The Shadows

SHADOW U.

New Skills, Concentrations, and Specializations

by ANANDA%BSU.DECNET%MSUS1.BITNET@Sdsc.Edu

The first campaign I started included a rocker and a theatre-type. Due to the dearth of related skills in the skill listings, I worked on creating my own. After a few sessions and a few new non-player characters, new concentrations and specializations also cropped up.

FORMATS:
general skill
> concentrations
>> *specializations*

PERFORMING ARTS

Instrumental music and vocal music encompass the ability to play instruments or sing well, and can be considered a measure of how good a musician a person is. Performance encompasses how the musician interacts with an audience. A person could be a technically brilliant musician, cutting lots of audio tracks, yet never do a single concert because of an inability to deal with an audience.

Instrumental music
> instrument family (saxophone, guitar, synth, etc.)
>> *specific instrument (alto sax, bass guitar, etc.)*

Vocal music
> choral, barbershop, rock, opera, etc.; vocal synth
>> *specialization is some aspect of the specific concentration*

Musical composition
> vocal
>> *choral, barbershop, rock, etc.*
> instrumental
>> *chamber music, symphonic, jazz, etc.*

Performance Performance is stage presence and working with an audience.
> dramatic, musical, comedic
>> *specialization is a specific style of the concentration*

Acting
> simsense, movies (flat films), stage plays, television (by medium), comedy, drama, western, horror
>> *by genre*

This skill could possibly switch the concentrations with the specializations. I have it arranged this way because more actors talk about making 'the big step' from one medium to another (especially television to movies) than from one genre to another. Also, anything to simsense is a much bigger step than between any two genres, since the latter doesn't usually require the actor to get cybered.

NON-PERFORMING ARTS

Artistic composition & design
> two-dimensional (painting, drawing, etc.)
>> *by general technique*
>> *color or black and white*
> three-dimensional
>> *sculpture, holographs, etc.*
> animation
>> *children's, adults', educational/instructional, etc.*

Written composition
> fiction genre (mystery, romance, poetry, western, science fiction, fantasy, suspense, 'popular fiction', etc.)
>> *novels, novellas/novelettes, short stories*
> non-fiction genre (news, science, self-help etc.)
>> *books/texts, articles (e.g., magazine, journals, newspaper, etc., as appropriate), etc.*
> scripts — simsense, movies (flat films), stage plays, television (series), music videos
>> *comedy, drama, western, horror (by genre); documentary, etc.*

The reason that the genres are concentrations and the lengths are specializations is that a person can more easily write different lengths of works within a different genre than write works of similar length across different genres. Scripts are the exception; script authors seem to cross genres more frequently than they cross medias.

ACTIVE SKILLS
Unarmed Combat
> Fist-fighting (brawling, boxing)
> Throws
> Grapple is renamed Wrestling (take-downs, holds, escapes)

Electronics
> Security systems (while it is true that many security systems are tied into a computer, there are many that aren't.)

SOCIAL SKILLS
Leadership
> Gang

Interrogation
> Verbal (interviewing)
> Machine-aided (lie detectors, etc.)
> Coercive (torture) (sick, I know, but just the thing for your next cyberpsycho npc who is determined to get that tidbit of info that your players didn't know they had.)

Negotiation
> Bargain (haggling, barter)
> Con (duping someone; persuading someone to do something they normally wouldn't do)

Etiquette
> Media (Journalists, Rockers, Musicians, Actors, etc.)
> Organized Crime (Yakuza, Mafia, Seoulpa rings, Tongs, inter-group relations)
> Religions/Cults (by religion or cult, inter-group relations)
> Tech (Technicians, Armorers, Mechanics, etc.)
> Military
> Government
>> Military and Government specializations include:
>> specific branches or departments
>> inter-branch or department relations
>> local- or state-level groups

About the Organized Crime concentration: Although arguments can be made to include this under the Street concentration, the different groups listed as specialization possibilities are highly organized and have their own rules of conduct, which are very different from the rules of etiquette that would apply to gangs and other Street elements. This would seem to argue for the various mob groups to be specializations of the Corporate concentration.

However, the primarily illegal and extra-legal orientation of the mob groups does not fit the Corp. concentration. Making Organized Crime its own concentration solves these problems.

KNOWLEDGE SKILLS

Theology

   Christian, Hindu, Muslim, etc.
      history of the religion or church, rituals, customs, etc.

LANGUAGES

   Move Estonian from the Baltic family to the Finnic family. One person speaking Finnish and one speaking Estonian can understand each other fairly well.

   Romance family: add Ancient Latin, Medieval Latin, and Church Latin. There are sufficient differences between the three to differentiate them.

   Sign Languages: American Sign Language;, Perkins-Athabaskan

   Sasquatch

   Special Languages: Pidgin English (the City Speak equivalent of many semi-aboriginal groups in South America, Africa and Asia)

NEW SKILLS

Jerry Stratton

   Here are some skills you won't necessarily learn at the city college. You'll most likely need to find a teacher in security or in the shadows.

   These are all special skills, and fall under the heading of Action skills. These require 2x Karma to train in, so referees take note: they are general skills, and cover quite a bit of ground.

Open Locks

   Opening locks covers hard locks (padlocks, etc.), electronic locks, and computer locks. Each type requires its own special tools, and characters can concentrate in any of those three types (or any other types that may exist). A hard lock kit costs 200¥. An electronic lock kit costs 400¥, and a computer lock kit costs 800¥. Opening locks is usually an unresisted test against the lock's rating, with extra successes reducing the base time to unlock. Some especially tough locks will have a threshold less than or equal to their rating.

Impersonation

   Impersonation covers all forms of impersonating other people: ventriloquism, disguise, and mannerisms. Each of those three can be concentrated in. Using this skill is usually an unresisted test against a number chosen by the referee, using the Skill Success Table. A troll trying to impersonate a human, for example, will find it nearly impossible. The referee will need to take into account the backgrounds and appearance of the impersonator and the person being impersonated. A street punk impersonating a CEO will find it a difficult task, unless the street punk has knowledge of corporate etiquette.

   The number of successes show how well the impersonation succeeded. Only one success will be necessary to fool most people. People who know the person being impersonated will have a threshold up to their intelligence. If the street punk tries to impersonate the CEO to the CEO's wife, the punk will need at least one more success than the wife's intelligence. Impersonating the CEO to his secretary will require only 1 extra success (a threshold of 1).

   The impersonator can reduce the target number by studying what needs to be done. If the street punk above finds someone willing to show him how a corporate CEO acts, he can make an Intelligence test vs. the target number (6), and the successes here reduce the target number when making the actual impersonation attempt. The street punk's intelligence is 3. He rolls 1 six. This brings the impersonation target number down to 5. Characters cannot study to bring down target numbers that are high because of physical reasons (a troll impersonating a human). The referee will have to decide which part of the target number is physical and which mental. It takes target number days to study for the intelligence test.

   A disguise kit costs Rating times 50¥ and weight three times Rating kilograms. The rating is the maximum target number the kit can deal with. A rating 5 kit can only be used for challenging or easier impersonations.

Sleight of Hand

   Sleight of Hand covers picking pockets, magic tricks, and diverting attention. Each of those can be concentrated in. Sleight of Hand is usually an unresisted success test against the target's intelligence (perception). The referee may assign a threshold for particularly difficult sleight-of-hand attempts. Picking a pocket is fairly easy (no threshold), but picking a pocket inside several layers of clothing will be more difficult (a threshold of 1 or 2).

   A magic kit will cost 50¥ or more, depending on what the character is going to do.

DEAD ZONES

Doctor Jerold Stratton, Ph.D. Psychology

Dead zones are mysterious regions where tech-nology fails. There are known dead zones in the Anzo-Borrego near San Diego, and one north of Denver.

Dead zones are known to change size at irregular intervals. One rumor is that they wax and wane with the phase and visibility of the moon. Another is that they grow as a natural check against the human population — as populations in nearby cities grow, so will any dead zones nearby.[1]

When nearing a dead zone, computers stop working (and may lose volatile memory), and cyberware starts acting up. This 'warning zone' can vary in size from a meter to a kilometer. Once within a dead zone, nothing electronic works, and it seems that sub-atomic processes stop as well.

Because of the effects, it's very hard to determine how a dead zone affects technology in the way that it does. Some magicians claim that within a dead zone, the laws of nature revert to their natural state — that devised by the Greek philosophers and naturalists. Matter becomes homogeneous, composed of earth, air, fire and water.[2] Unfortunately, we can't just go in and check this out — electron microscopes don't work, of course, in a dead zone. Everything visible seems to remain the same, but electricity stops flowing and radiation stops (or is blocked) within the zones.[3]

One of the most intriguing theories surrounding the dead zones is that the awakening hasn't yet finished. Eventually, the dead zones will grow to cover the world. Most of the theorists believe that such will only occur after hundreds of years, but the implications are staggering.

Much of our knowledge about humanity comes from inference based on technological assumptions. Carbon (radioactive) dating is a prime example. If, throughout half of our history, radioactive breakdown has not been occurring, then everything over five-ten thousand years old is up to twice as old as we thought it was.

And what will happen to our civilization when technology fails completely? Satellites will fall and undersea villages will suffocate. But is it possible that this has happened before? There are many strange legends that crackpots of the last century have attempted to explain via an alien race or technologically advanced forebears. Could it have been an earlier awakening that drove Atlantis into the sea? Might astronauts have visited us in unknown times, only to be stranded here (or elsewhere) when the magic came and the technology went?

»»›These things appear to be the opposite of *foveae*. Hopefully samurai don't go insane when they enter them. Or die.‹««
— Wordman (12:35:32/06-13-56)

---

1 *Urban Legends of the Awakening*, Adam Cecil, Harcourt, Fuji, Jovanovich, 2049.

2 "A Theory of Quantum and Zonal Atechnology", *Science*, Ariadne and Phillips, March 15, 2043.

3 Two well-received experiments have backed this up. The first (Wiedrich and Fries), reported in *New Research*, February, 2050, showed that X-Ray sources do not leave a mark on photographic plates within a zone. The second (Larasia), reported in *Scientific Republican*, January, 2050, showed that rats exposed to highly radioactive uranium within a zone were unharmed after weeks of exposure, while their control group counterparts contracted severe cases of cancer in days.

DEAD ZONES REDUX

Jerry Stratton, jerry@teetot.acusd.edu

There have been a few questions about the game mechanics behind dead zones. In our game, we use dead zones as flavor. Our game master decided to use dead zones after seeing them in a series I wrote for the ADND-L game list (Men Not Afraid). So, the mechanics presented here are not necessarily used by us. But they could be. This is the way dead zones act in my fiction, modified for a Shadowrun world. Change it as you see fit.

WHAT IS A DEAD ZONE?

A dead zone is a place where technology doesn't work. What technologies don't work? Powder and most other explosives don't explode. Electricity doesn't flow. Nuclear radiation doesn't radiate. Drugs don't react with the brain in the same way as outside of a zone. On the surface, things look the same. Fire still burns. Light still illuminates. Water still boils. Gasoline burns (although spark plugs don't spark, and who uses internal combustion anymore, anyway?)

Gears, springs, pulleys, and ropes work, but there's evidence that even these will have different effects. One group noted that ropes seemed much stronger inside a zone, as if the r^2 law were no longer in effect. It seems possible that mass due to acceleration increases linearly with distance from the center, rather than with the square of the distance.

»»›That bit of confusion is from physics. When you swing a rope around, anything tied on it's end is going to feel heavier. How much heavier is proportional to the square of the length of the rope. The same thing occurs when you climb a rope, since the rope always swings to the side, if only a bit.‹««
— Physics Phred (12:35:32/05-08-52)

Basically, everything that makes technology what it is, doesn't work.

»»›There are some strange things that work differently. There's an old parlor trick from way back, where you take a toothpick, a fork, and a spoon. Attach the spoon to the fork by inserting the bowl of the spoon between the tines of the fork. Insert the toothpick partially between the tines of the fork. Now, rest the other end of the toothpick on your finger. In a dead zone, that's impossible. The spoon and fork pull the toothpick down every time. Outside of a dead zone, you can balance it. Many elven scholars use this to point to the basic flaw in science. How can something be balanced if all the weight is on one end?‹««
— Dr. Jerold Stratton (07:48:49/03-28-92)

»»›Drugs do work differently in the zones. It used to be thought that the use of drugs in pre-awakening shamanic rituals was an attempt to simulate assensing. But I can guarantee you that peyote is a completely different thing inside a zone than it is outside. Outside, it's a trip. Inside, it's a journey.‹««
— Fire Mountain (07:51:52/03-28-92)

Both gravity and magnetism, or some analogy to them, do work. People don't float away from the earth when they're in a dead zone, and a few natural compasses continue to point north. Most compasses don't work. It seems that they must be created in a 'natural' way for them to work. Lodestones always work. And while electrical current doesn't exist in a zone, there is some analog to electricity: lightning still strikes in thunderstorms.

»»Technically, I don't see much difference between relativistic gravity and naturalistic gravity anyway. Both basically state that things fall because 'top' and 'bottom' exist. And we've yet to fully understand magnetism. However, magnetic north does not fluctuate inside a zone, whereas it can outside a zone. This indicates that lodestones are not pointing in the direction of the earth's magnetic lines of force, since these meander all over the place, but are pointing towards some naturalistic north.

And lightning? Well, according to the Greeks, lightning is a form of the element of fire. Incidentally, a very good instrument (so I've been told) for telling whether or not you're in a dead zone is one of those sealed flasks with metal leaves inside, (Leyden Jars, I believe) used in high schools. Take a rubber rod, give it a charge, and touch it to the metal ball on top of the flask. In the 'real' world, this causes the leaves to swing apart. In a zone, this does nothing at all.«««
— Dr. Jerold Stratton (22:27:40/03-29-92)

Dead zones range in size from a few meters to a few kilometers. The largest known dead zone is 15 miles wide, in the area known as the Bermuda Triangle. And it's been known to grow to twice it's size on clear nights of the full moon. Dead zones grow and shrink with the lunar cycle, but this depends on solar interference, cloud cover, and planetary forces. People in our Shadowrun game haven't figured it out yet, and it'll probably take a while. The lunar influence has been noted, but it's not exact, so not everyone believes it.

There are no known dead zones within a living city. In fact, most (if not all) seem to occur in the areas that were the least touched by man before the awakening. There are those who claim that dead zones are a healing attempt by the Earth. These are the same people who believe that dead zones will eventually grow and engulf the entire world.

Dead zones are spherical, and centered on the surface of the earth. In the ocean, they are centered on the underwater land surface.

WHAT ARE THE EFFECTS OF A DEAD ZONE ON SOCIETY?

Early in the 21st Century, trains were already coming back as a form of shipping. Because the rails were never redesigned, the rails that were built (and restored) are still compatible with the steam engine. And the steam engine works in a dead zone — fire burns, water boils, and pressure turns pistons. So, there are a few steam engines in the midwest. In the relatively large dead zone in the northern part of the Indian nations, normal trains debark and their engines replaced by a number of steam engines, which pull the load across the zone. On the other end, different diesels take over, and the steam engines pull another train the other way.

Except for the Bermuda Triangle dead zone, most dead zones are not large enough to cause major problems with air transportation. Dead zones are spherical. Even a six-mile wide dead zone only extends three miles high, and that only at the exact center. Since most dead zones occur in unpopulated areas and jets are usually quite high, they don't intersect with the zone.

»»Incidentally, there's a small body of evidence that says the Bermuda Triangle dead zone existed before the awakening.«««
— Smilin' Sam (07:34:41/04-10-92)

Underwater travel has perhaps been most affected. Submarines send out radar soundings. If the radar doesn't return, they'll skirt that area.

»»In fact, this may be the origin of the term 'dead zone.' When radar enters a dead zone, it doesn't come back, leaving a dead area on the radar screen.«««
— Silas Jack (08:08:17/03-28-92)

Stanley Steamers, a steam automobile from the early twentieth century, are popular automobiles among those few who live near zones. Surprisingly, these automobiles can reach speeds in excess of 50 miles per hour.

WHO USES DEAD ZONES?

Nobody really uses a dead zone. Enchanting materials taken from a dead zone are guaranteed to be unhindered by the deadening effects of having been worked. But even the most solitary mages haven't quite learned to live without portable radios, computerized libraries, microwaves, and digital watches. I mean, a rating 6 conjuring library weighs 300 pounds! Combine that with a rating 6 enchanting library, a rating 6 sorcery library, and whatever else you might need (Geology library? Biology library?) Of course, if you're hiding from a mundane, a dead zone is a great place to do it.

WHAT CYBERWARE DOESN'T WORK?

Any electronically augmented or chip augmented cyberware will completely fail in a zone. This includes just about everything. Some cyber-spur implementations — those that use muscle-position to spring a mechanical lock — will still extend in a zone. Boosted reflexes continue to work, although some correspondents have reported strange, shamanic sensations, possible due to the unnatural drugs that are boosted reflexes. Wired reflexes do not work, usually leaving the user a quivering mass.

FIREARMS

Firearms do not work, although gunpowder still burns. On the fringes of a zone, firearms may explode if used, causing damage equal to the damage of the weapon, The power is reduced by 1 (but not below 1) and the wound level is staged down one level (but not below light). And yes, an explosion in a firearm may set off the rest of the bullets. In this case, treat it as autofire, equal to half the number of shots exploding.

There have been some reports that, in the center of very large zones, when they've waxed to their largest, gunpowder doesn't even burn. This has yet to be confirmed.

ECONOMICS OF SHADOWRUNNING

Corporation Report: Economics of Independent Illegal Operatives — 'Shadowrunners'

Earl A. Hubbell <earl@cco.caltech.edu >

»»ıDug this out of some corporate's personal files in his headware memory, when a corporate extraction went wrong and we were forced to put him on the open market - thought you might find it amusingı«««
— Slash (2357:096/6-1-96)

ABSTRACT

Statistical analysis applied with some wild assumptions demonstrates 1) Shadowrunners are not generally a significant force and 2) They are an economic preferred alternative to 'in-house' operatives, despite general unreliability.

SEATTLE OF 2050

Population : $3x10^6$ individuals
Corporate affiliated: $1.5x10^6$
Below Poverty: $1x10^6$

Thus, we see economically independent units compose $5x10^5$ individuals. We rule out the 'below poverty level' population, as any significantly skilled/cybered/magic unit will be aggressively recruited/have entered poverty voluntarily/will not be counted in standard census.

From the UCAS census estimates, we have approximately 1% of the population having 'significant' cyber-enhancements (so called 'samurai', 'riggers' or 'deckers') or significant magical enhancement ('physical adepts'). Full mages compose approximately .1% of the population.

Thus, there are approximately $3x10^4$ units of significant personal power in Seattle. Of these units, 3,000 are mages. Due to aggressive corporate recruiting, it is estimated that only 10% of the 'significant' population may be considered 'independent'. Thus, we have $3x10^3$ significant units, of which 300 are mages.

For obvious reasons, counting this population is difficult, however, it seems that only approximately 20% of this final group engage in high-risk operations (the remaining 'independents' belonging to various 'normal' occupations).

Thus, the 'significant' population available to 'shadowrun' consists of merely 60 mages, 60 skilled 'deckers', approximately 120 riggers, 120 physical adepts, and 300 samurai (numbers do not add due to some overlap in categories, and approximation errors).

Given the near-necessity of 'magical cover' on any significant operation, we see an operating population of approximately 100 'teams' of runners within Seattle, composed from a pool of approximately 600 'powered' individuals, and approximately 2,000 skilled personnel in various 'support' positions (so-called 'fixers', 'detectives', 'security consultants', 'cannon-fodder'...)

This explains the 'close-knit' nature of an otherwise paranoid profession - the 'teams' generally know of each other, at least by reputation, and in the case of mages, almost certainly by individual (deckers as well). They interact with the same population, travel in the same circles, need the same information, think the same way.

Thus, we see that although 'runners' form a relatively large force on the scale they tend to operate, their disorganized nature tends to leave them with little real impact on corporate operations.

CORPORATE/RUNNER INTERACTION

SEATTLE:

Median Income: 25k¥/year.

This figure is highly unreliable, due to the very visible presence of 'unreported' money floating throughout many credit networks. Cash-flow estimations are therefore difficult, and much more approximate than any other computations.

Cash available to non-corporate indiv.: $\sim 10^{10}$ ¥/year.

Most of this 'income' is in fact passed back and forth between individuals of little note, or flows from the UCAS government to the welfare recipients, and is then returned, allowing the UCAS to claim{digression deleted}.

Cash available to corporate indiv.: $\sim 10^{11}$¥/year

Due to the 'pyramid' structure of the society in 2050, most of the money is available to the top 1% of the population, and is unreported due to various tricks with corporate holdings, services provided 'gratis', etc.

Due to the familiar 'money surge' as international financial markets open and close during the daylight hours, approximately $3x10^9$¥ value flows into and out of Seattle each day. This drives a fair amount of 'high finance', but has little effect on the lives of 'independents'. {digression deleted}

Assuming corporations, for optimum functioning, require the occasional 'bending' of stringent regulations and laws, since 100% law enforcement has been found to not be cost-effective in 'security maintenance' (see Lone-Star report #115345: 'Optimization of Law Enforcement by the Saad-Dine Algorithm'). Assume 99% of all corporate functioning may be 'above question'. Assume further that plausible deniability may be established for corporate operatives in 90% of the remaining cases. This leaves .1% of funds available, indeed, nearly required, to be spent outside the corporation on 'extra-legal' operations.

From our previous numbers, we obtain an estimated 10^8 ¥/year available in the Seattle area for payment of independent operatives. Given the estimated population of 10^2 teams, this works out to 10^6 ¥/year income per team - a high-paying income, cut into by the various individuals in the network being paid for their support services. (An interesting parallel to income tax may be made here - some free-market assumptions about 'government by market forces' seem to be confirmed.)

In practice, there is a strong stratification within runner society- most exist in an environment of rapid cash-flow, and succeed in merely a comfortable existence, punctuated by gambling with their lives. The rare high-success ratio teams are looked upon with great awe, and keep most of the merely adequate teams 'playing with the death lottery', and are often assumed to have some 'favor' or 'technique' that they have hit upon, when in reality most of the difference comes from statistical anomalies (the familiar 'gamblers paradox' restated).

Note that the total economic force available to the 'runners' is about a factor of 10 less than the total population of 'independents', and so plays only a minor role in the economic life of the city (welfare recipients alone exceed their cash, although most of it is spent on 'necessities').

APPENDIX

Some interesting breakdowns, and error analysis:

The total number of 'runners', seems likely to be accurate to within 50%. Smaller categories may vary by up to 200% (number of mages - shamans are especially notorious for not being counted).

With that in mind, however, some interesting secondary data may be applied to our results:

ADJUSTED POPULATION RATIOS

Human: .5 among independents

Ork: .2

Elf: .2

Other .1

These do not equal 'average' population ratios for Seattle, due to aggressive recruiting of humans by corporations, however, the accessibility of cyberware to humans seems to be larger, somewhat balancing this trend.

ADJUSTED EDUCATION RATIOS:

.7 High School or lower

.2 Bachelors or equivalent

.1 Ph.D. or other advanced

A large population of 'independents' tend to have informal or unusual educations, if they have them at all, and so are (mis)counted in the lower population. Surprisingly, a large number of advanced degrees are present in the independent population.

SOME CONSEQUENCES:

There are approximately 45 samurai/adepts presumed to have Ph.D.s in various fields - these subjects should probably be interviewed for a psychological study, so we can identify dangerous trends in our own employees.

Personal curiosity has led me to independently investigate the two known dwarf runner physical adepts possessing Ph.D.s. It seems that they are twin brothers, and interestingly enough, bitter enemies on the street. {deleted as digression}

— Dr. R. Smith-Nabulsi

Boeing-Mitsuhama Statistics Group 5.

»»I found a similar Renraku report on 'Corporate Cyberware: Cash Efficient or Research Boondoggle' - made some interesting points about cost-optimization within the corporate environment for cyberware.٭««

— Elephant (03:46:26/8-9-54)

SILENT DEATH

How not to wake up the corp guard three doors down

BULLET NOISE

A supersonic bullet sounds like a cracking whip. One which cracks from leaving the muzzle until it goes subsonic, which might not be until it is inside the target. Subsonic bullets make a sound like a whip that is *not* cracking. You can hear them both. The sound is *not* deafening. We are talking about shooting without anybody knowing.

MUZZLE NOISE

Gasses expanding at supersonic velocity sound roughly like a gunshot. Funny thing, that. Most of the sound is from the muzzle gasses expanding. The point of using subsonic ammunition (or faking it with a drilled barrel) is that if you want to be silent, do it right. Not too much benefit in quieting the muzzle noise in the quiet of the night just to follow it with the cracking of 30 whips from 30 shots… Either somebody really kinky is having lots of fun, or a firefight is going on.

BULLET TUMBLE

Stand a top up and let go. It falls over. Take a top. Stand it up and spin it and let go. It stays up for a while. Then it falls over. Spin a top real fast and it stays up longer. Slap a spinning top and it bounces around more than a slapped non-spinning top. A slapped fast-spinning top dances more wildly than a slow spinning top. Take a spinning bullet and fire it through air and its accuracy improves over a non-spinning bullet. This is akin to a spinning top standing up longer than a non-spinning top. Take a spinning bullet and fire it through a target of varying densities and toughness (like a human body) and like a slapped top it will bounce around.

Try the trick with the top. Spin the bullet real fast and fire it through a target of varying densities and toughness and it will bounce around wildly and tumble and dance. This is why rapidly spinning bullets tumble more wildly than slow spinning bullets. It is the energy expressed in rotation around one axis being changed into energy expressed in spinning around more than one axis…if a bullet spins around more than one axis it is tumbling. Lighter bullets will tumble more easily than heavy spinning bullets because… angular momentum… the top "resists" having it's axes of rotation changed. This is "gyroscopic force".

Take a heavy top and spin it slowly. Take a light top and spin it much faster so it has the same rotation energy. Slap them both the same. The lighter, faster rotating top bounces and dances more, in response to the same slap, than the heavy top. This is why the 7 mm magnum is the spear and the 5.56 (M-16) tumbles like the blade of a rototiller, as I said in the previous post. In these examples, the slap to the bullet is hitting skin and organ and fibrous connective tissue and muscle and bone in the target body.

Somebody posted that some doctor had proved that all bullets tumble the same amount, leaving the average mind to conclude that this is without regard to the bullet velocity, rate of spin, bullet weight or shape, or the target type.

Either the quote was careless or the doctor got his degree from a Crackerjacks box. I prefer to presume the latter. A cannon shell won't tumble from hitting me. An M-16 bullet will tumble more times going crotch-to-shoulder (which may occasion it exiting my body through the left knee) than going through my arm. Some slugs on some trajectories will make the one tumble the Doctor said they would, but for every slug, for every hit, to make one tumble, requires more smarts than a bullet has. (Unless it is a Cyberslug, which sounds like something that, when stepped on, will slime you right quick.)

SILENCERS AND BULLET SPEED

We have concluded that the "washer" type silencer does not slow the bullet down. Hooray for consensus.

We have had it explained that the drilled barrel type *does* slow it down. Truth is, all barrels exert friction on the passing bullet, whether drilled or not, because the bullet is squeezed in the barrel… if it were not so the gas would escape past the bullet which would damage the gun badly and ruin accuracy besides.

While the number and size and placement of holes can be done so that the highest velocity is not at the muzzle, the only object of drilling the barrel is to prevent supersonic muzzle gas… the bullet is supposed to be accelerating positive (getting faster) all the way to the end of the barrel. Drilling so many, or so big, or placed so that the bullet is slowed down by friction while inside the barrel sounds like some designer didn't do his math right, or was being really cautious about preventing supersonic gas at the muzzle. Combining the drilled barrel and the washer-type (which can sustain continuous fire if built right) sounds like a much more deadly combo.

WASHER SILENCERS

This is a can full of washers & springs.

The end of the barrel is threaded on the inside. The silencer screws into the end of the barrel. The washers are spaced apart with springs. The springs and washers may be coated to reduce rattling noise from the gas slamming them around. The outer casing of the silencer is perforated. It may also be multiple layers. The washers may also be perforated. The machining does not need to be super-critical… the 9mm bullet passes through a 10mm hole in the center of a 20mm washer. Most gas immediately hits the washer and diffuses through the perforations on the side of the can. What gas passes with the bullet through the 10mm hole repeats this at the next washer. It all gas goes subsonic before exiting the can (either at the perforations on the side or at the muzzle perforation) the muzzle noise has been suppressed. Gas quantity and pressure at the muzzle are the determining factors of how many washers of what size are required and what precision is required in the machining to achieve noise suppression. Note my choice of 9mm, 10mm, and 20mm are arbitrary ones. Exact models will vary and you can (illegally in US) make your own.

INSANITY

When we talk to God, we're praying.
When God talks to us, we're schizophrenic.

— Lilly Tomlin

Schizophrenia beats dining alone.

— Usario Clave

Jerry Stratton

Insanity is measured as Light, Moderate, Serious, or Deadly. The penalty to target numbers is the same as for normal damage, and is cumulative with physical or stun damage. There is no penalty for deadly insanity, but such a character can only be a non-player character.

When in a situation where insanity may occur, resistance will be rolled with Willpower. Insanity helps keep a character sane: if an already insane character makes a willpower test vs. further insanity, the insanity penalties are applied as a bonus instead of a penalty.

Insanity heals in a manner similar to mental damage, although rest is not required. A Charisma test is rolled. Insanity damage does not apply penalties to this roll, but mental or physical damage does. Divide the duration by the number of successes. This is the amount of time it takes for insanity to drop one level. If there are no successes, the level does not drop, and the duration is doubled for the next roll.

Insanity	Duration	Target Number
Deadly	10 days	6
Serious	6 days	5
Moderate	3 days	4
Light	1 day	3

EFFECTS

The exact effects of insanity are left up to the player and referee. The style of the game and the situation that caused the insanity should dictate how insanity is treated.

Light insanity should involve minor distractions or compulsions. Moderate insanity should involve definite compulsions and/or a twisted world-view.

Serious insanity will involve occasional hallucinations, paranoia, and/or very strange compulsions. Deadly insanity indicates that the character is completely insane. Most of the character's time is spent with hallucinations. It might involve paranoid delusions and schizophrenia, or a complete, non-stable personality switch.

Insanity is not cumulative. However, characters can have multiple insanities. Only the penalty for the most serious insanity modifies success tests. Each insanity must be cured separately.

A character might have a deadly psychosis (fear of flying), a moderate neurosis (kleptomania), and a light paranoia. Whenever the character is in a situation where kleptomania grabs hold, the character has the penalty of 2 for moderate insanity. If kleptomania isn't in effect, the character has the penalty of 1 for the paranoia (since paranoia will pretty much always be something the character will have to worry about). Whenever the character's fear of flying takes effect, the character is played by the game master, and no penalties are in effect. (Yes, the no penalty for deadly does override the real penalties for lesser insanities. It's the highest insanity, not the highest penalty, that takes precedence.)

THE EXPENSE OF MAGICAL CARE

Tony Moller <aroooo@clark.net>

In the shadows it can be good to be a magician. You have certain advantages that mundanes don't. You know it and they know it. Just listen to the rallying cry of shadow teams, "Geek the mage first! " But there's a down side. What happens when you take a hit? Or several hits? You get pulled out of the frey by your buddies, or DocWagon, if you're either lucky enough to sound the alert, or rich enough to afford Super Platinum.

So now there are two paths you can take. If you have another magician in your team, who can heal you, everything's wiz. Oh, you say you are the only magician? Well, then, you're fragged. Do you want to risk the local street docs who have never worked on a mage? I think not. Then its off to the hospital for you (if DocWagon didn't get to you first).

Now here's the kicker. The execs who make up the world only tell you what happens if you don't take the added difficulty in treatment. Like most higher ups they forget that magic works for others than shadowrunners and R&D gurus. They overlooked the fact that magicians can, and are, doctors. But they overlooked an even more important aspect (from their point of view)… the costs.

I gathered these representative doctors fees for magical treatment from across the country, and averaged them to give you all an idea of what you can expect to be charged, the next time you, the magician, get geeked first.

Standard Fees
All standard DocWagon fees apply.
All standard hospitalization fees apply.
All paramedic (first aid) fees apply.
Doctor's fees are double standard costs (per day):

Wound	D	S	M	L
Cost	800¥	400¥	200¥	100¥

Basic Costs
Per Force of Spell	1,000¥

[includes use of Magic Pool dice to Force of Spell]

Additional Costs
Per Magic Pool die above Force of Spell	1,000¥
Per Target Number above 4	1,000¥

[include cyberware and bioware mods]

Per Target Number below 4	-1,000¥
Per Karma spent on re-rolls	1,000¥

Magical Materials Used
Expendable Fetish	50¥
Reusable Fetish	50¥
Specific Spell Foci	450¥ per rating
Spell Type Foci	450¥ per rating
Power Foci	1,000¥ per rating
Healing Ritual Sorcery Materials	100¥ per rating

On-Site Treatment Costs for DocWagon Services (additional)
Light Wound	1,000¥
Moderate Wound	2,500¥
Serious Wound	5,000¥
Deadly Wound	10,000¥

Deadly Wound Stabilization
[used only if On-Site Deadly Wound treatment (above) refused by patient/representative, and then only if requested by patient/representative, for transport to a hospital/clinic, and only if Doctor has spell (note all DocWagon magical medical personnel are required to know this spell]

Per Force of Spell	200¥

[includes use of Magic Pool dice to Force of Spell]

Per Magic Pool die above Force of Spell	200¥

DocWagon Discounts
DocWagon Gold	-10%
DocWagon Platinum	-15%
DocWagon Super Platinum	-20%

DocWagon Contract Fee Modification:
[Add 25% to the base cost of the service contract for having magical healers respond to the DocWagon call. Also reflects the added security DocWagon maintains on the DNA samples on file.]

Mods to High Threat Response Team calls	+2,500¥

Acute Care:
Basic	+250¥ per day
Intensive	+1,000¥ per day
Extended	+1,500¥ per week

Magical fees not waived for on site resuscitations, including free resuscitations.

THE PETTING ZOO

Animals have these advantages over man: they never hear the clock strike, they die without any idea of death, they have no theologians to instruct them, their last moments are not disturbed by unwlecome and unpleasant ceremonies, their funerals cost them nothing, and no one starts law suits over their wills.

— *Voltaire*

Paul Devisser <pdevisse@twilight.tdkcs.waterloo.on.ca>

»»Hoi there all youz... A chummer of mine has got some red-hot data that may cast some light on the shadow... Right. Here it is.)«««

A couple of buds n' me took this run to Detroit. What we found was mind blowing.

There was the thing, called itself a Lonesti. Fraggin' weird. Had no astral sig whatsoever. It was humanoid, but it drained Jackie of her magic in less than 30 secs. Thumper, muscle along for the ride, toasted it with a couple of bursts from a MP-5TX. There were two more, and we geeked 'em both. They didn't even blink when I tossed a killer mana bolt at them. Wasted a perfectly good fire elemental, and it just kept coming. The only thing that even touched these things were several hundred rounds from my partner's gun. Blew my mind.

»»After Relli told this to me, I checked around. It took some digging, but this was lifted from the library at MITT. Cost me a hot deck as well, so it better be worth it. Word to the adventurous, the file was protected by some drek that I never scanned before. If ya can get some info about it, leave mail at LTG# 1934(4776-98567). Address to either Null Cipher, Epilogue, or Maelstrom. Oh yeah. I rewrote the file a little, getting rid of all the drek that was written in a language that none of us speak, and put it in the same format as the Paranatural Guide.)«««

M
A
G
U
S

The dataFAX for hermetic mages.
LTG: 19842 (24-1740)

LONESTI

[Source: Salan Ultha's *Unmasking the Demons*, 1468 AD]

A creature of ancient and mysterious origins, the result of a magical experiment gone horribly wrong. The energies that were part of the spell created a void of energy on the astral plane, while creating a life on the material plane. These creatures must feed on the magic force of others in order to survive. Although such a creature would typically feed on life-force, as a vampire, the energies involved mutated the creature, changing its requirements from life-force, to magic. The first meal the newly created creature consumed were the magicians that created it.

Lonesti have no essence. In order to survive, the magic they steal from others is slowly leaked from the prime plane, where it is stored in their physical form, to the astral plane. This allows creatures that are capable of astral perception to easily recognize Lonesti by merely perceiving them on the astral plane.

The manner by which these creatures feed is unknown. What is known is that the creatures are basically humanoid. Also, observations have shown that when the creatures have consumed the double the magic to be found in one human they 'give birth'. This process is similar to the reproduction process of bacteria.

Lonesti transfer memories genetically, so the memories possessed by the first, are possessed by all who currently exist. This may account for the incredibly intelligent nature of these creatures, whose IQ would easily reach the genius level. All can speak an ancient and dead language, giving rise to the speculation that this is the original tongue of the magicians that originally created the Lonesti.

All are extreme megalomaniacs, to the point that they will gladly perform genocide on mundaners. They regard magicians as food, and all other races as tools to obtain that food. They are without any sense of morality or humanity whatsoever.

Their greatest strength, other than the ability to drain magic, is their immunity to mana based spells, and all combat spells. This is due to the utter lack of an astral form. All creatures have an astral form, even mundaners. The absence of one in the case of the Lonesti disallows the use of mana based spells which must have an astral form to complete the link to the physical plane.

Powers: Immunity to age, Immunity to magic*, Magic drain.

Weaknesses: Magic loss.

* Only combat spells and mana spells. Physical spells and damaging manipulations are exempt from this.

»»GM NOTE:In 2011 there were only 3 of them that awoke out of 21 that had hidden in order to prevent the annihilation of the entire race. By 2050 there are 11. If either the elves or the greater dragons discover that some still live, they will spend every available resource to hunt the Lonesti down and kill them all.)«««

THEM THAR'S HORSES

Michael M Scott <WarMage@aol. com>

Recently, a friend of mine asked me what in the rules was done to allow mounted combat. I told him to look up the vehicle section and remember that bikes don't offer that much protection. He looked at me for about half a second and started laughing like a madman. He then explained to me that he wanted to run a cowboy(non-console) and there were no rules for animals in combat. Looking at Seattle it is no wonder, the squatters would be falling all over each other to try to get a free meal; however, in other parts of the world, particularly the NAN and the Slavic parts of Europe it was not only possible, but likely, that horses would be in everyday use.

Anyway, this got me to thinking about the possibilities of horses in SR2. I thought it should be possible to modify the existing combat for vehicles to include animals, not just horses. Here are the modifications I came up with, and a couple of templates that would mesh well with campaigns in the more civilized (ahem, excuse me, more picturesque) areas of the globe.

ANIMAL COMBAT STATISTICS

Difficulty

This is the equivalent of handling for animals. The first number indicates an animal that has been broken, the second indicates a wild animal.

This number is equal to the animals' Intelligence + Charisma for the broken, and Body + Strength for the unbroken animals.

Speed

This is equal to the animal's Quickness. The cruising speed is equal to the base Quickness, the second is the sprint (max speed) number (Q x multiplier).

Body

This is the same as the body listed in creature statistics.

Spiritedness

This is the opposite of vehicle autopilot. A number of dice that is subtracted from the Riding pool (see below). This number is subjective but should be equal to 1/2 of the difficulty for broken/Unbroken animals.

ANIMAL/RIDER INITIATIVE

Determine initiative for animals as normal unless they are being ridden by a trained rider. A trained rider is any character who has the physical skill Animal Handling, the concentration of Riding, or a specialization in any particular animal. The skill Animal Handling breaks follows: Animal Handling (Riding (SA), Training (SA), Teamster (SA&V). The SA stands for specific animal, the SA&V stands for a specific animal type and drawn vehicle combination.

A new dice pool is also created—the Riding Pool—equal to the character's skill in Animal Handling minus the animal's Spiritedness. A trained rider has the following effects on animal initiative:

- Any rider with the Animal Handling skill can add one to their initiative total (the animal's) for every two full dice they have in their skill.
- Any rider with a concentration in riding can add one to their initiative total (animal's) for every dice they have in Riding.
- Any rider with a specialization in riding can add two to his initiative (animal's) for every die they have in the specific animal Riding.

Note: All initiative numbers are based on the animal's initiative modified by the rider's most appropriate skill.

ANIMAL/RIDER ACTIONS

A rider and animal will act as one creature, i.e. the animal can take its move for half of the action and the rider can attack for the other half of the action. In this instance, both of the actions count as simple. Furthermore, all actions that are listed in the combat section are unchanged in terms of complexity. A non-trained rider can take no complex action while mounted, can take simple actions as if they were complex, can take the following free actions as if they were simple actions: Call a shot, Change Smartgun Fire Mode, Gesture, Observe, and Speak a word. It is impossible for a character to drop prone and all other actions remain the same. Note, this means non-trained rider mages will be unable to cast spells while mounted. (Anyone who remembers riding for the first time will verify this.)

ANIMAL/RIDER MANEUVERING

Next, we come to control. Any non-trained character, must use his full action to tell an animal what to do. An animal will continue doing what it was told for a number of actions equal to 1/2 its intelligence rounded down. (Do not let a non-trained rider try to ride a stupid animal (int 1) into combat unless you only want him yelling at the animal all combat). Also any non-trained rider takes a penalty equal to the animal's spiritedness to all actions including handling tests.

Trained riders, on the other hand, act as if the animal is an extension of themselves. They can perform a move with the animals move rate and take a simple action with their other action.

ANIMAL/RIDER COMBAT TURN

This turn is just like the vehicle combat turn with the Riding Pool replacing the Control pool for all tests. Fleeing, Relative distances, fight, and pursuit are handled in the exact same manner as in vehicle combat (SR2 p105-7).

1. Determine Initiative
   Resolve A and B below before initiative is determined.
   A. Allocate Riding Pool Dice.
   B. Make Position test.
2. Resolve Actions
3. Begin New Combat Turn
4. Make Escape Test

CRASH TESTS

Crash tests are handled the same way as for vehicles except, the test must be made any time the animal takes Moderate damage, Terrain has no effect on the test target, and the damage category is increased by 1 level for the rider(s) in crash tests. i. e. at speeds between 1 and 20 the rider would take Moderate damage while the animal would only take Light damage. Ramming and escape tests are handled the same way as they are handled in vehicle tests with standard modifiers for terrain. Furthermore, any untrained animal will "spook" when it takes damage equal to it's Intelligence. This requires a test just as if it had ran into something.

DAMAGE

Damage is standard for animals. With the normal modifiers to target numbers (all actions taken by both animal and rider), and initiative.

»»I I know a dude in Austin who can custom-make y'all saddles and tack out of Kevlar (with side plate for a 5/3 armor rating). Contact J. D. at 30583 (26-9269) (that's COWBOY, for you numerically impaired Yankees). I«««
— Sir Galahad (11:24:17/10-02-56)

»»»Secure-Tech also supplies customized barding at five times the cost of equivalent clothing, allow 2 weeks for delivery, and 23.95¥ for shipping and handling (twice that to deliver to anywhere west of Dodge City, Kansas). ﹜«««

— D. D. and Nell (01:55:41/11-15-56)

SPECIAL RULES

Using melee weapons from a mount/vehicle. When using a weapon from a mount or vehicle certain bonuses and restrictions apply.

First, all target numbers are increased by 1 for every full 30 that the animal or vehicle is moving this action. Second, all attacks made from a moving mount are modified as to the amount of damage they will do based on the relative speed of the two moving objects. For every relative 10 that the attacker is moving add 1 to the power of the attack, treat this as a burst, i. e. for every +3 increase the damage level by one. Relative speed is calculated as follows: if they are moving toward each other, the speeds are added together for all calculations. If they are moving the same direction the absolute value of the two speeds subtracted is used. If they are moving perpendicular to each other, then use only the speed of the animal or vehicle that the rider is on.

The charge is a variation on these rules, where the attacker is moving toward the defender, and the defender is either stationary or moving toward the attacker. If the defender is not moving toward the attacker and the attacker has the reach advantage, the attacker may attack as usual, but the defender may not counter attack, only parry. (the infamous lance charge from horseback).

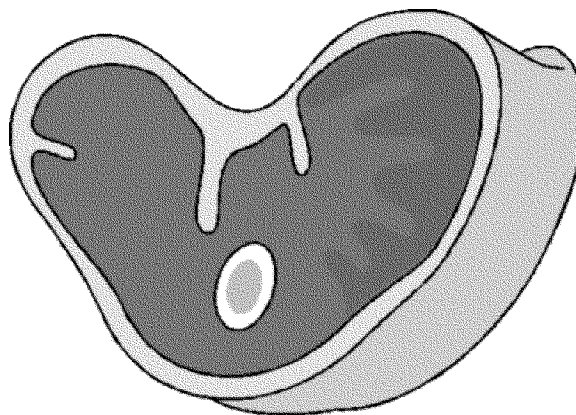Any weapon used from a mount *must* have a reach of at least 1 to reach anyone on the ground.

The lariat is the gaucho's best friend. To use a lariat a character makes an attack test that is resisted as normal, except, no armor is allowed and the target character must resist with only Quickness target number of 4 (6 for heavy rope).

The number of net successes achieved by the attacker serves as the initial power of the entangle attack. Characters can attempt to break free of the lariat by making a Strength test target (2 x # of successes-1 per round spent struggling) To break free the entangled character must make a number of successes greater than the power of the entangle. Entangled characters cannot take any action other than speaking or trying to break free.

See the *Meat Market* section for some archetyoes that use these new rules. By the way a horse in 2053 costs 3-7K nuyen depending on supply and demand.