missions that have included rounding up dissidents, handling "problematic" individuals, and suppressing separatist forces. If the details of these missions were revealed, it would be a major blow to the international reputation of the Soaring Sabers and the Chinese Communist Party.

Current Situation: The Soaring Sabers are wavering between their patriotic desire to serve their nation as directed, and their moral calling to only use their powers to help others. Any form of resistance would come at great cost, however. The government extends great privilege to the team member's families, including the best living conditions, educational opportunities, medical treatments, and wages available – but the Soaring Sabers know that these perks will only last as long as they stay loyal to the CCP.

SPETSIKHOTRON

Personnel: 13 (4,000 CR) **Funds:** 15 ($650M annual)
Facilities: 17 (73 acres) **Reputation:** 20 (25M fans)
Perks: Authority (combined law enforcement and military)
Drawbacks: Dark Secret (GRU/KGB ties), Duty, Notorious 20 (25M haters)

Spetsikhotron is the Russian Army's elite unit of ascendants. The name (pronounced "spet-seek-o-tron") is a contraction of "Spetsial'naya Psikhotronnaya Komanda" (Special Psychotronics Command). The group is sometimes referred to as the SPK, but only by its enemies; the SPK label is discouraged by the Russian government because they would prefer that Spetsikhotron be viewed as a team of heroes rather than as a sinister government agency.

Personnel: Spetsikhotron is commanded by Colonel Pyotr Markov, better known as Avangard ("Vanguard")." Gifted with the powers of hypersonic flight and superhuman strength, Avangard is Russia's answer to American Eagle. Russian propaganda depicts him as an invincible patriot and humanitarian and he has his own state-sponsored comic books, action figures, and animated shows. There are five other members of Spetsikhotron:

★ Tsar Bómba ("Tsar Bomb") can explode with enough power to level buildings and destroy underground bunkers.
★ Krasukha ("Belladonna"), a ravishing femme fatale, has the ability to change her shape and kill with a kiss.
★ Volshebnik ("Enchanter") can read minds, weave illusions, and enslave others to his will.
★ Uragan ("Hurricane") is a flying weather controller who can summon wind, rain, and lightning.
★ Pantsyr ("Carapace") can metamorphize into an invulnerable cockroach-like being.

With the exception of Avangard, the members of Spetsikhotron are individually less powerful than their counterparts in the Star-Spangled Squadron and Soaring Sabers. That's because they were recruited from a much smaller pool: The Russian government decided to only recruit from patriotic Russians with a history of military or intelligence service and excluded non-Russians, immigrants, and civilians. Spetsikhotron is, however, the best-trained and best-disciplined of the national ascendant teams.

Spetsikhotron's operations are supported by a staff of 1,100 personnel. 275 of these are security troops and the remainder are a mix of administrative, analysis, intelligence, propaganda, and technical staff.

Facilities: Spetsikhotron is based in a 43-acre underground facility located beneath the Mamayev Kurgan war memorial. A dominating hill that overlooks the city of Volgograd (once Stalingrad), the Mamayev Kurgan is surmounted by The Motherland Calls statue, a 280-foot tall concrete colossus of a sword-wielding woman. The statue has been modified with an elevator and airlock so that Spetsikhotron can exit from the head. The site was carefully chosen to represent the resurgent greatness of Russia. 650 of the personnel are stationed here. Outside of Volgograd, Spetsikhotron maintains branch offices in 30 other cities in Russia of varying size, each staffed with an average of 15 personnel.

Funds: Although much of Russia's armed forces are poorly resourced compared to Western armies, the Russian government has taken great care to keep Spetsikhotron amply funded and its members well-paid. The Special Psychotronics Command has a $650 million annual budget, much of which goes to lavish salaries for the six heroes and sinecures for their family. Spetsikhotron can reliably secure objects with a cost of 32 SPs or less.

Dark Secret: Spetsikhotron is a direct descendant of the psychotronics research programs organized by the GRU and KGB under the Soviet Union. Although publicly presented as a humanitarian group of heroes, the members of Spetsikhotron are actually hand-picked military operatives chosen for their training and loyalty to the Russian state, ruthless in their willingness to execute any mission they are given.

Current Situation: Prior to the rise of ascendants, Russia had been clinging to its status as a great power only by virtue of land mass, oil, and nuclear weapons. The sudden and unexpected payoff of its Cold War psychotronics research has catapulted Russia back into a position of international leadership. Spetsikhotron will be handled like a precious piece on the international chessboard.

OTHER ORGANIZATIONS

There are, of course, countless other organizations at work in the world of *Ascendant*. Real-world organizations such as the Department of Defense, the New York Policy Department, and Doctors Without Borders all still exist and could be easily modeled. A number of new, fictional organizations also exist or are reputed to exist – a few such are listed below.

Court of Night: Whispers of the existence of the Court of Night have only recently come to the attention of the Star-Spangled Squadron. Sources variously claim its members are avatars of gods, ancient aliens, or almighty ascendants. The Court are said to have invaded from other dimensions, or woken from long slumbers, or been summoned by the rise of new ascendants. The truth, if any, remains unclear. But the one thing all of the rumors agree upon is that the Court of Night are the implacable enemies of mankind.

Dark Emerald: Dark Emerald is a private military corporation comprised of low-power ascended individuals, all veterans with real combat experience. They are based out of Cape Town, South Africa (largely for tax reasons), but operate all over the world in both covert and overt roles. Within the PMC community, Dark Emerald is known for taking on jobs that would be impossible for ordinary mercenaries. Dark Emerald is currently banned from operating in the United States, as the Department of Homeland Security has connected them to the Exodus-led coup on Nauru in 2018. They are, nevertheless, active on US soil in secret.

El Cartel de Los Carteles: A criminal organization founded in 2010, El Cartel de Los Carteles was originally made up of defectors from the ranks of Mexico's elite special forces. In the decade since, they have risen to become the paramount cartel in the underworld, acquiring control of their rivals through intimidation, blackmail, and murder. They are believed to have over 10,000 soldiers, and in recent years have expanded from drug smuggling to kidnapping, extortion, gun running, and human trafficking.

Night Stalkers: The Night Stalkers is a possibly fictional group of self-proclaimed wizards and occultists who claim to fight the monsters and demons that hunt and torture humanity. The group was first mentioned in a creepypasta in 2013 and became a popular internet legend; many short stories and illustrations of the group fighting Slenderman, The Rake or Jeff the Killer circulate on Reddit, Discord, and various internet forums. Since the Battle of Atlanta, however, more and more people have come to believe the Night Stalkers are a real group. Believers cite a number of videos posted on the web depicting alleged Night Stalkers in trench coats fighting demons with strange words or drawn symbols carved on their flesh. Detractors argue it is just ascendant cosplayers with good use of special effects.

Nature's Right: Nature's Right is a vegan terrorist organization. It was established in March 2019, after the ascendant Levitee demonstrated that it was possible for animals to become sapient through ascension. Nature's Right argues that eating living creatures who are potentially sapient is tantamount to genocide. A covert group that believes in direct action, Nature's Right has been linked to dozens of bombings of meat-packing facilities, steakhouses, and butcher's shops. Online chatter suggests the group has at least two ascendant animals in its ranks, but these claims have not been verified. Nature's Right has been linked to Exodus through the notorious atomic-powered anti-nuclear activist Free Radical.

The Unseen Court: The Unseen Court is a group of street level heroes and crime fighters that emerged from Capital City's homeless and transient population. Little is known about the organization, as its members are skilled at hiding in plain sight and protected by a large network of informers and supporters. Neither police, criminal, nor journalistic efforts to investigate the group have succeeded. What is known is that the Unseen Court is notoriously short on cash, with all of the organization's funds being diverted into charitable purposes to help the city's most needy.

MISSIONS

When the Series is structured around an Organization, the Organization can assign **Missions** to the heroes. Missions are the GM's best friend: They give the heroes a clear objective with a defined territory and timeline, enabling him to sketch out the Antagonists, Challenges, and Locations they might encounter in advance of play.

The heroes' first Mission will be assigned at the start of the first Issue, and then additional Missions assigned as the Series progresses. The nature of the Missions assigned to the heroes will depend on the Organization they work for. Typical Missions might include apprehending a villain, averting a catastrophe, or solving a crime. Missions can be simple operations that require a single Issue to resolve, complex multi-Issue escapades of mind-boggling complexity, or anything in between.

Missions are usually undertaken sequentially, such that the heroes complete each Mission before undertaking a new one. However, Missions can also be undertaken in parallel, with the heroes pursuing multiple Missions at once in each Issue (much like how a police detective may have multiple open "cases" at any one time and dedicate a portion of each workday to each).

If you're an inexperienced GM, it's best to start your Series by running sequential single-Issue Missions that are only loosely tied into an Arc. Once you and your players are comfortable with the game rules and setting, you can begin to create and run more complex Missions spanning entire Arcs or begin to offer parallel Missions that the heroes can resolve in any order they choose. A Series that offers a choice of many Missions in parallel is somewhat equivalent to what fantasy gamemasters call a "sandbox".

Whatever format you choose, your Series is going to require dozens of Missions. The rules that follow will help you get started creating your first single-Issue (one session) Missions.

MISSION SYNOPSIS

The first step in creating a Mission is developing a short summary called a **Synopsis**. A Synopsis is a high-level overview of what the Mission is all about. Here's the Synopsis for a superhero story: "A secret government lab with dangerous viruses is threatened by the imminent eruption of a volcano. Before evacuation can occur, terrorists take advantage of the confusion to seize the lab. The heroes are called in to deal with the terrorists and prevent the viruses from being released into the environment."

Those of you blessed with fevered imaginations have probably already come up with dozens of ideas for Missions; turning them into Synopses is just a matter of writing them down. But even the most creative can get stuck. If you need some inspiration, you can flip through your favorite comic books or watch some action flicks for ideas. Or, if you prefer, you can call upon the oracular power of the dice by using the Random Mission Synopsis tables below.

RANDOM MISSION SYNOPSIS TABLES

These tables are intended to help you create a Mission Synopsis. Just go through the tables step by step, choosing a result at each step or rolling randomly. If you get a result that seems bizarre or inappropriate, you can re-roll, but sometimes you might find that a seemingly odd result will serve as the inspiration for an imaginative plot you wouldn't otherwise have considered.

Let's roll up a Mission Synopsis. We start by rolling 1d20 on the Mission table. Our result is a 3 – "The heroes are asked to investigate a CRIME that occurred, but their investigation reveals a PLOT." We now roll 1d20 on the Crime table and get a 17 – "Robbery: Villains have robbed ASSETS from LOCATION (2d6+1)." To find out what's been stolen, we roll 1d20 on the Assets table. Our result is a 16 – "Government Secrets." To find out where it's been stolen from, we roll 2d6+1 on the Locations table. We get a 9 – "SPECIAL LOCATION and Vicinity". We roll 1d20 on the Special Location table and get a 11 – "Military Base." Now we must find out what the Plot is. We roll 1d20 on the Plot table and get a 13 – "To directly bring about a CATASTROPHE." We roll a 13 on the Catastrophe table - Hostage VICTIMS held at LOCATION (2d6). For Location, we roll 1 – "Airport." For Victims we roll "Tiny Group of VIPs with Entourage." For VIPs, we roll 1d20 and get 11 – "Local Politicians." So how might we bring these random results together?

We decide that the "Local Politicians" are the mayor, police commissioner, and district attorney of Capital City, who are flying together to a conference in Washington, DC. The "Government Secrets" are their flight itinerary. We re-imagine the "Military Base" as the police precinct headquarters. The Synopsis is becoming clear: the villains have stolen the flight itinerary of the city's top politicians from the police headquarters as part of a plot to hold them hostage at the airport. We decide that the villains must have stolen a lot of other data, too, so it's not immediately obvious that the flight itinerary is what they were after. Now we just need to decide why they're doing it! Hostages are usually taken by terrorists with demands. Since they're abducting local politicians it should be something relevant to the city. We decide that the politicians have lately adopted a "tough on superhuman crime" policy that has put a lot of superhumans behind bars. The villains intend to use the hostages to demand the release of their criminal compatriots from lock-up.

Roll (1d20)	Missions
1-2	The heroes are asked to investigate a CRIME that occurred. It must be solved and the villains apprehended.
3-4	The heroes are asked to investigate a CRIME that occurred but their investigation reveals a PLOT.
5-6	The heroes learn a CRIME will occur. It must be prevented and the villains apprehended.
7-8	The heroes are called to confront a CATASTROPHE as it is occurring. It must be resolved.
9-10	The heroes are called to confront a CATASTROPHE as it is occurring, but in the course of resolving it discover a PLOT.
11-12	The heroes are assigned a TASK to accomplish.
13-14	The heroes are assigned a TASK to accomplish, but in the course of the task discover a PLOT.
15-16	The heroes are directly confronted by the villains while at a SPECIAL LOCATION and must defend themselves.
17-18	The heroes are directly confronted by the villains while at a SPECIAL LOCATION but it is just a feint in a PLOT.
19-20	The heroes uncover a PLOT that it is part of an even larger PLOT.

Roll (1d20)	Crime
1-2	Arson: Villains have committed arson at a LOCATION (2d6+1).
3-4	Assault: Villains have physical harmed VICTIMS at a LOCATION (2d6+1).
5-6	Bombing: Villains have detonated explosives affecting a LOCATION (2d6+1).
7-8	Burglary: Villains have burglarized ASSETS from LOCATION (2d6+1).
9-10	Extortion: Villains have blackmailed or extorted VICTIMS at LOCATION (2d6+1).
11-12	Hacking: Villains have hacked computers at LOCATION (2d10+2).
13-14	Homicide: Villains have murdered VICTIMS at LOCATION (2d6+1).
15-16	Kidnapping: Villains have kidnapped VICTIMS from LOCATION (2d6+1).
17-18	Riot: Villains have started a riot at LOCATION (2d6+1) which has put VICTIMS in danger.
19-20	Robbery: Villains have robbed ASSETS from LOCATION (2d6+1).

Roll (1d20)	Catastrophe	Roll (1d20)	Catastrophe
1	Blackout at LOCATION (roll 2d10+2)	11	Hijacked VEHICLE heading to LOCATION (2d6)
2	Bomb endangering LOCATION (roll 2d10+2)	12-13	Hostage VICTIMS held at LOCATION (2d6)
3	Catastrophic Accident at SPECIAL LOCATION	14	Meteor/Missile threatening LOCATION (2d8+6)
4	Civil Unrest in LOCATION (roll 2d10+2)	15	Military Conflict affecting LOCATION (2d8+6)
5	Crashed VEHICLE(S) at SPECIAL LOCATION	16	Nuclear Disaster affecting LOCATION (1d6+13)
6	Distressed VEHICLE (sinking, crashing, etc.)	17	Tornado affecting LOCATION (2d8+2)
7	Disease outbreak affecting LOCATION (2d10+2)	18	Tsunami affecting LOCATION (2d4+13)
8	Earthquake affecting LOCATION (roll 1d6+13)	19	Volcanic eruption affecting LOCATION (2d8+6)
9-10	Fire affecting LOCATION (roll 2d8+1)	20	CATASTROPHE (roll again) affecting EXOTIC LOCATION

Roll (1d20)	Task
1-2	Apprehend: The heroes must confront, arrest, or apprehend a group of antagonists at a SPECIAL LOCATION.
3-4	Convoy: The heroes must protect an ASSET being moved in a VEHICLE from SPECIAL LOCATION to SPECIAL LOCATION.
5-6	Extraction: The heroes must extract a VIP from a SPECIAL LOCATION, willingly or unwillingly.
7-8	Motorcade: The heroes must protect a VIP being moved in a VEHICLE from SPECIAL LOCATION to SPECIAL LOCATION.
9-10	Protection: The heroes must protect a VIP with Entourage while he is at SPECIAL LOCATION.
11-12	Recovery: The heroes must recover an ASSET that was stolen and is being kept at a SPECIAL LOCATION.
13-14	Rescue: The heroes must free VICTIMS who are being unwillingly held at a SPECIAL LOCATION.
15-16	Sabotage: The heroes must damage, destroy, or sabotage an ASSET at a SPECIAL LOCATION held by antagonists.
17-18	Takeover: The heroes must assault or infiltrate a SPECIAL LOCATION and take it over.
19-20	Theft: The heroes must steal an enemy's ASSET that is being kept at a SPECIAL LOCATION.

Roll (1d20)	Plot
1-2	To commit a CRIME.
3-4	To commit a CRIME and frame heroes for it.
5-6	To commit two related but different CRIMES (roll twice).
7-8	To commit a CRIME necessary to bring about a CATASTROPHE
9-10	To commit a series of 2d6 similar CRIMES (roll once).
11-12	To commit series of 2d6 similar CRIMES (roll once) to bring about a CATASTROPHE.
13-14	To directly bring about a CATASTROPHE.
15-16	To kill the heroes.
17-18	To perform a TASK.
19-20	To perform a TASK to bring about a CATASTROPHE.

Roll (Varies)	Location
1	Apartment
2-3	Family Home
4-7	SPECIAL LOCATION
8-13	SPECIAL LOCATION + vicinity (full block)
14-17	Local City (or similar sized region)
18-19	State/Province (or similar sized region)
20	Country
21	Continent
22	Planet

Roll (1d20)	Asset
1-2	Blueprints/Plans
3-6	Cash
7-8	Diamonds
9-10	Drugs
11-12	Fine Art/Collectibles
13-14	Gold/Precious Metals
15-16	Government Secrets
17-18	Financial Instruments
19-20	Real Estate

Roll (1d20)	Special Location	Roll (1d20)	Special Location
1	Airport	11	Library / School
2	Amusement Park	12	Military Base
3	Apartment Building	13	Monument / Statue
4	Bank	14	Museum
5	Bridge	15	Park
6	Bus Station	16	Plaza / Square
7	Convention Center	17	Skyscraper
8	Factory / Warehouse	18	Stadium
9	Government Building	19	EXOTIC LOCATION
10	Harbor	20	EXOTIC LOCATION

Roll (1d20)	Exotic Location	Roll (1d20)	Exotic Location
1	Abyssal Trench (Marianna, etc.)	11	Remote Island
2	Ascendant Training Academy/School	12	Sacred Ruin (Angkor Wat, Machu Picchu, etc.)
3	Asteroid / Comet / Planetoid	13	Secret Moon Base
4	City-sized Catacombs (Paris, Rome, etc.)	14	Secret Underwater Base
5	Fallout Shelter	15	Secret Volcano Base
6	High-Tech Laboratory	16	Secret Underground Tunnel Network
7	Missile Silo	17	Solar Farm
8	Orbital Space Station	18	Toxic Waste Dump
9	Point Nemo / Spaceship Graveyard	19	UFO Research Facility (Area 51, etc.)
10	Radioactive Site	20	UFO in Orbit

Roll (1d20)	Vehicle	Roll (1d20)	Vehicle
1	Aircraft Carrier	11	Jet Fighter
2	Ambulance	12	Jumbo Jetliner
3	Armored Transport Truck	13	Motor Yacht
4	Armored Personnel Carrier	14	Passenger Bus
5	Container ship	15	Private Jet
6	Cruiseliner	16	Police Car
7	Fire Engine	17	School bus
8	Heavy Truck	18	Submarine
9	Heavy Transport Helicopter	19	Tank
10	Light Helicopter	20	Supertanker

Roll (1d20)	VIP
1-3	Celebrity (actor, model, performer, star, etc.)
4	Criminal Kingpin (drug lord, mob boss, gang leader, etc.)
5	Dilettante (playboy, heiress, trust fund kid, etc.)
6	International Politician (ambassador, UN representative, EU representative)
7-9	Leading Professional (doctor, lawyer, professor, scientist, writer)
10-13	Local Politician (city council member, judge, mayor, police commissioner, sheriff, etc.)
14	Military Commander (admiral, general, field marshal, etc.)
15	Mogul/Tycoon (billionaire, CEO, venture capitalist)
16-17	National Politician (cabinet member, congressman, justice, president, senator, etc.)
18	Professional Athlete (basketball player, race car driver, golfer)
19-20	State Politician (governor, state representative, etc.)

Roll (1d20)	Victim
1-2	Innocent Bystander
3	Tiny Group of Innocent Bystanders (family, co-workers, set of 'john's, etc.)
4	Small Group of Innocent Bystanders (bus passengers, small office, etc.)
5	Large Group of Innocent Bystanders (jetliner or cruise ship passengers, large office, etc.)
6	Huge Group of Innocent Bystanders (shopping mall, large high school, etc.)
7	Enormous Group of Innocent Bystanders (convention crowd, university campus, etc.)
8	VIP with Entourage
9	VIP, Entourage, and Small Group of Innocent Bystanders (celebrity book signing event, etc.)
10	VIP, Entourage, and Large Group of Innocent Bystanders (political fundraiser, etc.)
11	VIP, Entourage, and Huge Group of Innocent Bystanders (rock concert, etc.)
12	VIP, Entourage, and Enormous Group of Innocent Bystanders (presidential rally, sporting event)
13	Tiny Group of VIPs with Entourages (private meeting)
14	Small Group of VIPs with Entourages (sports training camp, movie set)
15	Large Group of VIPs with Entourages (UN General Assembly, State of Union, Oscars, White House)
16	Huge Group of VIPs with Entourages (Democratic National Committee)
17	Enormous Group of VIPs with Entourages (Davos summit)
18	Contact of one of the heroes
19	Dependent(s) of one of the heroes
20	All dependents of all heroes

ANTAGONISTS AND ENVIRONMENTAL CHALLENGES

Every Mission is going to involve the heroes confronting problems that require extraordinary abilities to solve – typically in the form of **Antagonists** and/or **Environmental Challenges**.

Antagonists are NPCs that oppose the efforts of the heroes to complete their Mission. Some Antagonists are villainous ascendants using their powers for evil, but depending on the Mission and the nature of the heroes' Organization, Antagonists might also include police, soldiers, common criminals, killer robots, etc. Appendix A: Character Index (p. 445) provides several dozen characters that you can use as Antagonists in your Missions, ranging from lowly thugs to powerful superhumans. You can also create your own Antagonists by using the Character Creation rules.

Environmental Challenges are crises and disasters that demand attention. In an Environmental Challenge, the game world is the enemy. Heroes might be challenged to put out a raging fire, rescue earthquake victims, save passengers from a sinking ship, defuse a bomb, or stop a bus with broken brakes from mowing down pedestrians. Environmental Challenges are resolved with Challenge Checks. Chapter 7: Actions (p. 257) has mechanics for resolving many common Environmental Challenges that might appear in the game, as well as rules for creating your own Challenge Checks.

The second step in creating a Mission is sketching out some Antagonists and Environmental Challenges based on what Mission the heroes are on, the Organization the heroes work for, the Power Limit of the heroes, and other factors. You don't need to have all the details worked out yet, just some broad ideas. You'll work out the nitty-gritty later when you assign Challenge Ratings (discussed below).

SCENE STRUCTURE

Now it's time to plan the **Scene Structure** for your Mission. As noted above, the Scene is the basic building block of gameplay in sessions of *Ascendant*. During a Scene, the heroes might:

★ Travel to a new Location in the game world or revisit a Location they've already been to;
★ Fight one or more Antagonists;
★ Confront one or several Environmental Challenges;
★ Investigate the Location and question any Witnesses there in search of Clues; and
★ Interact with NPCs of various sorts, including innocent bystanders, contacts, bosses, underlings, or rivals.

Scenes which are primarily about fighting Antagonists or confronting Environmental Challenges are called **Action Scenes**. Scenes which primarily involve investigating the Location and questioning Witnesses for Clues, or interacting with NPCs in general, are called **Exposition Scenes**.

The first Scene of a Mission is usually the **Opening**, where some inciting incident kicks off the action. Most Openings are Exposition Scenes, often briefings of some sort ("Your mission, should you choose to accept it...") but a Mission can also open with a bang – there's nothing like a bomb going off in City Hall to get heroes going! Sometimes the Opening might be preceded by a **Teaser**, in which action unrelated to the Mission is resolved. (Everyone's favorite secret agent films start with Teasers.)

The last Scene of a Mission is the **Resolution**, where heroes have their chance to resolve the crisis, bring the villain to justice, etc. The Resolution is almost always an Action Scene, as players tend to prefer a climactic confrontation over a stately Agatha Christie-style whodunit reveal.

The heroes usually transition from Scene to Scene by changing Location. The heroes can either be **propelled** or **clued** to move from one Location to the next. When the heroes are **propelled** from one Scene and Location to another, it means something happens to them or to the world that demands a response. Of course, propelling is not compelling; the GM should never coerce their players into doing something if the players don't want to. Even when propelled by events, the players always have the choice of whether and how to respond. But if they choose not to act, they're stuck with the consequences of their choice.

Jack Hammer and Shadowmancer are examining a murder victim in the morgue at Memorial General when they are called to handle a hostage crisis at the American News-Sentinel Building. They are being propelled to a new Scene at the American News-Sentinel. They aren't physically forced to rush to the building; they could continue to examine the cadaver. But if they don't handle the hostage crisis immediately, it might unfold in ways they are unhappy with, and they'll have to live with the results. When heroes are propelled, they have to act or face consequences.

When the heroes are **clued** to move from one Scene and Location to another, it means they have discovered some way to move towards their desired Resolution. The most common way that the heroes are clued to move is by discovering Clues from investigating Forensic Sites and questioning Witnesses (hence the name). Heroes might also be clued to move to a new Scene and Location by

dialogue with friendly NPCs, suggestions from their Organization, advice from mentors, and so on. Heroes don't always respond to being clued; sometimes they may ignore the information or even be oblivious to the Clue entirely! When, why, and how urgently the heroes respond to encouragement is always up to them.

> While Jack Hammer and Shadowmancer were examining the murder victim, they discovered the business card of the Capital Grand Hotel concierge in the pocket of the deceased. They have been clued to transition to a Scene located at the Capital Grand Hotel. But they aren't propelled to the hotel. The heroes might not think the business card is important; or they might decide other things are more important (such as resolving the hostage crisis at the American News-Sentinel Building); or they might just pocket it to investigate later. When the heroes are clued to move, it's up to them to follow the clue(s) to the next Location and Scene.

To create your Scene Structure, you start with an Opening (or Teaser, then Opening) and then plan a sequence of Scenes, propelling, clueing, or triggering the heroes to move through various Action and Exposition Scenes in a way that leads to the Resolution of the Mission. Alternatively, you can start with the Resolution and work backwards to the Opening.

Easy enough, right? However, "no plan survives contact with the enemy," a saying which is as true for gamemastering as for warfare. No matter how hard you try, the Scene Structure you plan probably won't resemble what actually happens when your heroes take on your Mission. When a writer plots out a comic book, he has total control over the structure of each issue. He can set up interesting situations for his heroes to deal with, and then resolve the situation through whatever sequence of events makes for the best story. As GM, you are far more constrained: You can set up interesting situations, but you do not have authorial control over the outcome of events that follow. You can control what happens in the world and what choices the NPCs make, but you cannot predict with certainty what the heroes will do or whether they will succeed at what they attempt. You can only predict what they are likely to attempt and plan accordingly. It's likely that if you put Clues in front of the heroes, they'll follow the Clues to the next Scene. It's likely that if you present them with a crime in progress, they'll try to stop the crime, and probably succeed in doing so. But it's not certain.

In short, your Scene Structure should be understood as a likely path for the heroes to take, not as a railroad they must travel down.

BASIC SCENE STRUCTURE

There are four basic Scene Structures in **Ascendant**. These Scene Structures should seem familiar, as they are widely used in comic books, action movies, thrillers, and other media.

CRIME FIGHTING:

★ *Opening (Exposition Scene):* The heroes gather at Location A, where they are briefed by their Organization on a crime that has already occurred at Location B. They are encouraged (by their bosses at the Organization) to investigate.
★ *Exposition Scene:* The heroes investigate Location B and interrogate any Witnesses there. They discover Clues that reveal the Antagonist(s) and their current whereabouts at Location C. They are thus encouraged to head to Location C.
★ *Resolution (Action Scene):* The heroes confront the Antagonist(s) at Location C.

CRISIS RESPONSE:

★ *Opening (Exposition Scene):* The heroes gather at Location A, where they are briefed by their Organization that a crisis is ongoing at Location B. The crisis could be a natural disaster, a crime in progress, an inexplicable phenomenon, etc. They are propelled (by their bosses at the Organization or their own moral code) to respond right now.
★ *Action Scene:* The heroes resolve the ongoing crisis at Location B. The crisis is usually some sort of Environmental Challenge(s).
★ *Exposition Scene:* After the crisis is resolved, the heroes investigate Location B and interrogate any Witnesses there. They discover Clues that reveal the Antagonist(s) behind the crisis and their current whereabouts at Location C. They are thus encouraged to head to Location C.
★ *Resolution (Action Scene):* The heroes confront the Antagonist(s) at Location C.

SURPRISE CRIME FIGHTING:

★ *Opening (Exposition Scene):* The heroes stumble upon a crime that has already occurred at Location A. The heroes are encouraged to investigate and interrogate any Witnesses nearby. They discover Clues that reveal the Antagonist(s) of the crime and their current whereabouts at Location B. They are thus encouraged to head to Location B.

★ *Resolution (Action Scene):* The heroes confront the Antagonist(s) at Location B.

SURPRISE CRISIS RESPONSE

★ *Opening (Action Scene):* The heroes are confronted by a crisis at their Location A. This could be a surprise attack on them or their families, an unexpected natural disaster, etc. The heroes are propelled to resolve the crisis right now.

★ *Exposition Scene:* In the aftermath of the crisis, the heroes investigate Location A and interrogate any Witnesses present. They discover Clues that reveal the Antagonist(s) behind the crisis and their current whereabouts at Location B. They are thus encouraged to head to Location B.

★ *Resolution (Action Scene):* The heroes confront the Antagonist(s) at Location B.

COMPLEX SCENE STRUCTURES

The Scene Structures above are very simple. They include only two to four Locations and Scenes each and in practice would only take an hour to two hours of playing time to resolve. This is because in each Structure, the first Exposition Scene clues the heroes to move directly to the Resolution. To fill up a full session of play, you will want to create a more complex Scene Structure where they are clued or propelled to move through a number of Scenes before reaching the Resolution. There is effectively no limit to how complex you can make a Scene Structure, but for a single-Issue Mission, five to seven Scenes is usually sufficient.

Depending on your preference, a complex Scene Structure can proceed in sequence or in parallel, forming either a linear chain or a branching web. When Scenes proceed in sequence, you are planning for just one path forward – the heroes first go to A, then to B, then to C, and so on. When Scenes proceed in parallel, you are creating a network of interlinked Scenes, which the heroes can move through in a variety of different ways.

A Scene Structure consisting of a branching web of parallel Scenes is obviously much more challenging to create than a Scene Structure built as a linear chain of Scenes, but the added complexity often leads to a better experience for the players. A branching web allows affords the players more choices, providing a sense of agency that they can be denied in a more linear structure.

A branching Scene Structure can also include **Triggered Scenes**. A Triggered Scene is one that may or may not occur depending on the choices of the heroes. It might be triggered by taking particular actions, not taking particular actions, failing to meet a deadline, or any other condition. If a Triggered Scene does occur, the heroes are usually propelled to respond to it.

Because it's more complex, a Scene Structure utilizing a branching web also takes more time to prepare. Instead of three to seven Scenes spread across various Locations, you often have to prepare six to ten Scenes and Locations – some of which may end up not even being used! It can be frustrating to spend a lot of your free time prepping a Mission only to have half of what you create "go to waste".

But there are hidden benefits to the prep time. First, even if a Scene goes to waste, any work you've done on its Locations can be re-purposed for future use in your Series. Most Series tend to take place in a particular region (such as Capital City), so effort spent prepping for a fight at the city's Capital Grand Hotel isn't wasted; the heroes might visit the Capital Grand next Issue. (This also works in reverse: The longer the Series runs, the easier it is to create complex Missions, because so many Locations already exist for use.)

Second, the apparently simplicity of linear Scene Structure can be illusory. Players, particularly experienced players, don't like to be railroaded. If you plan for them to do X, they'll do Y; if you plan for them to do X, then Y, then Z, they'll instead do R, then head off to check out F, and then randomly end up at M. If you have only prepared for X, Y, and Z, then you'll be forced to improvise – a lot. When offered a lot of choices by the Mission, however, players don't feel as compelled to go off the rails. If they have to choose between A, B, or C as their next step, they're less likely to suddenly decide to do Q. In other words, giving your players more choices tends to actually make their choices more predictable.

There is one caveat to the above: Inexperienced players can be overwhelmed with choice. Many videogames and (sadly) many tabletop RPGs move the players through the game like a line attendant at Disneyworld cycling visitors through the rides. If your players have been trained to expect glowing exclamation points over the head of the next person they're supposed to talk to, a branching web of Scenes might simply frustrate them. In that case, it's much better to stick to a linear structure at first, and slowly introduce more choice as the Series progresses. (If you're an inexperienced GM yourself, this approach also has the virtue of easing you into more complex structures over time, too!)

Here is an example of a complex branching Clue Sequence for a Crime Fighting Mission. This Mission has nine Locations and could have as many as 12 Scenes. It would take about four to eight hours to resolve, depending how effectively the heroes play.

BRANCHING CRIME FIGHTING:

★ *Opener (Exposition Scene):* The heroes gather at Location A, where they are briefed by their Organization on a crime that has already occurred at Location B.

★ *Exposition Scene:* The heroes investigate Location B and interrogate any Witnesses there. Depending on the success of these efforts, they may discover Clues that lead to locations, C, D, and/or E.

★ *Action Scene:* While leaving B to travel to C, D, or E, the heroes are attacked by minions of the main villain. (In this case, the minions have no information as to who hired them or why so there is no related Exposition Scene, but it certainly would be possible to include one.)

★ *Branching Scenes:* The heroes' choices will drive them through the branches of the Scene Sequence.
   - ✪ If the heroes visit location C, an Exposition Scene occurs where they can discover Clues to D, E, and/or F.
   - ✪ If the heroes visit location D, an Exposition Scene occurs where they can discover Clues to C, E, and/or G.
   - ✪ If the heroes visit location E, an Action Scene occurs where they confront a challenge left for them by the villain. If they succeed in meeting the challenge, they can discover clues to C, D, and H.
   - ✪ If the heroes visit location F, an Exposition Scene occurs where they can discover Clues to the identity of the Antagonist, but not his whereabouts or plan. They can also discover Clues to G and H.
   - ✪ If the heroes visit location G, an Action Scene occurs where they confront minions of the villain. If they defeat the minions, they can interrogate them and investigate the location. They can discover Clues to the Antagonist's plan, though not his identity or whereabouts, as well as Clues to F and H.
   - ✪ If the heroes visit location H, an Exposition Scene occurs where they can discover Clues to the whereabouts of the Antagonist at location I, but not his identity or plans. They also can discover Clues to F and G.

★ *Triggered Action Scene:* If the heroes spend more than 24 hours in the Branching Scenes, the Antagonist puts his plan into effect at location J. This confronts the heroes with a crisis they are challenged to resolve.

★ *Branching Scenes:* The heroes' choices will drive them through another branching web of possible Clues.
   - ✪ If the heroes resolve the crisis at location J, an Exposition Scene occurs where they discover Clues to the whereabouts of the Antagonist at location I.
   - ✪ If the heroes fail to resolve the crisis at location J, and they haven't identified the whereabouts of the Antagonist at Location G, then the villain wins and escapes to commit further mayhem in the future.
   - ✪ If the heroes visit location I, they proceed to the Resolution.

★ *Resolution (Action Scene):* The heroes confront the Antagonist at Location I in an attempt to bring him to justice.

Here is an example of a straightforward linear Scene Structure for a Crisis Response Mission that has five Locations across eight Scenes, alternating between Action and Exposition. This Mission would take about three to four hours to resolve.

LINEAR CRISIS RESPONSE:

★ *Opening (Exposition Scene):* The heroes gather at Location A, where they are briefed by their Organization that a crisis is ongoing at Location B. The crisis could be a natural disaster, a crime in progress, an inexplicable phenomenon, etc.

★ *Action Scene:* The heroes resolve the ongoing crisis at Location B using their Powers and Skills.

★ *Exposition Scene:* In the aftermath of the crisis, the heroes investigate Location B and interrogate any Witnesses there. They discover Clues that lead them to Location C.

★ *Action Scene:* At Location C, the heroes are confronted by minions of the Antagonist who caused the crisis.

★ *Exposition Scene:* After defeating the minions, the heroes investigate Location C and interrogate the minions they've captured. They discover Clues that reveal the identity of the Antagonist, but not his whereabouts.

★ *Action Scene:* The heroes are alerted to another crisis occurring at Location D. It has been caused by the Antagonist as part of his plan. The heroes are challenged to resolve the Crisis.

★ *Exposition Scene:* In the aftermath of the crisis, the heroes investigate Location D and interrogate any Witnesses there. They discover Clues that reveal the Antagonist's whereabouts at Location E.

★ *Resolution (Action Scene):* The heroes confront the Antagonist at Location E in an attempt to bring him to justice.

REDUNDANT SCENES

When you create a Scene Structure, it's easy to fool yourself that every Clue you place will be discovered and understood, and that your players will follow the narrative thread you've woven like a veritable Sherlock Holmes. This is... not likely. Players are consistently going to miss the obvious and explore the irrelevant. Here's an example of how RPGs tend to really unfold:

Gamemaster: The corpse looks to have been torn apart by a wild animal, but the claw marks are too large for a dog or even a wolf. The victim's clothing is in bloody tatters and even the business card --

Player 1: Hang on, I have to use the rest room.

Idle discussion fills the air for several minutes until Player 1 returns.

Gamemaster: As I was saying, the victim's clothing is in bloody tatters. Even the business card in his pocket is soaked with -

Player 2: The clothing. What was he wearing?

Gamemaster: Um... He was wearing designer blue jeans and a leather jacket.

Player 1: Designer jeans. So he's probably wealthy. Do we think this was a hit for cash?

Player 3: Maybe it was a hit where the assassin uses trained bears.

Player 2: Very clever. It avoids human DNA evidence on the body.

Player 1: I think we should hit up our police contacts to see who has a license for exotic animals in the city.

Player 3: What should we do with the body?

Player 2: We've learned what we came for.

Gamemaster: Is there any beer left? I need a drink.

Player 1: He's upset we figured out his plot already!

In this case, the heroes have missed a really obvious Clue – the business card – and manufactured an imaginary Clue about a hitman who uses trained bears. If there's no other Clues available to lead them to the real Antagonist, then they're likely to fail the Mission. What do you do?

You have three options. First, you can adapt your Mission to use whatever crazy ideas they've come up. You just re-write reality in real time so that there really is a hitman with a killer bear out there. Some GMs are so good at improvising that they can run games without any preparation at all, simply by making up an odd situation and then opportunistically embracing whatever response the players offer. This approach is widely acclaimed within the story games community, where it is considered the height of the art of gamemastering. That said (if the extensive rules on physics haven't already alerted you to this), ***Ascendant*** is not a story game and running it like one would be quite challenging.

Second, you can let them stumble and even fail. Failure in and of itself is not a bad thing; this is a game, and sometimes players lose the game they are playing. The possibility of failure is what gives success its meaning. If the players miss every Clue and blithely disregard every opportunity to meet their objective, then they absolutely should fail. If that means Capital City gets blown up, then so be it. A few million imaginary people suffering imaginary deaths might just be necessary to maintain the integrity of your RPG. You can't make an omelet, etc.

That said, as players in a game, your heroes also deserve a fair shot at meeting the objectives you've put before them. That leads to the third option: plan ahead with redundant Scenes and Clues. It's a good practice to give three Clues for every Scene you expect your players to be clued to. Four is better if your players are inexperienced. You can get away with two Clues per Scene if they're highly experienced.

In the Scene Structure for Branching Crime Fighting, above, the initial Exposition Scene has three Clues, that lead to C, D, and E. Each of those Locations has three Clues, with one leading to a new Location (F, G, or H), and the other offering a second chance to get to C, D, or E. Each of the Locations F, G, or H has one Clue about the identity and plans of the Antagonist, and two Clues that offer second chances to F, G, or H. That might seem like a lot of circularity or redundancy, but it's on purpose. This is another example of how good planning before the game can make running the game much easier.

Let's return to the Mission Synopsis we rolled up earlier (p. 415) and work through the Scene Structure, making sure to have some Redundant Clues. According to our Synopsis, some villains have stolen the flight itinerary of the city's district attorney from the police headquarters as part of a plot to hold him hostage at the airport. The villains have stolen a lot of other data, too, so it's not immediately obvious that the flight itinerary is what they were after. The DA has lately adopted a "tough on superhuman crime" policy that has put a lot of superhumans behind bars. The villains intend to use the hostage to demand the release of their criminal compatriots. Thinking through how it might play in an Issue, we develop our Scene Structure as follows:

★ **Opening (Exposition Scene):** The heroes are summoned to their Organization's base (Location A), where they are briefed by their Organization that there has been a data theft at police headquarters (Location B).

★ **Exposition Scene (Police HQ):** The heroes investigate police headquarters (Location B) and interrogate any Witnesses in order to find Clues. By investigating the data, they can learn three Clues: #1, that the stolen data included this month's flight plans and security details for the district attorney; #2 that the stolen data included a lot of arrest records for ascendants from the last three months; and #3, that the hacker had the password to log into the police server, and from there brute forced his way into the secure database. By interrogating the precinct's personnel, they can learn Clue #4, which is that the precinct janitor's brother is an ascendant recently imprisoned for manslaughter after he used his powers in a bar fight. With a Red success, they might learn Clue #5, that the janitor has an account on an Exodus message board where he shared some passwords he saw on scratch paper at the sysadmin's desk "in case they would be useful to the cause." From here, the heroes' choices will drive them through other branches of the Scene Sequence.

★ **Exposition Scene (DA's Office):** The heroes interview the district attorney and can discover Clue #6, that he has been receiving threatening messages allegedly from Exodus ever since he started his "tough on superhuman crime" campaign. The heroes might use this opportunity to persuade the DA to change his flight plans, or to place themselves on his security detail.

★ **Exposition Scene (City Prison):** The heroes interrogate the recently arrested ascendants and can discover three more Clues. Clue #7 is that many of the ascendants feel they were wrongly imprisoned or given overly harsh sentences because they are superhuman. Clue #8 is that one of them has a brother who is a janitor at the police headquarters (a redundant Clue if they missed #4 that can lead back to the janitor). Clue #9 is that there's a rumor circulating among the inmates that they'll be released soon.

★ **Exposition Scene (Exodus Message Board):** The heroes use the janitor's account to login to the message board. They can discover Clue #10, revealing the details of the planned kidnapping of the District Attorney. On a Red success, they might find Clue #11, detailing the whereabouts of the Exodus safe house from which the operation is being plotted.

From there we can map out a few possible Action Scenes and Resolutions.

- ★ **Triggered Action Scene (Street Ambush):** If the heroes interview the janitor but don't arrest him, or if they interrogate the prisoners at the City Prison, then the villains attempt to ambush the heroes while they are on the streets.
- ★ **Triggered Action Scene (Airport Rescue):** If the heroes fail to figure out either the villain's plans or their whereabouts, the DA is kidnapped. Now the heroes are called on to rescue him and his entourage.
- ★ **Triggered Action Scene (City Prison Rampage):** If the DA is kidnapped and the heroes fail to rescue him, the Mayor panics and gives in to their demands, leading to a rampage at the City Prison.
- ★ **Triggered Resolution (Airport Assault):** If the heroes figure out the villain's plan but not their whereabouts, they can masquerade as the DA and his security detail and turn the tables on the Exodus Kidnappers when they attack at the airport.
- ★ **Triggered Resolution (Exodus Safehouse):** If the heroes learn the villain's whereabouts, they might assault the villains at their lair directly.

Based on this Scene Structure, we'd want to prepare battle maps of the street ambush, the airport, the city prison, and the Exodus safehouse.

MISSION TIMELINE

It's typical for heroes on a Mission to be racing against the clock. For instance, if terrorists are planning to blow up Capital City with an atomic bomb, the heroes need to disarm the bomb before it detonates. If a tsunami is threatening to destroy a coastal town, the heroes have to evacuate the civilians before the tsunami arrives. We call these deadlines the **Mission Timeline**.

Some GMs prefer to have events move at the "speed of plot." Rather than define any particular fixed times for events to occur; the GM just has them happen when it feels dramatic. If the heroes discover the bomb at 4:15pm, they find it set to blow up at 4:20pm and the heroes have 5 minutes to disarm it. If the heroes are skilled or lucky enough discover the bomb at 2:01pm, they find it set to blow up at 2:06pm… and they have 5 minutes to disarm it. If the heroes perform dismally and don't discover the bomb until 8:30pm the next day…. they find it was set to blow up at 8:35pm and still have 5 minutes to disarm it. This style of play is not without its advantages. It's a lot easier to make everything feel dramatic. It can feel anticlimactic to get to the bomb and discover you face no time pressure at all.

But it has disadvantages, too. The most obvious disadvantage is that sometimes the timeline of events is self-evident. If a tsunami is on its way, meteorologists can track its velocity – there's no mystery as to when it's going to hit. This can be overcome with some Hollywood-style hocus-pocus ("the weather satellites have all been destroyed! We're blind as to when it's going to hit!"). Even so, a larger problem remains: The illusion doesn't last.

When the heroes save the day just in the nick of time in Issue #1 of a Series, their players will cheer and feel great about it. But now imagine the heroes have saved the day just in the nick of time for the 10th, 20th, or 50th consecutive Issue in a row. At some point the players are going to catch on and realize "no matter what we do, we always save the day just in the nick of time." Suspension of disbelief is shattered, and with it the sense of excitement and meaningful choice that defines a good RPG.

If you're just running a one-shot Mission for friends, or if you're just starting off and feel like you need to reserve some flexibility while you learn the ropes, there's nothing wrong with having events occur at the "speed of plot." But for long-term play in a Series, it's much better to build your Missions with planned Timelines that can create a sense of verisimilitude in your game world.

Unfortunately, creating a Timeline for a Mission can be challenging. Should the tsunami be 8 hours away when the heroes arrive to help, or 2 hours? Should the Pentagon call them for help 48 hours before the terrorist's demands need to be met, or 24 hours, or 30 minutes? If your Timeline is too short, you've set them up to fail. If you're Timeline is too long, they'll win with ease.

CREATING A TIMELINE

Fortunately, **Ascendant** provides you with the numbers needed to keep the Timeline on track. The biggest time sinks in the game are traveling between Locations and Extended Challenge Checks requiring 1 or more SP to complete. Some Extended Challenge Checks that often come up in Missions are:

★ Investigating Forensic Sites for Clues
★ Questioning Witnesses for Clues
★ Befriending or Intimidating Witnesses
★ Processing Information
★ Saving the Day

Now, the AV of an Extended Challenge Check is always increased by the amount of Time the character spends on the Action. Therefore, by comparing the Attributes of the heroes and the Time in SPs available to them with the DV of the Extended Challenge Check, you can estimate how much Time they'll need for any given Extended Action. With that in mind, just follow these steps to create your Mission Timeline.

1. Start with the first Scene in your Scene Structure.

2. Write down a list of any Extended Challenge Checks the heroes need to make during the Scene in order to complete the Mission. For each Extended Challenge Check, do the following:

   ✪ Assign the Check a Difficulty Value.
   ✪ Look up the Attribute, Power, or Skill used for its Acting Value.
   ✪ Based on that information, decide which hero from your Series is most likely to succeed on the Check, and use his SPs of the appropriate Attribute, Power, or Skill for the Check's AV. (If several heroes could avert the crisis, the AV should be calculated using the best hero's AV plus the appropriate Team Attack bonus.)
   ✪ Subtract the AV from the DV. The result is the Time in SPs required for the heroes to complete the Extended Challenge Check.

3. Looking ahead to the next Scene, determine if the heroes will need to change Location. If so, use the heroes' Speeds to calculate the Time in SPs required for the heroes to travel from the current Location to the new one. Typically heroes either travel at the Speed of the slowest hero or travel on a vehicle together.

4. Convert the Times for the Extended Challenge Checks and for travel from SP into real-world values and add them up. The sum is the amount of time required for the heroes to complete the current Scene.

5. Proceed to the next Scene in your Scene Structure and repeat these steps until the time required for each Scene has been tallied.

Voila! You have a Mission Timeline.

CHALLENGE RATING

Crafting an appropriate set of challenges for a superhero team is no easy task. How many UN troopers is a fair fight for American Eagle? How many Yakuza thugs can Vendetta gun down without breaking a sweat? How long would it take Global Justice Initiative to deal with a city-wide fire? You can use Challenge Rating (CR) to understand the level of difficulty a particular set of Antagonists or Environmental Challenges will confront your heroes with.

CALCULATING CHALLENGE RATINGS

Calculating an Antagonist's Challenge Rating is easy: Just find his CP total on the adjoining Challenge Rating table and use the appropriate value. A character built with 240 CP has a Challenge Rating of 1. This represents a trained combatant, such as a US Army infantry soldier, SWAT trooper, or mob hitman. Characters built with more CP have a correspondingly higher CR.

> Airborne is a 610-CP ascendant with a Challenge Rating of 30. He is personally as powerful as an entire platoon of 30 infantry. Revenant is a 1000-CP ascendant with a Challenge Rating of 700. He's the equivalent of an entire brigade of soldiers.

Calculating an Environmental Challenge's Challenge Rating has three steps. Start by compiling a list of the Challenge Checks associated with the Environmental Challenge. Treat each Challenge Check as an Antagonist with a Power Limit equal to its DV x2. Find the Power Limit on the adjoining Challenge Rating table and write down the Challenge Rating that corresponds to that Power Limit. Then sum all of the Challenge Ratings for the Environmental Challenge and divide the total by 8.

CHALLENGE RATING = CR FOR PL (DV X 2) / 8

Note that in some cases a hero might be so powerful that he can automatically succeed at certain Challenge Checks. Nevertheless, the Challenge Check should be counted; if nothing else it will take up that hero's time during what might be a moment of crisis.

CP	Power Limit	Challenge Rating
121 – 160	8 or less	0.5
161 - 200	9	0.75
201 – 240	10	1
241 – 280	11	1.5
281 - 320	12	2
321 - 360	13	3
361 - 400	14	4
401 - 440	15	6
441 - 480	16	8
481 - 520	17	10
521 - 560	18	15
561 - 600	19	20
601 - 640	20	30
641 - 680	21	40
681 - 720	22	60
721 - 760	23	85
761 - 800	24	120
801 - 840	25	170
841 – 880	26	250
881 – 920	27	350
921 – 980	28	500
981 - 1000	29	700
1001 - 1040	30	1000
1041 - 1080	31	1400
1081 - 1120	32	2000
1121 - 1160	33	2800
1161 - 1200	34	4000
1201 - 1240	35	5600
1241+	36	8000

> The GM is planning an Action Scene in which a bridge has collapsed, sending ten cars (7 SPs of Weight each), two buses (10 SPs of Weight each), and a semi-truck (11 SPs of Weight) into the river below. The heroes are expected to lift the sinking vehicles out of the river.
>
> Lifting an object is a Challenge Check with a DV equal to the Weight of the object. Therefore the Action Scene presents the heroes with 13 Challenge Checks with DVs of 7 (x10), 10 (x2), and 11. Each Challenge Check is treated as an Antagonist with a Power Limit equal to its DV x2, yielding Power Limits of 14 (x10), 20 (x2), and 22. The Challenge Rating is therefore [(4 x 10) + (30 x 2) + (60)] / 8 = 20. The collapsing bridge will be about as challenging to deal with as a battle with an ascendant with a Power Limit between 19 and 21, or around 561 to 680 CP.

CHALLENGE RATING BUDGET

The **Challenge Rating Budget** determines the total of the Challenge Ratings of all Antagonists and Environmental Crises that will appear during the Mission. To calculate your Mission's Challenge Rating Budget, first add up the Challenge Rating of all of the heroes expected to be participating in the Mission, then multiply that total by the number of Action Scenes in the Mission. Increase the Challenge Rating Budget by up to 25% for a difficult Mission or decrease it by up to 25% for an easy Mission.

CHALLENGE RATING BUDGET = (COMBINED CHALLENGE RATING OF ALL HEROES) X (NUMBER OF ACTION SCENES) X (0.75 – 1.25)

Allocate a portion of the Challenge Rating Budget to each Action Scene. It's typical for the earlier Action Scenes to be budgeted with less of the Challenge Rating Budget while the later Action Scenes have more, to create rising difficulty as the Resolution nears, but this is not mandatory. Spend the Challenge Rating Budget for each Action Scene to purchase one or more Antagonists and/or Environmental Challenges that will appear in that Scene.

The Heroes deployed on a Mission include Airborne (Challenge Rating 30); Shadowmancer (Challenge Rating 60); Necrotronic (Challenge Rating 30); and Weatherman (Challenge Rating 20). The combined Challenge Rating of all the heroes is 30 + 60 + 30 + 20 = 140. In a Mission with three Action Scenes, the Challenge Rating Budget is 420. The GM might adjust that to between 315 and 525.

Assume the first Action Scene is budgeted 120 points of Challenge Rating. The GM might confront the heroes with a company of 120 US Army soldiers of Challenge Rating of 1 each; a platoon of 60 soldiers of Challenge Rating 1 each led by an ascendant with a Challenge Rating of 60; a single ascendant with a Challenge Rating of 120; or any combination of Antagonists that yields a total Challenge Rating of 120. The GM could also, e.g., spend 17 points of their Challenge Rating Budget to introduce the collapsing bridge Environmental Challenge (from the example above) into the Scene, and then spend the remaining 103 points of the Challenge Rating Budget on Antagonists.

Designer's Note: Why is the Challenge Rating of the heroes used to determine the Challenge Rating Budget they face? After all, *Ascendant* is not a story game, and the game world is largely treated as an objective place that exists independently of the heroes. Wildfires don't retroactively determine their intensity by how skilled the firefighters are! Don't worry, there's a good reason for this incongruity. The Challenge Rating Budget rules are built around the idea that the heroes are working for an Organization that sends them on Missions. A typical Organization doesn't want its operatives to fail; it sends out the right group of heroes for any given job. So it's not that the Missions are mysteriously engineered to challenge the particular group of heroes featured in the Series; rather the Organization is deliberately picking the right heroes for the right Missions, those within their capabilities. That's why each Mission's Challenge Rating Budget is set to within 25% of heroes' own Challenge Ratings.

If you're running a Series with different assumptions, Challenge Rating might end up being a much less useful tool. For instance, if the Organization you're using only has one team of operatives (the player characters), then the heroes will likely face a wider array of Missions. If you're running a sandbox-like Series where the heroes are choosing their own Missions, then there is likely to be little to no correlation between the heroes' Challenge Ratings and the Challenge Ratings of their Antagonists and Environmental Challenges. In either case the heroes might find some Issues to be cakewalks and others to be impossibly hard.

CHALLENGE RATING RATIO

Challenge Rating Ratio provides a barometer for the GM to assess how difficult a particular Action Scene will be for the heroes. Divide the Challenge Rating of the Antagonists and/or Environmental Challenges in the Scene by the total Challenge Rating of the heroes and round to the nearest ratio on the table below.

CR Ratio	Description
1:3	All Too Easy: The Antagonists are nearly certain to be defeated and/or Environmental Challenges met in 1-2 Pages.
1:2	Inadequate Challenge: The Antagonists are likely to be defeated and/or Environmental Challenges met in 2-3 Pages.
2:3	Minor Challenge: The Antagonists are likely to be defeated and/or Environmental Challenges met in 3-4 Pages.
1:1	Equal Challenge: It's 50/50 as to whether the heroes save the day or lose to the Antagonists or Environmental Challenge.
3:2	Serious Challenge: The heroes might lose in 4-5 Pages. Winning is possible but not easy.
2:1	Major Challenge: The heroes are likely to lose in 3-4 Pages. Winning is tough.
3:1	Critical Challenge: The heroes are likely to lose in 2-3 Pages. Winning is very tough.
4:1	Impossible Challenge: The PCs are nearly certain to lose in just 1-2 Pages.

Airborne, Shadowmancer, Necrotronic, and Weatherman have a combined Challenge Rating of 135. A platoon of 60 soldiers (Challenge Rating of 60) has a Challenge Rating Ratio of 60/140 or ~ 1:2. The soldiers will likely be defeated in just two to three Pages. If the soldiers were led by an ascendant with a Challenge Rating of 120, then the Challenge Ratio would be 180/140 or ~ 3:2. That would be a serious challenge and the heroes might very well lose.

CHALLENGE RATING OF RECURRING ANTAGONISTS

Sometimes the same Antagonist is likely to show up multiple times in the same Mission. For instance, if an Antagonist has a Power that lets him teleport to safety anytime he's knocked out, he could reappear in several Action Scenes. If an Antagonist is expected to fight vigorously in several Scenes, his Challenge Rating must be deducted from the Challenge Rating Budget for each of the Scenes.

Cabalist is a villainous ascendant with a Challenge Rating of 85. The GM's Scene Structure plans for Cabalist to appear as an Antagonist in three Action Scenes – a fight at the Statue of Liberty, a fight at the Washington Monument, and a fight at the Golden Gate Bridge. The GM must spend a total of 255 points from their Challenge Rating Budget.

Other times an Antagonist is likely to fight for just a short time in a Scene and then make an escape so he can reappear later. Deduct one-half his Challenge Rating from the Challenge Rating Budget for the Scenes he'll flee, and deduct his full Challenge Rating from any Scenes that he'll stick around to fight in.

The GM is planning an Action Scene with a Challenge Rating Budget of 60. He knows BFF (Challenge Rating 60) will be present with some mind-controlled minions. But BFF won't stick around to fight to the death – he'll leave that to his minions. The GM deducts ½ of BFF's Challenge Rating from the Scene's Budget. The GM spends the remaining 30 Challenge Rating on 10 elite hitmen (Challenge Rating 2 each) and a minor ascendant (Challenge Rating 10).

Designer's Note: A typical battle between characters of equal Power Limit takes about eight Pages to resolve. A villain who departs a Scene after three or four Pages is therefore only contributing to half of that Scene's Challenge Rating. For the same reason, a single Challenge Check for an Environmental Challenge has one-eighth the Challenge Rating as an Antagonist, because it takes eight Pages to defeat an Antagonist and just one Page to resolve a Challenge Check.

CHALLENGE RATING OF OBJECTS

Static Objects are never Antagonists. They're the innocent bystanders or objects. Sometimes they might contribute to an Environmental Challenge, of course, but that's already been "paid for."

Autonomous Objects can be Antagonists. Simply use the object's CP Cost to find its Challenge Rating on the table above, then expend the corresponding amount from your Challenge Rating Budget.

Worn Objects and any objects Crewed exclusively by one character are never Antagonists. However, they can affect the Challenge Rating of the character wearing or crewing them. If the object's CP Cost equals or exceeds the character's CP Total, use the object's Challenge Rating based on its CP Cost in lieu of the character's Challenge Rating.

> A US Army soldier has a CP Total of 240 and a Challenge Rating of 1. If he is equipped with Ballistic Armor (65 CP Cost) and an Assault Rifle (73 CP), it has no effect on his Challenge Rating because neither object's CP Cost exceeds his CP Total.

Crewed Objects with two or more Crew can be Antagonists. Use the object's CP Cost to find its Challenge Rating on the table above, then add it to the Challenge Rating of the Crew.

> An M1A2 Abrams tank costs 581 CP, giving it a Challenge Rating of 20. It is crewed by four soldiers – a tank commander (Challenge Rating of 1), a driver (Challenge Rating of 1), a gunner (Challenge Rating of 1), and a loader (Challenge Rating of 1). The M1A2 has a total Challenge Rating of 24.

CHALLENGE RATING OF ALLIES

Sometimes, the heroes might have the assistance of friendly NPCs during a particular Scene. For instance, if they're trying to put out a blaze, there might be firefighters helping them; if they're trying to apprehend a terrorist, they might get help from SEAL Team Six. Allied NPCs reduce the effective Challenge Rating of the Antagonists or Environmental Challenges in a Scene by their own Challenge Rating.

> During a hostage crisis brought on by BFF (Challenge Rating of 60), the heroes are assisted by eight SWAT officers from the Capital City Police Department. Each of the eight SWAT officers has a Challenge Rating of 1, so the overall Challenge Rating of the Scene is reduced by 8 from 30 to 22.

ASSIGNING HERO POINTS TO ANTAGONISTS

By default, antagonists have Hero Points equal to their 2 x (Power Level – 12). For Autonomous Objects, use the Power Level of a hero of closest equivalent Challenge Rating to determine Hero Points. For Crewed Objects, use the Power Level of a hero with a Challenge Rating equal to the sum of the crew's Challenge Rating. Do not use the crewed object's CP or CR.

> An M1A2 has four crew with CR 1 each, for a total CR of 4. The Power Level of a hero with the closest equivalent CR would be Power Level 14. Therefore the M1A2 has (14-12) x 2 = 4 Hero Points.

When the antagonists are of approximately equal power and number to the heroes, this will yield satisfying gameplay. If the antagonists are grossly outnumbered or grossly underpowered relative to the heroes, there will be a Hero Point deficit and you might wish to adjust the Hero Point totals. Find the Hero Point deficit by subtracting the number of Hero Points available to the antagonists from the number of Hero Points available to the heroes. Then simply allocate the deficit to the antagonists as desired.

> The Heroes deployed on a Mission include Airborne (16 Hero Points); Shadowmancer (20 Hero Points); Necrotronic (16 Hero Points); and Weatherman (14 Hero Points), with a combined 66 Hero Points. The combined Challenge Rating of all the heroes is 30 + 60 + 30 + 20 = 140. In a Mission with three Action Scenes, the Challenge Rating Budget is 420.
>
> Assume the heroes are confronted by a company of 120 US Army soldiers of Challenge Rating of 1 each (CR 120 total); a platoon of 5 M1A2 tanks with Challenge Rating of 24 each (CR 120 total); a platoon of 30 soldiers of Challenge Rating 1 each, led by an ascendant with a Challenge Rating of 60 (CR 90 total); and a single ascendant with a Challenge Rating of 85, for a total CR Budget of 415. The CR 85 ascendant has 22 Hero Points. The CR 60 ascendant has 20 Hero Points. The 5 tanks each have 4 Hero Points. In total, the antagonists have 22 + 20 + (5 x 4) = 62 Hero Points. The Hero Point deficit is 66 – 62 = 4 Hero Points. The GM decides to assign one of the US Army soldiers, who is equipped with a man-portable rocket launcher, 4 Hero Points.

ARCS

Once you and your players have completed a few Issues of play, it's time to introduce your first Arc into the Series. An Arc is a collection of four to six Issues which typically involves discovering and confronting a set of Antagonists and either solving a crime, averting a crisis, or completing a mission of some sort. All of the Issues are thematically linked into an overall **Meta-Plot** which is the main storyline of the Arc.

To get your Arc going, start by rolling or choosing a Meta-Plot from the table below, or making up one of your own. Flesh it out with a few sentences. A Meta-Plot describes what world-shaking calamity will happen if the heroes do nothing. It does not describe what the heroes have to do. Remember that you cannot control what the heroes do! Hence "the heroes topple the US government in a coup" is not a good Meta-Plot because you're deciding your players' actions for them. "An alien mind-controller seizes control of the US government" is a good Meta-Plot. One response to this Meta-Plot by the heroes might be to topple the government in a coup, but they might also destroy the alien and reinstate the lawful government, join the alien, etc.

Once you have chosen or created a Meta-Plot, the next step is to sketch out how the Issues of the Arc connect together. As with a Scene Structure, you ideally want an open-ended and branching structure to give your players the maximum freedom to interact with the game world. You don't want to over-invest your time and energy in a straightforward linear "adventure path" because you foreclose the improvisational and dynamic outcomes that come with free player choice. We offer the following as a template for new GMs who want a simple framework for a five-Issue Arc.

Roll (1d20)	Meta-Plot
1	An advanced AI gains sapience and begins to exterminate human beings.
2	A calamitous solar flare en route to earth threatens an end to technological civilization.
3	The dead rise, and a zombie apocalypse appears imminent.
4	A dimensional rift opens and issues forth monsters.
5	The discovery of an ancient artifact threatens to shift the global balance of power.
6	The evil counterparts of the heroes arrive from a mirror universe to cause havoc.
7	A catastrophic accident creates a new ascendant with god-like abilities and devilish motives.
8	An invasion from another dimension, plane of existence, or point on the timeline endangers the globe.
9	A kaiju or other being of great power awakens, and in its wake devastation follows.
10	The arrival of unidentified aerial phenomena is the harbinger of an alien invasion.
11	A new organization of villainous ascendants mobilizes to carry out a nefarious scheme of world conquest.
12	A powerful supervillain who escapes from prison or returns from the dead now seeks his revenge.
13	The leaders of an important nation-state fall under the control of, or are replaced by, evil ascendants.
14	A powerful nation-state deploys ascendant soldiers into a battle zone, escalating the globe toward war.
15	A pandemic of unknown origin begins to spread quickly, transforming all those it infects into monstrous ascendants.
16	A nearly omnipotent being creates an extradimensional "arena" where captured ascendants are forced to fight for survival.
17	A beloved hero unexpectedly turns to evil and begins to exterminate the people he once protected.
18	An arsenal of nuclear weapons is seized by super-powered terrorists who are intent on destroying the liberal world order.
19	The largest prison break in history unleashes scores of villainous ascendants into the world.
20	A new law that imposes harsh restrictions on ascendants makes former enemies into allies and vice versa.

★ Issue 1 - The Teaser: The first Issue of the Arc begins with an ordinary Mission with no obvious ties to the Meta-Plot. However, in some of the Scenes of this Issue, you include a few extra Clues, NPCs, or background chatter that is not tied to that Issue's Mission. News headlines and TV segments are often a good way to introduce information in the background and help make the world feel alive. However the information is given to the heroes, it's important that most of the material be unrelated to the Arc. Amidst these red herrings, you include one or two hints that foreshadow the Arc to come.

★ Issue 2 – The Inciting Incident: In the second Issue, the heroes come face to face with a crime, catastrophe, or other event that harkens back to the foreshadowing from Issue 1. In the course of this Issue, the heroes can find Clues to the existence of some larger Meta-Plot, but details of what's going on remain hazy.

★ Issue 3 – The Confrontation: In the third Issue, the heroes are directly confronted with dire threats generated by the Meta-Plot. If they fail, then there may be casualties and collateral damage. In the course of this Issue, the heroes can test their mettle against their Antagonists and find Clues that reveal what's actually going on.

★ Issue 4 – The Intensification: In the fourth Issue, the stakes get higher as the Antagonists show their true power. If the heroes lose now, the consequences will be dire! Even if the heroes win, they may suffer casualties; collateral damage to the game world may be devastatingly high. Through hard fighting and clever role-play, however, the heroes can find Clues to reveal how to end the danger.

★ Issue 5 – The Climax: In the final Issue, the heroes use what they've learned in prior Issues to deal with the Antagonist and Environmental Challenges, bringing the Meta-Plot to its climactic finale.

You can use the Random Mission Synopsis tables to brainstorm for ideas for each Issue of the Arc, or just create them from scratch. You can also scramble up the sequence of the Arc, or interrupt it with some unrelated Missions, etc. These are just guidelines!

Let's sketch out an Arc. We start by rolling on the Meta-Plot table. A result of 8 indicates that "An invasion from another dimension, plane of existence, or point on the timeline endangers the globe." We decide that the invasion occurs when a "consciousness raising" event held by the Church of Ascension actually makes contact with a race of psychic monsters from another plane of existence.

Issue 1 is a standard Mission – it could even be the district attorney kidnapping we rolled up earlier. Whatever the Mission is, we make sure that one of the NPCs encountered in the Issue is an evangelist for the Church of Ascension who asks them for a donation to help pay for the cost of the "Global Consciousness Meditation" being held at Churches worldwide next week. We also include a few other random NPCs, news blurbs, and so on to distract the heroes' attention, such as a TV newscaster talking about "a Florida man who claims to have conversed with an ascendant shark;" an interview request by a journalist who wants their thoughts on the rising crime rates in the nation; and a stern warning from the leader of their Organization to be careful, as casualties have been high lately. All of these facets serve to make the world feel alive and in motion.

In Issue 2, the heroes are called to investigate a massacre at their local Church of Ascension that took place during the Global Consciousness Meditation. Among the dead is the evangelist they met in Issue 1. By investigating the forensic site, they can get Clues revealing that something or someone entered the Church by means of portal or teleportation and proceeded to slaughter most of the membership. By interviewing the sole survivor, they can get Clues about the assailant's disturbing appearance and powerful abilities, as well as learn that it left the Church on foot after killing the members. Eventually, the heroes can track the creature into the city sewers and defeat it. In the aftermath, an autopsy reveals alien body chemistry unlike anything seen in any Terran organism.

In Issue 3, the heroes are confronted by an attack on their city by a horde of the monsters they encountered in Issue 2. The monsters are bent on destruction, and the heroes have to make difficult choices between fighting the creatures and saving civilians from environmental challenges caused by collateral damage. Eventually the heroes can triangulate to the epicenter of the attack. There they discover a boss monster wielding a strange rod and guarding an interdimensional portal. A distinctive obelisk that resembles the rod is visible on the other side of the portal. Waves of reinforcements pour through the portal to support the boss monster. If the heroes approach the portal, the boss monster uses the rod to close it. If the heroes kill the monster, they can recover the rod.

In Issue 4, the heroes are likely to examine the strange rod they (may have) found in Issue 3, investigate the sites of the heaviest fighting to search for Clues, and help out with recovery and repair efforts. These tasks might be set aside when reports come in of monsters attacking in numerous cities worldwide. As the heroes are the only ones with experience in fighting the creatures, they are called on by several mayors and city councils to help. If they don't, numerous cities fall to the alien invaders. If they do, they face several scenes of hard fighting. When they get to the portal in one or more of these cities, they discover the same distinctive obelisk is visible at the far side of the portal. The heroes might end this Issue by closing all the portals, or by passing through one of the portal themselves, or by permitting interdimensional armageddon.

In Issue 5, the heroes have the opportunity to carry the fight to the invaders, either because they went through the portal in Issue 4, or because they've learned how to use the rod they found in Issue 3. In their counterattack, they have to tackle waves of monsters, a ruling council of boss monsters, and the obelisk itself, a semi-sentient artifact that serves as a psychic antenna that can "tune in" to other planes of existence. Alternatively, if things have taken a different course in earlier Issues, Issue 5 might see the heroes called to protect a retreating human population from the invading alien hordes or asked to broker a peace deal with the invaders, or any other resolutions. Since we don't know for sure, we don't spend too much time overthinking it right now.

CHARACTER ADVANCEMENT

The hero's journey is embedded in the framework of escapist fiction. Virtually every fantasy story revolves around a person rising from ordinary to extraordinary in order to, and by, facing challenges. In comic books, however, the hero's journey is somewhat compromised by two factors. First, the hero's transformation from ordinary to extraordinary has usually either already happened or happens in the first issue of the hero's comic book. Second, the serial nature of comic books precludes the possibility of a journey ever reaching its destination. Conan rises to become king of Aquilonia to wear his crown on a troubled brow, but comic book heroes keep fighting the same villains in the same cities for decades. Nevertheless, some comic book heroes do show some signs of what in game terms is called Character Advancement. The most famous example is a well-known hero who began his career able to leap tall buildings and run faster than a locomotive and eventually developed the ability to fly at the speed of light and fire lasers from his eyes. We offer these Character Advancement rules to allow the heroes to rise in power and ability over time.

AWARDING CHARACTER POINTS

At the end of each Issue, you should award Character Points to all characters who participated in the Issue. The CP Award for an Issue is the sum of its **Action Scenes Award** and its **Mission Resolution Award**.

CR Ratio	Description	CP Award
1:3	All Too Easy	0.33
1:2	Inadequate Challenge	0.5
2:3	Minor Challenge	0.66
1:1	Equal Challenge	1
3:2	Serious Challenge	1.33
2:1	Major Challenge	2
3:1	Critical Challenge	3
4:1	Impossible Challenge	4

ACTION SCENES AWARD

The Action Scenes Award is earned by overcoming Antagonists or Environmental Challenges. For each Action Scene, find the Challenge Rating Ratio by dividing the Challenge Rating of the Antagonists and/or Environmental Challenges in the Scene by the sum of the heroes' Challenge Ratings. Consult the CP Award by CR Ratio table and write down the CP award for that Scene. Sum up the total for all the Action Scenes.

ACTION SCENES AWARD:
SUM OF CP AWARD FOR EACH ACTION SCENE

The heroes have a total Challenge Rating of 135. The Issue they have just completed had three Action Scenes. The first Action Scene was an Inadequate Challenge against 60 soldiers. The second Action Scene was a Minor Challenge against 100 soldiers. The last Action Scene was a Serious Challenge against a company of main battle tanks led by an ascendant. The Action Scene Awards are 0.5, 0.66, and 1.33, for a total of 2.5. The heroes each receive 3 CP for participating in the Issue.

Defeated Heroes: If the heroes fail to overcome a particular set of Antagonists or Environmental Challenges, reduce the Action Scenes Award by the amount for that Scene.

Imagine that the heroes had been defeated in the last Action Scene. They would lose the 1.33 CP award for beating the tanks, and instead would net only 1.16 CP, rounded to 1 CP.

MISSION RESOLUTION AWARD

The **Mission Resolution Award** is earned by accomplishing the Mission, regardless of the means or method used. Even if the heroes lose every confrontation with the Antagonists, fail at overcoming various Environmental Challenges, and barely pull a victory out of their pocket in the last Scene, they'd still get the Resolution Award (though they wouldn't get the reward from the Action Scenes they lost). Conversely, the heroes may earn several Action Scene Awards and not get a Mission Resolution Award, if they didn't complete the Mission that Issue or if they failed it utterly.

The Base Mission Resolution Award is 3 CP for each Issue required to accomplish the Mission. This total is then modified by the **Region Modifier** and **Severity Modifier**, shown below. The minimum Mission Resolution Award is 1 CP.

The **Region Modifier** is an adjustment to the Crisis Award determined by the area of the game world likely to be affected by the crisis. Note that the Region Award is not based on the severity of the crisis, merely its extent. An outbreak of swine flu in Delaware qualifies for a State/Province modifier, while a deadly bomb on a bus receives the Community modifier, even though the latter is more destructive to those who encounter it. Conversely, the **Severity Modifier** is an adjustment to the Crisis Award determined by the severity of the consequences that will be suffered by those the crisis effects.

Region	Example	Region Modifier
Individual	A private citizen will be beaten or murdered.	x0.16
Community	A local church will be vandalized or blown up.	x0.33
Borough	A neighborhood will be burned by an arsonist or suffer a slate of burglaries.	X0.66
City/County	A city will be flattened by a giant monster or fall under the control of a villain.	x1
State/Province	A state will be quarantined by a plague or destroyed by a MIRV.	x1.33
Nation/Country	An entire country will suffer an EMP attack or drown in a tidal wave.	x1.66
Globe	A gamma ray burst will end all life on earth or a super-volcano cause global cooling.	X2

Severity	Example	Severity Modifier
Trivial	Minor property damage or loss.	x0.33
Minor	Some property damage and/or physical harm with risk of loss of life.	x0.66
Moderate	Extensive property damage and some loss of life.	x1
Serious	Extensive irreparable property damage and extensive loss of life.	x1.33
Awful	Catastrophic destruction, obliteration, and/or fate worse than death.	X1.66

Let's consider a single-Issue Mission that involves preventing a nuclear bomb from being detonated in the middle of Capital City, damaging much of the metropolitan area and killing many people. The Base Mission Resolution Award is 3. The bomb will affect all of Capital City, so the modifier is x1. There will be extensive and irreparable property damage and massive loss of life, so the Severity Modifier is x1.33. The total Mission Resolution Award is therefore 3 x 1.33 = 4 CP.

Note that if the bomb were only powerful enough to damage one city block, the Region Modifier would have been x0.5 (Community). Conversely, if the bomb would cause the earth's core to detonate, the Region Modifier would be x2 (Globe).

Likewise, if the bomb were an antimatter device that would entirely obliterate Capital City and every living thing within it, the Severity Modifier would be x1.66. If the bomb were instead a stink bomb that made the city smell bad, the Severity Modifier would be x0.33.

A Mission to prevent an antimatter device that would cause the earth's core to detonate would be worth 3 x 2 x 1.66 = 10 CP.

ADJUSTING AWARDS TO ACCOUNT FOR DRAWBACKS

Sometimes, the heroes might lose a Perk (such as Authority) or be afflicted with a new Drawback if they are victorious in a particular Action Scene or Mission. If this is inevitable, increase the Action Scene Award or Mission Resolution Award by the CP value of the Perk they lose or the Drawback they are afflicted with.

The heroes are assigned a Mission to take down the boss of a powerful crime family to prevent him from selling US military secrets to Russia. The Mission has a Region Modifier of 1.66 and a Severity Modifier of x1, so it's worth 3 x 1.66 x 1 = 5 CP. However, the heroes will thereafter be actively targeted for vengeance by the crime family, a state of affairs best represented by the Hunted Drawback (Base Refund of 5 CP for being actively pursued by a secret organization). Therefore the Mission Resolution Award should be increased by the 5 CP Refund of Hunted, to a total of 10 CP.

In other cases, the heroes might lose a Perk or be afflicted by a new Drawback if they are defeated during a particular Action Scene or Mission, but not face any such consequence if they succeed. In that case, increase the Action Scene Award or Mission Resolution Award by ½ the CP value of the Perk or Drawback.

The heroes have accidentally triggered mystical music that will awaken the Great Old Ones if they don't silence it within the next 24 hours. If the heroes fail to stop the music, they will be afflicted with a 2 CP Dark Secret Drawback – the dark secret being that they're the ones who woke up the Great Old Ones. Their Mission Resolution Award for silencing the mystical music should be increased by ½ x 2 = 1 CP because of this risk.

Situations may also arise in which particular Action Scenes or Missions may result in the characters losing one Perk only to gain another or losing one Drawback only to be afflicted by another. In that case, increase or decrease the Action Scene Award or Mission Resolution Award by the difference in value of the Perks and Drawbacks before and after.

SPENDING CHARACTER POINTS

Heroes who receive Character Points can expend them between Issues to increase their Attributes; purchase new Powers, Skills, or Perks; increase existing Powers, Skills, or Perks; or buy off Drawbacks. The following rules apply:

★ All character advancement must be justifiable by the rationale for the character and events in the game, and all advancements are subject to your GM approval. A player may shift CP around as their character advances with GM approval of the rationale.
★ The CP costs for character advancement are the same as those for character creation.
★ Players can save unspent CP if desired. Saving CP allows a character to accumulate CP over several Issues in order to afford an expensive new Power or Skill or substantially increase an existing Attribute.
★ As a character accumulates additional CP, his CP total should be tracked on an ongoing basis. Conversely, as a character accumulates new Drawbacks, his CP total should be reduced by the CP Refund of the Drawback. His Power Limit should be recalculated based on his new CP total each time he gains CP. When a character's Power Limit increases, his pool of Hero Points increases as well.
★ If a character increases his SP score in a Primary Attribute, any Secondary Attributes, Variable Attributes, Powers, or Skills that use that SP score as their Base are increased at no cost.
★ If one or more Powers have Variable Costs that adjust based on the SP score of a Primary Attribute, and the Primary Attribute is increased, the character receives a CP refund that must be immediately spent. If not spent, the refund is lost.
★ A character cannot exceed his current Power Limit when spending CP to advance his character.

Skyfire is a flying flamethrower who began play as a 630 CP character with 10 SPs of AGI, 4 SPs of MIG, 12 SPs of Aerial Combat, and 10 SPs of Thermal Blast. Her Power Limit was 20. Now she has accumulated 20 CP over several Issues, bringing her to 650 CP. That raises her Power Level to 21 and increases her number of Hero Points by 2. She uses the 20 CP to increase her AGI from 10 to 11 and her MIG from 4 to 5.

The Base Score for Aerial Combat is AGI, so when she increases her AGI from 10 to 11, her Aerial Combat automatically increases from 12 to 13. The Variable Cost for her Blast was 1 CP per SP up to her MIG and then 5 CP per SP thereafter. When she increases her MIG from 4 to 5, she therefore gains a refund of 5 – 1 = 4 CP. She has to use this refund immediately on Perks. She invests the 4 CP into the Famous Perk, increasing her Reputation by 2 SP.

CHARACTER ADVANCEMENT IN KIND (OPTIONAL)

Character Points are the standardized "currency" of character advancement. But nothing stops from you offering an "in kind" award in lieu of or in addition to part or all of the Character Point you'd normally award for an Issue of play. Common "in kind" awards include:

★ Acquiring a Headquarters
★ Gaining Authority
★ Gaining Contact(s), Fame, Minion(s), or Sidekick(s)
★ Learning a new Combat Maneuver
★ Losing a Drawback such as Dark Secret, Hesitant, Hunted, Unheroic, Unlikeable, or Weak Willed

When you offer character advancement in kind, you can reduce the Action Scene Award or Mission Resolution Award by the CP value of the in-kind award. You can also, if you prefer, offer in-kind rewards in addition to the CP Awards, simply based on the outcome of the player's activities. This can result in somewhat faster character advancement. This latter approach works well if you're playing with "Them's the Breaks" character degradation (p. 440) and "A Dead Hero is Dead" character lethality (p. 443); it brings what might be called an "old school" mentality to the game, where once the game has begun, anything can happen without regard for any meta-game factor such as Character Point balance.

Whether CP awards, in-kind rewards, or a mix of both are right depends on your GM style and your players' tastes. The advantage of in-kind awards is that they allow you create more organic, plausible character advancement that is keyed to the events that unfold in particular Issues. It also reduces the burden on the players, as they don't have to worry about how to optimize their CP awards to best improve their character. The disadvantage to in-kind awards is that they reduce the players' control over their characters' advancement.

> The heroes have been assigned a Mission to stop Maximum Leader from destroying California with The Deplatformer. By the numbers, this Mission should include 3 CP in Action Scene Awards and a 7 CP Mission Resolution Award, for 10 CP total. The GM could decide to use an in-kind award instead. For instance, the grateful state of California might give the heroes a headquarters (10 CP value per hero) to operate from in the state.

DYNAMIC REPUTATION ADVANCEMENT (OPTIONAL)

Instead of requiring your players to expend CP buying the Famous Perk to increase their character's Reputation or buying off the Notorious Drawback to reduce their Notoriety, you can instead have Reputation and Notoriety be dynamic values that change over the course of the Series.

When using Dynamic Reputation Advancement, each player character is assigned a **Series Reputation** and **Series Notoriety** attribute. A character begins play with a Series Reputation base score equal to his Reputation (e.g. CHA as modified by the Famous Perk) and with a Series Notoriety of 0. (Player characters do not gain CP for taking the Notorious Drawback if these rules are

used.) Thereafter, at the end of each Mission, you as GM will increase or decrease each character's Series Reputation and/or Series Notoriety based on their respective actions.   Follow these steps:

1. Multiply the Mission Resolution Award for the Mission by 5 to get the character's Reputational Impact score of between 1 and 30. Increase the character's Reputational Impact score by 5 if he has Leadership (because leaders get all the attention) and by 5 if he has Sex Appeal (because...you know why).

2. Determine whether the character has been publicly credited with the mission succeeding. If yes, proceed to step 3. If no, reduce his Series Reputation by 1 SP and proceed to step 4.

3. Compare the character's Series Reputation score to the Reputational Impact score.

    ✪ If the character's Series Reputation is less than half the Reputational Impact, his Series Reputation increases by enough to equal half the Reputational Impact or by 2 SP, whichever is greater. (This represents the sudden rise to fame of a little-known hero who saves the day.)
    ✪ If the character's Series Reputation is less than or equal to the Reputational Impact, his Series Reputation increases by 1 SP if it is less than 25.
    ✪ If the character's Series Reputation is greater than the Reputational Impact, but not double it, his Series Reputation increases by 1 if it is less than 20.
    ✪ If the character's Series Reputation is double or more the Reputational Impact, his Series Reputation is unchanged.

4. Determine whether the character has been publicly credited with the mission failing and/or with Severe or Catastrophic casualties or damage to a Region not less than one step smaller than the Region the Mission affected. If yes, proceed to step 5. If no, reduce his Series Notoriety by 1 SP and skip to step 6.

5. Compare the character's Series Notoriety score to the Reputational Impact score.

    ✪ If the character's Series Notoriety is less than half the Reputational Impact, his Series Notoriety increases by enough to equal half the Reputational Impact or by 2 SP, whichever is greater. (This represents the sudden rise to infamy of a little-known hero who loses the day.)
    ✪ If the character's Series Notoriety is less than or equal to the Reputational Impact, his Series Notoriety increases by 1 SP if it is less than 25.
    ✪ If the character's Series Notoriety is greater than the Reputational Impact, but not double it, his Series Notoriety increases by 1 if it is less than 20.
    ✪ If the character's Series Notoriety is double or more the Reputational Impact, his Series Notoriety is unchanged.

6. Record the character's new Series Reputation and Series Notoriety on his character sheet.

Changes to a character's Series Reputation or Series Notoriety do not affect the character's CP total, Power Limit, or actual Reputation and Notoriety scores.

When using Dynamic Reputation Advancement, a character cannot expend CP buying the Famous Perk or buying off the Notorious Drawback. Instead, he must change these scores in game through doing Missions and publicly getting credit for them. He also gains no CP from taking the Notorious Drawback during character creation or thereafter. (Note that it's quite easy to become Notorious!)

> Aurora was just seen flying off into the Pacific to destroy The Deplatformer super-bomb that might have leveled California (Mission Resolution Award of 7 CP), hurray! Unfortunately while doing so, she accidentally blew up the Golden Gate Bridge. What's the impact on her popularity? Aurora began the Mission with a Series Reputation of 21 and a Series Notoriety of 0. The Reputational Impact of the Mission is 7 x 5 + 5 (because she's got Sex Appeal), or 40. She was publicly associated with the Mission succeeding, so we compare her Series Reputation with the Reputational Impact. The Reputation Impact is greater than her Series Reputation, so she gains 1 SP.
>
> Now we check the impact on her notoriety. She was publicly seen blowing up the Golden Gate Bridge, so we compare her Notoriety with the Reputational Impact. Her Series Notoriety of 0 is much less than half the Reputational Impact, so her Series Notoriety is increased by 20. Ouch! She now has 100 million fans (Series Reputation 22) for saving California, but 25 million haters (Series Reputation 20) for accidentally blowing up San Francisco's most famous landmark.

RECOVERING HERO POINTS

At the end of each Issue, characters recover 5 spent Hero Points per CP they have earned that Issue. Characters who do not earn any CP during an Issue do not recover any spent Hero Points.

Designer's Note: Many games that use Hero Points (or Force Points, Luck Points, Bennies, etc.) allow the player characters to recover their spent points at the start of each new game session. However, session-based recovery of Hero Points has the unfortunate side effect of encouraging the players to meta-game. For instance, imagine that a group plays regularly from 7PM to 11PM each week. It's 10PM and the player characters have learned the location of the enemy's base. But they've spent all their Hero Points. Therefore they decide to procrastinate on trivial tasks in order to "run down the clock" on that evening's session of play, preferring to confront the villain with their Hero Points replenished. This is meta-gaming; "sessions of play" or Issues exist for the players, not the characters.

To partly address this problem, Hero Point replenishment in *Ascendant* is tied to earning Character Points. In the example at hand, the player characters might have earned, say, 2 CP from their gameplay so far, but they could expect to earn another 4 CP from defeating the main villain and completing their Mission. If they decide to wait until next Issue, they'll only recover (2 x 5) 10 Hero Points.

CHARACTER DEGRADATION

Character degradation is the opposite of character advancement: The character gets weaker over time rather than stronger. In game terms, the character ends an Issue with fewer CP than he started with. Common causes of character degradation include the death of a character's Sidekick or Minions; the loss of a character's Authority, Contacts, Reputation, or Wealth; the destruction of a character's Devices or Singular Inventions; or the addition of new, harmful Drawbacks from the outcome of an Issue. More rarely a character might even lose Primary Attributes or Powers from some special circumstances.

While character degradation can decrease a character's CP total, it never decreases a character's Power Limit. Whatever setbacks he has suffered, the character remains a person with the same heroic potential. (This rule also avoids having to re-do a lot of math!)

Imagine that Airborne loses a battle to a monstrous serial killer and ends up captured. In order to escape from a fiendish death-trap, he has to cut off his own right arm with a laser. At the end of the Issue, not only does Airborne get no CP Award (he lost the battle), he also has is penalized with the 10-CP Missing Arm Drawback. This has degraded him from being a 610-CP character to being just a 600-CP character. A 600-CP character only has a Power Limit of 19, but Airborne retains his Power Limit of 20.

Beyond that rule, it's up to you as GM to decide how you want to handle character degradation in your Series. *Ascendant* offers you several options.

THEM'S THE BREAKS

Bad things happen. If a character loses valuable Perks, gains terrible Drawbacks, or otherwise ends up with less CP than he had before the Issue, he's just stuck with the outcome. When "Them's the Breaks" is the rule, characters get no reimbursement for degradation. This is a hardline stance that's suitable for Iron Age-style Series where death, loss, and revenge are major themes or for Golden Age Series set during wartime. (This is also the approach used in my sword-and-sorcery RPG *Adventurer Conqueror King System*, which has permanent wounds, horrific side effects from magic, energy drain, and more.)

The GM is running the campaign with "Them's the Breaks" rules. Therefore, Airborne is stuck with a Missing Arm. This sucks for him.

Falling deals Red Damage for an Attack with an EV equal to the faller's Weight in SPs plus the lesser of Falling Speed (usually 2, 6, or 7 SPs) and the Distance fallen. Falling Damage is usually Bludgeoning Type, but the GM may add another Damage Type if appropriate to the surface struck (Penetrating for falling on an iron fence, Thermal for falling in magma, etc.). A character can Roll with the Attack provided he is not Unconscious when he impacts.

> Stronghold had a Falling Speed of 7 SPs when he struck the water. His Weight is 3 SPs. Therefore he takes the Red Damage dealt by an Attack of (3 + 7) 10 SPs, which is 512 points of Bludgeoning Damage. Ouch!

Falling through Floors: Falling characters can break through floors that they strike. See Breaking through Floors (p. 296).

Impact Surface: Soft surfaces deal less Damage to characters who fall on them. If the surface has a Density of less than 9, reduce the fall's EV by 1 SP per SP less. A pile of sawdust has 4 SPs of Density, a bay of hale 5 SPs, a slab of snow 6 SPs, a tree 7 SPs, and water 8 SPs.

> Stronghold politely reminds his GM that he fell onto water (8 SPs of Density) so the EV of his falling damage is reduced by 1 to 9 SPs, yielding 384 Bludgeoning Damage.

Controlled Fall: If a falling character is neither Unconscious nor Overwhelmed, he can reduce the impact of his body by making a streamlined dive or gymnastic landing. The EV for a controlled fall is the lesser of Falling Speed and the Distance Fallen minus the character's Jumping Speed. The character's Weight is not added. (An awake and alert character with a Jumping Speed of 7 SPs or more will therefore never take falling damage – if his body can handle the impact from jumping 7 SPs, it can handle the impact from falling at a similar speed.)

$$\text{FALLING DAMAGE EV} = \text{WEIGHT} + \text{FALLING SPEED} </> \text{FALLING DISTANCE}$$

$$\text{FALLING DAMAGE (SOFT SURFACE) EV} = \text{WEIGHT} + \text{FALLING SPEED} </> \text{FALLING DISTANCE} + \text{SURFACE DENSITY} - 9$$

$$\text{FALLING DAMAGE (CONTROLLED) EV} = \text{FALLING SPEED} </> \text{FALLING DISTANCE} - \text{JUMPING SPEED}$$

STOPPING A FALL WITH AN EXTEND AUTOMATIC ACTION

As an Extended Automatic Action, an eligible rescuer can attempt to stop a falling character. A character is an eligible rescuer if he meets any of the following conditions:

★ Capable of Flight or Gliding and is within 0 SPs of the faller;
★ Capable of Wall-Crawling, is climbing above the faller, and is connected to him by a rope; or
★ Capable of Air Control, Gravity Control, Swinglining, Telekinesis, or similar Powers and the faller is within Range of the Power.

To find the Time required to stop the fall with an Extended Automatic Action, first sum the faller's Weight in SPs with his Falling Speed in SPs. Then subtract the rescuer's SPs of the Power used to stop the fall (Flight, Telekinesis, etc.) During this time, the faller (and a flying or gliding rescuer) will travel a Distance equal to the Falling Speed plus 1 SP less than the Time required to halt the descent.

Minimum Strength: When using Flight, Gliding, or Wall-Crawling to stop a fall, the rescuer's MIG must equal or exceed the faller's Weight or he cannot halt the descent. Likewise, when using Telekinesis or similar Powers, the character's SPs of Power must equal or exceed the faller's Weight or he cannot halt the faller's plunge.

Failed Rescue: If the Distance traveled is such that the faller still hits the ground, then the faller (and a flying or gliding rescuer) take damage from the fall. The fall deals Red Damage for an Attack with an EV equal to the greater of the faller or rescuer's Weight in SPs plus the Falling Speed (usually 2, 6, or 7 SPs).

$$\text{STOPPING TIME (FALL)} = \text{FALLER WEIGHT} + \text{FALLING SPEED} - \text{POWER}$$

$$\text{DISTANCE (STOPPED FALL)} = \text{FALLING SPEED} + \text{STOPPING TIME} - 1$$

$$\text{MINIMUM MIGHT OR POWER (STOPPING FALL)} = \text{FALLER WEIGHT}$$

$$\text{FALLING DAMAGE} = \text{FALLER/RESCUER WEIGHT} + \text{FALLING SPEED} </> \text{FALLING DISTANCE}$$

The Spetsikhotron want Stronghold alive, so the Russian hero Uragan soars down to rescue Stronghold. Uragan has a MIG of 6 SPs and Flight of 9 SPs. Let's assume that Uragan arrives just after Stronghold has fallen 320 feet, such that Stronghold's Falling Speed is 6 SPs. How long will it take Uragan to stop Stronghold's fall? Stopping Time equals Stronghold's Weight (3 SPs) plus his Falling Speed (6 SPs) minus Uragan's Flight (9 SPs); 3 + 6 − 9 = 0, so Uragan is able to stop Stronghold in 0 SPs of Time. Stronghold and Uragan plummet a distance equal to the initial Falling Speed of 6 SPs plus the Time of 0 SPs minus 1 SP. That's 5 SPs, or about 160 feet.

STOPPING A FALL WITH A CHALLENGE ACTION

As a Challenge Action, an eligible rescuer can attempt to stop a faller that he couldn't save with an Automatic Action. The rescuer must make a Power vs. (Faller Weight + Falling Speed) Challenge Check. If the color result is Green or better, the faller moves his Falling Speed in SPs -1 over the next 0 SPs of Time and is then halted. If the color result is White, the rescuer and the faller have suffered a Collision (see p. 275). A rescuer using Telekinesis or similar Power that allows him to manipulate masses from range is not at risk of colliding with the faller, and a White result simply means the rescuer failed to stop the faller.

Minimum Strength: When using Flight, Gliding, or Wall-Crawling to stop a fall, use the lesser of the character's SPs of MIG or the Power.

Stopping a Fall Quickly: 0 SPs of Time is still 3.5 seconds. If a faller is already moving fast, or if the fall began at a low height, the faller might need to be halted not in 3.5 seconds but in 2 seconds (-1 SP), 1 second (-2 SPs), a half-second (-3 SPs) or less.

As a Challenge Action, a rescuer can attempt to stop a fall in less than 0 SPs of Time. The AV of the check is the Power the rescuer uses to stop the faller (as above). The DV of the check is the faller's Weight plus his Falling Speed minus the rescue Time allotted. (Note that since the Time will be negative, this will increase the DV). If the color result is Green or better, the faller moves a Distance equal to the Time allotted plus his Falling Speed in SPs -1 and is then halted. If the color result is White, the rescuer failed to stop the faller and (if using Flight or Gliding) collided with him.

When a fall is stopped instantly, the faller takes damage from the shock of the sudden deceleration. The sudden halt deals Base Damage for a Concussive Attack with an EV equal to the faller's Weight minus the allotted Time.

STOPPING FALL:
POWER VS. FALLER WEIGHT + FALLING SPEED (- TIME)
STOPPING DISTANCE = FALLER SPEED -1 (+ TIME)
DECELERATION DAMAGE (TIME < 0) = FALLER WEIGHT − TIME

Let's imagine that when Uragan arrived, Stronghold has somehow fallen 640 feet, such that he was a mere 66 feet (4 SPs) above the water. Since Stronghold's Falling Speed is 6 SPs, Uragan needs to rescue him in -2 SPs of Time or less to avoid him hitting the water. Uragan makes a Flight vs. (Faller Weight + Falling Speed - Time) Challenge Check. The AV is 9 and the DV is 3 + 6 − (-2), so the RV is -2. Uragan rolls an 04, and succeeds with a Yellow result!

Because of the shock of the deceleration, Stronghold takes Concussive Damage. The EV is equal to Stronghold's Weight of 3 SPs minus the Time of -2 SPs, or 5 SPs. Therefore the hero suffers 12 points of Concussive Damage. That's much less than what he'd have taken if he'd hit the water, though still enough to seriously injure an ordinary person.

SWIMMING, DROWNING, AND SINKING

A character with Swimming Power can move and travel through water at a Speed equal to his SPs of Power. He does not have to spend an Automatic Action to float or tread water. If he has Underwater Adaptation, he can safely dive to a depth equal to his SPs of Power and is never in danger of Drowning or Sinking at above that depth. If he does not have Underwater Adaptation, he is in danger of Drowning or Sinking only if he fails a Challenge Check to move in hazardous conditions such as hurricanes, tropical storms, and stormy seas.

DEATH AND RETURN

Depending what options you've chosen for your Series, you may end up with dead player characters and dead NPCs. Are these characters really gone forever? It depends. In the Golden Age, it wasn't uncommon for characters to get killed, particularly in military-themed comics during WWII. In the Silver Age, character death was almost unheard of, at least in any permanent sense. In the Bronze Age, a measure of grittiness returned, and a few sidekicks and beloved significant others met their doom. It was not until the Iron Age of comics that the death toll really exploded. Lots of people died in Iron Age comic books, and that trend has stayed true into the Steel Age. But for at least half the deaths, there is usually an unexpected resurrection, a mysterious return, a sudden plot twist that brings the dead character back in some way. **Ascendant** offers you several options to "dial" your game's lethality to the desired level.

> Maximum Leader planted an atomic bomb in New York City, and Airborne was trying to defuse its trigger when the bomb detonated. The resulting 22 SPs of Concussive Ionizing Thermal Damage reduced Airborne to -3,520 Current Health, leaving him Slain.

A DEAD HERO IS DEAD

The character died, and there's no coming back from the grave. Dead NPCs don't return to the Series. The next Issue often features a funeral and eulogy for the deceased hero. A player who has lost their PC can roll up a new character using whatever rules you've set for starting characters.

> Airborne is dead, and he stays that way. Dreadnaught Security holds a 7-gun military funeral for their fallen hero. Airborne's player, Steve, has to roll up a new character to re-enter the Series. The GM has starting characters set at 560 + 2d6x10 CP, so that's what Steve gets for his replacement hero.
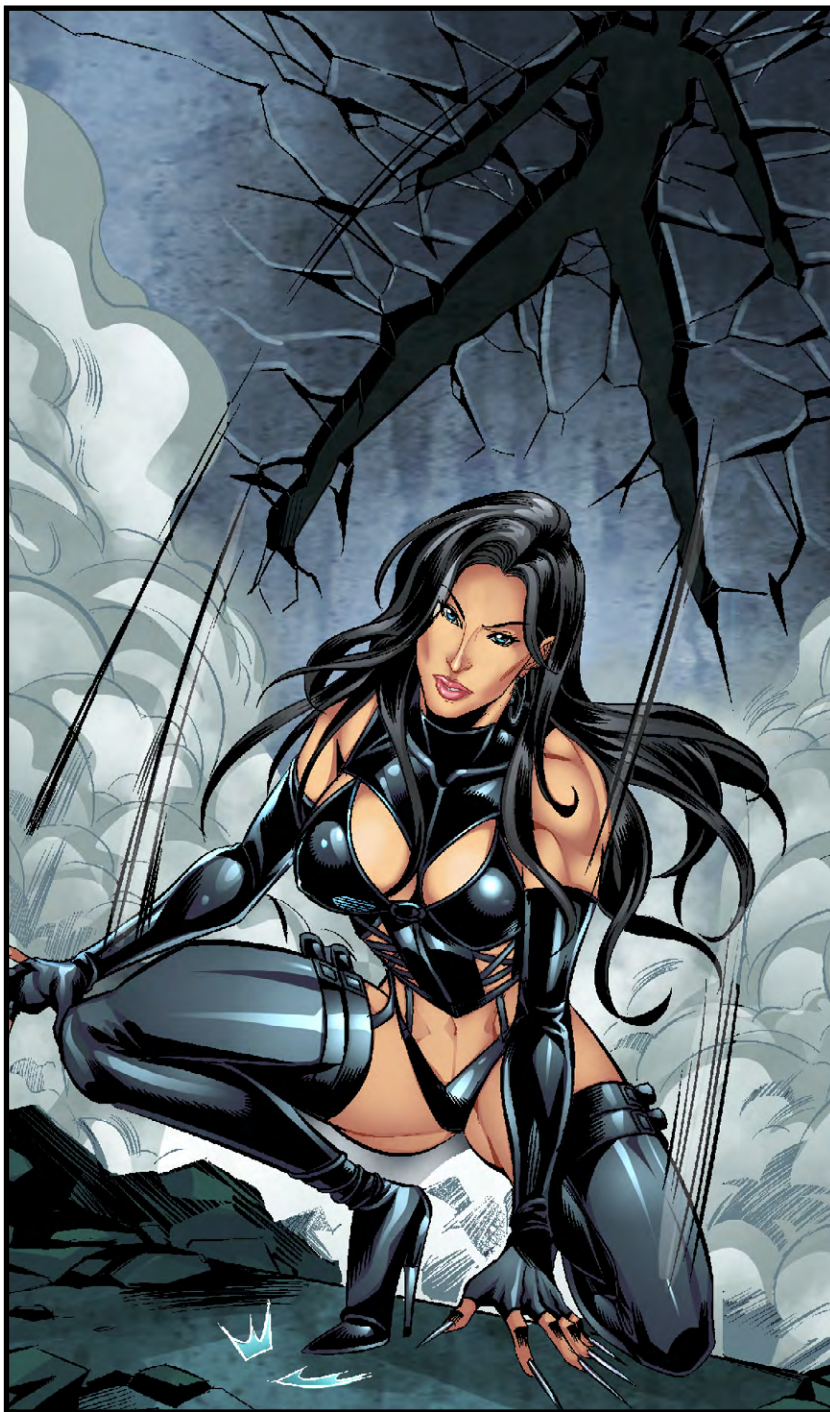
NOT THE HERO HE ONCE WAS

The character died – but somehow, he came back. A deceased PC can re-enter the Series at the start of the next Issue. A deceased NPC can re-enter the Series anytime at your discretion as GM. The character's return can represent resurrection by spiritual forces, reincarnation through scientific or magical means, clawing his way back from Hell through sheer grit, cloning with partial memories, or other means. However, when he returns, the character has been somehow weakened by his death. He gets no Award for the prior Issue and loses 10 Character Points to represent his diminished state. With your approval, the player can re-allocate CP if doing so is justified by the cause of death and return. If you're using "Good Follows Bad" rules for character degradation (p. 441), the PC can re-accumulate his lost CP rapidly. This is the default rule for **Ascendant**.

> After the mushroom cloud clears away, Dreadnaught Security discovers that Airborne is alive but crippled. Unwilling to lose their star talent, they rebuild him as a cyborg. Airborne has to lose 10 CP; Steve opts to take the Robotic Perk (5 CP) and Disturbing Appearance drawback (-5 CP) along with a 1 SP reduction in Airborne's CHA (-10 CP). Airborne awakens in Dreadnaught's RTP facility more machine than man…

THE HERO IS DEAD, LONG LIVE THE HERO

The character died, but his legacy lives on. Another virtually identical character will enter the Series to replace him. The new character could be a clone, an android replicant, a new hero or villain inspired by the old, or a Dependent, Minion, or Sidekick taking up the prior character's mantle. A replacement PC can re-enter the Series at the start of the next Issue with the same CP total as the prior character had just before he died. The character does not need to be identical in every respect to the prior PC, but it should play the same niche in the Series. A replacement NPC can re-enter the Series anytime at your discretion as GM.

> Airborne the man is dead, but Airborne the ideal lives on. Dreadnaught Security recruits a new ascendant to don the costume and identity of Airborne. Steve makes a new character with the same amount of Character Points that Airborne had when he died. If Airborne had accumulated 15 SP over his starting total of 610 CP, the new replacement Airborne would have 625 CP.

HEROES NEVER DIE, NOR VILLAINS NEITHER

The character didn't really die. He might have been left for dead, buried while still alive, knocked out only to awaken later, or any other cinematic *deus ex Machina* you choose. If a player character, he will re-enter the Series at the start of the next Issue. An NPC can re-enter the Series at your discretion as GM.

> Rescue teams find Airborne, sunburned and naked head-to-toe, lying in a smoking crater. All he needs to do is recuperate from his Serious Injury and he'll be ready for action!

APPENDIX A: CHARACTER INDEX

ASCENDANTS

Below we present some of the most prominent and powerful ascendants in the official setting as well as a smattering of lesser-known heroes and villains. Powers, Skills, and Perks marked in *italics* arise from Devices; see the Deprived of Device and/or Destruction of Device Vulnerable State under the character's Drawbacks. In order to make it easy to calculate Power Stunts during play, we've listed the CP cost of each ascendant's powers.

12SIGMA
960 CP, CR 500

PRIMARY ATTRIBUTES

HP
32

	MIG	AGI	VAL	RES	INS	CHA
VALUE	4	5	4	9	9	9

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	4
WEIGHT	3	INCOME	10
RUNNING SPEED	5	REPUTATION	20
JUMPING SPEED	1	PASSIVE SPOTTING	8
FLYING SPEED	0	PASSIVE LISTENING	0

HEALTH	80	RECOVERY	16	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Invention (240 CP), Insightful Empathy 12 (22 CP), Insightful Mind Reading 12 (61 CP), Memory 50 (112 CP), Super-Intelligence 15 (48 CP), Super-Stamina 6 (8 CP), Structured Data Processing 65 (25 CP)

Perks: Famous (22 CP), Multilingual (all known languages, 12 CP), Wealthy (10 CP)

BACKGROUND

Sung Jun-Han, known online as "12Sigma," became a Chess grandmaster at a record-breaking age 11 in 2012, the youngest-ever winner of the Starcraft 2 World Championship in 2013, and the youngest person to ever earn a PhD from the Massachusetts Institute of Technology in 2014. A year later he earned a perfect score on the Mega Society's Langdon Adult Intelligence Test, then went on to beat Google's AlphaGo in an easy 5-0 match-up. In November 2018, the 17-year old 12Sigma came out as an ascendant and began to explore the full scope of his powers under Kaya Ramakananda of the Church of Ascension. In December 2019, the polymathic Dr. Sung earned the People's Republic of China's Friendship Award for developing a cure for the novel coronavirus that had broken out in Wuhan. July 16, 2020 marked his greatest triumph: Dr. Sung left Earth on a spaceplane of his own design with a mission to explore the dark side of the Moon. He has never been heard from again. Four days later, the wreckage of the spaceplane crashed to Earth at Point Nemo. Dr. Sung is presumed dead, but his legion of fans insist that everything is just part of some larger plan by the world's smartest man.

AIRBORNE
610 CP, CR 30

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	11	7	9	9	5	7	16

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	9
WEIGHT	3	INCOME	6
RUNNING SPEED	5	REPUTATION	7
JUMPING SPEED	11	PASSIVE SPOTTING	8
FLYING SPEED	11*	PASSIVE LISTENING	0

HEALTH	480	RECOVERY	96	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Gliding 11 (32 CP), Jumping 11 (9 CP), Physical Invulnerability 11 (42 CP)

Skills: Avocation (sports fan) 6, Aerial Combat 9

Perks: Combat Maneuver (Super-Fast Melee), Protector, Tireless, Wealthy (10 CP)

BACKGROUND

Like his father and grandfather before him, Jack Roland enrolled in the US Military Academy at West Point and took a commission in the US Infantry. He excelled as a soldier and was quickly shepherded into advanced training. He earned his jump boots in 2009 and his Ranger tab in 2010. From June 2011 to April 2016, he served in the 75th Ranger Regiment, seeing action in Afghanistan, Pakistan, Iraq, and other classified locations. In April 2017, he and 50 rangers from 3/75th joined 40 Afghan commandos in a raid targeting Abdul Hasib, Emir of ISIS-K, in the Mohmand Valley. The raiders came under heavy fire as they approached by helicopter, and Jack was knocked out of the troop bay and into thin air at 5000 feet. Miraculously, he somehow landed safely, ran through blistering machinegun fire unharmed, and rejoined his unit. Jack's tale was ridiculed as impossible by his comrades, who soon began to shout "Airborne!" every time he approached. His CO recommended he seek treatment for PTSD. Jack dutifully obliged, explaining to his Army therapist everything that had happened to him. He was rewarded for his honesty with a branch transfer to some new Coast Guard unit. Jack interpreted this as a judgment he was no longer fit for the Army and angrily resigned his commission. When the Star-Spangled Squadron was announced, Jack realized what he had turned down. But bridges, once burned, are not easily rebuilt. Unable to find a place in the Squadron, Jack instead works as a professional crimefighter for Dreadnaught, Inc., the country's first ascendant security firm. Dreadnaught pays well and does good work, but it's not his calling. In his heart, Jack hopes he'll have a chance to serve America again. Airborne!

AMERICAN EAGLE
1040 CP, CR 1000

PRIMARY ATTRIBUTES — HP

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	15	10	15	12	5	10	38

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	15
WEIGHT	3	INCOME	9
RUNNING SPEED	5	REPUTATION	20
JUMPING SPEED	12	PASSIVE SPOTTING	8
FLYING SPEED	15	PASSIVE LISTENING	0

HEALTH	1920	RECOVERY	384	DETERMINATION	640	RECOVE	128

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Air Supply 18 (23 CP), Hovering Flight 15 (80 CP), Invulnerability 15 (150 CP), Infrared Dark Vision 12 (17 CP), Pressure Protection 20 (4 CP), Telescopic Vision 7 (19 CP)

Skills: Aerial Combat 15, Avocation (little league coach) 8, Profession (firefighter) 8

Perks: Authority (Star-Spangled Squadron, 10 CP), Famous (20 CP), Heroic (10 CP), Leadership, Principled (Code of Honor, 2 CP), Protector, Tireless, Wealthy (2 CP)

Drawbacks: Code of Honor (four-color hero, 2 CP), Dependent (wife and two children, 6 CP), Duty (Star-Spangled Squadron, 10 CP), Hunted (Exodus, 5 CP)

BACKGROUND

A firefighter from Freedom, Nebraska, Bill Goddard ascended in September 2014 when a burning elementary school collapsed on him. He shielded a pair of children with his body and, miraculously, both he and the children survived. His burgeoning superpowers attracted press interest six months later, when he lifted a car off a little girl. But he did not become became world famous until June 2018, when he donned a home-made cape and flew to Atlanta to stop Manticore from destroying the city. It was a battle Bill had no hope to win, for every blow he dealt Manticore was soon regenerated, while every wound he suffered at the monster's hands weakened him more and more. In desperation, Bill seized Manticore and flew into orbit, hurling the monster into the void of space. Upon his return to Earth, Bill was acclaimed as the world's first superhero, American Eagle. Eon Magazine named him Person of the Year. The US Coast Guard recruited him as the first member of the Star-Spangled Squadron, and he was its most prominent member until October 2020. Bill is devoted to his wife Amy and their two children, who reside with him at Constitution Island for their own protection. He genuinely believes in traditional American values and tries to live up to the highest ideals of duty, honor, and patriotism. Despite these powerful bonds, American Eagle has recently departed Earth again for reasons unknown...

AURORA
940 CP, CR 500

PRIMARY ATTRIBUTES | HP

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	3	7	5	7	4	12	32

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	10
WEIGHT	2	INCOME	9
RUNNING SPEED	5	REPUTATION	21
JUMPING SPEED	1	PASSIVE SPOTTING	14
FLYING SPEED	14	PASSIVE LISTENING	0

HEALTH	320	RECOVERY	64	DETERMINATION	320	RECOVERY	64

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Agile Light Control 14 (305 CP), Forcefield 14 (120 CP), Super-Fortitude 10 (12 CP), Super-Stamina 10 (28 CP), Lightning Reflexes 5 (10 CP), Ultra-Sensitive Vision 6 (18 CP)

Skills: Aerial Combat 14, Avocation (social media) 14, Power Aptitude (Agile Light Control) 14, Smack Talk 14, Stoicism 10

Perks: Authority (Star-Spangled Squadron, 10 CP), Combat Maneuvers (Super-Fast Ranged Attack, Super-Power Ranged Attack), Famous (18 CP), Mobile Defense Expertise, Sex Appeal, Signature Move (Super-Power Blast), Wealthy (5 CP)

Drawbacks: Code of Honor (always be fabulous, 1 CP), Duty (brand sponsors, 2 CP), Duty (Star-Spangled Squadron, 10 CP), Vulnerable State (triggered by moderate fear; loses Aerial Combat, Agile Light Control, Forcefield, Lightning Reflexes, Power Aptitude, Super-Fortitude, Ultra-Sensitive Vision, Mobile Defense Expertise, and Signature Move; gains Death Wish and Hesitant; 55 CP)

BACKGROUND

Since childhood, Brittney Sinclair had aspired to be a star, someone who lived her life in the spotlight, dazzling fans with her radiant glamour. Brittney spent her childhood studying modeling, acting, dancing, and singing. She studiously cultivated her social media. Her father, a Beverly Hills cosmetic surgeon, made sure she had perfect looks. Yet stardom escaped her grasp. Brittney was always the runner-up, the second place, always the girl who was a little too over-the-top and a little too desperate. When she was humiliated during the 2018 season finale of America's Next Top Model, Brittney ascended live on camera. Her dreams were fulfilled: She literally became a star. Brittney's incredible power level and photogenic good looks made her a natural recruit for the PR-focused Star-Spangled Squadron. As Aurora, she has all the fame she ever wanted, with dozens of brand sponsors and millions of dedicated fans. Yet the success is bittersweet. The world doesn't love Brittney Sinclair; it loves Aurora. Brittney now feels like an impostor in her own life. Anytime her self-confidence gets shaken, her Aurora persona slips away. When she had the support of her Squadron teammates, this rarely happened. But now American Eagle is absent from Earth, Stiletto is AWOL, and her other comrades are injured. Aurora is currently the only active member of the Star-Spangled Squadron – and *she just can't even.*

AVANGARD
1000 CP, CR 700

PRIMARY ATTRIBUTES — HP

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	14	14	14	8	5	8	34

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	14
WEIGHT	3	INCOME	8
RUNNING SPEED	5	REPUTATION	16/14
JUMPING SPEED	11	PASSIVE SPOTTING	8
FLYING SPEED	15	PASSIVE LISTENING	0

HEALTH	1280	RECOVERY	256	DETERMINATION	1280	RECOVERY	256

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: *Air Supply 10* (15 CP), Concussive Strike 16 (8 CP), Contrailing Hovering Flight 15 (75 CP), *Invulnerability 14* (144 CP), *Pressure Protection 20* (5 CP), Super-Fortitude 14 (24 CP), Triggered Self-Range Self-Immune Bang 8 (trigger: moves at Speed of 10+ SPs, 70 CP), *Telescopic Vision 8* (21 CP)

Skills: Stoicism 10

Perks: Authority (Spetsikhotron, 10 CP), Famous (16 CP), Ferocious, Leadership, Multilingual (English, German, Polish, Ukrainian), Tireless, Wealthy (2 CP)

Drawbacks: Dependent (wife and two children, 6 CP), Duty (Spetsikhotron, 10 CP), Notorious 14, Vulnerable State: Caught out of Battle Armor (takes 8 Pages to put on armor and can wear for up to 16 hours; loses Air Supply, Invulnerability, Pressure Protection, Telescopic Vision, 19 CP), Vulnerable State: Deprived of Battle Armor (remove with Extended Action, loses Powers noted above; 2 CP)

Notes: Anytime Avangard flies Mach 1 or greater, he triggers a hypersonic boom (8 SPs of Bang) automatically. He does not need to spend a Challenge Action to use his Bang, nor can he use his Bang apart from its trigger.

BACKGROUND

A highly decorated soldier from Directorate A of the FSB Special Forces, Colonel Pyotr Markov was leading Donbass separatists at the Battle of Avdiivka (February 2017) when his superpowers manifested. Markov shocked himself and his comrades by destroying enemy T-72s with hypersonic speed. Seeing Markov as Russia's answer to American Eagle, President Putin quickly promoted him to lead the newly formed Spetsikhotron under the code-name Avangard ("Vanguard"). Russia's state-sponsored media has released a series of comic books, action figures, and animated shows depicting Avangard as an invincible patriot and humanitarian. In reality, he is a hard and brutal man calloused by war. Since his ascension he has grown even more heartless and remote. His beloved wife and daughters are probably his last link to humanity. Understandably, the Russian government guards them carefully.

BFF
700 CP, CR 60

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	3	4	3	5	5	11	10

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	3	
WEIGHT	3	INCOME	7	
RUNNING SPEED	4	REPUTATION	11	
JUMPING SPEED	0	PASSIVE SPOTTING	8	
FLYING SPEED	0	PASSIVE LISTENING	0	

HEALTH	160	RECOVERY	32	DETERMINATION	160	RECOVERY	32

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Charismatic Verbal Emotion Adjustment (agreeableness) 11 (98 CP), Linked Charismatic Touch-Range Memory Manipulation 11 (64 CP) / Charismatic Tough-Range Manchurian Mind Domination (229 CP) with Power Flaw: Memory Manipulation and Mind Domination can only be used on Agreeable targets (-16/-57 CP), Super-Fortitude 8 (12 CP), Super-Stamina 8 (20 CP)

Skills: Avocation (stoner culture) 9, Parkour 11, Sport (skateboarding) 8, Stoicism 11

Perks: Criminal Connections (10 CP), Minions (CR 3, 5 CP), Sacrificer, Wealthy (10 CP)

Drawbacks: Compulsion (pot, 1 CP), Dark Secret (mind controller, 5 CP), Unheroic (-10 Hero Points, 50 CP), Unlikeable

Notes: BFF cannot use his Memory Manipulation or Mind Domination unless his victims are already in an Agreeable emotional state. His typical approach is to strike up a friendly conversation, use Verbal Emotion Adjustment to induce Agreeableness, and then affably ask for a "fist bump" or "high five" from his new friend. His Minions represent his current "friends".

BACKGROUND

Nobody ever liked José Ramirez – not his siblings; not his school classmates; not the kids at the skate park; not even his parents. School was a hell of isolation and loneliness. Graduation was worse – at least the bullies had acknowledged he existed. His family kicked him out at 18, so to make cash he started peddling dope on the streets of Tucson. It went bad fast. His customers failed to pay, which meant *he* couldn't pay his suppliers, which meant José got a visit from the local branch of El Cartel de Los Carteles. When the cartel enforcers started to break his legs with his own skateboard, José sobbed "can't we just talk about this guys?" Much to his surprise, the enforces agreed. Indeed, they agreed to everything he said. José had ascended, acquiring extraordinary powers to shape the emotions, minds, and memories of those he interacted with. A more ambitious man might use such powers to become a powerful supervillain. José just uses them to borrow fancy cars, enjoy complimentary stays at fancy hotels, and otherwise live the good life. He should be happy, but he's not. Despite, or perhaps because, of his powers José is lonelier than ever. He knows in his heart that his new friends only like their "BFF" because they are his pawns. Time will tell whether BFF will become drunk on power and evil or seek redemption through a genuine relationship with someone his powers don't affect.

DR. QUANTUM
940 CP, CR 500

PRIMARY ATTRIBUTES | HP

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	3	5	3	10	6	6	32

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	5
WEIGHT	3	INCOME	7
RUNNING SPEED	5	REPUTATION	18
JUMPING SPEED	0	PASSIVE SPOTTING	8/3
FLYING SPEED	0	PASSIVE LISTENING	0
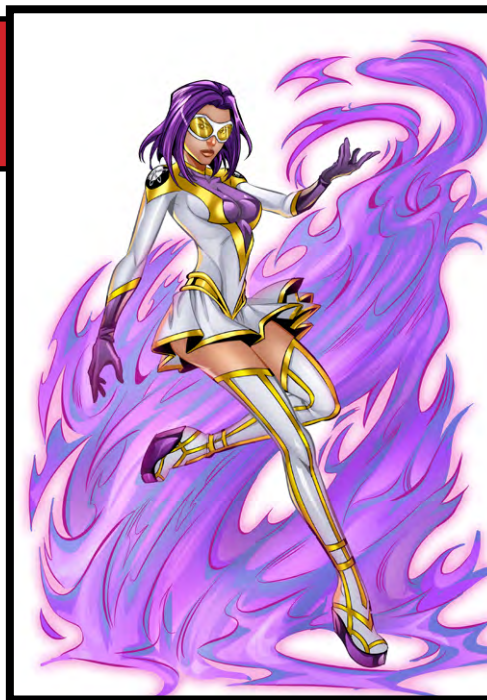
HEALTH	320	RECOVERY	64	DETERMINATION	320	RECOVERY	64

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Deflection 14 (84 CP), Hovering Flight 10 (60 CP), Lightning Reflexes 2 (4 CP), *Polarized Vision* 4 (9 CP), Power Pool – Quantum Psychoenergetics (Force Control, Variable-Impermeable Shaped Forcefield) 14 (423 CP), *Telescopic Vision* 4 (13 C), Super-Intelligence 12 (48 CP), Super-Stamina 10 (28 CP)

Skills: Avocation (tabletop games) 14, Power Aptitude (Force Control) 14, Science (quantum physics) 14

Perks: Authority (Star-Spangled Squadron, 10), Famous (24 CP), Multilingual (Japanese), Multitask, Wealthy (1 CP)

Drawbacks: Compulsion (scientific curiosity, 1 CP), Duty (Star-Spangled Squadron, 10 CP), Vulnerable State: Deprived of Googles (remove with Red disarm, loses Polarized Vision and Telescopic Vision, gains Dim Vision, 3 CP), Vulnerable State: Drained (loses Deflection, Hovering Flight, and Power Pool if Determination reduced to less than 64, 113 CP)

BACKGROUND

The daughter of a US Army War College professor and Japanese scientist, Harumi Maeda enjoyed a happy childhood filled with gaming, learning, and science. She earned a BS in Physics and Psychology from Harvard University, then earned her PhD in Physics at Stanford. Her work in delayed-choice quantum experiments led to an interesting job offer from the Theoretical & Applied Neuro-Causality Laboratory at University of California – Santa Barbara. Her findings at TANCL led Harumi to spot the connection between consciousness, zero-point energy, and the sort of superhuman abilities on display at the Battle of Atlanta. Through entheogenic drug use, careful biofeedback, and daily practice, Harumi slowly began to develop the psychoenergetic powers she had concluded lay dormant in every conscious being. In 2018 she authored a major research paper offering a theoretical case for superpowers. To her surprise, "Implications for Human Performance of Neuro-Causality over Quantum Fields" didn't get her a Nobel Prize. It didn't even get her published. Instead, it got her a visit from the U.S. government and a job offer to join the Star-Spangled Squadron. Now, as Dr. Quantum, Harumi works as both a member of the field team and as one of its top researchers into the how, what, and why of ascension. Despite her new-found powers and duties, Harumi has never lost sight of what's important in life and makes time each week to play tabletop RPGs with old friends.

HELEN KILLER
880 CP, CR 250

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA
VALUE	6	8	8	9	5	7

HP 28

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	8
WEIGHT	3	INCOME	7
RUNNING SPEED	5	REPUTATION	7/15
JUMPING SPEED	3	PASSIVE SPOTTING	NA/8
FLYING SPEED	0	PASSIVE LISTENING	NA/0

HEALTH	320	RECOVERY	64	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: *Lacerating Penetrating Strike 13* (40 CP), Lightning Reflexes 4 (8 CP), Insightful Mind Reading 8 (49 CP), Insightful Telepathy 8 (66 CP), Intuitive Combat Sense 13 (75 CP), Psychic Life-only Transmitting Blindsight 8 (79 CP), Super-Perception 10 (20 CP), Super-Stamina 10 (16 CP), Telepathic Scrying 5 (50 CP), Ultra-Sensitive Scent 10 (60 CP), Ultra-Sensitive Touch 10 (30 CP)

Skills: Escape Artist 13, Marksmanship (shooting) 13, Martial Arts (armed melee) 13, Stealth 13

Perks: Criminal Connections (20 CP), Multilingual (Braille, tactile ASL, 2 CP), Tireless, Watchful, Wealthy (2 CP)

Drawbacks: Blindness, Deafness, Hunted (Star-Spangled Squadron, 10 CP), Mute, Notorious (15 CP), Vulnerable State: Deprived of Katana (remove with Yellow disarm, lose Strike, 8 CP), Vulnerable State: Exposure to Electromagnetic Fields (loses Mind Reading, Telepathy, Combat Sense, Blindsight, and Telepathic Scrying in proximity of high-voltage EMF, 64 CP)

Notes: Her Ultra-Sensitive Scent and Touch and her Psychic Blindsight allows her to detect and identify nearby living creatures. Her Telepathy enables her to communicate with those she detects, and she can use Mind Reading to experience their thoughts or Scrying to see and hear through their eyes and ears. Her psychic powers can be disrupted by electromagnetic fields. Anytime she's Disrupted, damaged by an Electrical Aura, or within 4 SP of a high-voltage powerline, her Vulnerable State is triggered.

BACKGROUND

Helen Song became Helen Killer in February 2014, on a day when she was violently assaulted by paroled felon Robert Washington. A student at the California School for the Blind, 17-year old Helen had been sightless and deaf since birth; only the agonizing pain she felt in her torso told her she was being stabbed. At the brink of death, she ascended, and she saw for the first time through the eyes of her attacker as she slew him. Helen's unusual case of self-defense caught the attention of Project Ascension, and agents were dispatched to monitor her. When her powers were confirmed, Helen was conscripted into the program, becoming the 14th subject studied at Guantanamo Bay.

There she came under the influence of a fellow subject, the charismatic Magnus Danneskjöld (Maximum Leader), who reminded he that when she had been profoundly disabled, the world had treated her with cruelty – why then should she offer it kindness now that she was profoundly abled? The unsuspecting scientists studying her at Project Ascension had no idea of her radicalization. Helen was compliant and gracious with the researchers up to the moment she doomed them by freeing Manticore from sedation. Helen and Magnus escaped in the aftermath of Manticore's rampage to become the founding members of Exodus.

JIÀN SHÈNG - LIÁNG XÙ FORM
960 CP, CR 500

PRIMARY ATTRIBUTES

HP

	MIG	AGI	VAL	RES	INS	CHA
VALUE	7	7	15	9	5	9

32

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	15
WEIGHT	3	INCOME	9
RUNNING SPEED	7	REPUTATION	21
JUMPING SPEED	4	PASSIVE SPOTTING	8
FLYING SPEED	4*	PASSIVE LISTENING	0

HEALTH	960	RECOVERY	192	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Gliding 4 (18 CP), Immortality 13 (36 CP), Invulnerability 13 (138 CP), *Lacerating Strike 13* (24 CP), Running 7 (4 CP), *Self-Immune Self-Range Variable Intensity Lacerating Explosion 13* (181 CP) with Power Flaw: 1 use per minute (-81 CP), Super-Stamina 13 (24 CP)

Skills: Parkour 15, Profession (archeologist) 7

Perks: *Alternate Form (Zhù Yuè)*, Authority (Fēi jiàn, 10 CP), Close Defense Expertise, Combat Maneuvers (Super-Fast Melee, Super-Power Melee), Famous (24 CP), Multilingual (English), Sex Appeal, Tireless, Watchful, Wealthy (5 CP)

Drawbacks: Duty (Fēi jiàn, 10 CP), Unconsummatable, Vulnerable State: Deprived of Sword (remove with Yellow Disarm, loses Alternate Form, Explosion, and Strike, 33 CP)

Notes: His Explosion power summons a rain of swords that slices and slashes everything around him. The swords appear from thin air and vanish when the effect ends.

BACKGROUND

The leader of Fēi jiàn is Jiàn Shèng ("Sword Master"). Sword Master is a hero with two forms. In one form, he is a man named Liáng Xù who wields the legendary sword Gān Jiàng; in the other she is a woman named Zhù Yuè who wields the legendary sword Mò Yé. Liáng and Zhù were once a married couple; the pair died together in an archeological accident while seeking the legendary swords in China's remote mountains and were somehow reborn. Because Liáng speaks English and Zhù does not, he has appeared much more often in world press. Within China, however, Liáng and Zhù are both highly popular. An entire series of light novels has grown up depicting a love quadrangle between Sword Master's two forms and their comrades Karma Fire and Strategist.

JIÀN SHÈNG - ZHÙ YUÈ FORM
960 CP, CR 500

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA
VALUE	5	7	15	9	5	9

HP 32

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	15
WEIGHT	2	INCOME	9
RUNNING SPEED	5	REPUTATION	16
JUMPING SPEED	3	PASSIVE SPOTTING	8
FLYING SPEED	7	PASSIVE LISTENING	0

HEALTH	960	RECOVERY	192	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Flight 7 (43 CP), Immortality 13 (36 CP), Invulnerability 13 (138 CP), *Lacerating Strike 11* (24 CP), *Self-Immune Self-Range Instant Variable Intensity Fog 11* (129 CP) with Power Flaw: 1 use per minute (-58 CP), Super-Stamina 13 (32 CP)

Skills: Aerial Combat 15, Parkour 15, Profession (archeologist) 7

Perks: *Alternate Form (Liáng Xù)*, Authority (Fēi jiàn, 10 CP), Extra Attack, Famous (14 CP), Sex Appeal, Tireless, Watchful, Wealthy (5 CP)

Drawbacks: Duty (Fēi jiàn, 10 CP), Unconsummatable, Vulnerable State: Deprived of Sword (remove with Yellow Disarm, loses Alternate Form, Fog, and Strike, 27 CP)

Notes: Her Fog power summons a storm of butterflies that obscure everything in the area. The butterflies appear from thin air and vanish when the effect ends. Zhù Yuè often uses her first action to summon butterflies around herself and her foes and then uses her second action to make a surprise attack.

BACKGROUND

The leader of Fēi jiàn is Jiàn Shèng ("Sword Master"). Sword Master is a hero with two forms. In one form, he is a man named Liáng Xù who wields the legendary sword Gān Jiàng; in the other she is a woman named Zhù Yuè who wields the legendary sword Mò Yé. Liáng and Zhù were once a married couple; the pair died together in an archeological accident while seeking the legendary swords in China's remote mountains and were somehow reborn. Because Liáng speaks English and Zhù does not, he has appeared much more often in world press. Within China, however, Liáng and Zhù are both highly popular. An entire series of light novels has grown up depicting a love quadrangle between Sword Master's two forms and their comrades Karma Fire and Strategist.

KHEPRI
1000 CP, CR 700

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA
VALUE	5	5	5	9	12	7

HP 34

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	5
WEIGHT	3	INCOME	9
RUNNING SPEED	5	REPUTATION	7/4
JUMPING SPEED	2	PASSIVE SPOTTING	8
FLYING SPEED	0	PASSIVE LISTENING	0
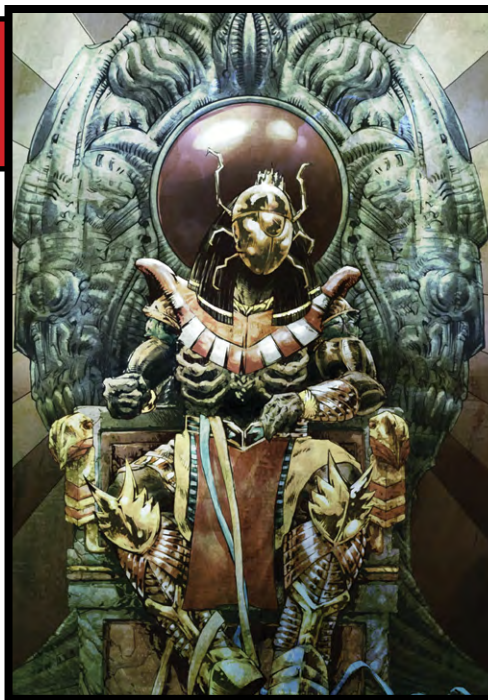
HEALTH	1280	RECOVERY	256	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Eye Contact Neck-Down Paralysis 14 (201 CP) with Power Flaw: 8 Page Recharge Time (-80 CP), Touch-Range Verbal Manchurian Mind Domination 14 (256 CP) with Power Flaw: targets must be paralyzed or unconscious (-84 CP), Psionic Power Pool (Mind Blast, Non-Transmitting Telepathic Scrying, Telepathy) 14 (200 CP), Super-Stamina 14 (36 CP), Thermal Dark Vision 4 (49 CP)

Skills: Martial Arts (armed combat) 14, Power Aptitude (Psionic Power Pool) 14, Stoicism 11

Perks: Headquarters (5 CP), Multilingual (Ancient Egyptian, Ancient Greek, Ancient Sumerian, Arabic, Classical Latin, English, Proto-Indo-European, Sanskrit, 4 CP), Singular Inventions (5 CP), Wealthy (5 CP)

Drawbacks: Compulsion (be worshipped, 5 CP), Disturbing Appearance (5 CP), Notoriety (4 CP), Vulnerable State: Failure to Rest in Meditation Vault (must spend 10 SPs of every 15 SPs of Time in vault; loses powers except Thermal Dark Vision and gains Compromised Immune System and Sickly 5; 59 CP)

Singular Inventions: Beam-khopesh (External crew, TOU 2, Weight -3, Annihilating Strike 14, 80 CP), Shieldbelt (Worn, TOU 3, Weight -5, Protective Deflection 14, 249 CP), Teleportation Bracelet (Worn, TOU 2, Weight -6, Slow-Self Only Teleportation, 97 CP), Meditation Vault (Worn, TOU 10, Weight 10, Air Supply 30, Bombproofing 10, Immortality 14, Pressure Protection 20, Regeneration 5, 208 CP)

BACKGROUND

The ascendant that calls itself Khepri walked the earth as an ordinary man three millennium before Christ. Upon his ascension, he became a god to the Bronze Age peoples of the Nile Valley. As a god, he proved tyrannical and cruel. In time, other ascendants, heroes of epics passed down through the centuries, overthrew him. But Khepri was not slain; and in his lair, hidden beneath the sands of Mesopotamia, he has slumbered in his meditation vault for five thousand years. Now he has awakened...

LEVITEE
640 CP, CR 30

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	6	4	4	8	6	10	16

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	4
WEIGHT	6	INCOME	5
RUNNING SPEED	0	REPUTATION	20
JUMPING SPEED	5*	PASSIVE SPOTTING	8
FLYING SPEED	7	PASSIVE LISTENING	5

HEALTH	320	RECOVERY	64	DETERMINATION	320	RECOVERY	64

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: All-Frequency Hearing 5 (8 CP), Air Supply 8 (13 CP), Charismatic Empathy 10 (20 CP), Charismatic Emotion Adjustment(Calm) 10 (115 CP), Hovering Flight 7 (60 CP), Pressure Protection 20 (9 CP), Physical Invulnerability 10 (40 CP), Super-Fortitude 10 (8 CP), Super-Perception 8 (8 CP), Super-Stamina 10 (16 CP), Swimming 5 (17 CP), Underwater Vision 4 (2 CP), Ultra-Sensitive Hearing 5 (10 CP)

Skills: Aerial Combat 10, Avocation (charity) 8, Smack Talk 12

Perks: Famous (20 CP), Mobile Defense Expertise, Sidekick (Dr. Sheba, 5 CP), Wealthy (5 CP)

Drawbacks: Body Form (aquatic), Code of Honor (conservationist, 2 CP), Damage Susceptibility – Lacerating 5, Dependents (manatee family, 5 CP), Duty (World Wildlife Federation, 5 CP), Hunted (kidnappers, 10 CP), Vulnerable State – Moderate Anger or Moderate Fear (INS reduced to 1, CHA reduced to 4, loses Empathy, Emotion Adjustment, and Hovering Flight, 61 CP)

Notes: If Levitee becomes highly stressed out or overwhelmed, he reverts to instinctual manatee behaviors, temporarily losing his sapience and superpowers. Use the Philanthropic Doctor template for Dr. Sheba (p. 457).

BACKGROUND

Levitee is world-famous as the first recorded instance of an ascended animal. The first signs of Levitee's unusual intelligence came in August 2015, when he rescued Dr. Chris Sheba from drowning in Safe Harbor. When Dr. Sheba returned to Safe Harbor a year later, Levitee was there to greet him. The two became friends and Dr. Sheba – in ever growing surprise – found Levitee capable of ever-more remarkable feats. As Levitee and his friend worked together to unlock the manatee's unique powers, they simultaneously came to realize that Levitee might not be unique: Other animals might be able to ascend. Since then he and Dr. Sheba have dedicated themselves to working to preserve and protect animals in partnership with the World Wildlife Federation. Sadly, not everyone is content to allow the ascended manatee to preach his message of peace and goodwill. He is constantly at risk of abduction from those who wish to experiment on him, breed him, or even destroy him and what he stands for. Levitee lightens the load with high spirited good humor and bountiful love for his human and manatee family.

MANTICORE
1020 CP, CR 1000

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA
VALUE	12	14	14	7	5	5

HP 36

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	14
WEIGHT	3	INCOME	0
RUNNING SPEED	5	REPUTATION	5/20
JUMPING SPEED	9	PASSIVE SPOTTING	8
FLYING SPEED	10	PASSIVE LISTENING	0

HEALTH	1920	RECOVERY	384	DETERMINATION	1920	RECOVERY	384

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Boomerang Penetrating Strike 16 (42 CP), Dark Vision 5 (15 CP), Invulnerability 12 (132 CP), Regeneration 15 (120 CP), Super-Fortitude 15 (32 CP), Super-Stamina 15 (12 CP), Ultra-Sensitive Scent 10 (60 CP), Winged Flight 10 (50 CP)

Skills: Alertness 8, Intimidation 12

Perks: Multilingual (Arabic, Farsi), Signature Move (Boomerang Strike), Tireless

Drawbacks: Deathwish, Disturbing Appearance (2 CP), Hunted (Star-Spangled Squadron, 10 CP), Notorious (20 CP)

BACKGROUND

From 2005 to 2009, Sergeant Andrew Dillon was a member of a black ops team assigned by SOCOM to assassinate terrorist leaders in Iran. Andrew took to the task with bloodthirsty zeal, sometimes wiping out entire families of known or suspected terrorists. His terrified victims called him Manticore after the man-eating monster of Persian myth. When the illegal assassination program was exposed and terminated, Andrew was court-martialed for war crimes and imprisoned at Ft. Leavenworth. To shorten his sentence, Andrew volunteered for the human performance enhancement program known as Project Ascension. On the night of December 22, 2012, Project Ascension succeeded, and Andrew was transformed outwardly into the monster he was inside: Manticore. After massacring most of Munson Army Hospital, Manticore was incapacitated with a Hellfire rocket and transferred under sedation to Guantanamo Bay. There he became the subject of years-long experiments that slowly drove him further into madness and rage. After escaping Gitmo in June 2018, Manticore flew to Atlanta and made a public assault on ANN Headquarters in order to force the American government to admit the existence of ascendants. (Killing a few "terrorist-loving journalists" was, of course, a bonus.) Manticore was ultimately defeated in a titanic struggle by American Eagle, who hurled the winged monster into outer space. Whether the creature that was once Sergeant Andrew Dillon is truly dead, or merely adrift in the vacuum, remains unknown.

MAXIMUM LEADER
1080 CP, CR 1400

PRIMARY ATTRIBUTES | HP

	MIG	AGI	VAL	RES	INS	CHA	**38**
VALUE	5	5	5	12	10	10	

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	10
WEIGHT	3	INCOME	14
RUNNING SPEED	5	REPUTATION	10/22
JUMPING SPEED	2	PASSIVE SPOTTING	8
FLYING SPEED	15	PASSIVE LISTENING	0

HEALTH	1920	RECOVERY	384	DETERMINATION	1920	RECOVERY	384

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Cosmic Control 15 (430 CP), Lightning Reflexes 5 (10 CP), Mind Screen 5 (40 CP) with Power Flaw: only screens Cosmic Awareness, Psychic Blindsight, and Scrying (-13 CP), *Pressure Protection 20* (4 PC), *Super-Strength 7* (12 CP), Super-Fortitude 15 (12 CP), Super-Stamina 15 (40 CP)

Skills: Avocation (chess) 11, Avocation (classical music) 11, Avocation (Hermetic occultism) 11, Power Aptitude (Cosmic Control) 15, Profession (philosophy) 14

Perks: Authority (40 CP), Criminal Connections (40 CP), Headquarters (20 CP), Leadership, Minions (CR 425, 40 CP), Multilingual (English, French, German, Russian, 3 CP), Multitask, Sacrificer, Tireless, Wealthy (40 CP)

Drawbacks: Compulsion (lead humanity to ascension, 2 CP), Duty (Exodus, 2 CP), Hunted (Star-Spangled Squadron, 10 CP), Notorious (23 CP), Vulnerable State: Caught out of Battle Armor (takes 8 Pages to put on armor and can wear for up to 16 hours; loses Pressure Protection and Super-Strength, 2 CP), Vulnerable State: Deprived of Battle Armor (remove with Extended Action, loses Pressure Protection and Super-Strength, 0 CP), Vulnerable State: Drained (loses Cosmic Control, Lightning Reflexes, Mind Screen, and Power Aptitude if Determination reduced to less than 960, 146 CP)

Notes: Maximum Leader's Headquarters consist of 20 SP facilities on the 23 SP island of Nauru. When at his HQ, he is always protected by Minions worth 425 CR, typically including at least one CR 250 ascendant bodyguard and a number of military personnel and vehicles. Due to his vast wealth and criminal connections he can easily acquire objects costing up to 31 SPs.

BACKGROUND

A chess grandmaster, musical composer, and esoteric philosopher, the polymathic Swedish-born Maximilian Danneskjöld earned his PhD in Continental Philosophy at the University of Gothenburg. His brilliant thesis "Quantum Will to Power: A Nietzschean Interpretation of von Neumann-Stapp Quantum Theory" secured him a prestigious job offer at DePaul University in Chicago, where he taught courses in Hegel, Heidegger, and Nietzsche to enraptured students. In his evenings, he devoted himself to contemplation of the nature of reality, seeking to achieve, through supreme will, domination of the implicate order. On the night of December 22, 2012, he succeeded in activating his metaplasts; great power coursed into him, through him, threatened to destroy him. Great power is a great beast and must be tamed with a whip and a firm hand. To learn to control his powers, Maximilian allowed himself to be recruited into Project Ascension.

With the help of the Project's careful training regimen, Magnus gradually brought his powers under control. As the reach of his will spread to encompass the world, Magnus realized he was the ubermensch: The cataclysmic all-destroyer and all-creator foretold by Nietzsche whose existence at once overthrew and gave meaning to the teeming masses of humanity. He would bring about the transvaluation of all values and lead humanity to overcoming itself. Ascendants were to men as men were to brutes; humanity was not an end in itself, merely a means to the higher end. Billions would need to die so that millions could truly live. Such is the philosophy of Maximilian Danneskjöld, the founder of Exodus, ruler of Nauru, the Maximum Leader.

RENARD THE FOX
1000 CP, CR 700

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA
VALUE	4	4	4	12	9	9

HP 21

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	4
WEIGHT	3	INCOME	13
RUNNING SPEED	4	REPUTATION	11/12*
JUMPING SPEED	1	PASSIVE SPOTTING	8
FLYING SPEED	0	PASSIVE LISTENING	0
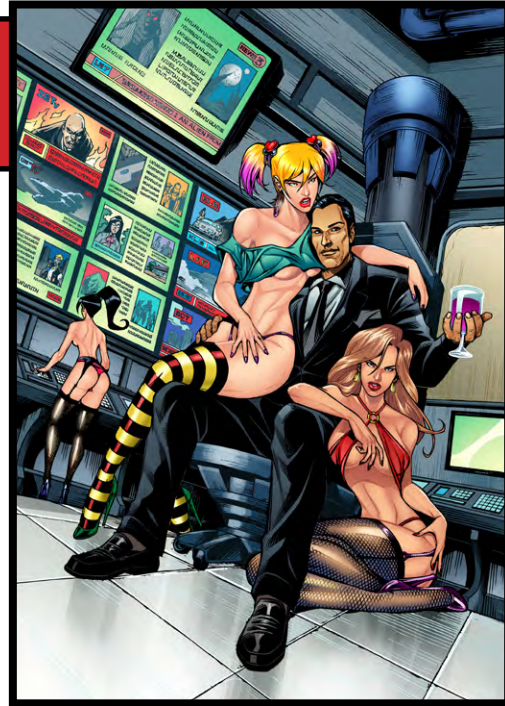
HEALTH	320	RECOVERY	64	DETERMINATION	640	RECOVERY	128

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Deep Network Technology Control 14 (445 CP), Super-Stamina 10 (24 CP)

Skills: Avocation (fashion) 15, Avocation (wine) 15, Persuasion 15, Profession (media mogul) 15, Smack Talk 15

Perks: Criminal Connections (40 CP), Famous (4 CP), Headquarters (10 CP), Multilingual (Chinese, English, German, Russian, 3 CP), Sex Appeal, Wealthy (80 CP)

Drawbacks: Code of Honor (Luciferian, 2 CP), Compulsion (expensive vices, 2 CP), Dark Secret (criminal empire, 5 CP), Duty (business executive, 5 CP), Notorious (12 CP), Unheroic (-13 Hero Points, 65 CP)

Notes: Renard's Headquarters consist of 17 SP of office facilities located in Montreal, Quebec. Due to his vast wealth, Renard can have virtually any objects he desires, up to a cost of 30 SPs.

BACKGROUND

Jean-Michael Renard was one of the first of the young entrepreneurs to see the promise of the Internet. While others battled for dominance of search, shopping, and social, Renard built an empire of online adult entertainment that made him as one of the wealthiest men in Canada. A millionaire by his early 20s, Renard soon became notorious within his industry as a man not to cross. Rival sites found their code infected with viruses, their traffic disrupted by DDS attacks, their private clips deleted, and worse. In 2015, Canada's National Cybercrime Coordination Unit began an investigation Renard's burgeoning empire. As his life, his liberty, and everything he had built came under threat, Renard ascended – and the Internet bent to his will. All evidence of his crimes was expunged from the web; shortly thereafter, the fact of his investigation was itself erased, and every individual involved disappeared without a data trail. With the ability to control technology anywhere in the world, Jean-Michael Renard became one of the most powerful crime lords in the world. Armed with an arsenal of stolen secrets, classified information, financial data, compromising chat logs, illicit photographs, and more, there is no one he cannot bribe, blackmail, or ruin, and nothing he cannot buy, sell, or steal. To his contacts at El Cartel de Los Carteles and Exodus, he is known as The Fox, and his cunning knowns no bounds.

REVENANT
1040 CP, CR 1000

PRIMARY ATTRIBUTES | HP

	MIG	AGI	VAL	RES	INS	CHA
VALUE	15	5	5	15	5	4

HP: 36

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	5
WEIGHT	3	INCOME	8
RUNNING SPEED	5	REPUTATION	4/8
JUMPING SPEED	12	PASSIVE SPOTTING	8
FLYING SPEED	0	PASSIVE LISTENING	0
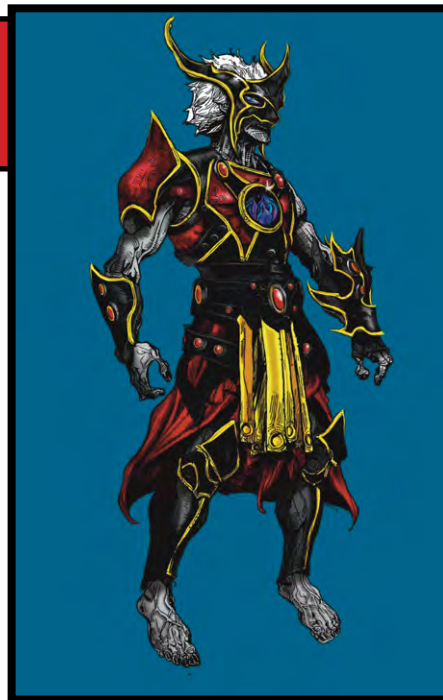
HEALTH	2560	RECOVERY	512	DETERMINATION	1920	RECOVERY	384

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: *Annihilating Blast 15* (40 CP), *Combat Sense 14* (90 CP), Immortality 18 (46 CP), *Infrared Dark Vision 10* (15 CP), *Invulnerability 14 (Flawed vs. Annihilating and Cosmic)* (120 CP), *Regeneration 16* (153 CP), *Super-Perception 10* (20 CP), *Super-Stamina 16* (4 CP)

Skills: *Intimidation 12, Martial Arts 15, Marksmanship (blasting) 15,* Profession (accountant) 8

Perks: *Combat Maneuvers (Mega-Power Ranged Attack),* Undead, Wealthy (2 CP)

Drawbacks: Hunted (Court of Night, 5 CP), Notorious (8 CP), Vulnerable State: Deprived of Mask (remove when unconscious; MIG drops to 5, RES drops to 10, loses Combat Maneuvers, all Powers except Immortality, and all Skills except Profession; 34 CP)

BACKGROUND

Ryan Ramos has experienced bad luck throughout his life. He lost his first job after being scapegoated by his boss for a scandal. He went on to start a number of other private businesses, each failing in turn due to some ill turn of fate. Nevertheless, he persevered, his iron will driving him forward again and again to new ventures. In 2018, his luck finally turned: He met the love of his life, Gabriella Castro; and with Gabriella as his muse, his accounting practice finally began to take off. He and Gabrielle became engaged with plans for a splendid wedding in Jamaica. Then misfortune struck again. He and Gabriella were walking on the pier at Kingston the evening before their wedding when they accidentally spotted a gang smuggling illicit cargo into the port. The smugglers seized the couple and dragged them inside their warehouse. Ryan and Gabriella denied being snoops or informants, but to no avail. Ryan was viciously beaten then shot in the chest. Slumped and bleeding, he watched as the gang abused and killed his fiancée.

He flailed around for a hammer, a plank, a weapon, anything, and his hands fell on a strange metal mask: The Mask of Dirgion. The precious artifact had been discovered by ISIS in Iraq and was being smuggled to a mysterious buyer stateside. By serendipity, Ryan's falling body had slammed into the create containing the Mask and it had tumbled out. As his bloodied hand gripped the Mask, Ryan heard – or thought he heard – a voice offering him the eternal peace of death or a new existence as an avatar of Dirgion. He chose the latter and rose as an implacable undead with a deadly gaze. In moments he had killed the entire gang and fled into the night. Whether he truly had been contacted by an extradimensional being, or whether stress had activated his latent metaplasts, not even Ryan knows. What does he know is that he is no longer human – and that he is being hunted everywhere he goes…

SHADOWMANCER
700 CP, CR 60

PRIMARY ATTRIBUTES

MIG	AGI	VAL	RES	INS	CHA	HP
5	7	6	9	5	6	20

VALUE

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	6
WEIGHT	3	INCOME	4
RUNNING SPEED	5	REPUTATION	6/5
JUMPING SPEED	2	PASSIVE SPOTTING	13
FLYING SPEED	0	PASSIVE LISTENING	0

HEALTH	480	RECOVERY	96	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Agile Darkness Control 11 (320 CP), Super-Stamina 11 (24 CP), Ultra-Sensitive Vision 5 (15 CP)

Skills: Investigation 8, Interrogation 8, Marksmanship (Blast) 11

Perks: Authority (police detective, 5 CP), Multitask, Principled (Code of Honor, 2 CP), Tireless, Watchful, Wealthy (1 CP)

Drawbacks: Code of Honor (four-color hero, 2 CP), Compulsion (Aurora's social media, 1 CP), Dark Secret (source of power, 1 CP), Duty (police detective, 5 CP), Notorious (5 CP), Vulnerable State: Height of Day (from 11:30AM to 12:30PM, AGI reduced to 5, VAL reduced to 5, RES reduced to 7, loses all Powers, Marksmanship, Multitask, Tireless, and Watchful, 90 CP)

Notes: Shadowmancer manages to both work a job and fight crime because of his Tireless Perk. However, he often collapses in exhaustion over his lunch hour, when his Vulnerable State kicks in and his Tireless Perk is lost.

BACKGROUND

Rial Porcher is a police detective by day and an aspiring hero by night. Night is, in fact, when his powers are at their strongest, for Rial is the master of darkness and shadow: the Shadowmancer. Rial never speaks of how he gained his abilities, but it must have been a disturbing event to cause his consciousness to choose powers of darkness. Whatever their origin, Rial constantly strives to push his powers to new limits, to earn the mantle of a true hero. Unfortunately for him, his grim appearance and shadowy powers lend him a sinister air and his concentrated focus appears to others as anger and hatred. Despite his many heroic endeavors, he has gotten little press coverage, and what he has received often describes him more like a villain than a hero. Rial has a strange fascination with Aurora of the Star-Spangled Squadron, whom he sees as his chief rival (though he won't admit that openly). She's light, he's dark. She's famous and popular, he's mysterious and feared. She has brand sponsorship and sex appeal, while he thinks these things are the marks of sellouts - folks who hero for fame instead of because it's the right thing to do. The thing that irritates him the most about being in Aurora's shadow is that despite her being a narcissistic sellout… she's still very much more powerful than him. It remains to be seen if Shadowmancer's envy will lead him down a dark path or carry him forward to admirable heights.

SINGULARITY
1000 CP, CR 700

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA	HP
VALUE	3	5	3	9	7	7	34

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	10/15
WEIGHT	2	INCOME	8
RUNNING SPEED	5	REPUTATION	16/16
JUMPING SPEED	2	PASSIVE SPOTTING	8
FLYING SPEED	13/18	PASSIVE LISTENING	0

HEALTH	960	RECOVERY	192	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Agile Gravity Control 0 (50 CP), Forcefield 13 (Flawed vs. Annihilating and Cosmic) (92 CP), Lightning Reflexes 7 (14 CP), Portal 0 (75 CP), Power Battery (Gravity Control and Portal) 15 (310 CP), Super-Fortitude 13 (16 CP), Super-Stamina 13 (40 CP), Time Control 5 (175 CP)

Skills: Avocation (DJ) 7, Investigation 9, Power Aptitude (Agile Gravity Control) 10, Sport (club dancing) 7

Perks: Famous (18 CP), Ferocious, Headquarters (Event Horizon nightclub, 10 CP), Multilingual (Dutch, Farsi, Spanish, Tagalog, 3 CP), Sex Appeal, Wealthy (2 CP)

Drawbacks: Compulsion (hedonistic, 2 CP), Duty (nightclub management, 2 CP), Notorious (16 CP), Unobservant, Vulnerable State: Exposure to PTSD triggers (triggered by burning military vehicles, lasts while vehicles in LOS + 1 Page, loses all powers except Super-Fortitude and Super-Stamina, 161 CP)

BACKGROUND

Crystal Jana Van Ort is the daughter of a Dutch American immigrant (Kars van Oort) who joined the Navy and a Filipino DJ (Aiza Jasmin Dimaandal) that met and wed while Kars was stationed in the Philippines. Raised as a military brat, Crystal moved around a lot and developed her mother's love for music and dance, often sneaking out to go to clubs in the different locations her father was stationed. She joined the Army after high school and was assigned to be an intelligence analyst for the 82nd Airborne Division.

During her second tour in Iraq, she saw an entire convey destroyed around her while her own HMMVW was miraculously untouched. Thereafter Crystal began to suffer severe and disorienting flashbacks. Diagnosed with PTSD, she was given a medical discharge from the Army. She tried to drown the memories by becoming a club kid in Capital City's flourishing party scene, but no matter how hard she partied, the PTSD seemed to worsen. Sometimes minutes would seem to stretch into hours; other times she would find herself in strange places with no memory of traveling there; she even started to hallucinate objects floating and shifting around her. Crystal feared she was going insane. Then the Battle of Atlanta revealed to her that superpowers were real – and Singularity was born.

Now Singularity operates an elite club in Capital City known as the Event Horizon. Many nightclubs have secret entrances; hers has no entrances at all. Access is available only to guests she invites or to those powerful enough to get inside. The Event Horizon serves as neutral ground where ascendants from any faction can gather in safety. Singularity enforces her club rules personally using her extraordinary ability to manipulate gravity, time, and space. While she can and does use her abilities for profit, she is often distracted or simply uninterested in engaging in the real world. When not running the club, she often lets herself get "lost in time" using her powers to view interesting events around the world in slow motion.

STILETTO
880 CP, CR 250

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA
VALUE	6	14	14	10	4	10

HP 28

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	20
WEIGHT	2	INCOME	8
RUNNING SPEED	6	REPUTATION	19/18
JUMPING SPEED	6	PASSIVE SPOTTING	8
FLYING SPEED	0	PASSIVE LISTENING	0

HEALTH	640	RECOVERY	128	DETERMINATION	640	RECOVERY	128

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Charismatic Pheromonal Emotion Adjustment (Lust) 10 (85 CP) with Power Flaw: 1 use per 5 Pages (-26 CP), Dark Vision 6 (17 CP), Filtered Hearing 5 (10 CP), Jumping 6 (6 CP), Lacerating Penetrating Strike 12 (35 CP), Lightning Reflexes 6 (12 CP), Immortality 15 (40 CP), Regeneration 5 (40 CP), Running 6 (2 CP), Super-Perception 12 (32 CP), Super-Stamina 12 (24 CP)

Perks: Authority (Star-Spangled Squadron, 10 CP), Combat Maneuvers (Super-Power Melee Attack), Famous (18 CP), Multilingual (Spanish, Russian, 2 CP), Sex Appeal, Tireless, Watchful, Wealthy (5 CP)

Drawbacks: Compulsion (revenge on El Cartel de Los Carteles, 2 CP), Compulsion (sex and violence, 2 CP), Duty (Star-Spangled Squadron, 10 CP), Hunted (El Cartel de Los Carteles, 5 CP), Notorious (18 CP)

BACKGROUND

Angelyne Knight was born into luxury in the posh East End of Capital City. Her father, Charles, was a private banker to the city's wealthy and powerful; her mother, Valentina, was an Estonian model. Angelyne enjoyed both her father's money and her mother's looks, often dabbling in modeling and fashion between clubbing and shopping. This privileged lifestyle disappeared when Charles and Valentina were murdered in 2012. Probate revealed that the Knight family was insolvent, their lifestyle a fraud maintained on illegal loans. Distraught and in debt, Angelyne found work as a dominatrix. Her society connections, haughty attitude, and striking bone structure made it easy for to attract a clientele of wealthy masochists. Angelyne became a prominent figure in the Capital City fetish scene, finding a power and purpose she had never known as a trust fund dilettante. Unfortunately for Angelyne, one of her clients was Sergio Enrique Zambada. A drug lord in El Cartel de Los Carteles, Sergio lavished her with money in exchange for her services – and secrecy. But secrets are hard to keep in the underworld, and eventually Sergio's rivals discovered his kink.

Sergio blamed Angelyne for the exposure. To restore his damaged machismo, Sergio and his henchmen kidnapped Angelyne and tortured her to the brink of death. As Angelyne lay dying, Sergio revealed the cartel had been her parents' creditors – and murderers. The pain and shock fueled her ascension into her own self-image of sex and power. She slaughtered Sergio and his cronies on the spot. Then, dubbing herself Stiletto for the unbreakable razor nails and sharpened heels she sported, she began a one-woman war against the cartel's operations in Capital City. After a year of mayhem, Stiletto suspended her crusade to join the Star-Spangled Squadron. She was admitted at the personal request of American Eagle, whom she dubbed "the only good man in this whole shitshow." Rather than attempt to tame Stiletto, the Squadron's political leadership encouraged her extreme appearance and behavior. The more energy the public spent arguing over costumes and codenames, the less energy it had to panic over humans of mass destruction. When American Eagle departed Earth, Stiletto went AWOL from the Squadron, and her present whereabouts are unknown.

STRONGHOLD
880 CP, CR 250

PRIMARY ATTRIBUTES | HP

	MIG	AGI	VAL	RES	INS	CHA	
VALUE	15	5	11	10	4	5	28

SECONDARY ATTRIBUTES

HEIGHT	1	INITIATIVE	11
WEIGHT	6	INCOME	7
RUNNING SPEED	5	REPUTATION	15
JUMPING SPEED	10	PASSIVE SPOTTING	8
FLYING SPEED	0	PASSIVE LISTENING	0

HEALTH	1920	RECOVERY	384	DETERMINATION	320	RECOVERY	64

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Bombproofing 5 (6 CP), Immovability 9 (14 CP), Invulnerability 10 (114 CP), Iron Will 10 (0 CP), Permanent Growth 3 (30 CP), Power Battery (Bombproofing, Iron Will, Invulnerability, Self-Range Quake, Regeneration) 15 (145 CP), Self-Range Quake 0 (15 CP), Regeneration 9 (72 CP)

Skills: Craft (mixology) 7, Sport (bowling) 7

Perks: Authority (Star-Spangled Squadron), Combat Maneuvers (Mega-Fast Melee Attack), Combat Maneuver (Mega-Power Melee Attack), Famous (20 CP), Grappling Expertise, Multilingual (Spanish, 1 CP), Protector, Tireless, Wealthy (2 CP)

Drawbacks: Code of Honor (four-color hero, 2 CP), Dependent (elderly nana, 2 CP), Disturbing Appearance (1 CP), Duty (Star-Spangled Squadron, 10 CP), Vulnerable State: Not Damaged Enough (If Health exceeds 960, Power Battery is not available, 28 CP), Vulnerable State: Not Damaged Enough (If Health exceeds 384, Power Battery is reduced to 5 SPs, 32 CP)

Notes: Stronghold's configuration of Powers changes with the circumstances as well as with how hurt he is. When he starts a fight, he doesn't have access to his Power Battery. When he gets a bit beat up (385-960 Health), he gains 5 SPs, which he usually puts into either Invulnerability or Regeneration. When he gets really beat up (384 Health or less), he gains the other 10 SP and will adopt whatever configuration makes the most tactical sense. SPs of Invulnerability, Regeneration, and either Bombproofing or Iron Will. Due to Power Limits, Stronghold can have a maximum of 16 SPs of Iron Will, 16 SPs of Bombproofing, 15 SPs of Invulnerability, 13 SPs of Self-Range Quake, and 16 SPs of Regeneration. The sum of his Invulnerability + Regeneration cannot exceed 26.

BACKGROUND

They say that your childhood years are the best of your life. This was decidedly not true for Jorge Campos. Not only did he loses his parents at a young age to a random car crash; not only did he have to go live with his grandmother in Jersey City; not only did he have the misfortune of growing up short, scrawny, and pimpled with acne; not only was he a kind and gentle child who took every insult to heart; but he also suffered through middle school locked into a metal back brace to prevent scoliosis and kyphosis. It was like being a wounded deer in the taiga and the timber wolves were unrelenting in their pursuit. Jorge managed to endure the bullying, suppressing his rage and resentment at the world's injustice deep in his bowels. Things finally turned around for Jorge when he graduated high school. The back brace was off, his skin was clear, and a late growth spurt brought him from scrawny to passably average. He spent an enjoyable year at college, joining the bowling team and becoming a popular bartender at house parties. The happiness proved ephemeral. At year's end, his nana revealed she had breast cancer and no money to pay for treatment. Jorge dropped out immediately and went to work tending bar at various joints across the river. Because of the treatments he paid for, his nana's cancer went into remission. He could have gone back to school, but Jorge decided that the right thing to do was to keep working to save money. And Jorge always tried to do the right thing.

In January 2018, as he was walking to the subway one night, he spotted a gang of hoodlums tormenting a homeless old woman. Jorge attempted to intervene, but alone and unarmed he stood no chance against six. "You think you're a big man? Some kind of big hero?" the hoodlums shouted as they began to pummel him. As his bones broke and his skull fractured, all the rage that Jorge had ever suppressed suddenly surfaced. And suddenly he was a big man… a very, very big man. And it was time for payback against the bullies and baddies of the world. Jorge's great size and less-than-subtle crimefighting style made it impossible for him to be anonymous. When the Star-Spangled Squadron asked if he wanted to be one of the founding members, he said yes. Now, as Stronghold, he has the friends and purpose he's always wanted, and Nana has the best lifestyle and healthcare that a fat government paycheck can offer. Life would be perfect if only he could find a bowling ball big enough for his fingers or a cocktail strong enough to get a buzz…

WARP
920 CP, CR 350

PRIMARY ATTRIBUTES

	MIG	AGI	VAL	RES	INS	CHA
VALUE	5	8	5	9	4	9

HP
30

SECONDARY ATTRIBUTES

HEIGHT	0	INITIATIVE	10
WEIGHT	3	INCOME	8
RUNNING SPEED	5	REPUTATION	17/10
JUMPING SPEED	2	PASSIVE SPOTTING	8
FLYING SPEED	0	PASSIVE LISTENING	0
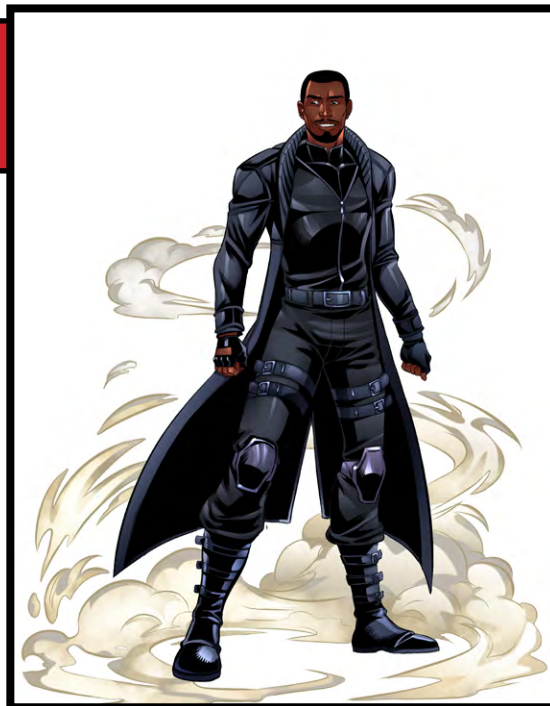
HEALTH	640	RECOVERY	128	DETERMINATION	240	RECOVERY	48

POWERS, SKILLS, PERKS, AND DRAWBACKS

Powers: Blinking Hyperkinetic Third-Party Teleport 15 (435 CP), Lightning Reflexes 5 (10 CP), Super-Stamina 12 (28 CP)

Skills: Avocation (poker) 6, Martial Arts 12, Noncombat Parkour 12, Sport (skydiving) 12

Perks: Authority (Star-Spangled Squadron, 10 CP), Famous (16 CP), Sex Appeal, Wealthy (2 CP)

Drawbacks: Compulsion (risk-taking), Duty (Star-Spangled Squadron, 10 CP), Duty (brand sponsors, 2 CP), Notorious (10 CP)

BACKGROUND

Born in Detroit, Jackson Reed clawed his way to fame and fortune with a series of "close-to-death" YouTube videos that garnered him legions of followers. Whether it was swinging beneath the 110-foot Corona arch near Moab, Utah; base jumping with a burning parachute off the New River Gorge Bridge; or free-running across Manhattan's tallest buildings, Jackson's audacity seemed to know no limits. Then, in June 2018, everything changed. American Eagle was the man of the hour, superheroes were real, and ordinary stuntmen just weren't that interesting. Jackson's video views plummeted and so did his self-esteem. After a night of whisky and self-pity, Jackson staggered out of bed and decided to make a freefall jump from the Freedom Tower without a parachute. He'd either ascend – literally and figuratively – or die trying. After falling 1,450 of the 1,776-foot drop, Jackson hit terminal velocity. At that moment, he realized that he wasn't going to fly; he was going to die. At that moment, Jackson Reed wished more than anything else that he was still back in bed in his hotel room. A second later, he was. Jackson Reed had become the world's first recorded teleporting ascendant. His amazing feats caught the attention of the U.S. government, who recruited him for the Star-Spangled Squadron. Now as Warp, he has all the fame, money, and excitement he dared to dream of. As Napoleon used to say to his friend Rommel, he who dares wins!

ANIMALS

Characters with the Skinchanging Power can use the templates below as the basis for their shapeshifting powers. Other characters might use animals as minions or sidekicks or even as the basis of the character itself. Each animal's entry lists Hero Points based on its CP, but ordinary animals generally have no Hero Points available. (It's assumed to have expended them surviving in the wild and never replenished them.) Minions or sidekicks should have the listed Hero Points, and the occasional "alpha" specimen might have some or all of its HP.

AFRICAN LION

Cost: 345 CP (CR 3)
Attributes: MIG 4, AGI 4, VAL 4, RES 4, INS 1, CHA 5, Weight 4, Height -1, Running Speed 6, Jumping Speed 2, Initiative 7, Passive Spotting 8, Passive Listening 10, Health 40, Determination 40, Hero Points 2
Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 2, Lacerating Penetrating Strike 5, Lightning Reflexes 3, Physical Invulnerability 1, Running 6, Super-Perception 5, Ultra-Sensitive Hearing 10, Ultra-Sensitive Scent 8
Drawbacks: Animal Body (quadruped), Illiterate, Unspeaking

BAT

Cost: 241 CP (CR 1.5)
Attributes: MIG 1, AGI 3, VAL 3, RES 3, INS 1, CHA 3, Weight -3, Height 0, Running Speed 2, Flight Speed 7, Initiative 3, Passive Spotting 8, Passive Listening 0, Health 15, Determination 30, Hero Points 0
Powers: Acoustic Transmitting Blindsight 7, All-Frequency Hearing 3, Super-Perception 3, Winged Flight 7
Drawbacks: Body Form (avian), Illiterate, Unspeaking

BENGAL TIGER

Cost: 412 CP (CR 6)
Attributes: MIG 4, AGI 3, VAL 6, RES 5, INS 1, CHA 3, Weight 4, Height -1, Running Speed 5, Jumping Speed 1, Swimming Speed 2, Initiative 9, Passive Spotting 8, Passive Listening 10, Health 40, Determination 40, Hero Points 6
Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 1, Lacerating Penetrating Strike 6, Lightning Reflexes 3, Physical Invulnerability 1, Running 5, Super-Perception 5, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 6, Swimming 2, Wall-Crawling 2
Skills: Stealth 5
Drawbacks: Body Form (quadruped), Illiterate, Unspeaking

BLOODHOUND

Cost: 346 CP (CR 3)
Attributes: MIG 3, AGI 3, VAL 3, RES 3, INS 1, CHA 3, Weight 3, Height -1, Running Speed 5, Jumping Speed 1, Initiative 5, Passive Spotting 8, Passive Listening 10, Health 30, Determination 30, Hero Points 2
Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 1, Penetrating Strike 4, Lightning Reflexes 2, Physical Invulnerability 1, Running 5, Super-Perception 5, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 10
Drawbacks: Body Form (quadruped), Illiterate, Unspeaking

BLUE WHALE

Cost: 387 CP (CR 4)
Attributes: MIG 12, AGI 3, VAL 3, RES 3, INS 1, CHA 3, Weight 12, Height 2, Swimming Speed 4, Initiative 3, Passive Spotting 8, Passive Listening 3, Health 640, Determination 30, Hero Points 4
Powers: Acoustic Submarine Transmitting Blindsight 7, Air Supply 10, All-Frequency Hearing 3, High Pressure Protection 11, Narrowband Radio Communication (whale song) 20, Physical Invulnerability 4, Super-Perception 3, Swimming 4, Underwater Vision 3, Ultra-Sensitive Hearing 3
Drawbacks: Body Form (aquatic), Illiterate, Unspeaking

BOTTLENOSE DOLPHIN

Cost: 266 CP (CR 1.5)
Attributes: MIG 3, AGI 3, VAL 3, RES 3, INS 1, CHA 4, Weight 4, Height 0, Swimming Speed 5, Initiative 3, Passive Spotting 8, Passive Listening 3, Health 30, Determination 30, Hero Points 0
Powers: Acoustic Submarine Transmitting Blindsight 9, Air Supply 7, All-Frequency Hearing 3, High Pressure Protection 8, Physical Invulnerability 1, Super-Perception 3, Swimming 4, Underwater Vision 3, Ultra-Sensitive Hearing 3
Drawbacks: Body Form (aquatic), Illiterate, Unspeaking

CHEETAH

Cost: 366 CP (CR 4)
Attributes: MIG 4, AGI 5, VAL 5, RES 3, INS 1, CHA 3, Weight 3, Height -1, Running Speed 6, Jumping Speed 1, Initiative 10, Passive Spotting 8, Passive Listening 10, Health 40, Determination 30, Hero Points 4
Powers: All-Frequency Hearing 1, Lacerating Penetrating Strike 4, Lightning Reflexes 5, Physical Invulnerability 1, Running 6, Super-Perception 5, Telescopic Vision 3, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 9
Skills: Stealth 5

Drawbacks: Body Form (quadruped), Easily Winded, Illiterate, Unspeaking

CHIMPANZEE

Cost: 266 CP (CR 1.5)

Attributes: MIG 3, AGI 3, VAL 3, RES 3, INS 1, CHA 4, Weight 3, Height 0, Running Speed 4, Jumping Speed 2, Initiative 3, Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Points 0

Powers: All-Frequency Hearing 1, Jumping 2, Memory 6, Physical Invulnerability 1, Super-Strength 5, Super-Perception 4, Wall-Crawling 2

Skills: Parkour 5

Drawbacks: Illiterate, Unspeaking

COCKROACH

Cost: 173 CP (CR 0.75)

Attributes: MIG 0, AGI 4, VAL 0, RES 1, INS 1, CHA 2, Weight -8, Height -4, Running Speed 2, Initiative 5, Passive Spotting 1, Passive Listening 0, Health 20, Determination 15, Hero Pts. 0

Powers: Air Supply 10, Cryogenic Ionizing Thermal Toxic Resistance 4, Lightning Reflexes 5, Physical Invulnerability 2, Running 2, Super-Perception 3, Super-Stamina 2, Swimming 2, Ultra-Sensitive Scent 5

Skills: Stealth 5

Drawbacks: Body Form (insectoid), Deafness, Dim Vision (Passive Spotting Range 1 SP), Illiterate, Unspeaking

COUGAR

Cost: 269 CP (CR 1.5)

Attributes: MIG 3, AGI 5, VAL 4, RES 3, INS 1, CHA 2, Weight 3, Height -1, Running Speed 6, Jumping Speed 2, Swimming Speed 2, Initiative 8, Passive Spotting 8, Passive Listening 7, Health 30, Determination 30, Hero Points 0

Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 2, Lacerating Penetrating Strike 4, Lightning Reflexes 4, Physical Invulnerability 1, Running 5, Super-Perception 5, Swimming 2, Ultra-Sensitive Hearing 7, Wall-Crawling 3

Skills: Stealth 5

Perks: Grappling Expertise

Drawbacks: Body Form (quadruped), Illiterate, Unspeaking

CROCODILE

Cost: 423 CP (CR 6)

Attributes: MIG 5, AGI 1, VAL 5, RES 5, INS 1, CHA 3, Weight 7, Height -1, Running Speed 3, Swimming Speed 0, Initiative 8, Passive Spotting 6, Passive Listening 0, Health 120, Determination 60, Hero Points 6

Powers: Air Supply 10, Dark Vision 4, Lightning Reflexes 3, Penetrating Strike 8, Physical Invulnerability 5, Running 3, Super-Perception 3, Super-Stamina 7, Swimming 4, Predatory Ultra-Sensitive Scent 8

Skills: Stealth 5

Drawbacks: Body Form (quadruped), Dim Vision (Passive Spotting Range 6), Easily Winded, Illiterate, Unspeaking

DRAFT HORSE

Cost: 287 CP (CR 2)

Attributes: MIG 5, AGI 3, VAL 2, RES 2, INS 1, CHA 3, Weight 7, Height 1, Running Speed 5, Jumping Speed 0, Initiative 2, Passive Spotting 8, Passive Listening 8, Health 60, Determination 20, Hero Points 0

Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 0, Noncombatant Super-Strength 8, Physical Invulnerability 2, Running 5, Super-Perception 5, Ultra-Sensitive Hearing 8, Ultra-Sensitive Scent 8, Ultra-Sensitive Touch 2

Drawbacks: Body Form (quadruped), Hesitant, Illiterate, Unspeaking

Note: If the horse is trained for war, increase VAL and RES to 3 each and remove the Hesitant Drawback. Increase CP cost to 312.

EAGLE

Cost: 260 CP (CR 1.5)

Attributes: MIG 2, AGI 5, VAL 5, RES 4, INS 1, CHA 4, Weight -1, Height 1, Running Speed 2, Flight Speed 7, Initiative 8, Passive Spotting 8, Passive Listening 0, Health 20, Determination 40, Hero Points 0

Powers: Lightning Reflexes 3, Penetrating Strike 4, Super-Perception 5, Telescopic Vision 4, Winged Flight 7

Perks: Illiterate, Unspeaking, Watchful

Drawbacks: Body Form (avian), Unspeaking

ELECTRIC EEL

Cost: 171 CP (CR 0.75)

Attributes: MIG 1, AGI 1, VAL 1, RES 3, INS 1, CHA 2, Weight 1, Height 0, Swimming Speed 2, Initiative 1, Passive Spotting 8, Passive Listening 0, Health 15, Determination 30, Hero Pts 0

Powers: Air Supply 8, Electrical Aura 3, Life-Only Submarine Transmitting Electroreceptive Blindsight 3, Super-Perception 3, Underwater Adaptation 6, Underwater Vision 3, Swim. 2
Drawbacks: Body Form (vermian), Illiterate, Unspeaking

ELEPHANT

Cost: 382 CP (CR 4)
Attributes: MIG 7, AGI 3, VAL 3, RES 5, INS 1, CHA 4, Weight 8, Height 1, Running Speed 5, Initiative 3, Passive Spotting 5, Passive Listening 8, Health 120, Determination 60, Hero Points 4
Powers: Additional Limb (trunk) 5, All-Frequency Hearing 5, Extended Hearing 4, Lacerating Strike 8, Narrowband Radio Communication (ultrasonic vocalizations) 12, Noncombatant Super-Strength 10, Physical Invulnerability 4, Running 5, Super-Perception 5, Ultra-Sensitive Hearing 8, Ultra-Sensitive Scent 8, Ultra-Sensitive Touch 2
Drawbacks: Body Form (quadruped), Dim Vision (Passive Spotting Range 5 SPs), Illiterate, Unspeaking

GIANT ANACONDA

Cost: 296 CP (CR 2)
Attributes: MIG 5, AGI 2, VAL 5, RES 3, INS 1, CHA 3, Weight 4, Height 2, Running Speed 2, Swimming Speed 3, Initiative 8, Passive Spotting 4, Passive Listening 0, Health 60, Determination 30, Hero Points 0
Powers: Bludgeoning Strike 6, Lightning Reflexes 3, Running 2, Super-Perception 3, Swimming 3, Predatory Ultra-Sensitive Scent 8
Skills: Stealth 5
Perks: Grappling Expertise
Drawbacks: Body Form (vermian), Deafness, Dim Vision (Passive Spotting Range 4), Easily Winded, Illiterate, Unspeaking

GIANT PYTHON

Cost: 320 CP (CR 2)
Attributes: MIG 4, AGI 2, VAL 5, RES 3, INS 1, CHA 3, Weight 3, Height 2, Running Speed 2, Initiative 8, Passive Spotting 4, Passive Listening 0, Health 40, Determination 30, Hero Pts 0
Powers: Bludgeoning Strike 5, Lightning Reflexes 3, Running 2, Thermal Dark Vision 3, Super-Perception 3, Predatory Ultra-Sensitive Scent 8, Wall Crawling 1
Skills: Stealth 5
Perks: Grappling Expertise
Drawbacks: Body Form (vermian), Deafness, Dim Vision (Passive Spotting Range 4), Easily Winded, Illiterate, Unspeaking

GIANT SQUID

Cost: 739 CP (CR 85)
Attributes: MIG 4, AGI 4, VAL 4, RES 5, INS 1, CHA 2, Weight 6, Height 1, Swimming Speed 4, Initiative 4, Passive Spotting 8, Passive Listening 0, Health 40, Determination 60, Hero Points 22
Powers: Additional Extended (+3 SP) Bludgeoning Lacerating Limb 8 (tentacle), Additional Extended (+3 SP) Bludgeoning Lacerating Limb 8 (tentacle), Additional Bludgeoning Lacerating Limb 8 (set of arms), Dark Vision 4, Instant Self-Range Fog 3, Lacerating Penetrating Strike 6, Super-Perception 5, Underwater Adaptation 11, Underwater Vision 3, Predatory Ultra-Sensitive Scent 8, Ultra-Sensitive Touch 1
Perks: Grappling Expertise
Drawbacks: Body Form (aquatic), Power Flaw (Fog only works underwater), Illiterate, Unspeaking

GORILLA

Cost: 268 CP (CR 1.5)
Attributes: MIG 6, AGI 3, VAL 4, RES 4, INS 1, CHA 4, Weight 4, Height 0, Running Speed 4, Initiative 5, Passive Spotting 8, Passive Listening 0, Health 80, Determination 40, Hero Points 0
Powers: All-Frequency Hearing 1, Physical Invulnerability 1, Super-Perception 4, Wall-Crawling 2
Skills: Parkour 5
Drawbacks: Illiterate, Unspeaking

GREAT HORNED OWL

Cost: 213 CP (CR 1)
Attributes: MIG 1, AGI 5, VAL 3, RES 3, INS 1, CHA 3, Weight -2, Height 0, Running Speed 2, Flight Speed 0, Initiative 5, Passive Spotting 8, Passive Listening 5, Health 15, Determination 30, Hero Points 0
Powers: Dark Vision 4, Lightning Reflexes 3, Penetrating Strike 2, Super-Perception 5, Telescopic Vision 3, Ultra-Sensitive Hearing 5, Winged Flight 5
Skills: Stealth 5
Drawbacks: Body Form (avian), Illiterate, Unspeaking

GREAT WHITE SHARK

Cost: 421 CP (CR 6)
Attributes: MIG 5, AGI 4, VAL 5, INS 1, RES 5, CHA 3, Weight 8, Height 1, Swimming Speed 5, Initiative 8, Passive Spotting 8, Passive Listening 0, Health 80, Determination 60, Hero Points 6

Powers: Life-Only Submarine Electroreceptive Blindsight 3, Lightning Reflexes 3, Penetrating Strike 7, Super-Stamina 6, Swimming 5, Predatory Ultra-Sensitive Scent 12, Underwater Adaptation 10, Underwater Vision 3
Drawbacks: Body Form (aquatic), Illiterate, Unspeaking

GREY WOLF

Cost: 357 CP (CR 3)
Attributes: MIG 3, AGI 4, VAL 4, RES 3, INS 1, CHA 4, Weight 3, Height -1, Running Speed 6, Jumping Speed 1, Initiative 6, Passive Spotting 8, Passive Listening 10, Health 30, Determination 30, Hero Points 2
Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 1, Penetrating Strike 4, Lightning Reflexes 2, Physical Invulnerability 1, Running 6, Super-Perception 5, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 8
Drawbacks: Body Form (quadruped), Illiterate, Unspeaking

GRIZZLY BEAR

Cost: 449 CP (CR 8)
Attributes: MIG 5, AGI 3, VAL 5, RES 5, INS 1, CHA 3, Weight 5, Height 1, Running Speed 4, Swimming Speed 2, Initiative 5, Passive Spotting 8, Passive Listening 10, Health 60, Determination 60, Hero Points 8
Powers: All-Frequency Hearing 1, Dark Vision 4, Lacerating Penetrating Strike 6, Physical Invulnerability 2, Running 5, Super-Perception 5, Swimming 2, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 12, Wall-Crawling 1
Drawbacks: Body From (quadruped), Illiterate, Unspeaking

HONEY BADGER

Cost: 469 CP (CR 8)
Attributes: MIG 2, AGI 4, VAL 4, RES 5, INS 1, CHA 5, Weight 0, Height -1, Running Speed 4, Initiative 4, Passive Spotting 6, Passive Listening 8, Health 20, Determination 60, Hero Pts 8
Powers: All-Frequency Hearing 1, Burrowing 2, Instant Limited Volume (0 SP) Nauseating Transparent Fog 3, Lacerating Penetrating Strike 3, Physical Invulnerability 5, Running 4, Super-Perception 3, Toxic Resistance 5, Ultra-Sensitive Hearing 8, Predatory Ultra-Sensitive Scent 9
Perks: Combat Maneuver (Super-Power Attack)
Skills: Escape Artist 5, Stoicism 7 (honey badger don't care)
Drawbacks: Body Form (quadruped), Dim Vision (Passive Spotting Range 6 SPs), Illiterate, Unspeaking

KING COBRA

Cost: 435 CP (CR 6)
Attributes: MIG 2, AGI 4, VAL 4, RES 3, INS 1, CHA 3, Weight 1, Height 0, Running Speed 4, Initiative 8, Passive Spotting 4, Passive Listening 0, Health 20, Determination 30, Hero Points 6
Powers: Dark Vision 3, Lightning Reflexes 4, Physical Invulnerability 1, Linked Delayed Onset (7) Touch-Range Extended Duration Incapacitating Paralysis 5 /Penetrating Strike 2 /Delayed Onset (9) Toxic Strike 5, Super-Perception 3, Predatory Ultra-Sensitive Scent 8, Wall Crawl 1
Drawbacks: Body Form (vermian), Deafness, Dim Vision (Passive Spotting Range 4), Illiterate, Power Flaw - Miscellaneous (Paralysis and Toxic Strike only effective if at least 1 Penetrating Damage is dealt), Unspeaking

MANATEE

Cost: 213 CP (CR 1.5)
Attributes: MIG 4, AGI 3, VAL 3, RES 3, INS 1, CHA 4, Weight 6, Height 1, Swimming Speed 4, Initiative 3, Passive Spotting 8, Passive Listening 3, Health 40, Determination 30, Hero Pts 0
Powers: Air Supply 8, All-Frequency Hearing 3, High Pressure Protection 8, Physical Invulnerability 2, Super-Perception 3, Swimming 4, Underwater Vision 3, Ultra-Sensitive Hearing 3
Drawbacks: Body Form (aquatic), Illiterate, Unspeaking

MASTIFF

Cost: 377 CP (CR 4)
Attributes: MIG 4, AGI 4, VAL 4, RES 4, INS 1, CHA 4, Weight 4, Height 0, Running Speed 5, Jumping Speed 1, Initiative 6, Passive Spotting 8, Passive Listening 10, Health 40, Determination 40, Hero Points 4
Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 1, Penetrating Strike 5, Lightning Reflexes 2, Physical Invulnerability 1, Running 5, Super-Perception 5, Ultra-Sensitive Hearing 10, Predatory Ultra-Sensitive Scent 8
Drawbacks: Body Form (quadruped), Illiterate, Unspeaking

MIMIC OCTOPUS

Cost: 483 CP (CR 10)
Attributes: MIG 1, AGI 4, VAL 2, RES 4, INS 1, CHA 2, Weight -2, Height -1, Swimming Speed 4, Initiative 2, Passive Spotting 8, Passive Listening 0, Health 15, Determination 40, Hero Points 10
Powers: Additional Extended Limb 2 (set of tentacles), Burrowing 1, Dark Vision 3, Invisibility 5, Instant Self-Range Fog 1, Naked Animal Replication 5, Super-Perception 5,

Swimming 4, Underwater Adaptation 7, Underwater Vision 3, Predatory Ultra-Sensitive Scent 8, Ultra-Sensitive Touch 1

Skills: Escape Artist 6, Stealth 6

Perks: Grappling Expertise

Drawbacks: Body Form (aquatic), Power Flaw – Miscellaneous (Fog only works underwater), Illiterate, Unspeaking

PEREGRINE FALCON

Cost: 258 CP (CR 1.5)

Attributes: MIG 1, AGI 6, VAL 4, RES 4, INS 1, CHA 4, Weight -3, Height 0, Running Speed 2, Flight Speed 8, Initiative 10, Passive Spotting 8, Passive Listening 0, Health 15, Determination 40, Hero Points 0

Powers: Lightning Reflexes 6, Penetrating Strike 2, Super-Perception 5, Telescopic Vision 3, Winged Flight 8

Perks: Watchful

Drawbacks: Body Form (avian), Illiterate, Unspeaking

RIDING HORSE

Cost: 294 CP (CR 1.5)

Attributes: MIG 4, AGI 4, VAL 2, RES 2, INS 1, CHA 3, Weight 6, Height 1, Running Speed 6, Jumping Speed 3, Initiative 2, Passive Spotting 8, Passive Listening 0, Health 40, Determination 20, Hero Points 0

Powers: All-Frequency Hearing 1, Dark Vision 3, Jumping 3, Noncombatant Super-Strength 7, Physical Invulnerability 2, Running 6, Super-Perception 5, Ultra-Sensitive Hearing 8, Ultra-Sensitive Scent 8, Ultra-Sensitive Touch 2

Drawbacks: Body Form (quadruped), Hesitant, Illiterate, Unspeaking

Note: If the horse is trained for war, increase VAL and RES to 3 each and remove the Hesitant Drawback. Increase CP cost to 319 and CR to 2.

CRIMINALS

The rise of ascendants hasn't made common criminals less common; indeed, crime rates are worse than ever. With the government, police, and heroes necessarily focusing on stopping humans of mass destruction, the scum of the street run amok. Criminals with Challenge Ratings of 1 to 4 make great antagonists for street-level heroes and great minions for more powerful villains. Unlike animals and everyday people, criminals generally have their listed Hero Points. (It's assumed that whatever they have spent they have replenished with villainous deeds.)

ARROGANT HACKER

Cost: 240 CP (CR 1)

Attributes: MIG 2, AGI 3, VAL 2, RES 4, INS 5, CHA 3, Weight 2, Height 0, Running Speed 3, Jumping Speed 0, Initiative 2, Income 1, Reputation 3 (Notoriety 5), Passive Spotting 7, Passive Listening 0, Health 20, Determination 40, Hero Pts 0

Skills: Engineering (electronic) 7, Infiltration 7, Interrogation 4, Persuasion 5, Science (computer) 7, Smack Talk 4, Stoic. 4

Perks: Criminal Connections (Dark Net, 10 CP), Multitask, Wealthy (10 CP)

Drawbacks: Dim Vision (Passive Spotting Range 7), Hunted (for cyber-crimes, 5 CP), Notorious (5 CP, Unlikeable

Equipment: Laptop Computer with Deep Network Technology Control 7, Light Handgun (EV 5), Smartphone, Tool Belt

BURLY BOUNCER/BRUISER

Cost: 240 CP (CR 1)

Attributes: MIG 5, AGI 3, VAL 4, RES 3, INS 2, CHA 3, Weight 4, Height 0, Running Speed 2, Jumping Speed 1, Initiative 4, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 60, Determination 30, Hero Points 0

Skills: Alertness 4, Avocation (bartending) 3, Combat Posture 6, Intimidation 5, Martial Arts 6, Smack Talk 4, Stoicism 4

Perks: Grappling Expertise

Drawbacks: Duty (job, 2 CP), Heavy

Equipment: Heavy Handgun (EV 6), Baseball Bat (EV 5), Smartphone

BRILLIANT SERIAL KILLER

Cost: 400 CP (CR 4)

Attributes: MIG 4, AGI 4, VAL 4, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 3, Reputation 5, Passive Spotting 8, Passive Listening 0, Health 40, Determination 60, Hero Points 4

Skills: Alertness 7, Avocation (entomology) 7, Craft (cooking) 6, Escape Artist 6, Infiltration 7, Investigation 7, Interrogation 7, Intimidation 7, Marksmanship (shooting) 5, Martial Arts 5, Medicine 7, Parkour 5, Persuasion 7, Science (psychology) 7, Smack Talk 9, Stealth 6, Stoicism 9

Perks: Authority (medical doctor, 1 CP), Combat Maneuver (Super-Power Melee), Criminal Connections (guns and drugs, 10 CP), Grappling Expertise, Watchful, Wealthy (10 CP)

Drawbacks: Dark Secret (serial killer, 5 CP), Duty (medical practice, 2 CP)

Equipment: Knife (EV 5), Handcuffs, Psychoactive, Rapid-Onset Neuromuscular Blocker, Sedative, Smartphone

CRIMINAL KINGPIN

Cost: 400 CP (CR 4)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 6, Reputation 15 (Notoriety 15), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Pts. 4

Skills: Alertness 7, Combat Posture 5, Interrogation 7, Intimidation 7, Marksmanship (shooting) 4, Martial Arts 4, Persuasion 7, Profession (executive) 6, Smack Talk 7, Stealth 4, Stoicism 6

Perks: Criminal Connections (government corruption, 40 CP), Famous, Wealthy (80 CP)

Drawbacks: Code of Honor (omerta, 2 CP), Dark Secret (crime boss, 5 CP), Dependent (reliable spouse, 1 CP), Dependent (troublemaking daughters x2, 4 CP), Dependent (hot-headed son, 4 CP), Duty (family business, 5 CP), Notorious (15 CP)

Equipment: Bulletproof Vest, Heavy Handgun (EV 6), Smartphone

DERANGED SHOOTER

Cost: 185 CP (CR 0.75)

Attributes: MIG 3, AGI 4, VAL 3, RES 3, INS 4, CHA 1, Weight 2, Height 0, Running Speed 4, Jumping Speed 1, Initiative 3, Income 0, Reputation 1, Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Points 0

Skills: Alertness 5, Avocation (heavy metal) 5, Avocation (videogames) 5, Combat Posture 4, Craft (comic book drawing) 5, Marksmanship (shooting) 5, Parkour 5, Smack Talk 4, Sport (skateboarding) 5

Perks: Lean

Drawbacks: Deathwish, Sickly, Unlikeable

Equipment: Assault Rifle (EV 7), Light Handgun (EV 5)

FANATICAL TERRORIST

Cost: 240 CP (CR 1)

Attributes: MIG 4, AGI 4, VAL 4, RES 4, INS 2, CHA 2, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 0, Reputation 2 (Notoriety 8), Passive Spotting 8, Passive Listening 0, Health 40, Determination 40, Hero Pts 0

Skills: Alertness 4, Avocation (ideology) 4, Combat Posture 6, Engineering (combat) 4, Infiltration 4, Marksmanship (shooting) 6, Martial Arts 6, Parkour 6, Piloting (air or ground vehicles) 5, Stealth 6, Stoicism 5

Perks: Criminal Connections (bombs and explosives, 20 CP), Principled (Code of Honor, 5 CP)

Drawbacks: Code of Honor (ideology, 5 CP), Deathwish, Hunted (terrorist watch list, 10 CP), Notorious (8 CP)

Equipment: Assault Rifle (EV 7), Machete (EV 4), Fragmentation Grenades (EV 8) x4, Satellite Phone

FANATICAL TERRORIST MASTERMIND

Cost: 400 CP (CR 4)

Attributes: MIG 3, AGI 4, VAL 4, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 4, Jumping Speed 0, Initiative 4, Income 5, Reputation 20 (Notoriety 20), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Pts 4

Skills: Alertness 6, Avocation (ideology) 7, Combat Posture 6, Craft (propaganda videos) 6, Engineering (combat) 7, Infiltration 7, Marksmanship (shooting) 6, Martial Arts 6, Parkour 6, Piloting (air or ground vehicles) 6, Smack Talk 7, Stealth 6, Stoicism 7

Perks: Criminal Connections (government corruption, 40 CP), Famous, Principled (Code of Honor, 5 CP), Wealthy (40 CP)

Drawbacks: Code of Honor (ideology, 5 CP), Deathwish, Dependent (eldest son on terrorist watch list, 2 CP), Dependent (youngest son on terrorist watch list, 2 CP), Dependent (daughter on terrorist watch list, 2 CP), Hunted (terrorist watch list, 10 CP), Notorious (20 CP), One-Eyed

Equipment: Bulletproof Vest, Submachinegun (EV 6), Satellite Phone

FLAMBOYANT CAT BURGLAR

Cost: 300 CP (CR 2)

Attributes: MIG 3, AGI 5, VAL 4, RES 3, INS 4, CHA 5, Weight 2, Height 0, Running Speed 5, Jumping Speed 1, Initiative 4, Income 2, Reputation 5 (Notoriety 5), Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Pts 0

Skills: Alertness 7, Avocation (art appreciation) 7, Combat Posture 6, Escape Artist 7, Infiltration 7, Marksmanship (shooting) 6, Martial Arts 6, Parkour 7, Persuasion 6, Stealth 7

Perks: Criminal Connections (guns and drugs, 10 CP), Sex Appeal, Wealthy (10 CP)

Drawbacks: Hunted (arrest warrants, 5 CP), Notorious (5 CP)

Equipment: Spy Catsuit, Light Handgun (EV 5), Climbing Gear, Night-Vision Goggles, Tool Belt

METHODICAL ASSASSIN

Cost: 400 CP (CR 4)

Attributes: MIG 4, AGI 5, VAL 5, RES 5, INS 4, CHA 4, Weight 3, Height 0, Running Speed 5, Jumping Speed 1, Initiative 5, Income 3, Reputation 4, Passive Spotting 8, Passive Listening 0, Health 40, Determination 60, Hero Points 4

Skills: Alertness 6, Combat Posture 7, Craft (watchmaking) 6, Escape Artist 7, Infiltration 6, Intimidation 6, Interrogation 6, Marksmanship (shooting) 7, Martial Arts 7, Parkour 7, Stealth 7, Stoicism 6

Perks: Combat Maneuver (Super-Fast Ranged, Super-Power Ranged, Super-Fast Melee, Super-Power Melee), Contact (hacker), Criminal Connections (automatic weapons and

explosives, 20 CP), Grappling Expertise, Watchful, Wealthy (10 CP)

Drawbacks: Code of Honor (omerta, 2 CP), Dark Secret (assassin, 5 CP), Duty (contract kills, 2 CP)

Equipment: Bulletproof Vest, Heavy Handgun (EV 6) with Laser Sight, Rapid-Onset Subcutaneous Poison, Tool Belt

SADISTIC THUG

Cost: 240 CP (CR 1)

Attributes: MIG 4, AGI 4, VAL 4, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 0, Reputation 3 (Notoriety 3), Passive Spotting 8, Passive Listening 0, Health 40, Determination 30, Hero Pts 0

Skills: Alertness 4, Avocation (gambling) 4, Combat Posture 5, Infiltration 4, Intimidation 4, Marksmanship (shooting) 5, Martial Arts 5, Parkour 5, Stealth 5

Perks: Combat Maneuver (Super-Fast Ranged), Criminal Connections (guns and drugs, 10 CP)

Drawbacks: Hunted (arrest warrants, 5 CP), Notorious (3 CP), Unlikeable

Equipment: Submachinegun (EV 6), Machete (EV 5), Smartphone

EVERYDAY PEOPLE

Not everybody is a hero or a villain, a crimefighter or a criminal. Some people are just people. While each everyday person's entry lists Hero Points based on CP, everyday people generally have no Hero Points available. (People are assumed to have expended them making it through life and never replenished them.) Minions or sidekicks should have the listed Hero Points, and the occasional important or named NPCs might have some or all of their HPs.

ABSENT-MINDED PROFESSOR

Cost: 400 CP (CR 4)

Attributes: MIG 2, AGI 3, VAL 2, RES 5, INS 5, CHA 3, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 6, Reputation 11, Passive Spotting 7, Passive Listening 0, Health 20, Determination 60, Hero Points 4

Skills: Avocation (science fiction) 7, Engineering 7, Profession (professor) 7, Science 7, Smack Talk 5, + either Engineering (specific field) 9 or Science (specified field) 9

Powers: Invention (50 CP)

Perks: Authority (tenure, 2 CP), Contact (government agency specific to research), Contact (grant foundation), Contact (university dean/department chair), Famous, Multilingual (any two languages), Wealthy (80 CP)

Drawbacks: Dependent (family, 2 CP), Dim Vision, Duty (professor, 2 CP), Hesitant, Unobservant

Equipment: Laptop, smartphone, tool belt

Notes: The absent-mind professor is a good Minion or Sidekick for characters with Invention. A character with Invention can also hire one or more absent-minded professors to work in a team to help him develop Inventions.

AMBITIOUS NATIONAL POLITICIAN

Cost: 480 CP (CR 8)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 8, Reputation 20 (Notoriety 15), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 8

Skills: Avocation (trendy charity) 6, Avocation (TV pundit) 6, Intimidation 9, Persuasion 9, Profession (politician) 7, Smack Talk 7, Sport (golf) 6, Stoicism 7

Perks: Authority (Congress, 20 CP), Contact (the White House), Famous, Wealthy (160 CP)

Drawbacks: Dark Secret (secret child, 5 CP), Dependent (Xanax-addicted spouse, 2 CP), Duty (political office, 5 CP), Notorious (15 CP)

Equipment: Bulletproof Vest, Smartphone

AWE-STRUCK GROUPIE

Cost: 160 CP (CR 0.75)

Attributes: MIG 2, AGI 2, VAL 2, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 2, Jumping Speed 0, Initiative 2, Income 0, Reputation 4, Passive Spotting 8, Passive Listening 0, Health 20, Determination 30, Hero Points 0

Skills: Avocation (ascendant fandom) 5, Avocation (videogames) 5, Data processing 4, Smack Talk 4

Perks: Famous (on reddit, anyway)

Drawbacks: Unconsummatable

Equipment: Smartphone

CROOKED STATE POLITICIAN

Cost: 320 CP (CR 2)

Attributes: MIG 3, AGI 3, VAL 2, RES 4, INS 4, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 2, Income 4, Reputation 13 (Notoriety 13), Passive Spotting 8, Passive Listening 0, Health 30, Determination 40, Hero Pts 0

Skills: Intimidate 6, Persuasion 6, Profession (politician) 6, Sport (golf) 4

Perks: Authority (state legislator, 10 CP), Contact (party chief), Contact (mayor's office), Criminal Connections (major crime family, 40 CP), Famous, Wealthy (40 CP)

Drawbacks: Dark Secret (on crime family payroll, 5 CP), Dependent (alcoholic spouse, 2 CP), Duty (political office, 5 CP), Notorious (13 CP)

Equipment: Smartphone

DEDICATED FAMILY MAN

Cost: 200 CP (CR 0.75)

Attributes: MIG 3, AGI 3, VAL 3, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 1, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Points 0

Skills: Avocation (scouting leader) 5, Craft (home improvement) 5, Profession (office worker) 5, Sport (cardio) 5

Perks: Principled (Duty, 1 CP), Wealthy (20 CP)

Drawbacks: Dependent (wife and 1.5 kids, 2 CP), Duty (9-to-5 job, 1 CP), Hesitant

Equipment: Smartphone

DISREPUTABLE CONSPIRACY THEORIST

Cost: 200 CP (CR 0.75)

Attributes: MIG 3, AGI 3, VAL 3, RES 3, INS 5, CHA 1, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 2, Income 0, Reputation 1 (Notoriety 6), Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Pts 0

Skills: Alertness 6, Avocation (conspiracy theory) 7, Avocation (prepping) 7, Craft (jury-rigging) 5, Investigation 6, Profession (technical writer) 6

Perks: Criminal Connection (Dark Net, 5 CP), Watchful

Drawbacks: Hunted ("by THEM man," 1 CP), Notorious

Equipment: Alarm System, Laptop Computer, Light Handgun (EV 5), Security Camera, Smartphone

GAUCHE REAL ESTATE MOGUL

Cost: 800 CP (CR 120)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 4, CHA 5, Weight 4, Height 0, Running Speed 2, Jumping Speed 0, Initiative 3, Income 16, Reputation 20 (Notoriety 15), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 24

Skills: Avocation (social media) 7, Engineering (civil) 6, Intimidation 9, Persuasion 9, Profession (real estate developer) 9, Smack Talk 9, Sport (golf) 7, Stoicism 7

Perks: Authority (CEO, 2 CP), Contact (City Mayor), Criminal Connections ("fixer," 5 CP), Famous, Multitask, Wealthy (480 CP)

Drawbacks: Dark Secret (bribery & corruption, 5 CP), Dependent (high-maintenance spouse, 5 CP), Duty (workaholic, 10 CP), Heavy, Notorious

Equipment: Smartphone

Note: The Gauche Real Estate Mogul has a net worth of about $2.8 billion. For a higher net worth, just add additional CP of Wealthy; each 80 CP increases Income by 2 SPs.

HARDBOILED PRIVATE EYE

Cost: 280 CP (CR 1.5)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 4, CHA 4, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 0, Reputation 4 (Notoriety 2), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 0

Skills: Alertness 6, Avocation (whiskey appreciation) 6, Combat Posture 4, Intimidation 6, Interrogation 6, Investigation 6, Marksmanship (shooting) 4, Martial Arts 4, Parkour 4, Persuasion 5, Piloting (ground) 4, Stealth 4

Perks: Authority (private eye, 2 CP), Contact (femme fatale), Criminal Connections (local gangs, 5 CP)

Drawbacks: Code of Honor (guy code, 2 CP), Duty (private eye, 5 CP), Notorious

Equipment: Light Handgun (EV 5), Binoculars, Handcuffs, Laptop Computer, Security Camera, Spy Bugs x 2, Smartphone, Tactical Flashlight, Tool Belt

HYPERCOMPETITIVE PROFESSIONAL ATHLETE

Cost: 560 CP (CR 150)

Attributes: MIG 5, AGI 5, VAL 5, RES 5, INS 3, CHA 4, Weight 3, Height 0, Running Speed 5, Jumping Speed 2, Initiative 5, Income 10, Reputation 20 (Notoriety 12), Passive Spotting 8, Passive Listening 0, Health 60, Determination 60, Hero Points 12

Skills: Avocation (videogames) 7, Intimidate 6, Noncombat Parkour 7, Smack Talk 7, Sport (football) 9, Sport (golf) 7, Stoicism 8

Perks: Famous, Sex Appeal, Wealthy (240 CP)

Drawbacks: Dark Secret (steroid use, 5 CP), Duty (pro athlete, 5 CP), Hunted (stalker, 1 CP), Notorious

Equipment: Smartphone

Note: The Hypercompetitive Professional Athlete has a net worth of about $50 million. For a higher net worth, just add additional CP of Wealthy; each 80 CP increases Income by 2 SPs.

JADED DILETTANTE

Cost: 560 CP (CR 15)

Attributes: MIG 4, AGI 4, VAL 4, RES 3, INS 4, CHA 5, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 10, Reputation 10, Passive Spotting 8, Passive

Listening 0, Health 40, Determination 30, Hero Points 12

Skills: Avocation (beauty & fashion) 6, Avocation (wine tasting) 6, Craft (bonsai trees) 5, Marksmanship (shooting) 5, Martial Arts 5, Intimidation 7, Parkour 6, Persuasion 6, Pilot (air vehicles) 5, Smack Talk 6, Sport (scuba diving) 6, Sport (golf) 6, Sport (skiing) 6, Sport (tennis) 6

Perks: Contact (prep school classmate), Contact (family trustee), Famous, Multitask, Sex Appeal, Wealthy (240 CP)

Drawbacks: Duty (charitable functions, 1 CP), Weak Willed

Equipment: Smartphone

Note: The Jaded Dilettante has a net worth of about $50 million. For a higher net worth, just add additional CP of Wealthy; each 80 CP increases Income by 2 SPs. Jaded Dilettantes have a 1% chance to actually be superheroes with Devices and Singular Inventions.

OBNOXIOUS IT TECH

Cost: 200 CP (CR 0.75)

Attributes: MIG 2, AGI 3, VAL 2, RES 3, INS 5, CHA 3, Weight 3, Height 0, Running Speed 3, Jumping Speed -1, Initiative 2, Income 1, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 20, Determination 30, Hero Points 0

Skills: Avocation (videogames) 6, Craft (miniatures painting) 4, Engineering (IT) 7

Perks: Wealthy (20 CP)

Drawbacks: Duty (9-to-5 job, 2 CP), Easily Winded (-2 SP Time), Unlikeable

Equipment: Laptop Computer, Smartphone, Tool Belt

PHILANTHROPIC DOCTOR

Cost: 260 CP (CR 1.5)

Attributes: MIG 3, AGI 3, VAL 2, RES 4, INS 5, CHA 4, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 2, Income 4, Reputation 4, Passive Spotting 8, Passive Listening 0, Health 30, Determination 40, Hero Points 0

Skills: Avocation (charity) 7, Medicine 7, Science (biology) 6, Sport (tennis) 4

Perks: Authority (doctor, 1 CP), Wealthy (40 CP)

Drawbacks: Code of Honor (Hippocratic Oath, 1 CP), Duty (medical practice, 2 CP)

Equipment: Smartphone

PLAINSPOKEN CONSTRUCTION WORKER

Cost: 200 CP (CR 0.75)

Attributes: MIG 4, AGI 3, VAL 3, RES 3, INS 2, CHA 3, Weight 3, Height 0, Running Speed 3, Jumping Speed 1, Initiative 3, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 40, Determination 30, Hero Points 0

Skills: Avocation (sports fan) 4, Craft (construction) 5, Engineering (civil) 4, Marksmanship (shooting) 4, Pilot (ground vehicles) 4, Smack Talk 5, Sport (bowling) 5

Perks: Principled (guy code, 1 CP)

Drawbacks: Code of Honor (guy code, 1 CP), Dependent (troubled teenage daughter, 2 CP), Duty (9-to-5 job, 2 CP)

Equipment: Smartphone

PRINCIPLED LOCAL POLITICIAN

Cost: 320 CP (CR 2)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 4, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 4, Reputation 13, Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 0

Skills: Avocation (local charity) 6, Persuasion 7, Profession (politician) 6, Sport (aerobics) 4

Perks: Authority (city council, 5 CP), Contact (local newspaper editor-in-chief), Contact (mayor's office), Famous, Principled (Code of Honor and Duty, 7 CP), Wealthy (40 CP)

Drawbacks: Code of Honor (oath of office, 2 CP), Dependent (disabled spouse, 2 CP), Dependent (college-age daughter, 1 CP), Duty (political office, 5 CP)

Equipment: Smartphone

SCHOLARLY INTERNATIONAL POLITICIAN

Cost: 520 CP (CR 12)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 8, Reputation 20 (Notoriety 15), Passive Spotting 6, Passive Listening 0, Health 30, Determination 60, Hero Points 10

Skills: Avocation (international charity) 7, Avocation (chess) 7, Intimidation 9, Persuasion 9, Profession (politician) 7, Profession (history professor) 7, Smack Talk 9, Stoicism 9

Perks: Authority (Cabinet post, 40 CP), Contact (CIA Director), Famous, Sex Appeal, Wealthy (160 CP)

Drawbacks: Dark Secret (war crimes, 5 CP), Dim Vision 2, Duty (political office, 5 CP), Notorious (15 CP)

Equipment: Smartphone

SELF-ABSORBED FASHIONISTA

Cost: 200 CP (CR 0.75)

Attributes: MIG 2, AGI 3, VAL 2, RES 2, INS 3, CHA 5, Weight 2, Height 0, Running Speed 3, Jumping Speed 0, Initiative 2, Income 1, Reputation 12 (Notoriety 12), Passive Spotting 8, Passive Listening 0, Health 20, Determination 20, Hero Pts. 0

Skills: Avocation (beauty & fashion) 5, Craft (selfies) 5, Sport (yoga) 5

Perks: Famous (social media influencer), Sex Appeal, Wealthy (20 CP)

Drawbacks: Hunted (stalker, 1 CP), Notorious (haters, 12 CP), Unobservant

Equipment: Pepper Spray (EV 4), Smartphone, 50% chance of Psychoactive

SLEAZY LAWYER

Cost: 260 CP (CR 1.5)

Attributes: MIG 2, AGI 2, VAL 2, RES 3, INS 5, CHA 4, Weight 3, Height 0, Running Speed 2, Jumping Speed 0, Initiative 2, Income 4, Reputation 8 (Notoriety 8), Passive Spotting 8, Passive Listening 0, Health 20, Determination 30, Hero Pts. 0

Skills: Avocation (cigar aficionado) 7, Interrogation 7, Intimidation 6, Persuasion 6, Profession (criminal law) 7

Perks: Authority (attorney, 1 CP), Contact (judge's clerk), Criminal Connections (hardened criminals, 10 CP), Famous, Wealthy (40 CP)

Drawbacks: Duty (legal practice, 5 CP), Notorious, Weak Willed

Equipment: Smartphone

SPOILED CELEBRITY

Cost: 560 CP (CR 15)

Attributes: MIG 3, AGI 5, VAL 3, RES 5, INS 4, CHA 5, Weight 2, Height 0, Running Speed 5, Jumping Speed 1, Initiative 3, Income 10, Reputation 25 (Notoriety 16), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 12

Skills: Avocation (beauty & fashion) 6, Avocation (social media) 6, Noncombat Parkour 7, Smack Talk 7, Sport (dance) 9, Stoicism 7

Perks: Contact (Hollywood agent), Criminal Connections (personal drug dealer, 10 CP), Minions (entourage and flunkies, 10 CP), Sex Appeal, Wealthy (240 CP)

Drawbacks: Dark Secret (cheated on current partner, 1 CP), Dark Secret (former sex worker, 2 CP), Dark Secret (rampant drug abuse, 5 CP), Duty (recording contract, 5 CP), Hunted (stalker, 1 CP), Notorious, Unlikeable, Unobservant, Weak Willed

Equipment: Smartphones x 2, Psychoactive x 10, Sedative x 30, Stimulants x 30

Note: The Spoiled Celebrity has a net worth of about $50 million. For a higher net worth, just add additional CP of Wealthy; each 80 CP increases Income by 2 SPs.

TROUBLEMAKING JOURNALIST

Cost: 280 CP (CR 1.5)

Attributes: MIG 3, AGI 3, VAL 3, RES 4, INS 4, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 1, Reputation 10, Passive Spotting 8, Passive Listening 0, Health 30, Determination 40, Hero Points 0

Skills: Alertness 5, Craft (photography) 5, Interrogation 6, Investigation 6, Persuasion 6, Profession (journalist) 6

Perks: Authority (press credentials, 1 CP), Contact (police detective), Contact (deputy mayor), Criminal Connections (petty crooks, 5 CP), Famous, Wealthy (5 CP)

Drawbacks: None

Equipment: Pepper Spray (EV 4), Taser (EV 4), Smartphone

UNSCRUPULOUS EXECUTIVE

Cost: 400 CP (CR 4)

Attributes: MIG 4, AGI 3, VAL 3, RES 4, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 1, Initiative 3, Income 6, Reputation 10, Passive Spotting 8, Passive Listening 0, Health 40, Determination 40, Hero Points 4

Skills: Avocation (investing) 6, Avocation (beauty & fashion) 6, Avocation (wine tasting) 6, Intimidation 7, Persuasion 7, Pilot (air vehicles) 4, Profession (executive) 7, Smack Talk 7, Sport (scuba diving) 5, Sport (golf) 5, Sport (skiing) 5, Sport (tennis 5)

Perks: Contact (MBA classmate), Contact (rich client), Criminal Connections (coke dealer, 5 CP), Famous, Multitask, Sex Appeal, Wealthy (80 CP)

Drawbacks: Dark Secret (affair, 1 CP), Dark Secret (coke habit, 1 CP), Dependent (high-maintenance spouse, 2 CP), Duty (stressful career, 5 CP), Unlikeable

Equipment: Smartphone, Stimulants x 10

Note: The Unscrupulous Executive has a net worth of about $3 million. For a higher net worth, just add additional CP of Wealthy; each 80 CP increases Income by 2 SPs.

WISE-CRACKING SECURITY GUARD

Cost: 200 CP (CR 0.75)

Attributes: MIG 3, AGI 3, VAL 3, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Points 0

Skills: Alertness 5, Investigation 4, Marksmanship (shooting) 4, Martial Arts 4, Persuasion 4, Piloting (ground vehicles) 4, Smack Talk 4

Perks: Authority (security guard, 2 CP)

Equipment: Baton (EV 4), Taser (EV 4), Handcuffs, Smartphone, Tactical Flashlight, Walkie Talkie

WOKE TECH TYCOON

Cost: 800 CP (CR 120)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 16, Reputation 16 (Notoriety 15), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 24

Skills: Avocation (Zen Buddhism) 7, Engineering (computer) 7, Persuasion 9, Profession (executive) 9, Smack Talk 7, Pilot (ground vehicles) 5, Sport (yoga) 7, Stoicism 7

Perks: Authority (CEO, 2 CP), Contact (the White House), Contact (Oscar-winning Hollywood director), Criminal Connections ("fixer," 5 CP), Famous, Multitask, Sex Appeal, Wealthy (480 CP)

Drawbacks: Dark Secret (bizarre kink, 5 CP), Dependent (troublemaking illegitimate heir, 5 CP), Duty (workaholic, 10 CP), Notorious

Equipment: Laptop Computer, Smartphone

Note: The Woke Tech Tycoon has a net worth of about $2.8 billion. For a higher net worth, just add additional CP of Wealthy; each 80 CP increases Income by 2 SPs.

FIRST RESPONDERS

Ascendants who fight crime and respond to disasters will meet many first responders. These brave men and women can be allies, contacts, minions, and sidekicks for ascendant heroes. First responders generally have their listed Hero Points. (It's assumed that whatever they have spent they have replenished with heroic deeds.)

BUFF FIREFIGHTER

Cost: 240 CP (CR 1)

Attributes: MIG 5, AGI 4, VAL 4, RES 4, INS 3, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 60, Determination 40, Hero Points 0

Skills: Alertness 4, Infiltration 4, Martial Arts (armed combat) 5, Medicine 4, Parkour 5

Perks: Authority (firefighter, 2 CP), Sex Appeal

Drawbacks: Code of Honor (FD code of conduct, 2 CP), Dependent (spouse, 1 CP), Dependent (wayward son, 2 CP), Duty (firefighter, 5 CP)

Equipment: Firefighter Entry Suit, Gas Mask, Head Lamp, Tool Belt, Walkie Talkie

COMPASSIONATE PARAMEDIC

Cost: 240 CP (CR 1)

Attributes: MIG 3, AGI 4, VAL 3, RES 3, INS 4, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 0, Initiative 3, Income 1, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 40, Determination 20, Hero Points 0

Skills: Alertness 5, Avocation (animal rescue) 5, Medicine 6, Persuasion 5, Piloting (ground vehicles) 5

Perks: Authority (EMT, 2 CP), Multitask, Principled (Duty, 5 CP), Wealthy (10 CP)

Drawbacks: Code of Honor (EMT code of conduct, 2 CP), Dependent (spouse, 1 CP), Dependent (foster daughter, 1 CP), Duty (EMT, 5 CP)

Equipment: Intramuscular Field Anesthetic x 6, QuickClot x 6, Smartphone, Tool Belt, Walkie Talkie

HONEST BEAT COP

Cost: 240 CP (CR 1)

Attributes: MIG 3, AGI 4, VAL 3, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 0, Initiative 3, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Points 0

Skills: Alertness 5, Combat Posture 5, Intimidation 4, Interrogation 4, Investigation 4, Marksmanship (shooting) 5, Martial Arts 5, Parkour 5, Persuasion 5, Piloting (ground vehicles) 5, Sport (bowling) 5, Stealth 5, Stoicism 4

Perks: Authority (police officer, 5 CP), Criminal Connections (confidential informants, 5 CP), Principled (Code of Honor and Duty, 7 CP)

Drawbacks: Code of Honor (PD code of conduct, 2 CP), Dependent (police spouse, 1 CP), Duty (beat cop, 5 CP)

Equipment: Bulletproof Vest, Heavy Handgun (EV 6), Baton (EV 4), Taser (EV 4), Handcuffs, Smartphone, Tactical Flashlight, Walkie Talkie

Notes: For a Dirty Cop, remove Code of Honor and Principled CP; add Wealthy (5 CP), raising Income to 1. For a Divorced Donut-Munching Cop, remove Dependent and add Heavy, reducing Speeds by 1 SP.

MORBID CORONER

Cost: 240 CP (CR 1)

Attributes: MIG 3, AGI 3, VAL 3, RES 3, INS 5, CHA 2, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 2, Reputation 2, Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Points 0

Skills: Avocation (morbid humor) 7, Investigation 7, Marksmanship (shooting) 4, Medicine 7, Profession (coroner) 7, Science (forensics) 7, Stoicism 5

Perks: Authority (city coroner, 5 CP), Wealthy (20 CP)

Drawbacks: Dependent (numerous cats, 1 CP), Duty (city coroner, 5 CP)

Equipment: Smartphone

OLD-FASHIONED POLICE COMMISSIONER

Cost: 400 CP (CR 4)

Attributes: MIG 3, AGI 3, VAL 3, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 3, Reputation 10, Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 4

Skills: Alertness 7, Avocation (black and white movies) 6, Avocation (classical music) 6, Avocation (mystery stories) 6, Combat Posture 4, Interrogation 7, Intimidation 7, Investigation 7, Marksmanship (shooting) 4, Martial Arts 4, Parkour 4, Persuasion 7, Piloting (ground vehicles) 4, Science (forensics) 6, Stealth 4, Stoicism 7

Perks: Authority (police commissioner, 10 CP), Contact (newspaper editor-in-chief), Criminal Connections (confidential informants, 5 CP), Famous, Heroic 2, Leadership, Minions (40 CP), Principled (Code of Honor and Duty, 7 CP), Wealthy (10 CP)

Drawbacks: Code of Honor (PD code of conduct, 2 CP), Dependent (devoted spouse, 1 CP), Duty (police commissioner, 5 CP)

Equipment: Bulletproof Vest, Light Handgun (EV 5), Smartphone

THOUGHTFUL DETECTIVE

Cost: 280 CP (CR 1.5)

Attributes: MIG 3, AGI 4, VAL 3, RES 4, INS 4, CHA 4, Weight 3, Height 0, Running Speed 4, Jumping Speed 0, Initiative 3, Income 1, Reputation 4, Passive Spotting 8, Passive Listening 0, Health 30, Determination 40, Hero Points 0

Skills: Alertness 6, Combat Posture 5, Craft (origami) 4, Intimidation 5, Interrogation 6, Investigation 6, Marksmanship (shooting) 5, Martial Arts 5, Parkour 5, Persuasion 6, Piloting (ground vehicles) 5, Science (forensics) 5, Stealth 5

Perks: Authority (police detective, 5 CP), Criminal Connections (confidential informants, 5 CP), Wealthy (10 CP)

Drawbacks: Code of Honor (PD code of conduct), Dependent (devoted spouse, 1 CP), Duty (police detective, 5 CP)

Equipment: Bulletproof Vest, Heavy Handgun (EV 6), Handcuffs, Smartphone, Walkie Talkie

TRIGGER-HAPPY SWAT TROOPER

Cost: 280 CP (CR 1.5)

Attributes: MIG 4, AGI 4, VAL 4, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 1, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 40, Determination 30, Hero Points 0

Skills: Alertness 5, Combat Posture 6, Intimidation 5, Interrogation 4, Investigation 4, Marksmanship (shooting) 6, Martial Arts 6, Parkour 6, Persuasion 5, Piloting (ground vehicles) 5, Sport (CrossFit) 5, Stealth 5

Perks: Authority (SWAT trooper, 5 CP), Combat Maneuver (Super-Power Ranged), Criminal Connections (confidential informants, 5 CP), Wealthy (10 CP)

Drawbacks: Dark Secret (likes to kill, 2 CP), Dependent (alcoholic/addicted spouse, 2 CP), Duty (SWAT trooper, 5 CP)

Equipment: Ballistic Armor, Submachinegun (EV 6) with Laser Sight, Baton (EV 5), Headlamp, Handcuffs, Smartphone, Walkie Talkie

WATCHFUL SECRET SERVICE AGENT

Cost: 400 CP (CR 4)

Attributes: MIG 4, AGI 5, VAL 5, RES 5, INS 4, CHA 4, Weight 3, Height 0, Running Speed 5, Jumping Speed 1, Initiative 5, Income 0, Reputation 4, Passive Spotting 8, Passive Listening 0, Health 40, Determination 60, Hero Points 4

Skills: Alertness 9, Combat Posture 7, Interrogation 7, Intimidation 7, Investigation 7, Marksmanship (shooting) 7, Martial Arts 7, Medicine 5, Parkour 7, Piloting (ground vehicles) 7, Sport (CrossFit) 7, Stoicism 7

Perks: Authority (Secret Service, 5 CP), Contact (the White House), Grappling Expertise, Principled (Code of Honor & Duty), Protector, Watchful

Drawbacks: Code of Honor (protect President, 2 CP), Duty (protect President, 10 CP)

Equipment: Bulletproof Vest, Heavy Handgun (EV 6), Handcuffs, Smartphone, Walkie Talkie

MILITARY PERSONNEL

The governments of the world have become actively involved in ascendant activity. Whether the characters are working for the Star-Spangled Squadron, fighting Russia's Spetsikhotron, or working as super-mercenaries, they are sure to encounter soldiers of all sorts. Soldiers, sailors, and aviators generally have their listed Hero Points. (It's assumed that whatever they have spent they have replenished with heroic deeds.)

BOLD NAVY ADMIRAL

Cost: 400 CP (CR 4)

Attributes: MIG 3, AGI 4, VAL 3, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 5, Reputation 10, Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 4

Skills: Alertness 7, Avocation (naval history buff) 7, Avocation (chess) 7, Breath Control 4, Combat Posture 5, Engineer (aviation) 6, Engineer (nuclear) 6, Intimidation 6, Marksmanship (shooting) 7, Martial Arts 4, Parkour 5, Pilot (water vehicle) 7, Profession (bureaucrat) 7, Smack Talk 7, Sport (golf) 6, Stoicism 8

Perks: Authority (flag-grade officer, 20 CP), Combat Maneuvers (Super-Fast Ranged, Super-Power Ranged), Contact (Joint Chiefs), Famous, Principled (Code of Honor, 2 CP), Wealthy

Drawbacks: Code of Honor (Navy code of conduct, 2 CP), Dependent (son deployed in Navy, 2 CP), Dependent (loyal spouse, 1 CP), Duty (commissioned officer, 10 CP)

Equipment: Smartphone

HAWKISH ARMY GENERAL

Cost: 400 CP (CR 4)

Attributes: MIG 3, AGI 4, VAL 3, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 3, Jumping Speed 0, Initiative 3, Income 5, Reputation 10, Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 4

Skills: Alertness 7, Avocation (military history buff) 7, Avocation (college football fan) 7, Combat Posture 5, Interrogation 7, Intimidation 7, Marksmanship (shooting) 6, Martial Arts 5, Parkour 6, Pilot (ground vehicle) 5, Profession (bureaucrat) 7, Smack Talk 7, Sport (golf) 6, Stealth 6, Stoic. 7

Perks: Authority (flag-grade officer, 20 CP), Contact (Joint Chiefs), Contact (defense contractor), Famous, Wealthy

Drawbacks: Code of Honor (Army code of conduct, 2 CP), Dark Secret (complicit in war crimes cover-up, 2 CP), Dependent (son deployed in theater, 2 CP), Dependent (loyal spouse, 1 CP), Duty (commissioned officer, 10 CP)

Equipment: Smartphone

MAVERICK ACE PILOT

Cost: 360 CP (CR 3)

Attributes: MIG 3, AGI 5, VAL 4, RES 5, INS 4, CHA 4, Weight 3, Height 0, Running Speed 5, Jumping Speed 0, Initiative 4, Income 0, Reputation 9 (Notoriety 10), Passive Spotting 8, Passive Listening 0, Health 30, Determination 60, Hero Points 2

Skills: Alertness 7, Avocation (poker) 7, Engineering (aviation) 6, Marksmanship (shooting) 9, Piloting (air vehicles) 9, Smack Talk 7, Sport (beach volleyball) 7, Stoicism 7

Perks: Authority (commissioned officer, 10 CP), Combat Maneuver (Super-Fast Ranged, Ultra-Fast Ranged, Mega-Fast Ranged, Super-Power Ranged, Ultra-Power Ranged), Famous, Mobile Defense Expertise, Multitask, Sex Appeal

Drawbacks: Code of Honor (officer & gentleman, 2 CP), Duty (commissioned officer, 10 CP), Notorious 10

Equipment: Flight Suit, Kevlar Helmet, Light Handgun (EV 5)

ORDINARY COMBAT HELICOPTER PILOT

Cost: 240 CP (CR 1)

Attributes: MIG 3, AGI 5, VAL 4, RES 3, INS 4, CHA 3, Weight 3, Height 0, Running Speed 5, Jumping Speed 0, Initiative 4, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 30, Determination 30, Hero Points 0

Skills: Alertness 5, Engineering (aviation) 6, Marksmanship (shooting) 7, Piloting (air vehicles) 7, Sport (pool) 6, Stoicism 4

Perks: Authority (warrant officer, 5 CP), Mobile Defense Expertise

Drawbacks: Code of Honor (Army code of conduct, 2 CP), Duty (warrant officer, 10 CP)

Equipment: Flight Suit, Kevlar Helmet, Light Handgun (EV 5)

Notes: To represent a Combat Helicopter Gunner, replace Mobile Defense Expertise with Combat Maneuver (Super-Power Ranged).

ORDINARY FIGHTER PILOT

Cost: 300 CP (CR 2)

Attributes: MIG 3, AGI 5, VAL 4, RES 4, INS 4, CHA 4, Weight 3, Height 0, Running Speed 5, Jumping Speed 0, Initiative 4, Income 0, Reputation 4, Passive Spotting 8, Passive Listening 0, Health 30, Determination 40, Hero Points 0

Skills: Alertness 6, Avocation (poker) 5, Engineering (aviation) 5, Marksmanship (shooting) 7, Piloting (air vehicles) 7, Smack Talk 5, Sport (beach volleyball) 6, Stoicism 6

Perks: Authority (commissioned officer, 10 CP), Combat Maneuver (Super-Fast Ranged, Super-Power Ranged), Mobile Defense Expertise, Multitask

Drawbacks: Code of Honor (officer & gentleman, 2 CP), Duty (commissioned officer, 10 CP)

Equipment: Flight Suit, Kevlar Helmet, Light Handgun (EV 5)

ORDINARY ARMOR SOLDIER

Cost: 240 CP (CR 1)

Attributes: MIG 4, AGI 4, VAL 4, RES 3, INS 4, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 40, Determination 30, Hero Points 0

Skills: Alertness 6, vocation (videogames) 5, Combat Posture 5, Engineering (mechanical) 5, Marksmanship (shooting) 6, Piloting (ground vehicles) 6

Perks: Authority (enlisted soldier, 5 CP), Mobile Defense Expertise

Drawbacks: Code of Honor (Army code of conduct, 2 CP), Dependent (military spouse, 1 CP), Duty (enlisted soldier, 10 CP)

Equipment: Kevlar Helmet, Submachinegun (EV 6), Tool Belt, Walkie Talkie

Notes: For a Tank Gunner, substitute Combat Maneuver (Super-Power Ranged) for Mobile Defense Expertise.

ORDINARY INFANTRY SOLDIER

Cost: 240 CP (CR 1)

Attributes: MIG 4, AGI 4, VAL 4, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 40, Determination 30, Hero Points 0

Skills: Alertness 5, Avocation (videogames) 4, Combat Posture 5, Engineering (combat engineering) 4, Marksmanship (shooting) 6, Martial Arts 5, Parkour 6, Piloting (ground vehicles) 5, Stealth 5

Perks: Authority (enlisted soldier, 5 CP), Combat Maneuver (Super-Fast Ranged)

Drawbacks: Code of Honor (Army code of conduct, 2 CP), Dependent (parents back home, 1 CP), Duty (enlisted soldier, 10 CP)

Equipment: Ballistic Armor, Assault Rifle (EV 7), Knife (EV 5), Fragmentation Grenades x 2, Military-Grade Night Vision Googles, Tool Belt, Walkie Talkie

ORDINARY NAVY SAILOR

Cost: 240 CP (CR 1)

Attributes: MIG 3, AGI 4, VAL 3, RES 4, INS 4, CHA 3, Weight 3, Height 0, Running Speed 3, Jumping Speed 1, Initiative 3, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 30, Determination 40, Hero Points 0

Skills: Alertness 5, Avocation (videogames) 5, Avocation (poker) 5, Combat Posture 4, Engineering (nuclear) 5, Marksmanship (shooting) 6, Martial Arts 4, Piloting (water vehicles) 6, Sport (swimming) 6

Perks: Authority (enlisted sailor, 5 CP), Combat Maneuver (Super-Fast Ranged, Super-Power Ranged)

Drawbacks: Code of Honor (Navy code of conduct, 2 CP), Dependent (unreliable spouse, 2 CP), Duty (enlisted sailor 10 CP)

Equipment: Smartphone, Tool Belt

SKILLED INFANTRY SOLDIER

Cost: 300 CP (CR 2)

Attributes: MIG 4, AGI 4, VAL 4, RES 3, INS 3, CHA 3, Weight 3, Height 0, Running Speed 4, Jumping Speed 1, Initiative 4, Income 0, Reputation 3, Passive Spotting 8, Passive Listening 0, Health 40, Determination 30, Hero Points 0

Skills: Alertness 5, Avocation (videogames) 4, Combat Posture 6, Engineering (combat engineering) 4, Intimidate 4, Interrogate 4, Marksmanship (shooting) 6, Martial Arts 6, Parkour 6, Piloting (ground vehicles) 5, Smack Talk 4, Stealth 6, Stoicism 4

Perks: Authority (NCO, 5 CP), Combat Maneuver (Super-Fast Ranged), Contact (buddy at DoD), Multitask, Watchful

Drawbacks: Code of Honor (Army code of conduct, 2 CP), Dependent (wife back home, 1 CP), Duty (enlisted soldier, 10 CP)

Equipment: Ballistic Armor, Assault Rifle (EV 7), Knife (EV 5), Fragmentation Grenades x 2, Military-Grade Night Vision Googles, Tool Belt, Walkie Talkie

SPECIAL FORCES SOLDIER

Cost: 400 CP (CR 4)

Attributes: MIG 5, AGI 5, VAL 5, RES 4, INS 4, CHA 4, Weight 3, Height 0, Running Speed 5, Jumping Speed 2, Initiative 5, Income 0, Reputation 4, Passive Spotting 8, Passive Listening 0, Health 60, Determination 40, Hero Points 4

Skills: Alertness 6, Combat Posture 7, Engineering (combat engineering) 6, Intimidate 6, Interrogate 6, Marksmanship (shooting) 7, Martial Arts 7, Parkour 7, Persuasion 5, Piloting (ground vehicles) 7, Smack Talk 6, Stealth 7, Stoicism 5

Perks: Authority (NCO, 5 CP), Combat Maneuver (Super-Fast Ranged), Contact (buddy at DoD), Criminal Connections (terror networks, 5 CP), Multitask, Watchful

Drawbacks: Code of Honor (Army code of conduct, 2 CP), Dependent (family back home, 1 CP), Duty (enlisted soldier, 10 CP)

Equipment: Ballistic Armor, Assault Rifle (EV 7) with Laser Sight, Knife (EV 5), Fragmentation Grenades x 4, Military-Grade Night Vision Googles, Tool Belt, Walkie Talkie

Note: For a Special Forces Sniper, increase Marksmanship (shooting) to 9, increase Stealth to 8, and add Combat Maneuver (Super-Power Ranged). Remove Multitask. Equip with Sniper Rifle with Laser Sight and Telescopic Scope.

SUPER-SOLDIER

Cost: 600 CP (CR 20)

Attributes: MIG 5, AGI 5, VAL 5, RES 5, INS 5, CHA 5, Weight 3, Height 0, Running Speed 6, Jumping Speed 3, Initiative 5, Income 0, Reputation 5, Passive Spotting 8, Passive Listening 3, Health 120, Determination 60, Hero Points 14

Powers: All-Frequency Hearing 1, Bludgeoning Strike 8, Electrical Toxic Resistance 5, Physical Invulnerability 5, Regeneration 2, Running 6, Super-Perception 6, Super-Strength 6, Super-Stamina 7, Telescopic Vision 3, Ultra-Sensitive Hearing 3, Underwater Vision 3

Skills: Alertness 7, Combat Posture 9, Engineering (combat engineering) 7, Intimidate 7, Interrogate 7, Marksmanship (shooting) 9, Martial Arts 9, Parkour 9, Persuasion 5, Piloting (ground vehicles) 9, Smack Talk 7, Stealth 9, Stoicism 7

Perks: Authority (NCO), Combat Maneuvers (Super-Fast Ranged, Super-Power Ranged, Super-Fast Melee, Super-Power Melee), Contact (Joint Chiefs), Leadership, Multitask, Principled (Code of Honor & Duty, 12 CP), Sex Appeal, Tireless, Watchful

Drawbacks: Code of Honor (Army code of conduct, 2 CP), Dependent (loyal spouse, 1 CP), Duty (super-soldier, 10 CP)

Equipment: Ballistic Armor, Assault Rifle (EV 7) with Laser Sight, Knife (EV 5), Fragmentation Grenades x 4, Military-Grade Night Vision Googles, Tool Belt, Walkie Talkie

Note: The Super-Soldier is intended to be a "realistic" superhero whose abilities are at the peak of what might plausibly be created through genetic modification and training in our world. See Real-World Superpowers (p. 489).

APPENDIX B: CONDITIONS

This Appendix summarizes all the Conditions that can affect characters in *Ascendant*.

Bleeding. The Bleeding condition is a special effect of the Lacerating and Penetrating Damage Types on creatures. At the end of each of his Panels, a Bleeding creature suffers Damage as if from a Green result on a Lacerating or Penetrating Attack (as per the original Attack) with an Effect Value equal to the Special Effect Value (SEV), then reduces the SEV by 1. When the SEV is reduced to 0, the wound has clotted and the Condition ends. At the start of his Panel, a creature with Regeneration automatically reduces the SEV of the Bleeding condition by his SPs of Regeneration. The creature or an ally can attempt to bind the wound as a Challenge Action. The creature or ally makes an INS v. SEV Challenge Check and reduces the SEV of the Bleeding condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result. Objects are immune to the Bleeding condition; see Leaking.

Blinded. The Blinded condition can be inflicted by successful use of the Flash power. It can also be a permanent condition caused by certain Drawbacks. It can also arise with regard to a particular target when the target's SPs of Obscurity equal or exceed the character's SPs of Passive Spotting Range. A Blinded character cannot claim LOS to targets. When attacking, he can only make Blind Attacks (p. 377). He will be Totally Surprised by any attacks made by opponents outside of Earshot and Partially Surprised by attacks made by opponents within Earshot (p. 300) unless he has another way to detect them. If a Blinded character has Blindsight, he can ignore this Condition for purposes of interacting with any characters within Range of his Power. If this Condition is caused by the Flash power, it will be a temporary Condition that lasts one or more Pages. The character can end the Condition at the start of his Panel by spending a number of Hero Points equal to the number of Pages he will otherwise remain Blinded. An object can only be Blinded if it is Autonomous and has a Passive Spotting Range.

Burning. The Burning condition is a special effect of the Thermal Damage Type. At the end of each of his Panels, a Burning character suffers Damage as if from a Green result on a Thermal Attack with an Effect Value equal to the Special Effect Value (SEV), then reduces the SEV by 1. When the SEV is reduced to 0, the flames die out and the Condition ends. Damage from the Burning condition is reduced by any type of Thermal Protection. A character with SPs of Thermal Protection equal to or greater than the SEV is immune to this Special Effect. Anyone with Air Control, Water Control, or similar Powers with SPs equal to or greater than the current SEV of the Burning condition can attempt to reduce the SEV of the Burning condition; handle as if putting out a fire with a Magnitude equal to the current SEV. Otherwise, the Burning character can attempt to extinguish the flames through stop-drop-and-roll as a Challenge Action. The character makes an AGI vs. SEV Challenge Check and reduces the SEV of the Burning condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result.

Corroding. The Corroding condition is a special effect of the Corrosive Damage Type. At the end of each of his Panels, a Corroding character suffers Damage as if from a Green result on a Corrosive Attack with an Effect Value equal to the SEV, then reduces the SEV by 1. When the SEV is reduced to 0, the chemical has evaporated or oxidized and the Condition ends. Anyone with Water Control or similar Powers with SPs can attempt to reduce the SEV of the Corroding condition; handle as if putting out a fire with a Magnitude equal to the current SEV. A Corroding character who can fully immerse himself in water can automatically wash the corrosive agent off and end the Condition as an Automatic Action. Otherwise, the Corroding character can attempt to wipe off the acid as a Challenge Action. The character makes an AGI vs. SEV Challenge Check and reduces the SEV of the Corrosive condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result.

Dazed. A character gains the Dazed condition when he Rolls with an Attack and reduces the Color Result by one color. A character can also gain the Dazed condition if he is affected by the Quake power. On his next Panel, he can only take two Actions, and one of the two must be an Automatic Action. A character can spend 1 Hero Point at the start of that Panel to remove this Condition. Otherwise, the Condition automatically expires at the end of that Panel.

Deafened. The Deafened condition can be inflicted on a character by successful use of the Bang power. The Deafened condition can also be a permanent Condition for characters with certain Drawbacks. A Deafened character is out of Earshot of all sounds. He will be Totally Surprised by any attacks made by opponents outside of LOS unless he has another way to detect them. If this Condition is selected as a Drawback, the character cannot have SPs of Extended Hearing, Filtered Hearing, or Ultra-Sensitive Hearing, and he cannot have the Bad Hearing drawback. If this Condition is caused by the Bang power, it will be a temporary Condition that lasts one or more Pages. The character can end the Condition at the start of his Panel by spending a number of Hero Points equal to the number of Pages he will otherwise remain Deafened. An object can only be Deafened if it is Autonomous and has a Passive Listening Range.

Destroyed. An object gains the Destroyed condition when its Current Durability is reduced to a negative value equal to or greater in magnitude to its Maximum Durability. A Destroyed object leaves behind rubble and wreckage appropriate to the type of Damage that destroyed it, but it cannot be repaired. The Destroyed condition is permanent. Creatures are immune to this Condition; see Slain.

Disoriented. The Disoriented condition is a special effect of the Neural and Psychic Damage Types. A Disoriented creature reduces his Initiative by the Special Effect Value of the Attack (to a minimum of 0). In addition, if the SEV of the Attack exceeds the target's RES, the target loses one Action on his Panel. If the target has Neural or Psychic Protection (as per the original Attack), he may subtract his SPs of Protection from the SEV. A creature with SPs of the appropriate Protection equal to or greater than the SEV is immune to this Special Effect. Otherwise, at the end of each of his Panels, the creature reduces the SEV by 1. When the SEV is reduced to 0, the creature regains his mental equilibrium and the Condition ends. At the start of his Panel, a creature with Resilience automatically reduces the SEV of the Disoriented condition by his SPs of Resilience. Objects are immune to the Disoriented condition.

Disrupted. The Disrupted condition is a special effect of the Electrical and Ionizing Damage Types. While Disrupted, the character reduces his Initiative by the SEV of the Attack (to a minimum of 0). In addition, if the SEV exceeds the target's MIG, the target loses one Action on his Panel. At the end of each of his Panels, the character reduces the SEV by 1. When the SEV is reduced to 0, the character regains his physical equilibrium and the Condition ends. At the start of his Panel, a character with Resilience automatically reduces the SEV of the Disrupted condition by his SPs of Resilience. Objects are immune to the Disrupted condition unless they are Autonomous.

Dominated. The Dominated condition is inflicted on a character by successful use of the Mind Domination power. Dominated characters are automatons with no will of their own and act according to orders issued to them by the character dominating them. At the end of his Panel, a Dominated target can attempt to break the Mind Domination. Making the attempt does not require an

Action. To break the Mind Domination, the target must succeed on a RES vs. Mind Domination Attack Check with a color result that is equal to or better than the color result the controlling character scored against him. Treat the dominating character's color result as one color worse for purposes of Challenge Check color result required if the target was ordered to directly harm himself or loved ones or if the target is no longer in Range of the dominating character. When attempting to break free, the Dominated target can always spend Hero Points to increase the AV. The dominating character can only spend Hero Points to increase the DV if the target is in Range and LOS.

Drowning. A Drowning creature cannot take any Actions. On the start of his Panel, he takes 3 points of Neural Health Damage. Unless he is Unconscious, he then makes an AGI vs. Hazardousness Challenge Check. If the result is Red, he begins swimming again and the Condition ends. If the result is Orange, Yellow, or Green the creature continues Drowning. If the result is White, the creature becomes Unconscious. Even if pulled to safety, a creature who became Unconscious from Drowning continues to take 3 points of Neural Health Damage each Panel until he is resuscitated or Slain. A Mind Field does not protect against Damage from Drowning. Objects are immune to this Condition; see Sinking.

Emotional. The Emotional condition is inflicted on a creature by successful use of the Emotion Adjustment power. The effects of the Emotional condition depend on the emotion, intensity, and focus imposed. At the end of his Panel, an Emotional target can attempt to break free of the Emotion Adjustment. Making the attempt does not require an Action. To break free, the target must succeed on a RES vs. Emotion Adjustment Attack Check with a color result that is equal to or better than the color result the adjusting creature scored against him. When attempting to break free, the Emotional target can always spend Hero Points to increase the AV, but the adjusting creature can only spend Hero Points to increase the DV if the target is in Range and LOS.

Engaged. An Engaged character has become entangled in close combat with an Engaging opponent. Any Ranged Attacks against either the Engaged or Engaging character by any other characters suffer a -2 penalty to their RV due to the difficulty in distinguishing the two targets. The character is considered to be Encumbered as if he were carrying an object with a Weight equal to the greater of the Engaging opponent's MIG or Weight + Speed. If the character's Encumbered Speed is 1 SP or more, the character may take a Movement Action while carrying the Engaging opponent along with him. If the character's Encumbered Speed is reduced to 0 or less, he cannot take a Movement Action and he cannot make Melee Attacks or Wrestling Attacks at any characters other than the attacker. The Engaged condition ends when the Engaging character relinquishes his grip or when the Engaged character escapes (p. 391).

Engaging. An Engaging character has Engaged an opponent, entangling them in close combat. Any Ranged Attacks against either the Engaged or Engaging character by any other characters suffer a -2 penalty to their RV due to the difficulty in distinguishing the two targets. The character is considered to be Encumbered as if he were carrying an object with a Weight equal to the greater of the Engaged opponent's MIG or Weight + Speed. If the character's Encumbered Speed is 1 SP or more, the character may take a Movement Action while carrying the Engaged opponent with him. If the character's Encumbered Speed is reduced to 0 or less, the character must relinquish his grapple and end the Conditions in order to take a Movement Action. The Engaging condition ends when the Engaging character relinquishes his grip or when the Engaged character escapes (p. 391).

Exhausted. A creature gains the Exhausted condition from taking Extended Actions of over a certain Time. An Exhausted creature suffers a -2 penalty to his MIG (or MIG substitute) for purposes of lifting, carrying, pushing, pulling, and throwing; Speed (or Speed substitute) for purposes of traveling; INS (or INS substitute) for purposes of processing information; and to their Income for earning money. A creature can end the Condition by resting for 8 hour (14 SP) of Time or by expending 2 Hero Points on his Panel. An object cannot be Exhausted.

Fatigued. A creature gains the Fatigued condition from taking Extended Actions for over a certain duration of Time. A Fatigued creature suffers a -1 penalty to his MIG (or MIG substitute) for purposes of lifting, carrying, pushing, pulling, and throwing; Speed (or Speed substitute) for purposes of traveling; INS (or INS substitute) for purposes of processing information; and to their Income for earning money. A creature can end the Condition by resting for 1 hour (10 SP) of Time or by expending 1 Hero Point on his Panel. An object cannot be Fatigued.

Frozen. The Frozen condition is a special effect of the Cryogenic Damage Type. While Frozen, the character reduces both his Initiative and Speed by the SEV of the Attack. At the end of each of his Panels, the character reduces the SEV by 1. When the SEV is reduced to 0, the character's body temperature has normalized and the Condition ends. Anyone with Fire Control or similar powers can automatically warm the Frozen character; handle as if putting out a fire with a Magnitude equal to the current SEV.

Grappled. A Grappled character has been grabbed by a Grappling opponent. The Grappled characters is also considered Engaged. A Grappled character cannot make Melee Attacks or Wrestling Attacks at any characters other than the Grappling opponent. If the character's Encumbered Speed is reduced to 0 or less, he also cannot make Ranged Attacks at any opponents other than

the Grappling opponent. If the character had previously been Engaging, Grappling, Holding, or Pinning another character, those Conditions end as the opponent must now deal with the Grappling Opponent's wrestling maneuvers. The Grappled condition ends when the Grappling character relinquishes his grip or when the Grappled character escapes (p. 391).

Grappling. A Grappling character has grabbed a Grappled character. The Grappling character is also considered Engaging. The Grappling character may use his MIG in lieu of his VAL as the AV for any Melee or Wrestling Attacks against the Grappled opponent, and as the DV for any Melee or Wrestling Attacks by the opponent. The character may also use his MIG/VAL as the DV against Ranged Attacks by the Grappled opponent. If the character makes a Sweep or Judo Throw Trick Attack (see p. 396) against the Grappled opponent, he reduces the Color Threshold of success he needs by one color (e.g. he can Sweep on Green and Throw on Yellow). The Grappling condition ends when the Grappling character relinquishes his grip or when the Grappled character escapes (p. 391).

Held. A Held character has been firmly grappled by a Holding character. The Held character is also considered Grappled. The Held character cannot make Ranged Attacks at any targets other than the Holding character. If the Held character's Encumbered Speed is reduced to 0 or less, the character cannot make Ranged Attacks at all. The Held Character must use the lesser of his MIG or VAL as the AV for any Melee or Wrestling Attacks against the Holding character and as the DV for any Melee or Wrestling Attacks by the Holding character. The Held condition ends when the Holding character relinquishes his grip or when the Held character escapes (p. 391).

Hiding. A Hiding character gains a bonus to his SPs of Obscurity. The bonus from Hiding is equal to the lesser of the character's AGI or the sum of the Cover and Obscurity available to the character from terrain, lighting, and weather. A Hiding character who moves without Cover or Obscurity immediately stops Hiding. A Hiding character who makes an Attack, suffers Damage, or involuntarily gains any Condition immediately stops Hiding. Other Actions can also end Hiding at the GM's discretion.

Holding. A Holding character has firmly grappled a Held opponent. The Holding character is also considered Grappling. If the Holding character makes a Sweep or Judo Throw Trick Attack against the Held opponent, he reduces the Color Threshold of success by two colors. If the character's Encumbered Speed is 1 or more, and the opponent's Encumbered Speed is 0 or less, the character can Sweep and Judo Throw the target as if it were Stationary. The Holding condition ends when the Holding character relinquishes his grip or when the Held opponent escapes (p. 391).

Infected. An Infected creature has contracted a disease, noted in parentheses after the Condition, e.g. Infected (smallpox). Infected creatures do not display any symptoms until in-game time equal to the disease's Incubation Period has passed. At that point, the GM should secretly make a Pathogenicity vs. MIG Attack Check for each infected creature. If the Check's result is White, the creature has mild symptoms with no mechanical effect in game. If the Check's result is Green or better, the creature gains the disease's Symptomatic condition. If the Check's result meets the color threshold of the disease's Virulence, the creature gains the disease's Morbid condition for that color. A creature who has the Infected condition can infect others by Direct transmission. Objects are immune to the Infected condition.

Kneeling. A Kneeling creature is crouched on one knee. A creature may gain the Kneeling by taking an Automatic Action to bend the knee. While Kneeling, a creature temporarily reduces his VAL and Height by 1 SP. The Condition ends if he goes Prone or stands up with an automatic action. He can also end the Condition as part of a Movement Action at no penalty.

Leaking. The Leaking condition is a special effect of the Lacerating and Penetrating Damage Types on objects. At the end of each of its Panels (or its wearer or crew's Panel), a Leaking object suffers Damage as if from a Green result on a Lacerating or Penetrating Attack (as per the original Attack) with an Effect Value equal to the Special Effect Value (SEV), then reduces the SEV by 1. When the SEV is reduced to 0, the Condition ends. Damage from the Leaking condition cannot be reduced by any type of Protection. The wearer or crew of the object can attempt to plug the leak as a Challenge Action with an INS vs. SEV Challenge Check and reduces the SEV of the Leaking condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result. Creatures are immune to the Leaking condition; see Bleeding.

Morbid. A Morbid creature is severely ill from a particular disease, noted in parentheses after the Condition, e.g. Morbid (smallpox). When a creature gains a disease's Morbid condition, all Symptoms caused by the disease begin to apply to him. When in-game Time equal to the disease's Morbidity Period has passed, he gains all Conditions caused by Virulence of the relevant color result. If the creature is still alive, the Symptoms continue until in-game time equal to the disease's Convalescence Period has passed, at which point the Morbid condition ends. Any Conditions caused by the Morbid Condition do not end, however. A creature who has the Morbid conditions can infect others by Airborne, Droplet, or Direct transmission. Objects are immune to the Morbid condition.

Mute. The Mute condition is inflicted on a character by successful use of the Paralysis or Face-Only Paralysis power. It can be a permanent Condition for characters with certain Drawbacks. A Mute character cannot produce sounds. While Mute, a character cannot speak and cannot take any Actions that involve speaking (such as befriending or intimidating NPCs) unless he has another means of communicating. He cannot use any powers with the Charismatic modifier unless he has another means of communicating. An object can only be Mute if it is Autonomous and has 1 or more SPs of Noise.

Mute is usually a temporary Condition that ends after one or more Pages. A temporarily Mute character can end the Condition early at the start of his Panel by succeeding on a RES vs. Paralysis Attack check with a color result that is equal to or better than the color result the Paralysis Attack Check scored against him. Alternatively, the character can end the Mute condition by spending a number of Hero Points equal to the number of Pages he will remain Mute if he doesn't break free.

Observing. An Observing character gains a bonus to his Passive Spotting Range and Passive Listening Range. The bonus to his Passive Spotting Range is equal to the lesser of his SPs of INS/Super-Perception compared to the greater of the SPs of Obscurity available to target(s) from Stealth or camouflaging terrain. Observing does not help with Cover or with Obscurity from darkness or weather. No amount of concentration can let someone see through walls or in pitch darkness.

Overwhelmed. A character gains the Overwhelmed condition when he Rolls with an Attack and reduces the Color Result by three colors, or when he is already Dazed and reduces it by two colors, or already Staggered and reduces it by three colors. A character can also become Overwhelmed if his Current Determination is reduced to 0. As soon as a character becomes Overwhelmed, any Powers he was sustaining automatically deactivate. On his next Panel, an Overwhelmed character cannot take any Actions. An Overwhelmed character cannot Roll with any Attacks except by spending Hero Points. A character can spend 3 Hero Points at the start of that Panel to remove this Condition for that Panel. The Condition expires at the end of the character's Panel if his Current Determination is above 0.

Paralyzed. The Paralyzed condition is inflicted on a creature by successful use of the Paralysis power. It can be a permanent Condition for creatures with certain Drawbacks. While Paralyzed, a creature does not have a Jumping Speed or Running Speed. He cannot take any Actions that use VAL, MIG, AGI, or any Powers or Skills that substitute for those Attributes. He is considered to have an AGI, VAL, MIG, and Speed of 0 for purposes of DV to Melee, Ranged, Wrestling, and Ramming Attacks and cannot Roll with those Attacks.

However, if a Paralyzed has a Control or Mental power that indirectly affords him a Speed (such as Telekinesis affording him Flight) and does not rely on AGI, he can use that power to travel with a Movement Action. He can use the Speed where applicable for DV. He still cannot Roll with Melee, Ranged, Wrestling, and Ramming Attacks, however. Paralyzed creatures are Stationary (p. 488) unless being moved by a Power or another character.

Paralysis is usually a temporary Condition that ends after one or more Pages. A temporarily Paralyzed creature can end the Condition early at the start of his Panel by succeeding on a RES vs. Paralysis Attack check with a color result that is equal to or better than the color result the Paralysis Attack Check scored against him. Alternatively, the creature can end the Paralyzed condition by spending a number of Hero Points equal to the number of Pages he will remain Paralyzed if he doesn't break free.

Partially Surprised. Partially Surprised is a contextual Condition that only applies between particular target(s) and attacker(s). A target who cannot see an attacker (because the attacker is outside LOS) but can hear him (the attacker is within Earshot) or otherwise detect him (through, e.g. Ultra-Sensitive Smell) is Partially Surprised by the attacker. A Partially Surprised target has a -2 penalty to his DV, to a minimum DV of 0 or the Minimum Ranged DV. The Partially Surprised target can freely use Powers that increase his DV such as Combat Sense and Deflection. A Partially Surprised target can still Roll with a Surprise Attack.

Pinned. A Pinned character has been rendered almost helpless by a Pinning opponent. The Pinned character is also considered Held. The Pinned character cannot take any Challenge Action except to attempt to Escape (p. 391). The Pinned character's Gliding Speed, Jumping Speed, Running Speed, Swinglining Speed, Swimming Speed, and/or Winged Flight Speed is reduced to 0 SPs prior to calculating Encumbrance. Other Speeds (such as ordinary Flight) are not reduced. (This Condition does not apply if the opponent's Height exceeds the attacker's Height by 2 SPs or more.) If the Pinned Character's Encumbered Speed is reduced to 0 or less, the character cannot Roll with Attacks that hit him, and his VAL and AGI are considered 0 for purposes of Melee and Ranged Attacks against him. The Pinned condition ends when the Pinning character relinquishes his grip or when the Pinned character escapes (p. 391).

Pinning. A Pinning character has firmly grappled a Pinned character. The Pinning character is also considered Holding. The Pinning condition ends when the Pinning character relinquishes his grip or when the Pinned character escapes (p. 391).

Poisoned. The Poisoned condition is a special effect of the Toxic Damage Type on creatures. At the end of each of his Panels, a Poisoned creature suffers Damage as if from a Green result on a Toxic Attack with an Effect Value equal to the SEV, then reduces the SEV by 1. When the SEV is reduced to 0, the poison has worked through the target's system and the Condition ends. At the start of his Panel, a creature with Regeneration automatically reduces the SEV of the Poisoned condition by his SPs of Regeneration. An ascendant with the Healing Power can reduce the SEV of the Poisoned condition by his SPs of Power as an Automatic Action. The creature or an ally can attempt to extract the poison as a Challenge Action. The creature or ally makes an INS v. SEV Challenge Check and reduces the SEV of the Poisoned condition by 1 on a Green result, 2 on a Yellow result, 3 on an Orange result, or 4 on a Red result. Objects are immune to the Poisoned condition.

Prone. A Prone creature is lying on the ground. A creature may gain the Prone condition from becoming Unconscious, from certain Powers and Special Effects, or by taking an Automatic Action to drop to the ground. While Prone, the creature temporarily reduces his VAL, Height, Running Speed, and Jumping Speed by 2 SPs. He gains a +1 AV when making Ranged Shooting Attacks due to his ability to stabilize his weapon. The Condition ends when he rises to kneeling or standing with an automatic action. In addition to these effects, a creature who becomes involuntarily Prone drops any objects he was carrying in his hands. Objects are immune to this Condition; see Toppled.

Radiation Sickness. The Radiation Sickness condition is inflicted on a creature who accumulates 0 SPs or more of Radiation Exposure from spending Time in radioactive sites. Creatures with Radiation Sickness waste away over time. Each time a creature with Radiation Sickness is eligible to recover Health (usually every 15 SPs of Time), the creature must make a MIG vs. Radiation Exposure Challenge Check first. On any result except Red, the creature's Maximum Health is reduced by the amount determined by cross-referencing his SPs of Radiation Sickness and the number on the Loss column of the Radiation Exposure table. If the creature's Maximum Health is equal in magnitude to the negative of his Maximum Health, he is slain. If Maximum Health is 0 or less, he is Unconscious. On a Red result, the Radiation Sickness ends. Once a creature's Radiation Sickness ends, any lost Maximum Health thereafter recovers at the same rate as his Current Health. A creature does not recover Current Health until his Radiation Sickness ends. Objects are immune to the Radiation Sickness condition.

Seriously Injured. A Seriously Injured creature is Dazed and Exhausted while the Condition lasts. He can ignore the Dazed condition for one Page by spending a Hero Point. He can ignore the Exhausted condition for one Page by spending two Hero Points; or ignore both Conditions for one Page by spending three Hero Points. The Condition(s) resume(s) on the subsequent Page, although he can spend Hero Points again to ignore the Condition(s) if they are available. The Seriously Injured condition and its sub-Conditions end when he heals or he becomes Slain. Objects are immune to the Seriously Injured condition.

Sinking. A Sinking object descends towards the bottom of the water at a rate called its Sinking Speed. The Sinking Speed is determined by the object's Density and its Current Durability. An undamaged object descends towards the bottom at a Sinking Speed equal to its Density – 8. If the Sinking Speed is 0 or less, it simply bobs up and down in the water like a buoy. A Wrecked object descends with a Sinking Speed of Density – 6, while a Destroyed object descends with a Sinking Speed of Density – 4. While Sinking, objects are susceptible to pressure damage. An object has a Maximum Safe Depth equal to its SPs of Underwater Adaptation. Therefore, the water pressure counts as a Bludgeoning Aura with SPs equal to the object's Current Depth – its Maximum Safe Depth. Some Sinking objects are also susceptible to water damage. If the object is technological and does not have Underwater Adaptation, the water counts as a Corrosive Aura with 1 SP.

Slain. A creature gains the Slain condition when his Current Health is reduced to a negative value equal to or greater in magnitude to his Maximum Health. A Slain creature becomes a static object (i.e. a corpse). If relevant, the corpse has a Height and Weight equal to the Slain creature's Height and Weight and a Toughness equal to the Slain creature's Weight divided by 3 (rounded down) plus 2. The Slain condition is permanent. Objects are immune to this Condition; see Destroyed.

Sneaking. A Sneaking character gains a bonus to his SPs of Sound Absorption. The bonus from Sneaking is equal to the lesser of the character's AGI or the Ambient Loudness + 5. A Sneaking character can take Movement Actions, but his Speed is reduced by 2. A Sneaking character who suffers Damage, involuntarily gains a Condition, or moves at his full Speed immediately stops Sneaking. Other Actions can also end Sneaking at the GM's discretion. Attacking does not necessarily end Sneaking, but the additional Sound Absorption gained by Sneaking do *not* apply to Attacks or other Actions using objects unless the object is a melee weapon with Augmentative Strike.

Staggered. A character gains the Staggered condition when he Rolls with an Attack and reduces the Color Result by two colors, or when he is already Dazed and reduces the color result by one color. On his next Panel, he can only take one Action, which cannot be a Challenge Action. A character can spend 2 Hero Points at the start of that Panel to remove this Condition. Otherwise, the Condition automatically expires at the end of that Panel.

Stationary. A Stationary target is a creature or object that has an AGI of 0, a VAL of 0, and has not taken a Movement Action on its most recent Panel or been moved by another character either this Page or the prior Page. A Stationary character is considered to have a Speed of 0. Stationary targets can be lifted, carried, pushed, pulled, and stopped using the Action rules as Automatic Actions (p. 271). Stationary targets can also be Clambered onto and/or Toppled as Automatic Actions by characters within 0 SP who have the appropriate Attributes (p. 394).

> **Note:** The Stationary condition is used to differentiate why a hero can pick up a car using his MIG, but cannot pick up an elephant without first making a Wrestling Attack. Most creatures never have the Stationary condition, even if currently standing still, because they have AGI and VAL scores of 1 or more. However, a "brain in a jar", quadriplegic, or similar creature might be Stationary. Most Objects are Stationary when not moving, because most objects do not have AGI and VAL scores.

Stuck. The Stuck condition is usually inflicted on a character by a successful attack with the Glue power, but it can also come about if a character is buried in an avalanche or similar circumstance. A Stuck character adds the SPs of Glue (or equivalent) to his Weight for purposes of resisting being moved by a Collision, Ramming Attack, Knock Back Special Effect, Telekinesis, or opponent who have grappled him. He subtracts the SPs of Glue from all Speeds except Teleportation. If that reduces all of the target's available Speeds to 0, his DV against Ranged Attacks is also reduced to 0 SPs. (The foregoing notwithstanding, Glue does not affect Deflection.) If the Stuck character becomes Prone or Toppled, his Melee, Ranged, and Wrestling AV and DV are reduced by the SPs of Glue. If this results in his DV being reduced to 0, the target cannot Roll with Attacks which use that DV. A Stuck target can attempt to break free by expending a Challenge Action and making a MIG/Speed vs. Glue Attack Check. On any other result, the target frees himself from the Condition. He must now use a Movement Action to exit the Area of the Glue or he can become Stuck again as a new target at the start of his next Panel!

Symptomatic. A Symptomatic creature is suffering the ill effects of a specific disease, noted in parentheses after the Condition. When a creature gains a disease's Symptomatic condition, all Symptoms Caused by the disease begin to apply to him. The Symptoms continue until in-game time equal to the disease's Convalescence Period has passed, at which point the Symptomatic condition ends. A creature who has the Symptomatic condition can infect others by Airborne, Direct, or Droplet transmission.

Toppled. The Toppled condition affects objects in lieu of the Prone condition if the Effect Value or Special Effect Value that triggers the Condition is greater than the object's Weight. An object that has Toppled has rolled over on its side or back. For most objects, the effects are as per the Paralyzed condition until the object is set upright. Static objects, and most crewed objects, cannot choose to end the Condition on their own; they must be set upright with a character whose MIG exceeds its Weight. An autonomous or crewed object with AGI and INS Attributes and Super-Strength greater than its own Weight can stand back up like a creature.

Totally Surprised. Totally Surprised is a contextual Condition that only applies between particular target(s) and attacker(s). A target who is completely unaware of an attacker is Totally Surprised by the attacker. A target is completely unaware of his attacker if the attacker is out of both Line of Sight and Earshot and the target has no other means of detecting the attacker. A Totally Surprised target has a DV of 0 against a Surprise Attack. (However, a Ranged Attack against a Totally Surprised target still has a Minimum Ranged DV.) If a Totally Surprised target has Intuitive Combat Sense, he can use his SPs of Power as the DV but otherwise he cannot use any Powers to increase his DV when Totally Surprised. A Totally Surprised target can still Roll with a Surprise Attack.

Unconscious. A creature gains the Unconscious condition when his Current Health is reduced to 0 or less. As soon as a creature becomes Unconscious, he drops Prone. Any Powers he was sustaining automatically deactivate. An Unconscious creature cannot take any Actions and cannot claim to be within LOS or Earshot of any targets. He cannot be the target of Emotional Attacks, but he can be targeted by Melee, Mental, Ranged, Wrestling, and Ramming Attacks. He is considered to have an AGI, VAL, MIG, and Speed of 0 for purposes of DV to such Attacks. An Unconscious creature cannot Roll with Attacks. The Condition ends when his Health is increased above 0 or he becomes Slain. Objects are immune to this Condition; see Wrecked.

Wrecked. An object gains the Wrecked condition when its Current Durability is reduced to 0 or less. As soon as an object becomes Wrecked, any Powers it was sustaining automatically deactivate. A Wrecked autonomous object cannot take any Actions and cannot claim to be within LOS or Earshot of any targets. A Wrecked crewed or worn object cannot be used. A Wrecked object is considered to have an AGI, VAL, MIG, and Speed of 0 for purposes of DV to Melee, Ranged, Ramming, and Wrestling Attacks. A Wrecked object cannot Roll with Attacks. The Condition ends when the object's Durability is increased above 0 or it becomes Destroyed. Creatures are immune to this condition; see Unconscious.

APPENDIX C: REAL-WORLD SUPERPOWERS

Ascendant was carefully designed to model the real-world limits of human performance, such that characters with peak Primary Attributes and Skills have talents similar to those of the best Olympic athletes, Nobel prize holders, and so on. However, even the most skilled and talented human beings are forbidden from selecting superpowers.

That seems realistic, doesn't it? After all, there are no superheroes in the real world. And yet… as our knowledge of human biology has grown, we have come to the astounding realization that mutants do exist, right now, with capabilities that are seemingly superhuman. This Appendix offers some suggestions for Gamemasters who might wish to run a gritty campaign using realistic superheroes or simply allow ordinary humans of 240 CP to purchase some Powers.

All-Frequency Hearing (1 SP). Scientists believe that a mutation in the SLC26A5 gene could permit humans to hear into the ultrasonic range.

Blindsight, Acoustic Transmitting (5 SPs). Daniel Kish, who lost both of his eyes as a child to retinoblastoma, has developed echolocation abilities sufficient to enable him to bicycle through traffic and hike on steep mountain trails. A bat has 7 SPs of this Power; we estimated Kish at 5 SPs.

Data Processing (16 SPs). Megasavant Kim Peek could read a complex book in an hour and memorize it entirely. If we assume each was a 50,000-word book (15 SP of information), memorizing it in an hour is 15 + 11 − 10 = 16 SPs of Data Processing. Similarly impressive feats of mathematical processing have been achieved by human calculators. Speed-reader Anne Jones can process 4,700 words per minute, suggesting 8-9 SPs of this Power.

Density (1 SP). A family in Connecticut has been found with a mutation to their LRP5 gene, resulting in abnormally high bone density. According to Dr. Richard Lifton in the *New England Journal of Medicine,* the family members "have extraordinarily dense bones and there is no history of fractures. These people have about the strongest bones on the entire planet."

Deflection (9 SPs). Samurai swordsman Isao Machii can cut a BB gun pellet fired at him in half with his katana. We have charitably rated this at 9 SPs, to match the maximum SPs of Marksmanship a gunslinger might bring to bear, though the real score is hard to know.

Empathy (6 SPs). Through the study of nonverbal communication, micro-expressions, and facial actions correlated with emotion, Dr. Paul Ekman has developed the ability to instantly assess another person's concealed emotions.

Flight, Hovering (7 SPs). French inventor Frank Zapata's hoverboard enables him to fly at 110mph. It looks almost exactly like the fictional Green Goblin's hoverboard.

Invention. Extraordinarily inventive human beings occasionally approach "mad scientist" levels. Most famously, Nikola Tesla allegedly invented death rays and wireless power transmission.

Memory (48 SPs). Marilu Henner and 24 other people on record have hyperthymesia, which is a hyper-photographic memory. People with the condition have enlarged temporal lobes and caudate nuclei. According to *Scientific American,* the human brain has storage capacity for 2.5 petabytes of memory; if all of it is accessible via hyperthymesia, that's 48 SPs of Memory. Woah!

Regeneration (2 SP). Genetic or pharmacological disruption of the FAAH gene has been shown to accelerate skin wound healing in mice by two to three times. An Oxford study has found that Jo Cameron, a 71-year old Scottish woman with mutations in her FAAH genes, can also heal very quickly without scarring. More powerful regenerative capabilities might become possible with CRISPR technology, as many other animals can regenerate entire limbs.

Resistance, Bludgeoning (5 SPs). John Ferraro of Boston has a thick skull that can withstand the blow of a sledgehammer (5 SPs). His skull is more than twice as thick than that of the average man's, measuring 16mm in thickness compared to an average of 6.5mm.

Resistance, Cryogenic (1 SP). Wim Hof is a Dutch athlete known as the "Iceman" who can tolerate extremely cold temperatures, including climbing Mt. Everest in shorts and bathing in ice for two hours. A typical person can bathe in ice water for about one hour before freezing.

Resistance, Electrical (6 SPs). Slavisak Pajkic holds a world record for successfully having 20,000 volts of electricity (6 SPs) pass through him without sustaining any injury. Serbian scientists allege that he has a genetic mutation that causes electricity to pass through his outer skin.

Resistance, Lacerating/Penetrating (5 SPs). Shaolin monk Hu Qiong allegedly has unbreakable skin that can stop a spear from penetrating his throat. We're not sure we believe it – but if it's true that's 5 SPs of Penetrating Resistance.

Resistance, Toxic (5 SPs). Michael Lotito had an abnormally thick stomach lining enables him to consume toxic substances which would kill ordinary people. Mithridates famously took small doses of poison every day and therefore became immune to it, a practice which Tim Friede has followed with snake venom in order to become a living antivenin. Ozzy Osbourne, who has gene variants associated with the ability to absorb methamphetamine and alcohol, may be an ascendant. We rate everyone else at 5 SPs.

Running (6 SPs). Usain Bolt is already known to carry a mutation in the ACTN3 gene that encodes for increased volume of fast-twitch muscles – and a study published in *Journal of Applied Physiology* by Peter Weyand concluded that humans could theoretically run 48% faster than Usain Bolt. Scientists at the Federal Polytechnic School in Switzerland inhibited the NCoR1 gene in mice, which led them to run twice as fast as normal, due to increased muscle size and density combined with a greater volume of mitochondria.

Super-Intelligence (9 SPs). Super-Intelligence of 6 - 7 SPs could represent an absent-minded genius like Einstein who had little awareness of his surroundings but nevertheless was highly intelligent. Super-Intelligence of 8 - 9 SPs could represent a once-in-history genius like John von Neumann, a man who the smartest scientists of the 20th century held in awe. Nobel Laureate Hans Bethe explained "I have sometimes wondered whether a brain like von Neumann's does not indicate a species superior to that of man." Eugen Wigner said that von Neumann "had a brain which was phenomenal and a true miracle…. Only he was fully awake.

Most of the rest of the people whom I know, including Einstein, did not have phenomenal brains." Enrico Fermi said to physicist Herb Anderson, "Johnny can do calculations in his head ten times as fast as I can! And I can do them ten times as fast as you can, Herb, so you can see how impressive Johnny is!" Increase the cap on the character's Skills by 1 SP per SP by which Super-Intelligence exceeds 5.

Super-Perception (6 SPs). Tetrochromats (who have four cones in their eyes) such as Concetta Antico have the ability to perceive millions of colors that are invisible to ordinary humans. Golden ears are very sensitive to sound, able to hear very soft sounds, or high-frequency sounds, or tiny timing differences. Super-sniffers such as Carrie Barcomb can smell if another person has a stomach virus or a cavity. People with tactile sensitivity process tactile input differently, have such extraordinary senses of touch that the wind on their skin or grass on their feet can cause pain. Super-tasters have twice as many taste buds as normal humans.

Super-Stamina (7 SPs). A Connecticut family with extraordinarily dense bones are said to be "living counterparts to the hero in Unbreakable." Perhaps this mutation, if combined with the physical and mental toughening of combat training, could make someone twice as durable as normal.

Super-Strength (7 SPs). Animals with homozygotic myostatin-related muscle hypertrophy (due to a mutation in the ACVR2B gene) have significantly increased muscle mass and strength. The first human being with this condition was diagnosed in 2004. What a person with this mutation could achieve if they devoted themselves to world-class powerlifting remains unknown but we have assumed an approximate increase of +1 SP over current strength limits, granting Super Strength of 6 SPs in the absence of other mutations. Neanderthals were approximately 6 times stronger than human beings, suggesting Super-Strength of 7 SPs might be possible if combined with a robust body form and increased bone density.

Strike, Bludgeoning (6-8 SPs). Melchor Menor, a two-time international Muay Thai champion, has trained to increase the bone density in his shins to the point that he can break baseball bats in half with a single kick. Martial artist Mas Oyama could break rocks with his hands and kill a bull with a single punch. More famously, Bruce Lee's punches could knock back full-grown men (200 lbs) a distance of 15 feet and his kicks could slam a 300-lb heavy bag so hard it would hit the ceiling. If combined with Super-Strength, perhaps a human being could achieve 7 or even 8 SPs of Strike.

Swimming (2 SPs). Long-distance swimmer Martin Strel has swum the length of the Amazon, Danube, Mississippi, and Yangtze Rivers. Navy air rescue swimmers are able to swim through stormy waters that would drown ordinary humans.

Telescopic Vision (3 SPs). Veronica Seider of Stuttgart Germany has a visual acuity of 20/2, granting her vision that is 10 times better than a normal human's eyesight.

Tireless Perk. Finnish skiing champion Eero Mantyranta has a mutation in his erythropoietin gene that allows him to carry 50% more oxygen in his bloodstream. Ultra-marathoner Dean Kamazes can run continuously for 80 hours due to a mutation that causes his body to rapidly shed lactic acid from his muscles. 5% of the population has abnormal copies of the DEC2 gene, granting them the ability to function with far less sleep than the average person.

Ultra-Sensitive Hearing (3 SPs). The average person can hear 1 decibel, but golden ears, people who possess remarkable talents in hearing, can reliably discern tiny frequency differences less than 0.1 decibel.

Ultra-Sensitive Scent (10 SPs). George Aldrich is NASA's super-sniffer and tests objects for their scent before they are dispatched into space. Another super-sniffer, Carrie Barcomb, can smell when another person has a stomach virus or a cavity. Such sensitivity has been compared to that of a sniffing dog, which we rate at 10 SPs.

Ultra-Sensitive Touch (3 SPs). Helen Keller could recognize friends by the feel of their faces and read lips by touch. She was able to "hear" by feeling the vibrations made by the sounds, with sensitivity sufficient to hear a pencil falling off a desk. Her family could call her to a meal by knocking on the wall.

Underwater Vision (3 SPs). The Moken people of the Andaman Sea are able to see underwater clearly. They can constrict their pupils to the maximum known limit of human performance, can change their lens shape to accommodate a wider field of view. In addition, their eyes do not get red or irritated from salt water despite spending their days fishing underwater.

Wall-Crawling (1 SP). Climbing champion Tori Allen was brought up with monkeys and has mastered many of their climbing tricks. Rock climber Jyothi Raj, known as the "Monkey King," scaled Chitradurga Fort without safety harnesses.

APPENDIX D: ATTRIBUTE SUBSTITUTIONS

This Appendix summarizes the circumstances when one Attribute, Power, or Skill can substitute for another. Substitutions that can occur in broad, non-specific circumstances that require GM approval are noted as "related." E.g. the GM determines when Engineering can substitute for INS based on whether a particular Challenge Check is engineering-related.

AGI Substitutes	Circumstances
Aerial Combat	Replace AGI as AV for flying-related actions and as DV vs Ranged Attacks, Ramming Attacks, Bangs, Explosions, Flashes, Gusts, and Snares when moving
Combat Sense	Replace AGI as DV vs Ranged Attacks
Craft	Replace AGI as AV for crafting-related actions
Deflection	Replace AGI as DV vs Ranged Attacks, Ramming Attacks, Bangs, Explosions, Flashes, Gusts, and Snares while maintained
Insight (INS)	Replace AGI as AV for Ranged Attacks with Control Powers or any powers with Psionic modifier
Kinetic Teleportation	Replace AGI as DV vs Ranged Attacks, Ramming Attacks, Bangs, Explosions, Flashes, Gusts and Snares when moving
Marksmanship	Replace AGI as AV for Ranged Attacks
Parkour	Replace AGI as AV for parkour-related actions, and as DV vs Ranged Attacks, Ramming Attacks, Bangs, Explosions, Flashes, Gusts and Snares when moving
Piloting	Replace AGI as AV for piloting-related actions, DV vs Ranged Attacks, Ramming Attacks, Bangs, Explosions, Flashes, Gusts and Snares when moving
Sport	Replace AGI as AV for sport-related checks
Stealth	Replace AGI as AV for Hiding and Sneaking actions
Valor (VAL)	Replace AGI as DV vs Ranged Attacks and Ramming Attacks if character has Close Defense Expertise perk and Attack is at 0 SPs Range
Wall-Crawling	Replace AGI as AV for Clamber actions

CHA Substitutes	Circumstances
Interrogation	Replace CHA as AV for Interrogation actions such as questioning a witness
Intimidation	Replace CHA as AV for Intimidation actions, including demanding a favor and intimidating an NPC
Persuasion	Replace CHA as AV for Persuasion actions, including befriending an NPC, influencing a crowd, and requesting a favor
Reputation	Replace CHA as AV for Persuasion actions to influence crowds
Smack Talk	Replace CHA as AV for Goading Emotion Attacks

INS Substitutes	Circumstances
AGI	Replace INS as AV for Control powers with Agile modifier
Alertness	Replace INS as AV for Observation actions
Avocation	Replace INS as AV for avocation-related actions
Data Processing	Replace INS as AV Information actions and for Investigation of a database
Engineering	Replace INS as AV for engineering-related actions
Infiltration	Replace INS as AV for bypassing security and related actions
Investigation	Replace INS as AV for Investigation actions
Medicine	Replace INS as AV for medicine-related actions
Profession	Replace INS as AV for profession-related actions
Science	Replace INS as AV for science-related actions
Super-Intelligence	Replace INS for all purposes except Observation actions, including Base Score for Powers, Skills other than Alertness
Super-Perception	Replace INS for Observation and Investigation and as Base Score for Alertness and Investigation
Ultra-Sensitive Scent	Replace INS as AV for Investigation of a forensic site's scents
Water Control	Replace INS as AV for Resuscitation to rescue a Drowning character

MIG Substitutes	Circumstances
Additional Limb	Replace MIG for all purposes related to using Additional Limb, including EV for Melee Attacks, Hurling Ranged Attacks, and Wrestling Attacks with it
Earth Control	Replace MIG for all purposes related to lifting, carrying, pushing, pulling, stopping or throwing masses of earth and stone
Escape Artist	Replace MIG as AV for Escapes from Engaged, Grappled, Held, or Pinned conditions
Gravity Control	Replace MIG for all purposes related to Gravity Control, including lifting, carrying, pushing, pulling, stopping, or throwing creatures or objects and EV for Wrestling Attacks
Pressure Protection	Replace MIG for purposes of determining Damage from high and low pressure
Snare	Replace MIG for purposes of Snare-based Wrestling Attacks
Stretching	Replace MIG as AV to Escape from Engaged, Grappled, Held, or Pinned conditions
Strike	Replace MIG as EV for Melee Attacks
Super-Stamina	Replace MIG for purposes of Health, Health Recovery, and DV; and as Base Score for Pressure Protection and Underwater Adaptation
Super-Strength	Replace MIG as EV for Melee Attacks and Wrestling Attacks, as Base Score for Additional Limb, Jumping Speed, and Strike, as AV and DV for Glue, and all other purposes except those covered by Super-Stamina
Telekinesis	Replace MIG for all purposes related to Telekinesis, including lifting, carrying, pushing, pulling, stopping, or throwing creatures or objects and EV for Wrestling Attacks

RES Substitutes	Circumstances
Breath Control	Replace RES as SPs of Time to hold breath
Iron Will	Replace RES as AV to break free from Emotion Adjustment, Mind Domination, and Paralysis, and as DV vs Emotion Attacks, Mental Attacks, and Intimidation
Stoicism	Replace RES as DV vs Emotion Attacks, Mental Attacks, and Intimidation if Skill is maintained with Automatic Action
Super-Fortitude	Replace RES for purposes of Determination, Determination Recovery, and Base Score for Breath Control

VAL Substitutes	Circumstances
Agility (AGI)	Replace VAL as DV vs Melee Attacks and Wrestling Attacks if character has Mobile Defense Expertise perk and conditions are met
Combat Posture	Replace VAL as DV vs Melee Attacks and Wrestling Attacks if Skill is maintained with Automatic Action
Combat Sense	Replace VAL as DV vs Melee Attacks and Wrestling Attacks
Deflection	Replace VAL as DV vs Melee Attacks and Wrestling Attacks
Escape Artist	Replace VAL as AV to Escape from Engaged, Grappled, Held, or Pinned conditions
Hyperkinetic Teleport	Replace VAL as AV for Melee Attacks and Wrestling Attacks
Martial Arts	Replace VAL as AV for Melee Attacks and Wrestling Attacks
Stretching	Replace VAL as AV to Escape from Engaged, Grappled, Held, or Pinned conditions

Special Substitutes	Circumstances
Power Aptitude	Replace one designated Attribute as AV when using one designated Power, chosen when Skill is selected

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