Newtech Goodies

By Sanmateo

Tools

Tools	Cost (credits)	Weight (Pounds)	Avail
Atmo'lyzer (advanced)	48	3	C
Atmo'lyzer (simple)	20	2	E
Grapple Gun	2	12.5	C
Microfusion Power Plant	100	1,000	C
Mule Attachments	25	500	E
Weldstrip	1	-	E

Atmo'lyzer (Advanced): Handheld sensor detects atmo composition, breathability, toxins, pollutants, chem agents and biologicals. A reliable analysis typically requires at least a fifteen minute sweep.

Atmo'lyzer (simple): Lower tech version detects atmo composition and breathability, but doesn't check for toxins, pollutants, chem agents or biologicals.

Grapple Gun: This pistol sized device fires a thin but durable dart with sufficient power to penetrate stone, cement or similar material. Once the dart has penetrated it projects several firm filaments to secure itself in place. A thin, flexible cable connects the dart to the grapple gun which can then be mounted on a separate harness (included). Once connected, and the dart/cable element secured, the operator can activate a built in powered winch to reel in the cable. The grapple gun is technically reusable, but wears quickly. A typical grapple gun has a range (cable length) of 50 feet.

Micro Fusion Power Plant: A small fusion power plant. Generates enough power to operate a homestead, with plenty of juice to spare.

Mule Attachments: This could be a backhoe, drilling rig, dozer, whatever, each purchased separately, and fit on Large Mule (not included).

Weldstrip: A simple, thin strip of material used to fuse two weldable surfaces together. It is of limited use in mechanical repairs, but found in most well stocked mechanics shops

Protective/Emergency Gear

regardless. It is ideally suited for fusing shut metal doors, airlocks and other portals.

Advanced Flexiplate Vest: The newtech answer to the plate vest, this vest features much more flexible material and more ergonomic design in both in the basic fabric and in the plate armor elements.

Advanced Hazmat Full Body Suit: Likewise, a more flexible version of the full body NBC suit that minimizes impediment to movement, manipulating small objects and complex actions.

Advanced Infantry Helmet: Similar to the standard infantry helmet, this helmet sport features designed to minimize the impediment to hearing and peripheral vision.

Advanced Riot Gear: Following the philosophy of the flexiplate vest to its logical conclusion, we have the advanced riot gear suit. Unfortunately the high cost limits its usefulness and it is rarely seen, even in high security areas where simply assigning more units with standard riot gear is usually more cost effective. Expect to see this armor only in the most delicate Alliance operations and strike teams.

Armored Vacc Suit: A sleek pressurized body suit made out of self-sealing weave and ballistic mesh produced for the Alliance (or bounty hunters who work for them). When it suffers a tear, the fabric automatically pulls together to seal the hole before internal atmosphere is lost. There is a small atmo-tank (holding a few hours of air) built into the back. It also comes with a vacuum helmet (2W armor rating). Without the helmet, the suit's weight drops by 5 pounds and the wearer no longer suffers the -2 step Alertness penalty. The suit absorbs 1 point of Wound damage and converts all Wound damage from normal bullets into Stun damage, just like ballistic mesh.

Weapon Gear

Customized Holster: A custom built handgun holster that allows a +2 step to Initiative, but only for one specific handgun type and only for the individual it was crafted for.

Digital Sights: An weapon-integral high resolution video camera sighted to a matching

Protective Gear	Cost (credits)	Weight (Pounds)	Avail	Notes
Adv. Flexiplate Vest	70	4	I	-4w. No Agility penalty
Adv. Hazmat Full Bodysuit	350	8	I	-3w. No Attribute penalty
Adv. Infantry Helmet	32	2	I	-4w. No Alertness penalty
Adv. Riot Gear	380	15	I	-3w. No penalties
Armoured Vacc Suit	226	25	I	-1w. -1step Agi/-2step Ale.

CHAPTER 2

forearm mounted or eyewear view screen, allowing firing from full cover or around corners with a -1 skill step penalty.

Laser Sight: A standard laser sight, typically mounted above or below the weapon barrel. Provides a +1 step skill bonus to weapon use, but only within close range.

Neural Interface Sighting Modification: (with low-light/infrared targeting) Identical to the digital sight but feeding the output from the high-res video camera directly into the wielder's optic nerve via a neural 'plug' surgically implanted in the palm. Low-light or infrared sighting is standard, provides the ability to fire around corners and from cover (at no penalty) as well as granting a +1 skill step for normal combat use.

Silencer: Just like it sounds, for folk who don't want their guns bein' heard outside the bank while they're inside robbing it! Unfortunately a silencer reduces the effective range of the firearm by half.

Silencers are only available on the black market.

WEAPON GEAR	COST (CREDITS)	WEIGHT (POUNDS)	AVAIL
Customized Holster	5	1	E
Digital Sight	50	-	C
Laser Sight	20	-	E
Neural Interface Mod	550	-	I
Silencer	40	-	I

Computers & Hard/Software

Lexicon (Translators): A standard data pad-sized device which automatically translates one spoken language into either a readable format or a vocalized translation. Each lexicon is typically programmed with one particular translation as a standard package (English/German, for example) but can be easily upgraded with further language sets over the Cortex for a flat 5–10Cr fee. Any language spoken in the 'Verse is available for download, including versions covering those dialects on the Rim worlds which've become so corrupted as to be otherwise incomprehensible.

Portable Cortex Terminal: Identical to the standard Personal Access Cortex Terminal but

COMPUTERS	COST (CREDITS)	WEIGHT (POUNDS)	AVAIL
Lexicon (Translator)	40	2	C
Portable Cortex Terminal	400	1	C

COMMS & SECURITY	COST (CREDITS)	WEIGHT (POUNDS)	AVAIL
Holo Comm. Gear	90	30	C
Holo Recorder/Player	225	7	C
Parrot	54	1	C
Video Capture	2	-	E
Video Comm. Gear	60	18	C

roughly the size and shape of an Encyclopedia (see core rulebook p.83).

Communications Gear

Holo-Comm Gear: Identical to a hand held video transmitter and typically used for direct holographic communications and conferencing. Has a 70 mile range and is unencrypted. It also provides holographic recordings/projections as well as standard photograph and two-dimensional video. Due to its compact nature, however, it can only store 15 minutes of holographic video at one time and its recording range is limited to the 10'x10' area directly before the device. It likewise has limited cortex access for transfer and storage of the holographic, photographic and standard video data.

Holo-Recorder/Player: Designed specifically for holorecording and projection. Can store up to five hours of holographic data, capable of live-streaming via cortex (assuming a cortex terminal or connection is readily available) and has a recording range of up to 100'x100'. Very expensive and normally considered a professional item.

Parrot (Shoulder-mounted Professional Video Capture): A video capture mounted on the shoulder wired to a stylish neckband that monitors the wearer's head movements and rotates the capture to follow their gaze. The Parrot requires a small measure of training to operate effectively, however, as more subtle manipulations (focus, zoom, etc) are also controlled by subtle head and neck movements. The Parrot isn't very concealable and is normally used by journalists, court reporters, interviewers and any other professional who regularly requires free hand movement while documenting their surroundings.

Video Capture: A postcard sized audio/video recorder with high-resolution display. Typically has an internal memory storage of four hours.

Video Comm Gear: A standard handheld transmitter with 70 mile range, unencrypted, but providing two-way video communication. Also

CHAPTER 2

takes photographs and video (up to 30 minutes worth of memory) and limited cortex access in order to facilitate transfer of photo/video memory.

Medical Equipment

Cryo-Bag: A standard air-tight body-bag with an emergency cryo-stasis unit built it. Typically issued to paramedics and other emergency responders in high-profile areas such as the Bellerophon estates or those emergency medical units attached to Parliament officials or government buildings. It's designed for the transport of gravely wounded patients directly to emergency treatment. Battery operated and good for up to twelve hours of sustained cryo. Requires an Average Resistance roll to avoid 1d6 stun damage both during initial flash-freezing and resuscitation.

Personal Auto-Med: A newtech operating theater/medcomp combination in the form of a standard patient's recovery bed. Usually non-portable but at least able to be wheeled about as needed, although it does require a power source. Provides a +1 step bonus to the patient's Endurance checks while attached to the device and provides a +1 steps to the treating physician's monitoring, diagnosis and resuscitation attempts.

Portable Auto-Med: A briefcase-sized version of the personal automed. Basically a portable version of the operating theater/medcomp combination. Also provides a +1 step bonus to a patient's Endurance checks while attached to the device and a +1 step bonus to attempts to resuscitate that patient.

Frontier Horse Doctor's Bag: Operates identically to the standard doctor's bag but designed and supplied for use in treating common animals (dogs, horses, etc.)

Medical Equipment	Cost (credits)	Weight (Pounds)	Avail
Cryo-Bag	3500	3	C
Frontier Horse Doctors Bag	30	11	E
Personal Auto-Med	1000	220	C
Portable Auto-Med	1600	20	C
VetAcad Veterinarian Bag	200	11	C

VetAcad Veterinarian's Bag: Like the MedAcad bag, this is the standard issue emergency treatment gear issued to Core educated veterinarians. It operates identically to the MedAcad bag in the treatment of common animals.

Security Equipment

Acid Pen: Designed and used specifically for acts of sabotage, shaped like a standard black marker. Specifically, the acid pen was first designed in order to apply powerful acids to metal engine parts and vulnerable sections of aircraft/spacecraft fuselage. In time the acid would damage the metal and render the vehicles useless until repaired or even cause deadly failure midair or in the Black. The acid pen was very popular with Independent forces saboteurs during the Unification War and they are still relatively easy to get on the blackmarket even today. Being caught in possession of an acid pen, however, will all but guarantee a stiff prison sentence for conspiracy to commit acts of terrorism. Generally the acid pen gives a +2 step skill bonus to any use of the Sabotage skill.

Blackvine Gun: An off-shoot of the foam barricade canister, taking advantage of the foam's usefulness in subduing potentially dangerous individuals. An advanced version of the foam (blackvine foam) is launched from this hand-held pistol-styled projector at the target's feet or lower body. In a successful hit the target must make a Hard Get Out Of Harm's Way roll on both that turn and the next (each counting as an action) in order to avoid being rooted in place.

Attacks aimed at the upper torso are handled in the same manner but, if not successfully avoided by the target, give a -2 step penalty to actions requiring arm or upper torso movement. The effects of aimed shots to the head, hands, etc should be fairly obvious.

Blackvine doesn't work very well in loose soil, for obvious reasons. Checks made in such environments are Average or better, depending on what substance or material the foam is expected to root it's target to. Blackvine foam will degrade and disintegrate within one hour, under normal conditions, but can be dissolved with standard chemical solvents almost immediately. Ammo for the blackvine guns costs 5Cr per cannister.

Blackvine Sticky Bomb (Riot Control

Grenade): Like the Blackvine gun above but in grenade form. Capable of subduing multiple targets within range of its initial burst. On a successful hit the target must

Security Equipment	Cost (Credits)	Weight (Pounds)	Avail	Notes
Acid Pen	100	-	I	
Blackvine Gun	37	1	I	
Blackvine Sticky Bomb	1	1	I	Range increment 5'
Foam Barricade Canister	3.2	1	C	
Handcuffs	1	1	E	8 Life Pts. 6 BoS, Difficulty : Incredible
Handcuffs, Zip-Tie	0.2	-	E	2 Life Pts. 4 BoS, Difficulty : Heroic
Manacles	3	2	E	12 Life Pts. 8 BoS, Difficulty : Incredible
Neural Restraints	60	1	I	
Vyper Security System	120	24	C	

make the standard Hard Get Out Of Harm's Way check on both that turn and the next (each counting as an action) in order to avoid being rooted in place.

Blackvine Sticky Bombs are subject to all of the same conditions as the Blackvine Gun (see above).

Foam Barricade Canister: A 1' long, 4" diameter canister containing a rapidly expanding foam that hardens near-instantly on contact with air. The canister contains enough foam to build one 5' x 5' x 20' wall.

A hardened foam barricade can provide adequate protection against most small arms fire and is designed expressly for that purpose. The foam itself is typically dark, matte grey or olive green in color. The barricade foam can be deployed in 5' x 5' x 5' sections, if desired. If used during combat then one 5' x 5' x 5' section can be deployed as a single action and a particular section will harden enough to provide cover on the following turn.

Handcuffs: Standard steel cuffs, locked by either mechanical key or electronic key-pin.

Handcuffs, Zip-Tie: Standard plastic wrist restraints. Easy to apply and disposable. Cost is for a packet of ten.

Manacles: A thicker, hardened version of standard handcuffs and typically connected by a much thicker chain or cable. Designed to fit either wrists or ankles. Like handcuffs, they can be locked with either mechanical key or electronic key-pin.

Neural Restraints ('Nerve Locks'): A newtech electronic version of manacles which apply a steady neural pulse to the wearer's wrists, dazing the wearer and rendering them much more pliable and easy to direct. PC/NPC's under this effect suffer a -2 step skill penalty to actions requiring any amount of concentration and a -1 step penalty to all other actions.

Vyper Security System: A newtech version of the standard vehicle alarm. Issues electric shocks to anyone attempting to operate or manipulate the device it protects without first bypassing the system. Easily adaptable to voice recognition, electronic key or any other standard locking mechanism that may already be present. Though the Vyper system is very adaptable and can be slaved to individual weapons, vehicle controls, ship bridge stations or even a standard door lock, actually installing the system can be tricky and is usually handled by trained Vyper System personnel.

If a person with Technical Engineering skill gets hold of a Vyper system and wants to take a crack at it, it's a Formidable task (without specialized training) and takes at least several hours. Bypassing the system, on the other hand, is also Formidable task, not to mention a little dangerous. The Vyper system delivers a verbal warning to anyone attempting to operate, disassemble, bypass or otherwise manipulate the object or device it is attached to, delivering 1d6S shocks each turn thereafter until reset by its owner. In most cases one shock is enough to convince a body to desist.

Covert Ops Gear

Concealable Capture: Identical to the Video Capture above but reduced to roughly the size of a fingernail and approximately as thick.

Explosives Detector: This handheld device sniffs out nitrogen compounds — the basis for all common explosives.

Frictionless Mini-Pellets: A packet containing enough pellets to effectively coat a 10'x10' area of ground surface simply by emptying it out. Movement across any semi-level surface covered with frictionless pellets (without falling flat) requires a Hard Agility check. Even successful

CHAPTER 2
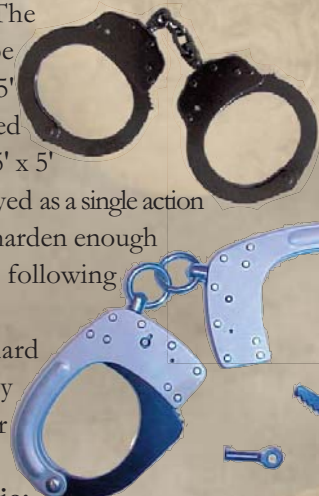
movement makes any other action during the same turn much more difficulty while attempting to maintain balance. Getting up once you've fallen is itself requires a Hard Agility check. Prone characters can, of course, act normally otherwise.

Laser Tapper: This device bounces an invisible laser beam off a window, using the return signal to convert the window's vibrations into a high definition replications of the sounds occurring in any enclosed room (or the immediate area otherwise) beyond. Vacuum-sealed double-paned glass (standard in most core world architecture) blocks eavesdropping by this device. (Newtech: x4. Allows a poor quality, low resolution video representation of the room's interior. The resolution is too poor to allow any distinguishing features to be discerned but allows accurate tracking of movement and location of specific targets within the room.)

Covert Ops	Cost (credits)	Weight (pounds)	Avail
Concealable Capture	15	-	I
Explosives Detector	12	1	C
Frictionless Mini-Pellets	25	-	C
Laser Tapper	12.5	0.5	I
Ranged Microphone	20	0.2	I
Snake Eye Lens	16	-	I
Spider-Gear	1	5	C
Spotter Contacts	60	-	C
Spotter Contacts, Advanced	150	-	C
Sub-Vocal Communicator	160	-	I

Ranged Microphone: A hand-held device (approximately 4" long by 1" in diameter). The ranged microphone has a simple thumb-controlled dial that allows the operator to 'tune in' any particular 10' x 10' area to a range of 100' in the direction it's pointed. Comes with its own dedicated receiver, independent of the microphone itself. The device, once set to a desired ranged, does not need to be held to continue operating.

Snake-Eye Lens: A microscopic lens mounted on a thin fiber optic cable (available in nearly any length). The cable includes its own adaptor to mount on most standard captures and video monitors. The snake-eye lens can be used to extend the capture or monitors detection range around corners, through keyholes, air vents and similar obstructions.

Spider Gear: Think Spiderman. Palm, knee and foot pads that project flexible monofilaments into nearly any solid material (including stone, but not most solid metals) that become rigid when flexed. Takes a bit of getting used to but a skilled user can scale nearly any surface at any angle with little difficulty.

Spotter Contacts: Spotter contacts are newtech electronic contact lenses designed to enhance standard visual range in some way. Individual models allow binocular vision (up to x100), thermal imaging and lowlight (with built in protections). Standard versions only allow the thermal and low-light effects up to 40 feet and limit peripheral vision (-1 skill step penalty to Alertness/Perception checks in some cases). Advanced versions extend

CHAPTER (X2)
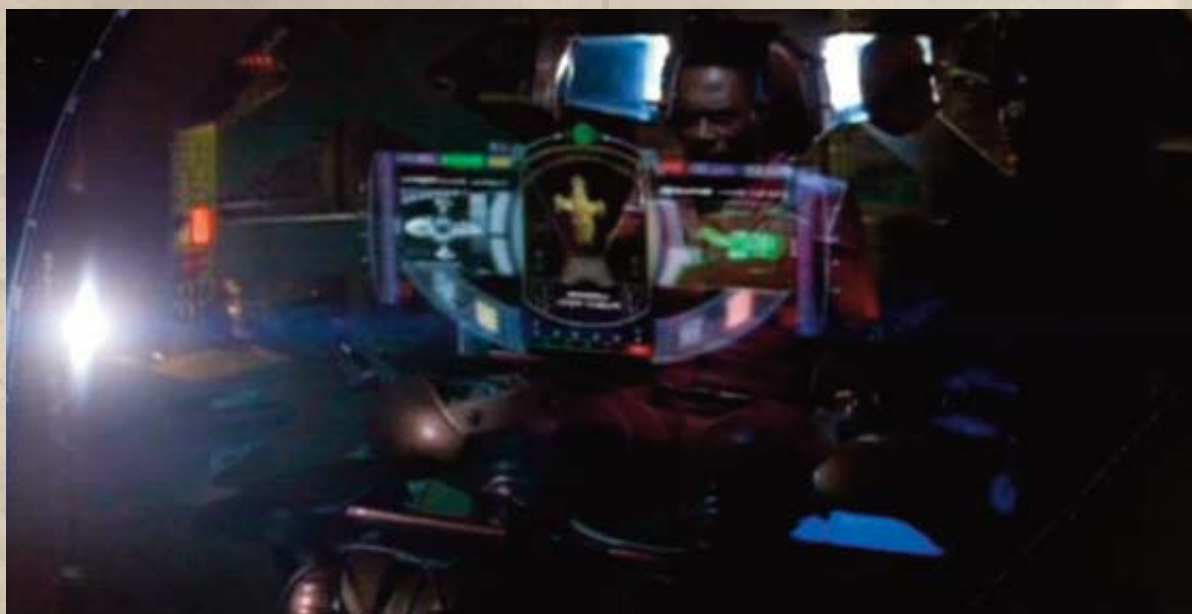
the effect to the wearer's full visual range. Special vision effects and enhancements are triggered and controlled with specific blinking routines.

Sub-Vocal Communicator: A standard communicator with a 4 mile range with built-in encryption. Analyzes and transmits the wearer's sub-vocalizations for discreet communication. Normally shaped into a small fleshtone dermal patch applied at the throat with a matching earbud communicator for receiving transmissions.

General Equipment

Aqua Breather: A mask and filter system that allows the wearer to breath underwater by extracting oxygen directly from the surrounding water. The aqua breather itself is normally mounted on a belt or small backpack and connected to the mask by a flexible tube.

Binoculars: Your basic range findin' type lookers. All different shapes, sizes, and styles are available. The lookers have a night vision function to them and can determine distances as well.

Bio-Canteen: A self-contained container that holds and purifies 1 liter of water. The filters contain good bacteria that help remove harmful bacteria from the water. 1 filter is good for about 3 refills. (1 Credit for a 2 pack of filters.)

Long-Leash: Requires training for the animal it is designated to but, granting that, enables the operator to issue sub-vocal commands and prompts to a pet or other trained animal. Very popular with Core worlders who want to avoid the embarrassment of scolding their lovable "Whoopsy" for behaving inappropriately with guests. Law enforcement officers use the system to direct trained attack dogs remotely or discreetly.

Grav-Glider: Serves the same purpose as a parachute but much more reliable, reusable and compact. Four flexible hoops of material are

General Gear	Cost (credits)	Weight (Pounds)	Avail
Aqua Breather	32	3	C
Binoculars	4	3	E
Bio-Canteen	3	2	E
Long-Leash	80	-	C
Grav-Glider	100	10	C
Survival Kit	8	9	E

projected from the backpack container and utilize a temporary one-shot grav field to slow and, to some extent, direct the wearer's descent. Skilled users can maneuver a grav-glider far more easily and precisely than a standard parachute and can slow their descent to as little as one meter per second.

Survival Kit: Somethin' no one should travel the Black without. A survival kit is a container about the size of a backpack that has assorted items needed for emergency situations. The following are included in the pack; 1 person shelter, basically a small pop tent; Bio-canteen; 2 Bio-canteen filters (1 filter is good for 3 refills); 1 protein bar (If sliced thin bar will easily last a week); 1 space blanket; 1 basic first aid kit; Flash light (manual powered, lasts 4 hours, 5min to recharge); Survival Knife (treat as combat knife); Knife contains: Small compass, 2 needles, Spool of nylon thread, 12 matches, piece of flint.

Cortex Gear

By Sanmateo

We present this addition to the core rulebook's Computer, Hardware and Progs section. This expansion is most useful if you are planning to make the cortex and computer hacking a regular part of your campaign. Otherwise, it can tend to bog things down a bit.

Computers come in a variety of designs and types, the most basic of which is the standard cortex terminal, geared specifically toward accessing and navigating the cortex. As such it has little other function, though it has memory and allows a significant amount of stored information (stored on one's cortex profile, that is) as well as all the functions one would expect from a very nice web browser. However, characters with Technical Engineering/Computer Programming or Hacking might want something more specialized to work with.

Computers have attributes all their own, just like a ship. These attributes are limited to Alertness, Intelligence, Willpower and the derived attribute Hardware (Alertness + Intelligence + Willpower). A standard personal access cortex terminal has d2 in all these attributes and 6 Hardware (not d2 + d2 + d2, since Hardware represents the computer's 'Life Points' or ruggedness). By simply upgrading these Attributes, installing some specialized hardware and choice progs, your cortex hacker can build the system that works best for them.

Computers also have three standard general skills: Security, Hacking and Programming. These are likewise included in the base package at d2 and cost more for a better base software system. Starting cost for building a personal computer/cortex terminal is equal to a personal cortex terminal (i.e. 100Cr). Upgrade from this base model using the following table. Base Memory is equal to Willpower + Intelligence but can be upgraded as well to a maximum of d12 + d12. You'll note that computer attributes and general skills up to d8 represent the standard personal computer stats. Stats of d10 to d12 + d2 represent the cutting edge of commercial computer hardware/software, available only in the core. Alliance military and government agencies like to keep the best stuff to themselves, with few exceptions, and possession of gear or software with scores of d12 + d4 or higher is illegal (not to mention incredibly hard to find).

Attributes & Skills	Cost (credits)	Avail
d4	15	E
d6	45	E
d8	70	E
d10	115	C
d12	175	C
d12+d2	300	C
d12+d4	475	I
d12+d6	950	I
d12+d8	1500	I
d12+d10	3000	I
d12+d12	6000	I

Computer Attributes & General Skills

Here's an example: Let's say our hacker character, Ebon Smith, wants to design a personal computer to best utilize his amazing Technical Engineering/Hacking skills. He decides he wants a state-of-the-art, top of the line (yet, still legal) system. He hits the cortex and accesses Monarch Computer Systems and orders himself a personal computer system. Because Monarch is so customer friendly he is able to design the system he wants and chooses these Attributes: Alertness d8, Intelligence d10 and Willpower d6; giving him a Hardware of 26. He goes on to buy Computer, Hacking and Programming general skills at d6 each to allow for specialty progs. A real top-shelf system, that one, and a whopping 465 credit price tag to go with it.

Since our guy Ebon is going to be doing a lot of hacking with his new system he decides some hardware upgrades might be a good idea. Unfortunately, after actually paying for his state-of-art system he finds most of them a bit too pricey. He opts for Standard Hardware Hardening as a must-have and decides he'll upgrade later with that very tempting Black Box option after his next big score. Ebon figures Portability is a very nice option for a hacker that may have to run for his life now and again. After much soul searching he gives in and goes with that one as well. Still, he's hurting financially now and is a bit concerned about what progs he'll be able to afford. Total for hardware upgrades: 325 credits.

Computer Hardware

Alliance-Grade Hardware Hardening: Absorbs 3 points of damage from all attacks to Hardware.

Black Box Upgrade: Provides a +2 step to the computer's Stealth skill, if any.

Dedicated Sourcebox Upgrade: Simply makes

Standard Hardware Upgrades	Cost (credits)	Avail
Alliance-Grade Hardware Hardening	500	I
Black Box Upgrade	500	I
Dedicated Sourcebox Upgrade	75	C
Holo-Image Development Suite Upgrade	30	C
Portability Upgrade	250	E
Standard Hardware Hardening	50	C

the computer a dedicated cortex sourcebox. Provides the ability to access the cortex via any terminal for up to one mile around. However, it brings with it a -2 step penalty to computer's Stealth skill as well as providing a +1 step bonus to anyone attempting to bypass the computer/terminal's authorization.

Holo-Image Development Suite Upgrade: Doesn't help in hacking but does allow you to use your computer to create nifty holograms (see p. 84 of the core rulebook).

Portability Upgrade: Makes your computer portable and decidedly smaller. A laptop, if you will.

Standard Hardware Hardening: Absorbs 1 point of damage from all attacks to Hardware.

In place of specialty skills computers have Progs. Like specialized character skills, a computer must have a d6 in the requisite general skill to use the specialized program.

Computer Progs

Security

Anti-Virus: Anti-virus programs detect and attack intruding viruses and destroyers in their system. An anti-virus prog is assumed always to be active and attempts to detect viruses and destroyers automatically. Once detected the anti-virus prog will continue to attack each virus/destroyer until it is destroyed. Anti-virus can also remove Attribute penalties from Virus attacks (after disconnecting from the attacking system) with a successful Hard Intelligence + Security/Anti-virus action for each penalty. Botches make the penalties permanent and they can only be removed by completely replacing all software (removing and replacing computer skill specialties at full cost).

To detect a virus is an opposed action: Alertness + Security/Anti-virus versus Intelligence + Hacking/Virus or Destroyer.

To destroy a virus is an opposed action: Willpower + Security/Anti-virus versus Willpower + Hacking/Virus or Destroyer is used.

Authorization: This resists intrusion by unauthorized systems, programs and users. This is the first line of defense in most computer systems, insinuating itself directly between the system and the cortex at large. Typically this represents a code of some sort, often encrypted, that must be recognized before direct access to the system is allowed. Most public information is located outside the computer's Authorization to allow free access. The XerO Security prog is an example of a d8 Authorization prog.

A system's Authorization skill is used in opposed action: Alertness + Security/Authorization versus the intruder's Intelligence + Hacking/Access skill.

ICE: ICE stands for Intrusion Counter-measures Electronics. This is typically a subroutine to the computer system's Authorization program and is likewise plugged directly into a cache of accesses, viruses and destroyers. ICE constantly monitors the Authorization prog. If an attempt at unauthorized access is made the computer system will use its ICE prog to automatically track down the user, access the user's system and attack with Virus or Destroyer (or both). ICE is legally available to many corporations, allegedly for use in protecting data associated with military/government contracts but is otherwise meant to be limited to Alliance government or military use only.

Locating an intruding system (once ICE has been alerted by a failed attempt at Access) is an opposed action Alertness + Security/ICE versus Intelligence + Hacking/Ninja. Once it has identified the attacker, ICE attempts to trace back to the attacking system itself (Alertness + Security/ICE versus Intelligence + Security/Stealth).

Access is then typically used to breach the enemy system's Authorization (Willpower + Hacking/ICE versus Alertness + Security/Authorization) and individual viruses and destroyers take over from there, however, the ICE prog continues to monitor these subordinate progs and aids them (see p. 144 of the core rulebook 'Aiding Others').

Encryptions: Encryption progs simply encrypt individual files or records, making them inaccessible without the corresponding password/code or bypassing the encryption with an Access prog. This is typically an Easy difficulty action as one only has access to files in one's own system or a system already hacked. However, there are rare instances where difficulty is harder (encrypting mathematical

language files or files in non-standard operating systems, for example).

Hacking

Access: Access progs utilize random algorithms and/or advanced key algorithms to breach Authorization progs (and sometimes Encryption). The SubKelvin prog is an example of a d8 Access prog.

Access is used as an opposed action Willpower + Hacking/Access versus Alertness + Security/Authorization or Intelligence + Security/Encryption.

ICE Breakers: A specialized form of Access prog designed specifically to derail, detour and shut down ICE progs; these progs are extremely handy when your Access fails to breach the target system's Authorization and your Ninja didn't fool the ICE. In such cases ICE breakers can attempt to shut down or detour an incoming ICE prog before it rips your system to pieces. Unfortunately, you still have to get past Authorization before your ICE breaker can assault the enemy ICE. In many cases that ICE is already hard at work on your own system by then. Still, at the very least it gives you a chance to minimize the damage.

ICE breaker is used in opposed action Willpower + Hacking/ICE breaker versus Alertness + Security/ICE progs.

Destroyers: These are specialized viruses that attack a system's attributes directly by creating devastating power surges in its circuits and overriding control systems. Success imposes a permanent -1 step penalty to one Attribute that can only be removed by replacing the component (replacing the appropriate Attribute completely, at full cost) as well as inflicting the Destroyer's die in damage to Hardware.

Destroyers continue to attack each turn until deleted or quarantined with an opposed Intelligence + Security/Anti-virus action. While Viruses may be bad news, Destroyers are worse (and possession or use of Destroyers is a sure fire way of getting Feds on your trail). Destroyers are used in opposed action Willpower + Hacking/Destroyer versus Willpower .

Viruses: Viruses attack a target system's attributes like Destroyers but do so by bogging down the system with erroneous instructions and damaging the software, effectively handicapping the system. Viruses continue to attack each round in the same manner as Destroyers and are likewise opposed by Anti-virus. Unlike Destroyers, however, software damage can be undone by Anti-virus progs and the Attribute penalty thus removed. Viruses do not damage Hardware, either.

Viruses continue to attack each turn until deleted or quarantined with an opposed Intelligence + Security/Anti-virus action. Viruses are used in opposed action Willpower + Hacking/Virus versus Willpower .

Stealth: Stealth progs simply mask the signature, identification codes, cortex profile, etc of the computer system, making it harder for other systems and users to locate it. This is useful in preventing ICE progs from tracing you back to your system and for keeping others from locating your system on the cortex.

Stealth is used in opposed action Intelligence + Security/Stealth versus Alertness + Programming/Scanner or Alertness + Security/ICE.

Ninjas: Ninja progs aid in avoiding detection by any ICE progs you may have tripped as

Speciality Progs	Cost* (credits)	Avail	Description
Security			
Anti-Virus	2	E	Detects and destroys virus and destroyer progs
Authorization	4	E	Resists intrusion by unauthorized systems, programs and users
ICE	100	I	Attacks intruding systems with Viruses or Destroyers
Encryption	4	E	Encrypts files and records
Hacking			
Access	40	I	Bypasses a system or computer's authorization
ICE Breakers	150	I	Resists or countermands ICE progs
Destroyers	170	I	Viruses that attack system attributes directly in order to permanently reduce attributes
Viruses	80	I	Attacks system software in order to penalize computer attributes
Stealth	40	I	Increases difficulty of discovering a system or computer
Ninja	70	I	Masks detection by system security and ICE
Programming			
Backdoors	50	I	Creates one or more unsecured access points in a computer and computer system
Decryptors	30	I	Decrypts files
Database Tools	2	E	Creates, destroys or alters files and records
Scanners	3	E	Aids in searching cortex, systems or computers
Slavedrivers	4	E	Aids in control of slave systems

* Price listed is a base price per die step. Multiply this by target die step to determine cost. For example: A d2 Access prog's base price is 40Cr. A d4 Access prog would therefore cost 80Cr (40Cr x2). A d6 would cost 180Cr (40Cr x3).

CHAPTER 2

well as security monitors running looking for suspicious activity in the system you're sneaking around in.

Ninja is used in the opposed action Intelligence + Security/Ninja versus Alertness + Security/ICE or the individual monitoring system's Alertness + Programming/Scanner.

Programming

Backdoor: Backdoor progs are used solely in reprogramming a system with a backdoor (an access point that completely bypasses Authorization altogether) in case the hacker intends to return at a later date and doesn't want the bother of hacking all over again.

Installing a backdoor is an action, Intelligence + Programming/Backdoor, with the difficulty depending on the quality of the system itself.

Decryptor: These progs simply hack individual files and records that have been Encrypted. Access progs can do the same thing but suffer a -2 step penalty since they really aren't designed for it. Likewise the Decryptor prog can be used to hack Authorization but suffers the same -2 step penalty. The difficulty of decrypting a file or record within a system varies, depending on how well it was encrypted in the first place.

The action is Intelligence + Programming/Decryptor.

Database Tools: These progs aid in creating, altering or destroying files or records within a hacked system (or one's own system, for that matter).

Scanner: Scanner progs aid in searching out information on the cortex as well as finding a specific file or piece of data in a hacked system. Any kind of computer search on any system can utilize Scanner progs to help. Scanner can also be used inside another system to locate backdoors, if any, and save you the trouble of creating one yourself.

Slavedriver: Slavedriver progs simply allow the user to set up routines for slave systems attached to the hacked system (security monitor, gun scans, locked doors), altering those slave systems (feeding false video, changing door access) and even remotely operating those systems.

After agonizing a bit, Ebon hits the cortex (and the back alley data markets) and spends the last of his substantial stash on the following progs:

Security: Anti-virus d10; Authorization d10; Encryptions d8. Total: 20 credits.

Hacking: Access d10; ICE breaker d8; Virus d8; Stealth d10; Ninja d10. Total: 840 credits.

Programming: Backdoor d8; Decryptor d8. Total: 160 credits.

Total prog cost: 1,020 credits. Once Ebon gets through crying we'll head on and learn how to hack….

The nice thing about computers is that they can do so many different things at one time. Unfortunately hackers, no matter how skilled, are a bit more limited. While a character can perform multiple actions per turn in combat, a computer operator can only perform one. On the other hand, a smart hacker prepares and has his system set up to perform the appropriate actions either automatically or at his command. Thus the hacker can aid his computer in performing one task per turn (see p. 144 of the core rulebook, Aiding Others) but he can instruct his system to perform as many actions as he likes that turn (most actions, however, cannot be performed multiple times in one turn). In order to hack a system (whether we're stealing data, changing financial data or performing some act of corporate sabotage) there are steps to follow:

How To Hack

Step 1: Locating the target system

Search: First we either already know the location of our target system on the cortex or we have to find it. If we have to find it then we use our Technical Engineering/Computer Operations skill to do so. Most targets are Easy or Average to find since the very nature of the cortex assumes that, if they're on the cortex in the first place, they must want to be found. Some folks don't, though, and only have a cortex link for the sake of convenience. These folks may be Hard or even Formidable. Some purposefully hide their cortex link, setting up separate public systems or disguising the link as something else. Systems like these can often be Heroic, Incredible or even Ridiculous to find. Let's not even talk about the Impossible ones, hmm? Why in the 'Verse would you even want to get into the Celestial Garden of Sihnon? Ni shi sai gooa if you even want to buzz some place like that!

Finding target system access points: Once you've got your target location you need to search for access point. An access point is a way past all the public information and into the system itself. They're also where you find the system's

Authorization prog and your first obstacle. Finding a target system's access points varies in difficulty as well, though only the most paranoid systems bother to hide them especially well. Still, they aren't exactly advertised and it's assumed that if you're going there then you already know where it is.
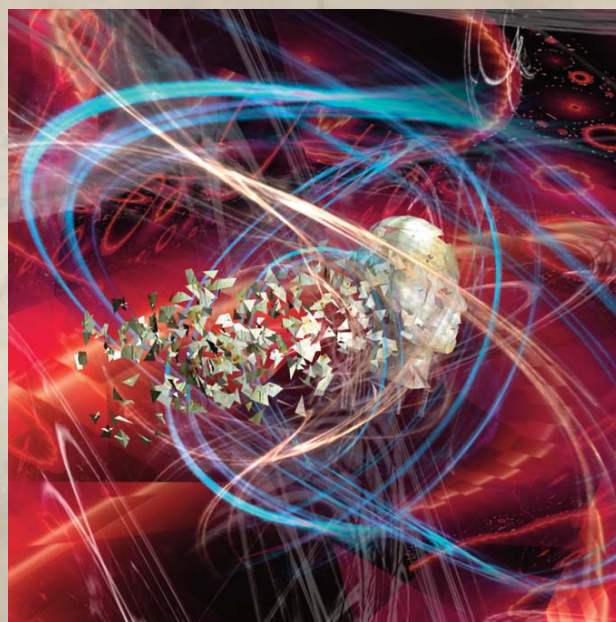
Step 2: Accessing the target system

Bypassing authorization: Now you've found your target and located the access point(s). Now you have to get yourself authorized to go inside. Getting into the system is the real trick and this is where our chips start hitting the table.

Maybe you're doing a job for a disgruntled employee who's given you a proper authorization code or maybe your employer has some other way around. If not, then it's time to hack.

As explained in the Computer Progs section this is where your Access prog butts heads with the system's Authorization. You're probably directly aiding your computer during this part of the hack so both you and your computer would roll the dice. You roll Int+Tech Engineer/Hacking and your computer makes a Will+Hacking/Access. Compare whichever roll is higher versus the target system's Alert+Security/Authorization. If you score a Success then you're in, no sweat. Otherwise… well you had better hope the target system hasn't got an ICE prog standing by.

Now, you can attempt to bypass authorization as many times as you like until you succeed (or get bored), but bear in mind that this is typically the most crucial step in most hacking operations. A tripped Authorization program is usually designed to ring bells somewhere that a hacker is mucking about the place (although less secure systems don't bother to alert until the third or even fifth failed attempt). This may be an ICE prog, security programmers within the system itself or even a nice flashing alert notice at the local Federal Marshall's office. A failed attempt at bypassing Authorization on a hard target usually means it's time to log off for the day and hope your Stealth prog covered your tracks on your way over to the system. You did buy a Stealth prog didn't you? Good. I knew you were smart.

Step 3: Navigating the target system

Assuming we're in now and not getting beat over the head by the local Marshall or watching our 2,000 Credit computer go up in smoke, now it's time to find whatever it is we came here for.

Search: If we're looking for a specific file or have a certain sub-system we want to mess around with then we have to find it. This Search usually utilizes your computer's Search prog and you might be aiding it as well. Normally, by this time, we haven't run into any trouble and can focus on one thing at a time. Still, it is conceivable that we're already in trouble and trying to do several things at once. Not to worry, searching a system isn't usually all that difficult (assuming we know what we're looking for) and your computer can probably handle it while you're inflicting your Anti-virus on some Destroyer prog or running an ICE breaker.

Maybe we aren't looking to rifle through files or control a slave device. Maybe it's a specific user or his office computer we're looking for. Still, it's all the same and finding a user or specific subsystem (like an office computer, personal computer or whatever) is a search like any other. On the other hand, you should be aware that if the user is actually logged on at the moment and has any hacking skill at all, finding him without alerting him is going to be a might trickier.

Step 4: Doing the job

So, you're in and you've found what you're looking for. What to do now? Well, that depends on what you came here for.

Accessing file, records and logs: Assuming

you came to fiddle with a file or some sub-system then you must first access it. Many times this is practically automatic. Most systems don't bother encrypting the majority of the files inside their own system since they're almost all designed to be accessed easily in the first place. But, then again, we probably hacked this system to get at something particularly juicy, didn't we? It ain't likely they'll leave something that tempting lying around in the general files. This is usually calls for an Access or Decryptor skill action. Your GM will set the difficulty of the encryption on the file.

System scan: One option to consider as soon as we get into the system is running a scan of the system. Here's the main use of the nice little Scanner prog you bought, it scans the whole system and lets you know just what it's got and what you should look out for. ICE progs, any users currently logged in, slave devices, sub-systems, the whole works. Your scanner prog is looking to find every nook and cranny of the place for you. On the other hand, letting your Scanner go hog wild in a system that you just hacked may not be a great idea. If there are security users looking for suspicious activity then you might as well wave your hands about and yell "ICE me!" Always have your Ninja and Stealth running when you let loose your Scanner.

Of course, accessing files isn't the only thing you can do once you get past the system's Authorization. Here's just a few other options….

Tracking a user: You can find and monitor a particular user, snatch couples of his inter-office emails and even tap his phone calls.

Transmitting files : One common hacking job is to access files from one department and transfer them to your employer in the other. Inter-office rivalry is quite the money maker.

Encrypting files: Ask yourself what happens when you let your d12+d2 Encryption prog loose on the system's operating program? There are corporation who pay dearly for the man-hours of work lost digging out something like that.

Controlling slave devices: Security monitors, coded doors, communications systems and even, in some cases, environmental controls.

All bow to the mighty Slavedriver prog. Great for running interference for the rest of your team when they break into Iskellian Technologies main offices or even simply terrorizing the employees.

Creating a backdoor: This is a nice one if you've found a particularly shiny system you intend to return to. Planting a backdoor with your Backdoor prog lets you return later with your very own Authorization-free access point. Better yet, copy your own Authorization to it for your very own secure entrance. Better hope no one does a hard system scan while you're gone, though…

Creating files/logs/records: Plant a prog of your own design to monitor a system or file and record everyone that accesses it. Bug an office phone and record message that go through. Heck, create a false log to throw your competition off. Better yet, plant a false system log framing that loud-mouth hacker down at Joe's Pool Hall for hacking in instead of you.

Deleting or altering files/logs/records: This one's pretty obvious. You did remember to change the logs showing "unknown user" accessing that digital file you sabotaged yesterday, didn't you? How about hacking the local Federal Marshall's system and erasing that arrest warrant that just went out?

Altering cortex logs: Here's an interesting one. What if the system you're hacking is the very same cortex node you're using? Eliminate all signs of your passing to keep Blue Sun from tracking down the kuangzhe de hundan who set off the main office's fire suppression system last night.

CHAPTER 2

Craptech

By IntoTheBlack

"For every bit of technology that performs as well as expected, an' everythin' that's shiny an' futuristic, there's always that bit of technology that's seen better days, those utterly *go se* goods. If you want a piece of technology that's a bit cheaper than usual, and are willing to take slightly less quality for the money, you can pick up a piece of craptech – something that doesn't work quite properly, but is significantly cheaper."

Craptech Categories

A - Increase weight by up to 25%; reduce ammo, battery life, or range by 25%. Subtract 0 to 10% from cost.

B - Increase weight by up to 50%; reduce ammo, battery life, or range by 50%; reduce damage or skill by one step. Subtract 10 to 25% from cost.

C - Increase weight by up to 100%; reduce ammo, battery life, or range by 75%; reduce damage or skill by two steps. Subtract 25 to 50% from cost.

D - Increase weight by up to 200%; reduce ammo, battery life, or range by 90%; reduce damage or skill by three steps. Subtract 50 to 75% from cost.

Multiple Craptech Mods: Subtract worst mod + 1/2 of each lesser mod to price, to a minimum price of 5%.

Sample

Frontier Shotgun: This double-barrelled shotgun is manufactured, if one could call it that, locally. Its biggest particular problem is its incredibly low ammo capacity; each barrel has but one shot, and after that, better hope you have something else to rely on. It is also particularly heavy (weight + 50%), and a little inaccurate (reduce skill by one step). This is a C mod and two B mods; the GM decrees that this totals to a 75% discount. You can buy your frontier shotgun for the low price of 12.5 credits at retail prices.

Ship Maintenance & Newtech/Craptech

Some people insist on lavishing their ship with the best care they can possibly afford – and maybe their luck is going particularly shiny. Others are truly desperate to keep their ship from breaking down, and aren't too picky about how smooth things work as long as they do. This is meant to cover such situations.

Newtech & Ship Maintenance: The best parts garner the best performance. If you consistently spend double the normal monthly

maintenance cost (after the mechanic's skill roll), for three consecutive months or from the time it was brand new, you can choose one attribute and declare that attribute to receive a +1 step Attribute bonus due to excellent maintenance and shiny parts. You can only take this bonus on one attribute, and you must continue to pay double the normal maintenance cost to keep it; if you miss a month of Newtech maintenance, you lose the bonus (and must provide Newtech maintenance for three months to re-acquire it.)

Craptech and Ship Maintenance: On the other hand, you get what you pay for. You can spend half or one quarter normal maintenance costs (after the mechanic's skill roll), if you feel lucky. (Maybe the mechanic forgot to inform you of his Botchiness?) If you spend half the normal maintenance cost, every other month, you must choose an Attribute; rolls made against this Attribute suffer a -1 step penalty. (If you spend one quarter the normal maintenance cost, this decision is made every month.) To negate the penalties, you
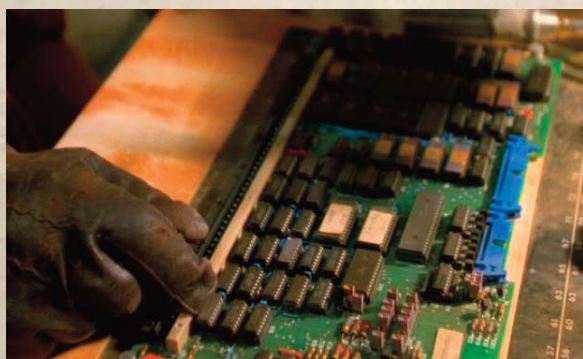
must pay in full for each month of maintenance where craptech was used (to replace all the less-than-wonderful parts you included.)

Example: Six Oh Six, a racing vessel owned by a private collector, is the recipient of Newtech maintenance, and has been since it left the shipyard. It is already blessed with a high Agility, and Agility is the focus of its improvements. The ship normally costs 400 credits per month to maintain, but to keep it in tip-top shape for asteroid-dodging (and get that +1 step Agility bonus) costs an average of 800 credits per month (or up to 1600 credits if the pit crew accidentally breaks the gyrorotation cuffs during service... er, Botches their roll.)

Example: Morrigan, a Firefly that is currently serving as a joyrider for a group of meddlesome folk, is in need of maintenance, but the captain is being particularly stingy (must be that cargo of livestock what died en route) and can't pay too much for parts. Rather than pay full price (320 credits) for this months maintenance, he orders the mechanic to make do with 80 credits. The mechanic unhappily complies, and chooses to drop Strength by one step. For the next two months, things aren't going too smooth either, and with the budget crisis still looming, the captain only allows half the required amount (160 credits) per month for repairs: this time, Agility suffers. In order to replace these faulty parts, the captain would have to pay for three months' maintenance, in addition to any normal maintenance costs. Sometimes it don't pay to be cheap.

bullets fast enough for autofire. Machine pistols are somewhat concealable (+1 step skill bonus on Perception checks to find).

Pistol, Light: The staple of gunfighters everywhere, light pistols include any smallish semiautomatic handgun. Light pistols are very concealable (no bonus on Perception checks to find).

Pistol, Heavy: The staple of more lethal gunfighters, heavy pistols include any largish semiautomatic handgun. Heavy pistols are somewhat concealable (+1 step skill bonus on Perception checks to find).

Revolver, Light: An old-fashioned handgun that operates with a hammer-and-cylinder mechanism, it never goes out of style due to its greater stopping power than the typical pistol. A revolver's magazine is a 'speed loader' ring fitted with six bullets that can be slapped quickly into the cylinder when empty, requiring 1 action just like changing a pistol's magazine. Light revolvers are very concealable (no bonus on Perception checks to find).

Revolver, Heavy: These old-fashioned hammer-and-cylinder handguns are bigger versions of their lighter cousins with even more stopping power. Heavy revolvers are reloaded with a 'speed loader' ring just like light revolvers. Heavy revolvers are somewhat concealable (+1 step skill bonus on Perception checks to find). Although most have a 6-round cylinder, some custom heavy revolvers feature an 8-round cylinder at the higher listed cost .

Longarms

Assault Rifle, Light: A full-auto rifle frowned on by most authorities (except when they're the ones using them). Light assault rifles are long, typically require two hands to fire, and are usually impossible to conceal on a person.

Assault Rifle, Heavy: An even deadlier full-auto rifle frowned on even more by most authorities. Heavy assault rifles are long, almost always require two hands to fire, and are impossible to conceal on a person.

Assault Rifle with Integral Shotgun: (see assault rifle and pump-action shotgun for individual stats) A standard assault rifle with integral shotgun. Switching between weapons is considered an action. However, cost listed in parentheses indicates a more integrated model designed to allow the wielder to switch between weapons without penalty.

Gasgun Rifle: Identical to the handheld gasgun but projects a more powerful burst of gas. Applies a +1 skill step bonus to attempts to strike specific targets with the initial burst and projects a gas cloud in a 30m/100 foot wide cone out to 60m/200 feet.

Rifle, Light: A long firearm that can be used for hunting or combat. Rifles are long, conspicuous, and impossible to conceal on a person. Light rifles may be equipped with a scope to increase range (see Heavy Rifle) at ×2 cost.

Rifle, Heavy: A long firearm used by those

Longarms	Damage	Range (feet) PB/S/M/L	Max ROF (Magazine)	Cost (credits)	Weight (Pounds)	Avail
Assault Rifle, Light (5.56mm) P	d8 W	10/150/300/450	3 (30) †	60	9	I
Assault Rifle, Heavy (7.62mm) P	d8 W	10/200/400/600	3 (40) †	120	11	I
Assault Rifle, Light with integral shotgun	*	*	*	150 (500)	16	I
Assault Rifle, Heavy with integral shotgun	*	*	*	300 (900)	18	I
Gasgun rifles	*	10/20/30/40	1 (5)	60	10	I
Rifle, Heavy (.50) P	d8 W	10/250/500/750*	3 (20)	160	15	C
Rifle, Sonic	d8 S	10/15/30/45	2 (50)	140	6	I*
Shotgun, Double-barrelled	d10 W*	10/40/80/120	1 (2)	50	10	R
Shotgun, Pump-action	d10 W	10/40/80/120	2 (5)	50	8	R
Shotgun, Semiautomatic	d10 W	10/40/80/120	3 (10)	150	8	C
Shotgun, Automatic	d10 W	10/40/80/120	3 (10/30)	300	10	I
Shotgun, *Huo-lung* (Fire dragon)	D8 W*	10/20/30/40	2 (5)	200	10	I
Shotgun, Sawed-off	*	10/20/40/60	*	*	× 1/2	I
SMG, Light (9mm) P	d6 W	10/60/120/180	3 (35) †	40	6	I
SMG, Heavy (10mm) P	d8 W	10/90/180/270	3 (50) †	80	8	I
Zero/Low-G Shield Rifle	d8 W	10/175/350/525	3 (30)	250	15	I

*see description   W = Wound Damage   S=Stun Damage   P=Powered version available at x2 cost   †Can fire single shot, burst, or autofire

who prefer one shot, one kill. Heavy rifles are impossible to conceal on a person. When using the built-in sniper scope, the rifle's short, medium, and long ranges are multiplied by ×4. However, the shooter has to spend at least one turn bracing the rifle and aiming (p. 153) before gaining the benefit of the scope on subsequent shots. The shooter must remain a stationary Easy target while continuing to use the scope.

Rifle, Sonic: As described on p. 81 of the core rulebook. Sonic rifles are more compact than their ballistic counterparts but are still rather difficult to conceal on a person (+3 step skill bonus on Perception checks to find).

Shotgun, Double-barrel: Two barrels of death. If the shooter fires both barrels at once at a target, treat the attack as a single shot and increase the damage by +1 step (to d12 W). Reloading a double-barrel shotgun takes 1 action. They are very difficult to conceal (+4 step skill bonus on Perception checks to find).

Shotgun, Pump-action: The most popular shotgun out on the Rim. Reloading this kind of shotgun takes 1 action per 2 shells loaded. They are very difficult to conceal (+4 step skill bonus on Perception checks to find).

Shotgun, Semiautomatic: A shotgun designed for serious combat duty. Reloading this kind of shotgun takes 1 action per 2 shells loaded. They are very difficult to conceal (+4 step skill bonus on Perception checks to find).

Shotgun, Automatic: A standard semi-automatic shotgun with full-auto modification. Can fire single-shot, three round burst or ten round full auto. Full auto fire requires a full clip, however, unless the 30 round drum cartridge is used.

Shotgun *Huo-lung* (Fire dragon): Pump action shotguns designed to fire *Dragon's Breath* rounds without a chance of ceasing to function (see Custom Ammo List, *Dragon's Breath* rounds for particulars).

Shotgun, Sawed-off: Any shotgun can be converted into a sawed-off 'hogleg' simply by cutting down the barrel. The sawed-off shotgun's short, medium, and long ranges are cut in half, but the weight is cut in half too and it now can be fired in one hand. Sawed-offs are also more concealable (+2 step skill bonus on Perception checks to find).

SMG, Light: Submachine guns are popular in the criminal underworld. Light submachine guns are fairly compact and often have a reduced or folding stock. They can be fired in one hand in a pinch (and at a -2 step skill penalty). Light SMGs are still rather difficult to conceal on a person (+3 step skill bonus on Perception checks to find).

SMG, Heavy: Heavy submachine guns have a full stock and are closer in size to a rifle (like Jayne's gun shown on p. 68). They are more powerful but require two hands to fire and are usually impossible to conceal on a person.

Zero/Low-G Shield Rifle (2W integral shield): A weapon designed specifically for zero-gravity and low-gravity combat. Includes an integral shield mounted on the barrel providing a nice 2W armor value against attacks (from the direction the wielder is aiming only, unfortunately). Also provides greatly reduced recoil, allowing three shots or bursts per turn without the additional penalties one would expect from firing a weapon in low gravity environments. Auto-fire, however, incurs dramatic penalties after the first burst (-2 skill step for second burst, -4 for third) in addition to standard action penalties.

This weapon, while illegal, is actually not that hard to find on the black market. Mass produced and distributed during the Unification War, it was nonetheless quickly replaced with a simpler design. Rather than destroy the decommissioned weapons, the Alliance military simply scrapped them as trash. Naturally they quickly found their way onto less reputable markets.

Heavy Weapons

Assault Rifle with Integral Grenade Launcher: (see assault rifle and grenade launcher for individual stats). A standard assault rifle with integral grenade launcher, allowing the firer to switch from rifle to launcher as a standard action. The cost presented in parentheses indicates a more integrated model designed to allow the wielder to use a thumb-switch controlling the action. This version is prohibitively expensive but allows the wielder to switch from rifle fire to grenade launcher without expending an action on it.

Grenade Launcher: As described on p. 80 of the core rulebook. These weapons are impossible to conceal on a person.

CHAPTER 2

Heavy Weapons	Damage	Range (feet) PB/S/M/L	Max ROF (Magazine)	Cost (Credits)	Weight (Pounds)	Avail
Assault Rifle, Light with integral grenade launcher	*	*	*	450 (1100)	32	I
Assault Rifle, Heavy with integral grenade launcher	*	*	*	700 (1800)	42	I
Grenade Launcher	*	10/40/80/120	1 (8)	106	12	I
Machine gun, Light	d8 W	10/200/500/700	3†† (60)	200	20	I
Machine gun, Heavy	d10 W	10/200/500/700	3†† (100)	450	30	I
Minigun, Man-portable	D8 W	10/150/300/450	5†† (100)	480	40	I
Personal anti-tank rifle	D6 W	10/200/400/600	2 (3)	520	55	I

* see description   W = Wound Damage   †† Autofire Only

Machine Gun, Light: Sacrificing portability and maneuverability, full machine guns gain greater durability, longer range and a larger magazine. These weapons are designed to deliver a large number of rounds downrange but generally require a tripod, bipod or a secure mount to fire effectively. Machine guns fired without proper bracing (hand-held machine guns, for example) suffer a range penalty one increment higher. Magazines are generally chain or drum-fed and can only be fired full-auto.

Machine Gun, Heavy: A heavier version of machine gun, it incurs the same penalties if fired without first being properly braced. Magazines are generally chain or drum-fed and can only be fired full-auto.

Minigun, Man-Portable: A drum-fed five-barrel minigun. Comes with sling to mount and fire from the hip, integral tripod and is capable of fire directly from the shoulder. Fires full-auto only, cannot fire standard bursts or single shots. Each full-auto burst uses ten rounds of ammo.

Personal Anti-Tank Rifle: A shotgun-design firing small but powerful anti-tank rockets. The rockets themselves are designed to eject from the rifle via a standard explosive charge and engage its rocket motor well clear of the gunner. Anti-tank rifles typically have optional laser guidance for more precise strikes, with the gunner himself acting as observer with the designator integral to the rifle barrel. These weapons (and their given stats) are intended to operate at vehicle scale in combat. Antitank rockets for these weapons are typically kinetic, explosive or magnetic.

Explosives

Flak-Smoke Grenade: Like a standard smoke grenade, a flak-smoke grenade gives a +8 to attack difficulty but also applies this penalty to thermal, lowlight and other vision enhancing gear by producing a semi-solid pellets of hot, floating ash along with standard smoke. The especially thick smoke produced by a flak-smoker lasts twice as long as a standard smoke cloud and is more difficult to dissipate.

Fragmentation Grenade: The fragmentation grenade listed on p. 80 (Table 3-10) is a high explosive Newtech model produced exclusively for the Alliance military. It is extremely illegal in the hands of private citizens. There are plenty of old-fashioned basic grenades left over from the Unification War floating around the 'Verse (see Jayne's example on p. 155). They are less deadly, though still technically illegal for private citizens to possess.

Sticky Bombs/Grenade Modification: A Newtech modification for any individual grenade or standard explosive which triggers on release of the device (when thrown or launched) and allows the device to attach to the first object it touches. The sheath applied to the explosive device is covered with a semi-solid plastic that, when activated, instantly becomes viscous and very sticky. Cannot be applied to grenade

Explosives	Damage	Range (feet)	Cost (Credits)	Weight (Pounds)	Avail
Flak-smoke Grenade	d4S	20	6	1	I
Frag Grenade (Newtech)	5d6 W	15	6	1	I
Frag Grenade (Basic)	3d6 W	5	1.8	1	I
Sticky bombs/grenade modification	–	–	4	–	I
Thermite Grenade	–	2	4	1	I
Tripwires/triggers	–	–	2	–	I
White Phosphorus Grenade	2d6B*	10	4	1	I

* see description   B=Basic Damage   S=Stun Damage   W = Wound Damage

CHAPTER 2

launcher ammo or other expelled rounds and is designed primarily for either thrown weapons or as a component for particularly nasty booby traps.

Thermite Grenades: Not an offensive weapon and does not burst but is rather designed to destroy enemy gear, vehicles, etc. One thermite grenade will burn a hole through a vehicle's engine or destroy a few crates of weapons in about a minute. The grenade, once ignited, burns so intensely that it will continue to burn underwater, until entirely consumed or until deprived of oxygen.

Tripwires/Triggers: A typical explosive trigger, usually activated by a standard tripwire or motion, sound or vibration sensors. As a Newtech version they are more durable, safer to install and slightly more discriminating.

White Phosphorus: An offensive burst weapon, burns with an intensity similar to a thermite grenade and designed both to injure enemy personnel and produce smoke cover. The smoke it produces is hotter than that of a typical smoke grenade and will rise relatively quickly into a column, especially outdoors, thus providing cover for only a short time. The burn damage of the grenade is especially dangerous as it is continual, applying each combat turn and gradually reducing by 2 points each turn.

For example: a target struck by a white phosphorus grenade for 6 points of damage in the first turn suffers 4 more points of damage the following turn and 2 after that. This damage continues each round unless the burns themselves are somehow smothered or otherwise extinguished. Armor effects on damage apply each round as well. White phosphorus grenades are not only illegal but extremely difficult to obtain as even the Alliance does not condone their use and does not employ them.

Hand-to-Hand Weapons
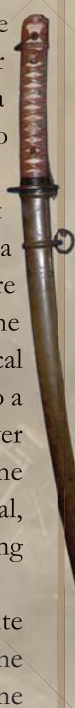
Bayonet: A combat knife designed to be attached to the end of the barrel of a combat rifle. This permits the gun to be used like a spear in hand-to-hand combat without affecting its ability to shoot. Assault rifles are automatically equipped to receive a bayonet, but other long firearms need to be specially modified.

Bull Whip/Wire Whip: A favorite among slavers and ranchers. A whip is made from leather (most of the time) and is about 8–12ft in length. Any damage done by a whip is Stun, unless the whip has barbs on it or is made out of metal. Whips can also be used to disarm and trip people. To trip, the attacker follows the rules for grappling in the combat section of Chapter 5. To disarm, you must make a called shot using Agility + Strength (-1 step on both die) and the defender makes an Agility + Strength roll to defend himself with.

Gun Butt: A hand-to-hand weapon built into the back of every gun. Obviously, a blow from the butt of a rifle or shotgun hurts worse than getting pistol-whipped (hence the difference in damage).

Layer Blade: A layer blade is typically a double-edged blade about 16" in length and made of a sandwich of thin-film diamond between fillers of density-enhanced steel. It can only be manufactured in orbit (requires zero-g conditions) and its cost is prohibitive. Nonetheless it is popular with those who take their knife work seriously. It's extremely tough and can, given a wielder with appropriate upper body strength, can cut through solid metal. Layer blades are so sharp and durable that they ignore one point of armor.

Note that you can combine bullet types, as long as base damage die remains at d2 or higher, but all cost multipliers are cumulative.

Hand-to-Hand	Damage	Cost (credits)	Weight (lbs)	Avail
Bayonet	d4 W	6	1	E
Bull Whip	d4 S	1	2	E
Gun Butt, Handgun	d2 B	–	–	As Gun
Gun Butt, Longarm	d4 B	–	–	As Gun
Layer Blade	d8 W*	50	1	I
Wire Whip	d2 W	2	2	E

* see description   B=Basic Damage   S=Stun Damage   W = Wound Damage

CHAPTER 2

Custom Firearm Ammo	Cost Multipler	Base Damage	Notes
Armor Piercer	x2	-1 step	Ignores half (round up) armor
Blanks	x0.5	*	*
Bronze FMJ	x5	+1 step	No other special effects
Cacophony	x5	-3 steps	Combined Tracer and Shrieker
Explosive	x25	*	*
Fragmentation	x5	*	*
Gas Puff	x10*	*	*
Gold	x25	-	Really Shiny!
Hollow Point	x2	+2 steps	Armour value doubled. No armor = -1W
Holy Cross	x2	-	No special effects
HP/AP	x5	+1 step	Ignores half armor (rounded *down*)
Incendiary	x5	-2 steps	*
Injector	x10*	*	*
Irradiated	x50	*	*
IR-Seeker	x25	-1 step	*
Rad Seeker	x25	-1 step	*
Rubber	x2	-	All but 1W converted to stun, after armor
Seeker	x25	-1 step	*
Shaped Charge	x25	*	*
Shrieker	x2	-2 steps	+2 steps to Alertness to hear bullet flight
Signal Seeker	x25	-1 step	*
Silver	x10	+1 step	Shiny!
Smoker	x5	-3 steps	5' smoke cloud (obscured vision), d3 turns
Subsonic	x5	-1 step	Range halved. -2 step Alertness to hear.
Target Rounds	x0.5	-1 step	Convert all damage to Base damage.
Titanium FMJ	x25	+2 step	No other special effects
Tracer	x2	-2steps	*
Tracker	x10	-2 steps	Emits trackable signal for up to 24 hours.

* see description

Ammunition

Custom Firearm Ammo

Armor-Piercer: Ignores half (round up) of any armor. Base damage -1 step.

Blanks: These rounds make noise, but do zero damage; if within 10 feet of target, target does take (base damage -2 steps) Stun damage, but that's about it.
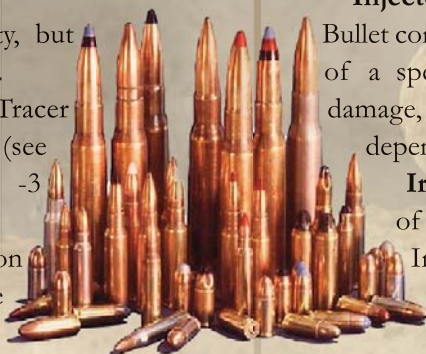
Bronze FMJ: Not pretty, but effective. Base damage +1 step.

Cacophony: Combined Tracer and Shrieker effects (see descriptions). Base damage -3 steps.

Explosive: Core explodes on impact; this inflicts (base damage -2 steps) W damage (armor protects) if no wounds were inflicted, or 3d(base damage -2 steps) W damage if any wounds occurred (and armor does not protect.)

Fragmentation: Explodes into shrapnel on impact. Inflicts (base damage -2 steps) extra damage if it wounds enemy, but targets with armor effectively gain 2W extra protection base damage.

Gas Puff [cost×10 + (drug cost per dose ×10)]: Round releases a brief cloud of gas that for one turn creates a 5 foot cloud of inhalant drug.

Precise effects depend on the drug; an Alertness + Discipline roll (Hard for a person hit by the round, Average for anyone else) allows you to take proper action (don't breathe, etc.) Base damage -3 steps. LC depends on drug.

Gold: These golden bullets look awful pretty. That's about it.

Hollow-Point: Armor protection doubled, targets without protection have 1W protection. Base damage +2 steps.

Holy Cross: A perversely popular sales item: bullets with the Holy Cross engraved on them. No special effects.

HP/AP: Ignores half (round down) of any armor. Base damage +1 step.

Incendiary: Round deforms on impact and releases white phosphorus, causing d6 W fire damage (-1 step per round, unless a fire starts.) Armor protects normally. Base damage -2 steps.

Injector [cost×10 (+ drug cost per dose)]: Bullet contains a tiny amount (one dose, usually) of a specific drug; if bullet inflicts wound damage, the drug is considered injected. LC depends on drug. Base damage -2 steps.

Irradiated: Very nasty bullets consisting of lead around a depleted-uranium core. Inflicts damage as per radiation exposure: a Resistance check for every minute the bullet remains in the victim, with a starting difficulty of Easy, and increasing by a cumulative +4 difficulty for each roll. Failed rolls while the bullet remains in the victim result in d2 S damage. After no further Stun can be taken, the character suffers both Wound and Shock damage until death. Removing the bullet quickly is generally recommended.

IR-Seeker: Gains +1 step bonus to hit warm objects (+2 step bonus to hit precise, intense heat sources, like an exhaust coil); -1 step penalty to hit

CHAPTER 2

anything that isn't warmer than the environment. Base damage -1 step

Radseeker: Gains +1 step bonus to hit radioactive devices (+2 step bonus to hit precise points that are emitting radioactivity); -1 step penalty to hit anything else. Base damage -1 step.

Rubber: Non-lethal rounds for crowd control; all but 1 Wound from shot converted to Stun damage after armor.

Seeker: Gains +2 step bonus to hit if using Designator or firing at a target a previous Seeker has hit. -2 steps to hit if not using Designator and previous Seeker has missed. Seeker signals last 10 turns. Base damage -1 step.

Shaped Charge: Core is explosive, shooting a jet of molten metal forward; this inflicts 2d(base damage -2 steps) extra damage and ignores 4W of armor on a successful detonation. Must hit a hard target to detonate (strike 3W or more of armor, or inflict 5W or more damage.)

Shrieker: Round shrieks in flight, adding +2 Steps to hear its flight (if a roll is necessary at all.) Base damage -2 steps.

Signalseeker: Gains +1 step bonus to hit transmitting objects or people (+2 step bonus to hit transmitting devices directly); -1 step penalty to hit anything else. Base damage -1 step.

Silver: These silver bullets look awful pretty, and inflict +1 step damage as well due to their quality.

Smoker: Round releases thick smoke upon impact, obscuring vision within 5 feet for d3 turns. Autofire can create a powerful smoke screen. Base damage -3 steps.

> "There's people gonna die."
> — Jayne Cobb

Subsonic: Range increment halved, -2 step modifier to any Alertness rolls to notice shot. Base damage -1 step.

Target Rounds: These rounds are designed to mark up a target without causing much real damage. Damage converted to Basic, leaves a paint mark on impact. Base

damage -1 step.

Titanium FMJ: Incredibly strong, lightweight, and deadly. Base damage +2 steps.

Tracer: Round glows brightly in flight, adding +2 Steps to observe its flight (if a roll is necessary at all). When used to help aim, can add +1 or +2 steps at GM's option to future shots. May start fires if it hits flammables, also at GM's option. Base damage -2 steps.

Tracker: If bullet inflicts wound damage, or otherwise remains with target, it can be tracked with a signal tracker for up to 24 hours. Base damage -2 steps.

Custom Shotgun Ammo

Shotgun Slug: Converts a standard shotgun shell to a 'bullet' that can then be customized. Range increment × 10. Base damage -1 step.

Buckshot: Regular, ordinary shotgun shells, these fire a spray of small projectiles that provide ideal damage for cutting through big game or for use in combat. +1 step to hit, but -1 step to base damage per range increment past Close.

Birdshot: A shell containing a multitude of small projectiles, ideal for hunting birds, but less so for killing people. Armor protection doubled (and targets without armor get 1W armor.) Base damage -1 step. +1 step to hit, but -1 step to base damage per range increment past Close.

Smallshot: A shell containing a multitude of tiny projectiles, good for target practice and very little else. Range increment halved, armor protection doubled (and targets without armor get 1W armor.) Base damage -2 steps. +1 step to hit, but -1 step to base damage per range increment past Close.

Flechette: Round fires a multitude of tiny darts. Range increment × 1.5, armor protection doubled. Base damage +2 steps. +1 step to hit, but 1 step to base damage per range increment past Close.

Custom Shotgun Ammo	Cost Multipler	Base Damage	Notes
Beanbag Shell	x5	-	Convert all but 1W to Stun, after armor
Birdshot	x0.75	*	*
Buckshot	x1	-	*
Canister	x2*	-3 steps	*
Dragon's Breath	x10	-1 step	*
Flashbang	x2 + 8cr	*	*
Flechette	x5	*	*
Rubber Pellet Shot	x2	*	*
Shotgun Slug	x2	-1 step	Range increment x10
Smallshot	x0.5	*	*
Teargas	x2 + 12cr	*	*
* see description			

Beanbag Shell: Converts all but 1 Wound to Stun damage after armor.

Canister [cost ×2 + (drug cost per dose × 10)]: Fires a canister that releases a brief cloud of gas on impact, which creates a 5 foot cloud of inhalant drug. Precise effects depend on the drug; an Alertness + Discipline roll (Hard for a person hit by the round, Average for anyone else) allows you to take proper action (don't breathe, etc.) NBC masks generally protect against this effect. Base damage -3 steps.

Tear Gas: These canister rounds create a cloud of tear gas (2d6 Stun to anyone within 5 feet, 1d6 Stun to anyone within ten feet); anyone within this cloud also is at an effective -2 steps to all Attributes if they breathe in the cloud or have their eyes open. An NBC mask protects against this effect.

Flashbang: These rounds explode with effects similar to a flashbang grenade, but in a much smaller package. Everyone within five feet of the impact of a flashbang round takes d6 B damage, and everyone within 10 feet is automatically stunned for one turn, and must make a Survival roll against a difficulty of 11 or be stunned for 2d6 more turns. (Complete ear and eye protection gives a +2 step Vitality bonus to this roll.)

Dragon's Breath: A shell loaded with exothermic metals that sends an enormous gout of flame forward when fired. Range increment × 10, Base damage -1 step, inflicts Burn damage and is likely to start fires on any flammable object in range. Weapon has a 1 in d4 chance of immediately ceasing to function (may be more or less depending on reliability of weapon, if notable).

Rubber Pellet Shell: Fires a burst of rubber pellets; all but 1 Wound converted to Stun damage after armor. +1 step to hit, but -1 step to base damage per range increment past Close.

Ammo for Gasguns

The typical load for a gasgun is

Jayne:	"Six men came to kill me one time... ...and best of them carried this. It's a Callahan full-bore autolock. Customised trigger, double cartridge thorough-gauge. It is my very favourite gun."
Mal:	"You offerin' me a trade?"
Jayne:	"A trade? Hell it's theft. This is the best damn gun made by man. It has extreme sentimental value. It's miles more worthy than what you got."
Mal:	"What I got? She has a name."
Jayne:	"So does this. I call it Vera."

CHAPTER 2

three shot canister of knock-out gas (see the gas grenade, pp. 80–81 of the core rulebook) but other canisters are available, each holding three 'shots'. There are other loads that are available, however.

Adhesive: These loads contain a powerful industrial glue, instantly adhesive with a low viscosity. Such adhesives retain their adherence until completely dried, which typically takes two to three minutes. The adhesive gasgun load is most effective when fired at the feet of the target, forcing a Hard Strength check to avoid immobilization for the turn. An equally powerful solvent will cut through such an adhesive in one or two turns.

Aerosols: Aerosol loads are intended for use in reducing laser attacks or detecting laser tripwires in the area. The resulting aerosol cloud will cover the area of the gasgun's effective range (20 feet × 40 feet). An aerosol cloud of this kind acts as 1W armor against laser attacks, with two or more clouds between the attacker and the target adding cumulative protection.

Biotoxin: A biotoxin is a natural, organic toxin such as that found in certain shellfish or plants. Most biotoxins are most effective when absorbed directly into the skin and the addition of dimethyl sulfoxide accomplishes this, as well as hastening the biotoxin's effects on the target's system. Biotoxin charges for gasguns are available on the black market in three varieties (for simplicity's sake, you can of course add more of your own). Type I: Hard, 2d4 Stun; Type II: Hard, 2d4 Wound; Type III: Formidable 2d6 Wound.

The target, if caught in the Biotoxin cloud, makes a Resistance check with the difficulty depending on the biotoxin type. Failure results in full damage taken; Success reduce damage by half and Extraordinary success reduces damage to 1 (either Stun or Wound, depending on the type). If

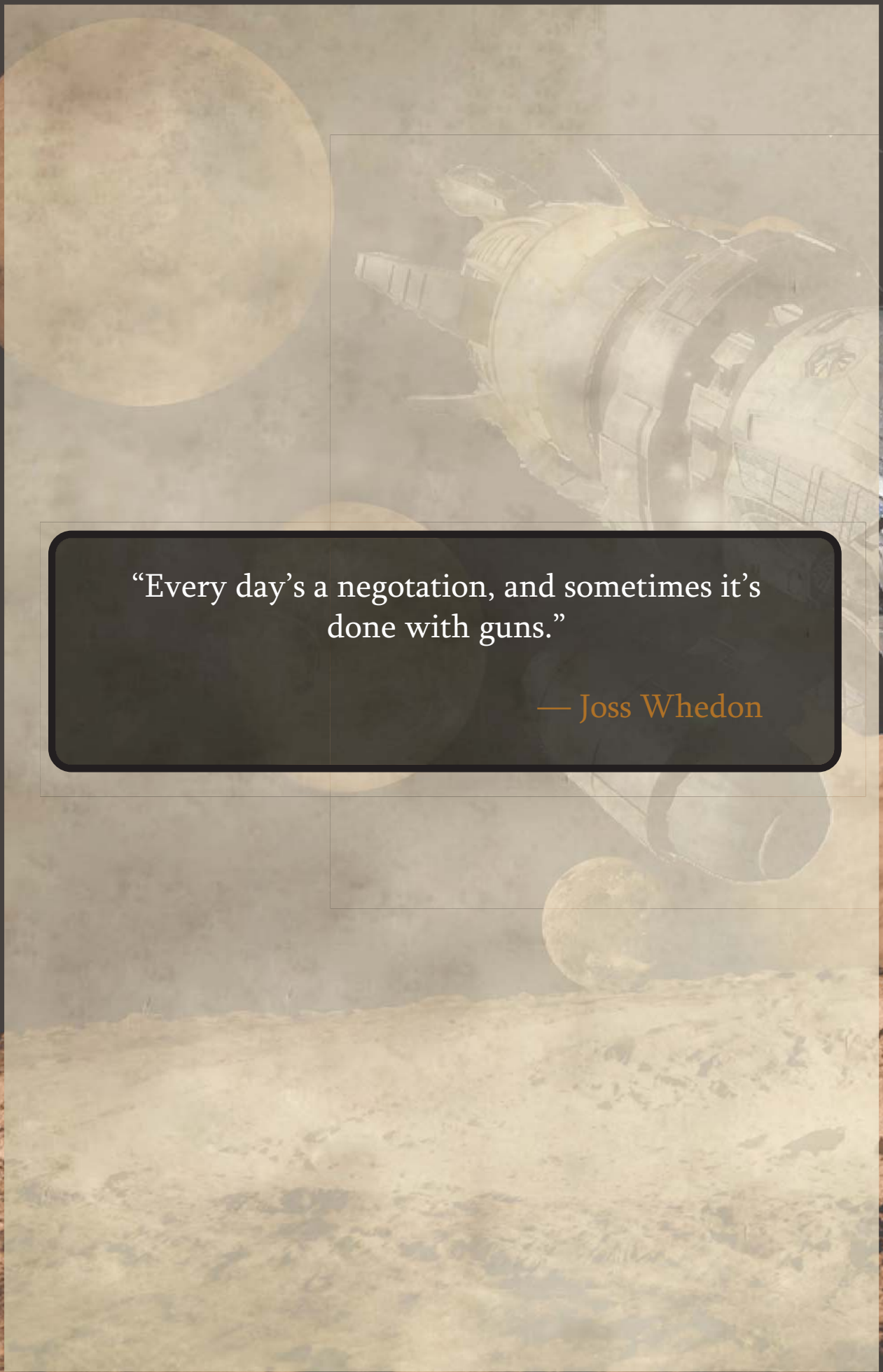| Gasgun Ammo	Cost (Credits)	Avail
Adhesive	3	E
Aerosols	1	E
Biotoxin, Type I	22	I
Biotoxin, Type II	50	I
Biotoxin, Type III	120	I
Chemical/Blister	35	I
Drug	*	*

* see description

rendered unconscious, the victim takes the remainder of the damage in Shock points.

Chemical/Blister & Blood Agents: Unlike biotoxins (see above) blood agents are designed to kill, though they generally require inhalation rather than simple skin contact. Holding your breath and closing your eyes works well enough if you don't have a gas mask or similar protection but open sores or wounds (or open eyes, for that matter) will allow the poison to enter your system at half effect.

Blister agents, however, only require skin contact and will take full effect on anyone not properly protected. Both agents will render their effects each round the victim stays within the cloud (or until they are wise enough to leave) doing 2d6 Wound damage. A Successful Formidable Resistance check reduces the damage by half and an Extraordinary Success reduces it to 2W (the minimum).

Drug [Cost (each): ×2 specific drug cost (×3 for dermal delivery); Availability: Varies]: The most common form of gasgun load are various drugs, usually sedatives. Targets are allowed a Resistance check to reduce or eliminate the effects of inhaled drugs with difficulty depending on the drug itself. Skin contact (dermal delivery) forms of drug gasgun loads should, however, be harder to resist, increasing the difficulty one step in most cases.

CHAPTER 2

"Every day's a negotation, and sometimes it's done with guns."

— Joss Whedon