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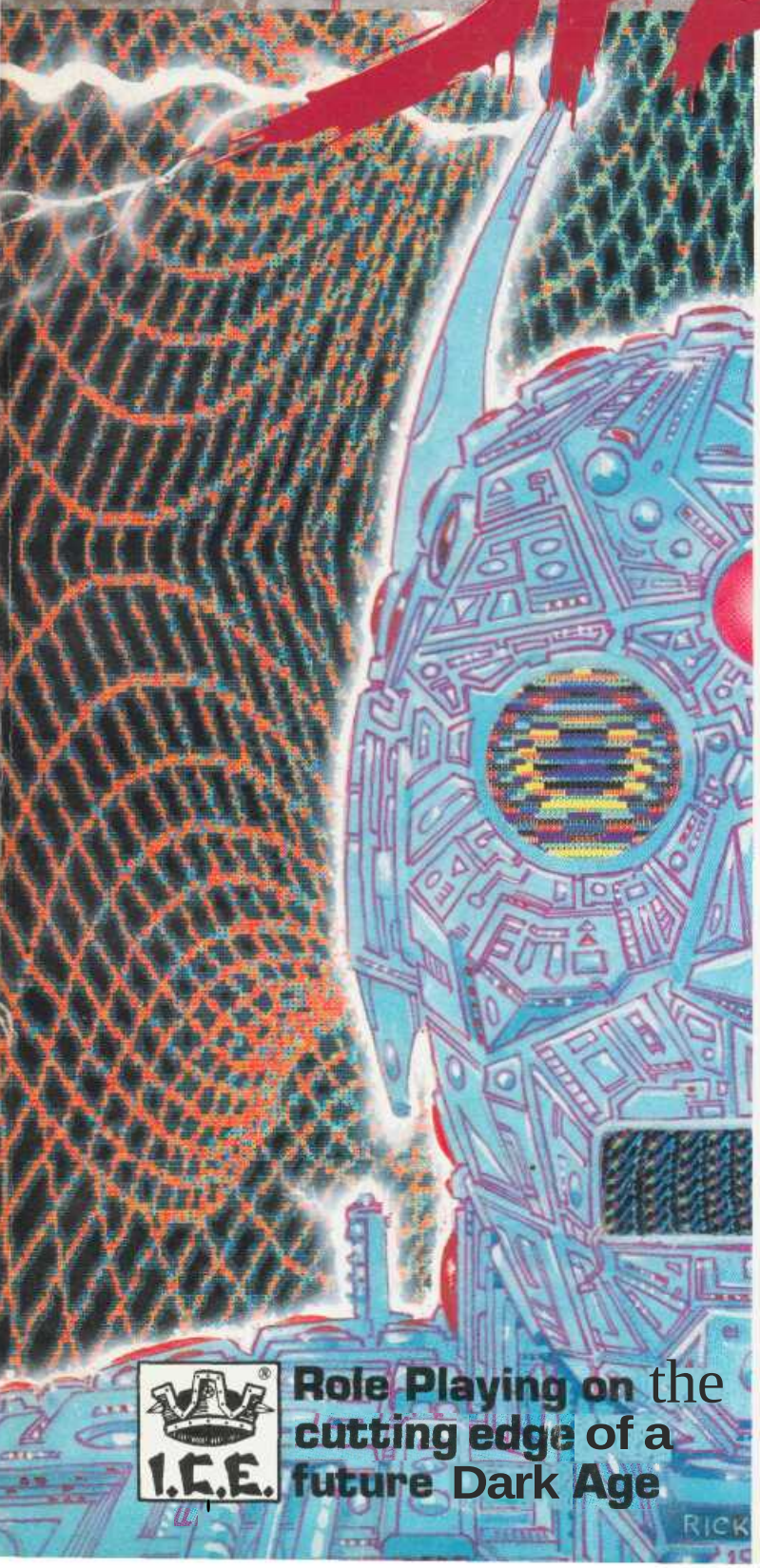
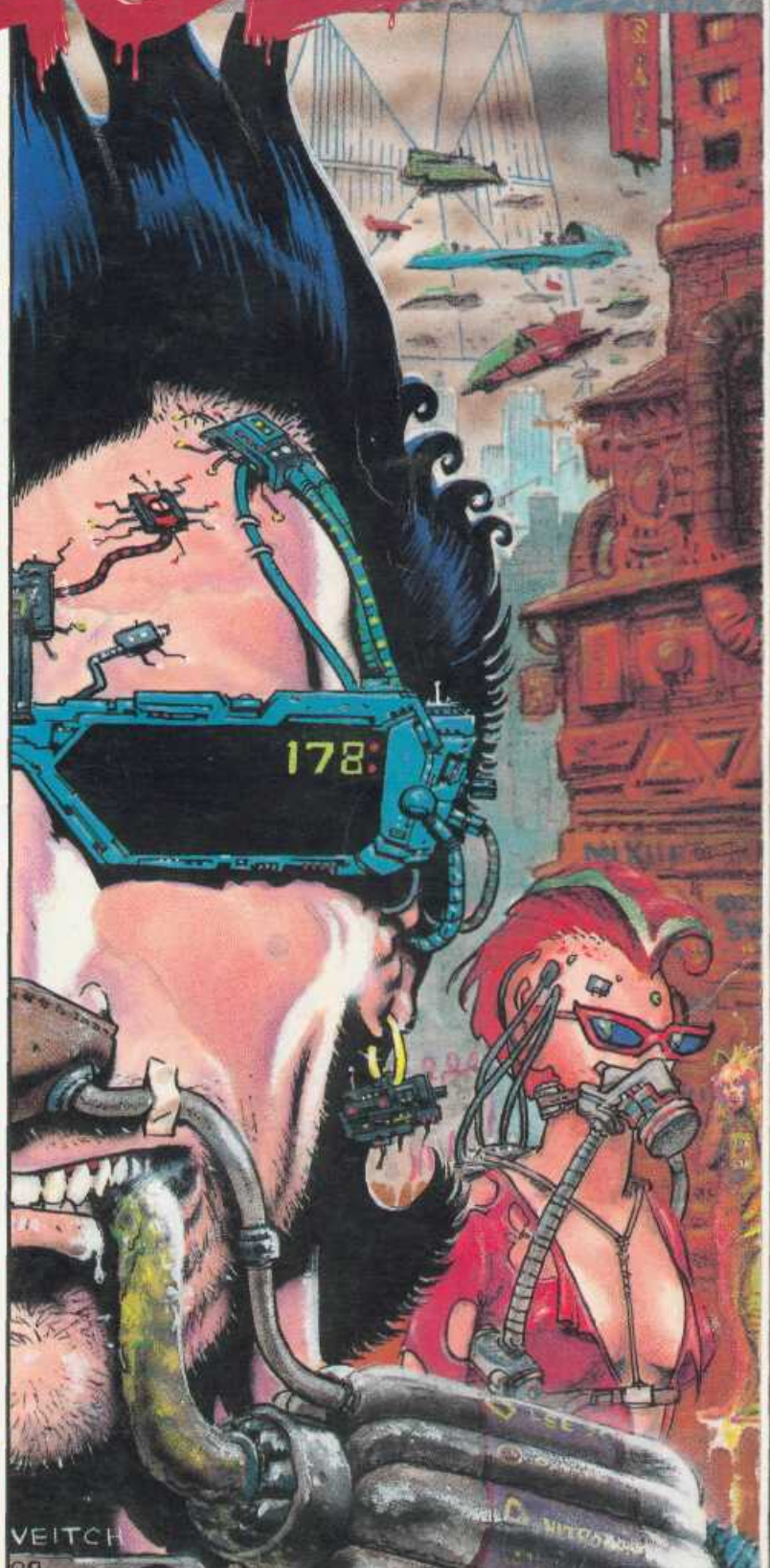
CYBER SPACE™





I.C.E.

Role Playing on the cutting edge of a future Dark Age


CYBER
SPACE

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DEDICATION

This work is humbly dedicated to the monumental thinkers and futurologists whose tremendous insight and profound knowledge of human nature made it possible: Isaac Asimov, John Brunner, Arthur C. Clarke, Philip K. Dick, William Gibson, Timothy Leary, John Lilly, Bruce Sterling, and Alvin Toffler.

CYBERSPACE™

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EARTH, 2090

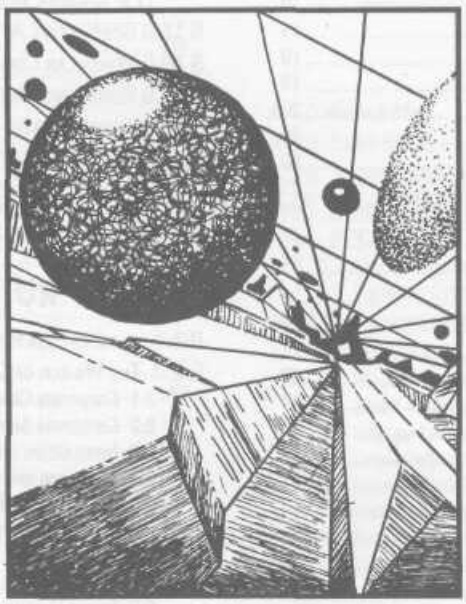
Below the glittering towers of the MegaCorp headquarters, millions of abused and hopeless citizens struggle to maintain some semblance of order in their puny lives. Massive airships course slowly over the choking metropolitan maze of the Pacific Sprawl, their iridescent advertisements burning rays of light into the otherwise dismal and polluted atmosphere...

MIKURA BIOLABS WANTS YOU -—
BECOME AN ORGAN DONOR!

VISIT THE L-5 COLONY

IF THINE EYE OFFEND THEE...
IT ISN'T AN *AUSTIN!*

In the streets, the constant cacophony of the rabble continues; hovercraft engines whine loudly, burning alcohol fuel; the primal beat of neo-rock pounds through the walls of a crowded nightclub; street vendors shout their slogans, plying krill and unknown foodstuffs off their meager pushcarts; cries of pain erupt from a nearby alleyway as a local Sprawlgang assaults its latest victim — no one pays much attention anymore. Zaibatsu board-members make their world-spanning decisions via teleconference line, unmoved by the passions of the lives they effect, protected behind the austere holographies of the council room. Sensory stars record their latest money-making ventures, shot over the Global Telecommunications Net into the tired brains of millions without real lives of their own. Interplanetary shuttles take off and land on schedule, carrying residents and visitors to and from the orbital colonies and resorts. Lush suburban developments, packed with young over-acheivers, are patrolled by automated and armed guards. Big money runs this show, and it's the same all over the world...



In the dark and hazy recesses at the back of an abandoned warehouse, a lone adventurer gears up for his dangerous mission. Removing a small plug from the back of his skull, he attaches a set of wires into the waiting aperture and sits down before a well-worn console. "Gotta get out", he mumbles, and then "Burn me if they want to... I got nothing to lose".

Sliding a small, shiny card into the console's slot, he half sings the chorus of a popular neo-rock tune: "tranquilizers... cigarettes...we're only human... we all get wet..." He scratches at the back of his right hand, where a shiny tatto shows his moniker — "VidKid", and flips a switch on the console's plastic casing. Instantly, as if some invisible strings had been cut, his body slumps back into the overstuffed chair, eyes rolling in their sockets. Oblivious, he twitches slightly. The journey has begun. Sixty seconds later and two hundred miles away, a red light flashes on a computer workstation in the corporate headquarters of a local BioLab.

"Alert! Alert!" drones the mechanical voice of the security monitor, "Counter-espionage Breached! Deterrents ineffective! ", but it is too late. By the time the on-line security personnel manage to locate the intruder, several important files have been removed from memory, and the central processor has begun slowing down dangerously. The data security chief links into the secondary processor and begins routing tracers through the Net as technicians swarm into the cooled central chamber, cutting into the system. The local and Corporate police are notified, and the phone company attempts to comply with their demands. Eventually, the insinuated Virus is detected, isolated, and removed, but the intruder is long gone.

"Ha!" VidKid yanks the trodes from his head and runs to the sink, where he douses his aching temples in cold water, and rubs the slightly burnt area around his trodejack. "Got the suckers!" He returns to the small console and removes the shiny card from its slot, recalling the stream of sensitive data he witnessed as he performed the last crucial download; bright squares of neon green, dancing in the bold red confines of the central processing unit. He recalls, too, the fierce jab of electric blue which fried him for a split second before he eluded its charge. Tucking his newfound meal-ticket into the pocket of his fatigues, the Kid replaces his dust plug and packs up his trusty CyberDeck. "It's time to hit the mean streets, boyo — someone'll pay megacredits for this file — gonna buy me a way out of this hole..." The small scar at the base of his neck hardly hurts anymore — hell, it was probably just a Mark 3 or 4.

PREFACE

THE SYSTEM

PART I: PLAYER CHARACTER GENERATION

Cyberspace is divided into several discrete sections. Other sections will be referred to by the part of the book and then the section within the part:
P — Preface; S — System; R — Running the World; T — Technology, C — Cyberspace; V — Adventure; A — Appendices.

PART II: RESOLVING CHARACTER ACTIONS

RUNNING THE WORLD

TECHNOLOGY

CYBERSPACE

ADVENTURE

HOT ON THE HEELS OF LOVE

APPENDICES

PREFACE

"She, born of the industrial revolution, had not held as conceivable… that men who live by pulling levers at an electronic switchboard, are not easily ruled, but men who live by digging the soil with their naked fingers, are…"

- Ayn Rand

"Steer for the deep water only,
Reckless 0 soul exploring, I with thee and thou with me.
For we are bound where mariner has not yet dared to go.
And we will risk the ship, ourselves and all."

— Walt Whitman

1.0 INTRODUCTION

"The brain is an extra-terrestrial organ."

—Timothy Leary

The world represented in Cyberspace may seem at first to be brutal, evil, almost an allegory of the present. In a way it is. But consider the trends in modern society. We tolerate things to day that were unthinkable fifty years ago. Just look at our world today. We also take for granted things which were either ridiculous luxuries or simply unavailable just a few decades in the past. Entertainment, communication and travel have all been revolutionized — the latter two to the point that only permutations and refinements (gimmicks) remain to be seen.

On the other hand, overpopulation is a problem like never before; famines and diseases sweep some Third World countires, while others thrive on the profits of illegal drug sales. A black market on human organs is already a reality; people sell their kidneys to wealthy and unhealthy. 'Sports' have become a massive industry; athletes take drugs which artificially increase muscle size at the cost of their future health — can surgery and grafting be too far off? Superpowers manipulate smaller countries like pawns to fight minor wars, while they have become increasingly unweildy and incompetent at surgical military operations. Meanwhile, corporations have massive clout with politicians, lobbyists controlling the government with bribery and blackmail. Terrorism is rampant, using the media to further its ends. The homeless are on every street-corner; drugs have spawned gangs and gangs are murdering and looting in cities across the US. How long before this cancer on mismanaged capitalism spreads?

Misinformation, disinformation, propoganda, espionage, sabotage, have all become more sophisticated and prevalent with the electronic age. It's bound to become a part of everyday life.

One hundred years in the future is not so different as it may seem — at least on the surface. One may argue that the technological advances between 1890 and 1990 changed the face of the planet, and they did. But the culture and morals of society were left far behind. And as we move into the 21st century, money is becoming a serious restraining factor on technological research, and as early as 2000 the breakdown began. Science took a more ominous and secretive path while the 'common man' became more and more alienated from the technology he had come to depend on.

RUNNING A *CYBERSPACE* CAMPAIGN

A role playing game needs "rules" (or guidelines) to define and control the physical realities of the world in which adventures may take place. Ideally, such rules are able to handle most of the common situations that might arise without detracting from the flavor and detail of the plot or setting of the game. This specific set of rules handles the physical realities of people, places and things in the dark future world of *Cyberspace,* where the ultra-powerful MegaCorps have all but enslaved mankind and doomed life on planet Earth to a dismal shadowy existance; where human beings have mastered the incredible interface of mind and machine; where fully one-third of the general population possesses cybernetic implants or enhancements; and tens of thousands have escaped to the orbital and lunar space colonies. In setting the tone and technological mood of the game, this work has drawn heavily from the writings of such dark-future masters as William Gibson, Bruce Sterling, Philip K. Dick , Walter J. Williams, and John Brunner, as well as many others whose visions are not quite so grim but nonetheless insightful. This text contains all the prospective Gamemaster ("GM") needs to know about setting up a *Cyberspace* campaign.

The GM should keep in mind that these "rules" are really only guidelines to aid in the creation and running of a dark future role playing campaign. The GM should feel free to modify them to fit any specific view or style of role playing, and the Players should realize that the GM is the final authority when it comes to rules interpretations or changes. On the other hand, these rules and the GM's decisions concerning them are the only guide that the Players have to their characters' capabilities and the reality of the *Cyberspace* world. The GM must be consistent and fair when making decisions or the Players will lose the trust and confidence necessary for a truly enjoyable and satisfying role playing game.

The GM should first skim the rules to get an overall view of the system, and then reread all the rules thoroughly. If a section is not understood, it should be marked and referred to again after all the rules have been read. The GM need not memorize or fully analyze the significance of all the rules at first. The rules are organized so that many situations can be handled simply by referring to the specific rules sections when they first arise.

The Players should first read *Guidelines,* and then proceed to create a character by following the guidelines provided in *The System, Part I.* Finally, they should read *The System, Part II* to get an idea of what their options are in various tactical and other specific situations. It is not strictly necessary for Players to read *Running the World* and *Technology* , although it cannot hurt to do so — these Sections provide a clear view of the world and the technology available in it. If the Players do not care to do all that reading, the GM should paraphrase or have them read only the portions which relate to their character specifically. Players who are interested in the use of CyberDecks should read the *Cyberspace* Section. No Player should read the example adventure.

REFERENCING

Cyberspace is divided into several discrete sections. Other sections will be referred to by the part of the book and then the section within the part.

P — Preface
S — System
R — Running the World
T — Technology
C — Cyberspace
V — Adventure
A — Appendices

2.0 GENERAL INFORMATION

The following section contains information useful for finding your way around the book and understanding the terminology.

A NOTE ON GENDER

ICE has employed the male gender throughout Cyberspace, This does not imply any chauvanism on our part (quite the contrary), but it is far more convenient than him/her/it, and less artificial than the new age constructs. It is also correct English that the 'male' pronoun represent the race as a whole: the Random House Dictionary defines 'he' in the second entry as 'anyone'.

2.1 ABBREVIATIONS AND DEFINITIONS

Commonly used terms are identified here; many are abbreviated in the text for convenience, so they are keyed in this section.

2.1.1 ABBREVIATIONS

Abbreviations are listed alphabetically within subcategories.

CHARACTER STATS

Ag.....Agility
Co.....Constitution
Em.....Empathy
In.....Intuition
Me.....Memory
Pr.....Presence
Qu.....Quickness
Re.....Reasoning
SD.....Self Discipline
St.....Strength
Ap.....Appearance

SKILL LIST

Acrobatics.....Acr
Administration.....Adm
Advanced Math.....AdM
Ambush.....Amb
Appraisal.....App
Armored Body Suit.....ABS
Armored Exoskeleton.....AEx
Astrogation.....Astg
Astronomy.....Astr
Biological Technics.....BioT
Biology.....Biol
Body Development.....BD
Chemistry.....Chem
Combat.....Com
Contortions.....Cont
Culture.....Cul
Cyber Attunement.....CybA
CyberDeck Operation.....CDOp
Cybernetics.....Cyb
Cybernetics Technics.....CybT
Drive.....Drv
Drug Tolerance.....DrT
Electronic Bypass.....EBy
Electronics Technics.....ElecT
Environs.....Env
Equipment.....Eq
Exploit.....Exp
Falsification.....Fls
Fire.....Fir
Foraging, Rural.....FoR
Foraging, Urban.....FoU
Frenzy.....Frz
Gambling.....Gam
History.....His
Intrusion.....Int
Light Body Armor.....LBA
Linguistics.....Lng
Mechanical Bypass.....MBy
Mechanical Technics.....MecT
Media.....Mda
Medical Practice.....MeP
Melee.....Mel
Missile.....Mis
Mounted.....Mtd
Music.....Mus
No Armor.....NoA
Perception.....Per
Physics.....Phy
Pilot.....Plt
Planetology.....Pl
Quick-Draw.....QuD
Software Technics.....SofT
Sport.....Sp
Stalk & Hide.....S&H
Streetwise.....StW
Subduing.....Sub
Trickery.....Trk
Utility.....Util

GAME TERMS

AT.....Armor Type (four possible ATs are used in this game)
AT(DB).....Armor Type with Defensive Bonus given
Bon.....Bonus
CF.....Critical Failure (usually an unmodified roll of 05 or lower)
CIRS.....Cybernetic Implant Rejection Syndrome (measured by CIRS Stat)
CN.....Construction Project
CS.....Critical Success (usually an unmodified roll of 96 or higher)
D.....Die/Dice (e.g.; "1D10" = a ten-sided die roll)
DB.....Defensive Bonus
DL.....Difficulty Level
EP.....Experience Points
GM.....Gamemaster (Game Referee)
Lvl.....Level (Experience Level)
MM.....Moving Maneuver
Mod.....Modifier or Modification
NPC.....Non-Player Character
OB.....Offensive Bonus
PC.....Player Character
Rd, Rnd.....Round (a ten-second period)
RP.....Repair Project
RR.....Resistance Roll
RS.....Research Project
SM.....Static Maneuver
SRB.....Standard Rank Bonus (progression of Mods gained by Rank/Rtg# progression; Ranks 1-10 add +5 each, Ranks 11-20 add +2 each, Ranks 21-30 add +1 each, and Ranks 30+ add +1/2 each)
Stat.....Statistic or Characteristic

2.1.2 DEFINITIONS

The terms defined below are used throughout the text to refer to various aspects of the *Cyberspace* role playing game system. All terms which are defined within this Section are written in capitals.

Action: An action is the activity which a character may perform during a *Round* (10 seconds).

Campaign: An ongoing science fiction role playing game which takes place as a series of connected adventures, with respect to both time and circumstance.

Chance: Often an *Action* or event has a "chance" of succeeding or occurring, and this chance is usually stated in the form of a percentage. This means that if a roll (1-100) is made and the result is equal to or less than the indicated number, the *Action* or event succeeds (or occurs); otherwise it doesn't.

Critical Strike: Damage other than simply *Hits* which result from an attack.

Defensive Bonus (DB): The total subtraction from the opponent's attack roll due to the defender's quickness, position, and any other advantages.

Fumble: An especially ineffective attack or poor use of equipment, the result of which is disadvantageous to the attacker/user.

Gamemaster (GM): The referee/judge/narrator of the campaign. The person responsible for giving life to the game by creating the setting, world events and other key ingredients. He interprets situations and rules, controls *Non-Player*

Characters, and resolves conflicts and actions.

Hits: Accumulated pain and bleeding, that can lead to shock and unconsciousness (also called concussion hits). Each character can take a certain number of hits (determined by his "Body Development") before he passes out.

Level: A character's level is a measure of his current stage of skill development, and is usually indicative of his capabilities and power.

Maneuver: An *Action* performed by a character that requires unusual concentration, concentration under pressure, or a risk (e.g., climbing a rope, balancing on a ledge, picking a lock, etc.). Maneuvers requiring movement are called "Moving Maneuvers", and others are called "Static Maneuvers".

Melee: Hand-to-hand combat (i.e., combat not using projectiles, firearms, or missile weapons).

Non-Player Character (NPC): A character in the game whose actions are not controlled by a *Player,* but instead are controlled by the GM.

Offensive Bonus (OB): The total addition to an attack roll due to the attacker's *Stats, Skill,* position, weapon, and any other advantages.

Open-Ended Roll: See Section 2.2; "Dice Rolling Conventions".

Parrt: The use of part of a character's offensive capability to effect one opponent's attack.

Player: A participant in a role-playing game who controls one character (his own "*Player Character*").

Player Character (PC): A character whose actions and activities are controlled by a *Player* (as opposed to the Gamemaster).

Profession: A character's profession is a reflection of his training and thought patterns; in game terms, it effects how much effort is required to develop skill in various areas of expertise.

Resistance Roll (RR): A die roll which determines whether or not a character successfully resists the effects of a poison, drug, disease, or some other form of adversity.

Round (RD): The time (10 seconds) required to perform one *Action.*

Session: A single sitting of game adventure. A number of sessions form a *Campaign.*

Stat: One of the ten physical and mental characteristics which influence how effectively a character is able to perform various *Actions.*

Skill: Training in an area which influences how effectively a character performs a specific *Action* or activity. "Skill Rank" is a measure of the effectiveness of a specific skill.

2.2 DICE ROLLING CONVENTIONS

The dice used in *Cyberspace* consist of a pair of ten sided dice (or twenty sided dice with each set of digits appearing twice), which yield a result between 0 and 9. If two of these dice are used, a variety of results can be obtained. In general, all roll directives are written in the form "#D#"; where the first # indicates the number of dice rolled and the second # indicates the type of die (e.g.; "3D10" would mean a roll of three ten-sided dice, added together).

- **1-100 roll:** Most rolls in *Cyberspace* are "1-100" rolls (also called "D100" rolls). When both dice are rolled together and one die is treated as the "tens" die and other as the "ones" die, a random result between 01 and 00 is acheived ("00" is used as 100, not 0).
- **Open-ended roll:** Most "D100" rolls are "open-ended". Such a roll can yield a result lower than 01 or higher than 100. If a roll is open-ended:
- **A roll under 06** calls for a second roll to be made and subtracted from the first.
- **A roll over 95** calls for a second roll to be made and added to the first.
- **1-10 roll:** When a result between 1 and 10 is required, only one die is rolled. This gives a result between 0 and 9, but the 0 is treated as a 10. Such a roll is also called a "D10" roll.
- **Other rolls:** Other rolls are variants of the above.

2.3 DIFFICULTY LEVELS

Difficulty Levels represent the inherent difficulty or ease associated with a specific task, and translate in game terms into a bonus or penalty which is applied to the dice roll made for the task. Often, the GM will have to decide upon the appropriate Difficulty Level to assign to a task suggested or attempted by the Players. This Mod is cumulative with any skill bonuses, stat bonuses, and miscellaneous modifiers applied to the situation.

DIFFICULTY LEVELS

Routine	+30
Easy	+20
Light	+10
Medium	+0
Hard	-10
Very Hard	-20
Extremely Hard	-30
Sheer Folly	-50
Absurd	-70
Insane...	...-100

Note: *When the* Personal Maneuver Chart *is used to resolve an action, these modifiers are not applied to the die roll; the inherent difficulties have been reflected in the structure of the table itself.*

2.4 TASK ABBREVIATIONS

A "Task" is any game situation which requires some sort of die roll to determine the degree of success or maneuver result (either Static or Moving). There are five "Task Types", and each is associated with a specific maneuver table or process, as noted below:

CN = Construction Project (*Construction/ Research Chart, p.47*)

MM= Moving Maneuver *(Personal Maneuver Chart, p.44*)

RP = Repair Project *(Malfunction/Repair Chart, p.48)*

RS = Research Project (*Construction/ Research Chart, p.41*)

SM = Static Maneuver *(Static Maneuver Chart, p.43*)

Tasks presented in this text are recorded in the following abbreviated fashion, consisting of three parts:

1) The first two letters represent the Task Type, as shown above. This is followed by a slash (/).
2) The second abbreviation indicates the skill or stat(s) used to modify the dice roll. This is followed by a colon (:).
3) The last letter indicates the Difficulty Level of the Task, as explained above. It is always the initial letter of the DL "name" except that "X" is used for "Extremely Hard" ("E" means "Easy"). Some examples:

MM/Acrb:V = A *VeryHard* Moving Maneuver modified by Acrobatics skill.

CN/CybT:H = A *Hard* Construction Project modified by Cybernetics Technics skill

MM/St:S = A *Sheer Folly* Moving Maneuver modified by Strength.

THE SYSTEM

"Cyberspace is one of the slang terms for the world's linked communications network. With the advent of fiberoptics in the late 20th century, the conduits of data transfer became sophisticated enough to permit virtually instantaneous conveyance of intricate images and commands. The matrix could support very complex icons; a visual representation could be constructed from the data presented, and with the recent improvement of the Direct Neural Interface, users could actually unite their consciousness with the Net. This allowed humans to interact with computers on a level of intimacy previously undreamed-of. With an arsenal of the right programs, someone could enter the net and face all but the best computer defense mechanisms on an even footing. We have a problem."

— Diane Hestus
From a Briefing to the
Executive Board of Intelligence Services
Cerebus, 2083

PART I: PLAYER CHARACTER GENERATION

The Cyberspace role playing system is designed to allow novice or experienced players to create interesting and detailed characters with a minimum of hassle. Players (and GMs) who are interested in more detailed character generation rules should read Section S 13.0, which discusses using ***Space Master*** with *Cyberspace.*

In order to better understand and present the world of *Cyberspace,* the GM should read the *Running the World* and *Technology* Sections before allowing players to create their first characters for his campaign.

GENERATING A CHARACTER

There are seven basic steps that must be followed to generate a character:

1) Determine stats (Section S 1.0)
2) Determine profession (Section S 2.0)
3) Determine social class (Section S 3.0)
4) Develop adolescence skill (Section S 4.0)
5) Develop apprenticeship skill (Section S 5.0)
6) Determine your starting money, equipment, and cyberization (Section S 6.0)
7) Determine your bonuses (Section S 7.0)

Each of the following seven sections discusses one of these steps. Each section contains boxed summaries of each step. An experienced role player can just read these summaries to get an idea of how to generate a *Cyberspace* character.

> Before beginning to generate a character, a player should make a general decision as to what type of character he wants to have. This decision should concern the character's profession and his physical and mental attributes.

Note: *Section S9.0 presents a set of optional guidelines for giving characters a detailed background, idiosyncrasies, injuries, and handicaps. If a GM decides to use this material, the character background should be chosen between steps 3 and 4 of the procedure outlined above.*

THE CHARACTER RECORD SHEET

The *Character Record Sheet,* found at the end of Section S 13.0 (page 39), is the key in generating a character. This sheet is organized to aid you during the generating process. As you follow each step of the process, you should record your results on this sheet. Use a pencil, since you will be changing and updating your character regularly.

THE MASTER CHARACTER CHART

If the Gamemaster and players wish to avoid the process of generating characters, they can use the *Master Character Chart,* located in Section A 5.0, which gives average skill bonuses for the various professions at various levels.

Example: *Charlie Venom will be the example character in this section. He wants to be a Sneak; quick, alert, and clever. Charlie's completed* Character Record Sheet *can be found at the end of Section S 13.0 (page 38).*

1.0 MENTAL AND PHYSICAL STATS

The base mental and physical attributes of a character are represented by eleven statistics called "stats":

Constitution	Co
Agility	Ag
Self Discipline	SD
Reasoning	Re
Memory	Me
Strength	St
Quickness	Qu
Empathy	Em
Intuition	In
Presence	Pr
Appearance	Ap

Each character has a numerical value on a scale of 1 to 100 for each of his stats. The value of a stat indicates how it rates relative to the same stat of other characters. The lower the value of a stat, the worse a character will compare to his peers. Relatively high stats give bonuses (see below) which apply to attempts to accomplish certain activities.

> To determine the values for your stats, make eleven rolls (1-100) and note the results on a piece of scratch paper. Then assign each roll to one of your stats as your see fit. Record each stat on your *Character Record Sheet* in the "Value" column of the Stat section

Example: *The player creating Charlie rolls: 68, 73, 79, 90, 18 (ouch), 58, 96, 47, 80, 42, 77. That 18 will be a hindrance, but at least he has two 90+ scores to compensate. The player records all of the stats on his* Character Record Sheet. *He wants Charlie to be adept at Subterfuge Skills and firing a gun, so he consults the* Skill List Chart *(Section S 4.0) to get an idea of which stats will affect these skills. He places his stats as follows:*

Co: 79 Ag: 80 SD: 42 Me: 58 Re: 68 St: 73 Qu: 96 Pr: 47 In: 90 Em: 18 Ap: 77

STAT BONUSES

Certain bonuses and penalties may apply to a character's skills and activities if his stats are high enough or low enough. Section S 7.0 will discuss how these bonuses are obtained and how they affect the character.

THE STATS

Constitution (Co): A character's general health and well-being; resistance to diseases, poisons and physical damage. This stat affects a character's ability to resist disease, poison, and bodily damage.

Agility (Ag): Manual dexterity and physical litheness. This stat affects character's capabilities in missile combat, movement and other maneuvers.

Self Discipline (SD): Control of your body and mind — the ability to push yourself, drawing upon inner reserves of strength.

Reasoning (Re): The ability to comprehend and categorize data for future use, and to draw logical conclusions from it.

Memory (Me): The ability to retain what you have learned; the basis of "common knowledge" type rolls.

Strength (St): Not brute musculature, but the ability to use your existing muscles to their greatest advantage. This stat affects character's capabilities in melee combat, carrying loads, and other activities.

Quickness (Qu): A measure of reflexes & conscious reaction speed; affects overall Defense Bonus. This stat affects character's defensive capabilities as well as driving skill and other activities.

Empathy (Em): Your relationship to the all-pervading force known as The Essence, which resides in all things natural. This stat affects a character's personality and communicative skills.

Presence (Pr): Control of mind, self-image, bearing, charisma, and the ability to use these traits to affect and control others.

Intuition (In): A combination of wisdom, luck, genius, insight, and the "favor of the gods" (whoever they are). This stat affects character's ability to perceive things, and might be used to grant "hunch" rolls.

Appearance (Ap): This stat gives a general idea of a character's comeliness (an 01 or 02 indicates a truly ugly person, while a 99 or 00 would indicate a very handsome character). This is a very subjective rating and the GM should treat it as a general guideline during play.

OTHER FACTORS

In addition to stats (which affect his capabilities during play), it is desirable to have some measure of the other factors that go into a character. The Gamemaster should keep in mind that these factors are not essential to a game and may be bypassed in the interest of quicker play.

Personality: This is an indicator of the general attitude that the character seems to present to the world. It is up to the player (and GM), but typical personalities might include: calm, neutral, angry, sly, greedy, stubborn, stupid, rude, etc.

Physical Appearance Factors: Factors such as sex, height, weight, hair color and style, eye color, gender, age, skin tone and so on should be determined by the player (or GM).

Other Factors: Many other character traits can be chosen at this point to help flesh out the character: e.g., Mannerisms, Habits, Beliefs, Long and Short Term Goals, Motivations, etc.

Record your character's personality, physical appearance, and other factors in the appropriate spaces on the Character Record Sheet. This step may be delayed until later if the player and the GM wish.

Example: *Charlie will be the cool, calculating type, so his Personality is recorded as Calm, Sly. The generating player wants Charlie to maintain a low profile, so he chooses a height of 1.8m, a weight of 75 kg, short black hair, brown eyes, and pale skin. The young Sneak will be 24 years old when he begins his career.*

2.0 PROFESSIONS

Each character must have a Profession, sometimes called a character class. This reflects the fact that early training has molded the character's thought patterns, thereby dictating the ease (or difficulty) the character will have in pursuing mastery of various skills (described in Section S 8.0). A Profession does not prohibit the development of any skills, but it does make the skills for that profession's "area of concentration" easier to develop.

Profession	Area of Concentration
Sleaze	Social Skills
Sneak	Subterfuge Skills
Killer	Weapon Skills
Net Junkie	Cyberspace Skills
Jockey	General Skills
Tech Rat	Technical Skills

Choose a profession and record it in the "Profession" space on your *Character Record Sheet.*

Example: *As previously mentioned, Charlie will be a Sneak.*

PROFESSIONAL BONUSES

Depending upon his profession, certain bonuses may apply to a character's skills and activities. Section S 7.0 will discuss how these bonuses are obtained and how they affect the character.

THE PROFESSIONS

GM *Note:* *The profession names given for Cyberspace are intended to convey the dark, cynical atmosphere of the game environment. If the GM wishes to use another term, several are included at the end of each definition. A more technical term which loosely corresponds to a* ***SM*** *Profession is also noted.*

Sleaze: A Sleaze is a individual who relies primarily on *Social skills* to perform his job. They often gain information through interaction or manipulating others with their sharp conversational abilities. Although they excel in the development of these skills, they have a rather difficult time learning many others. Examples of Sleaze include corporate and governmental administrators, salespeople, teachers, entertainers, and theologians.

Other names for this profession may include: Society Dude/Babe, Slime, Reagan, Socializer, Politico, Suit, Media Bum, Schmoozer. ***Space Master*** Similar Profession: Administrator, Theologist, or Entertainer.

Sneak: These characters focus on the "hands-on" aspects of crime and security, and may be either cops or criminals. They are generally concerned with crimes of a physical nature rather than the high-tech computerized exploits of the Net Junkies. Their skill development opportunities are quite broad, although they (obviously) center on the *Subterfuge skills.* Other names for this profession may include: Security Man, Prowler, Eye, Hood. ***Space Master*** Similar Profession: Criminologist.

Killer: This profession covers all manner of fighters, from Sprawl thugs to corporate assassins. Regardless of group affiliation or social class, any character whose training is primarily concerned with weaponry, combat, military tactics and/or warfare is a Killer. Their primary areas of skill development are *Weapon skills* and *Maneuvering skills.* It is relatively difficult for Killers to learn scientific or social skills, as they have little use for such pursuits. Other names for this profession may include: Trigger-Boy/Girl, Scrapper, Punk, Jason, BrawlBoy, Thug, Fighter, Strongarm. ***Space Master*** Similar Profession: Armsman.

Net Junkie: Feared and renowned Neural Interface specialists, Net Junkies utilize their specialized machines called CyberDecks to move through the abstract dimensions of the Global Telecommunications Network (i.e., Cyberspace) and infiltrate security systems. They are quite good with *Cyberspace skills* and fairly good with *Technical skills,* but have a hard time with the more physical pursuits (they spend a lot of their time in another world). Other names for this profession may include: Net Jockey, Nethead, Brain, Bryce, Deck Jockey, Decker, Hacker. **Space Master** Similar Profession: None.

Jockey: A Jockey is a individual whose specialized professional skills have to do with the operation of equipment; including his personal equipment. Jockeys specialize in *Maneuvering skills* and *General skills.* These are the citizens that make sure civilization "keeps running": drivers, pilots, communications personnel, paramedics, etc. Jockeys also have knowledge of basic computer operation (conceptually very different than the intuitive world of Cyberspace) and they use their understanding of computer/user interface to perform the more mundane operations in the Net (accessing satellite links, etc.). Jockeys do not necessarily know how their equipment works, they just know how to use it. Other names for this profession may include Fly-Boy, Controller, Fingers, Console Jock, Operater Keyboard Cowboy. **Space** Master Similar Profession: Pilot, Any Technician, Medic.

Tech Rat: This Profession covers a wide variety of character types, ranging from R&D scientists to simple mechanics. Tech Rat characters include: maintenance workers, free-lance special device-riggers, engineers, physicians, scientists, cyber-designers, weapon makers, etc. They are often employed by one of the world-powerful MegaCorps; many are attached to CorpMerc teams or political military forces. A Tech Rat might even be be a "Wormtech" practitioner, creating unauthorized works of genius for sale on the black market. Tech Rats fare well with *Technical skills,* but generally shun the more physical pursuits. Most Tech Rats have their own specific area of expertise (one of the technical skills). Other names for this profession may include: Mr Science, Handyman, Fixer, Toolie, Techie, Plumber, Repairman, Grease Monkey. **Space** Master Similar Profession: Any Technician, Researcher, Physician, Engineer, Planetologist.

3.0 SOCIAL CLASS

This section provides a means of varying and individualizing characters with an eye toward playability and immersion in the *Cyberspace* genre. The details of a character's place of origin and social status can have a great bearing on the opportunities he is presented with in adult life. Such important factors as observational skills, morals and ethics, and status all depend in part on the area and social class into which a person is born. Although there is no strict division of social classes in the *Cyberspace* world, these factors are nonetheless observed in the guidelines which follow.

In real life, social class often plays a part in determining which profession a person will enter (or be forced to enter). Since such a "realistic" system would eliminate the players' chance of choosing his own character profession, this situation is handled in reverse. Based upon the character's profession, a roll (1-100) on the *Social Class Chart (page 14)* following determines the circumstances of his birth.

If the GM is willing, a player may simply choose a social class for his character, provided that that social class is a possibility for the Profession in question, according to the chart that follows.

Note: *The word "Family" is used rather loosely here; it refers not only to a person's biological family, but to whatever group or organization took care of the character as a youth. In the world of Cyberspace, as many people are raised outside of traditional families as in them.*

Make a roll (1-100) and refer to the *Social Class Chart* to determine your character's social class. Record this information on your *Character Record Sheet.*

Example: *Charlie rolls 1D100 and consults the Sneak column of the Social Class Chart. His roll is 58, which yields LSprl (Lower Sprawl) as his social class.*

STARTING LANGUAGES

The number of languages that a starting character knows is based upon his social class as indicated by the Starting Language Chart. A character's first language is known to "degree" 5 (Section S 8.8). All other languages (if any) are known to "degree" 4.

STARTING LANGUAGE CHART

Social Class	Starting Languages
Corporate Upper Class (UCorp)	3
Corporate Middle Class (MCorp)	2
Corporate Lower Class (LCorp)	1
Sprawl Upper Class (USprl)	2
Sprawl Lower Class (LSprl)	1
Res. & Ref. Zones Worker (RRWrk)	1
Arcology (Arcol)	1
Wilderness or Wastelands (Wilds)	1
Urban Homeless (UHmls)	2
Nomadic Homeless (Gypsy)	1
Space Colony (SClny)	3

SOCIAL CLASS CHART

Roll	PROFESSION					
	Sleaze	Killer	Jockey	Sneak	Tech Rat	Net Junkie
01-05	UHmls	SCIny	UHmls	SCIny	Gypsy	UCorp
06-10	RRWrk	Arcol	RRWrk	RRWrk	Wilds	Arcol
11-20	LSprl	LCorp	Gypsy	Gypsy	LSprl	LSprl
21-30	USprl	MCorp	Arcol	UHmls	USprl	USprl
31-40	Arcol	RRWrk	SCIny	UHmls	Arcol	USprl
41-50	LCorp	UHmls	LSprl	LSprl	RRWrk	LCorp
51-60	LCorp	Gypsy	USprl	LSprl	SCIny	LCorp
61-70	MCorp	Wilds	LCorp	USprl	LCorp	MCorp
71-80	MCorp	USprl	MCorp	LCorp	LCorp	MCorp
81-90	UCorp	LSprl	MCorp	MCorp	MCorp	SCIny
91-95	Gypsy	LSprl	Wilds	Arcol	MCorp	SCIny
96-00	SCIny	UCorp	UCorp	UCorp	UCorp	UCorp

CODE DESCRIPTIONS

UCorp — Corporate Upper class; "Family" is high-ranking Corporate Officer(s). PC will have easy access to company resources and vehicles, etc.

MCorp — Corporate Middle Class; "Family" is mid-level Corporate Executive/Director(s). PC has limited access to company resources.

LCorp — Corporate Lower Class; "Family is low-level Corporate Administrator(s)/Clerk(s)/Researcher(s)/etc. PC has contacts in service levels of corporate structure.

USprl — Sprawl/Inner City Upper Class; "Family" is well known Merchant/Tradesperson. PC knows many Sprawl dwellers as : clientele.

LSprl — Sprawl/Inner City Lower Class; "Family" is urban poor. PC knows many Sprawl dwellers as friends/associates.

RRWrk — Resource and Refining Zones Workers; "Family" is Laborer(s)/Driver(s), possibly itinerant. PC has a small circle of loyal friends/co-workers.

Arcol — Arcology; "Family" is enclosed community. PC will always be welcome back at the Arcology (unless outcast for some reason).

Wilds — Wilderness or Wastelands; "Family" is outcast or reclusive, subsistence very poor. PC is familiar with the topography and inhabitants of the wilderness area he hails from.

UHmls — Urban Homeless; "Family" is Beggars/Criminals. PC is familiar with other street people from the same general area, may have knowledge of the sewers, etc.

Gypsy — Nomadic Homeless; "Family" is Gypsy Clan. PC has a clan of comrades who will welcome his back at any time (or do favors if asked).

SCIny — Space Colony (orbital, lunar, martian); "Family" is Explorer(s)/Astronaut(s)/Colonist(s). PC is often able to obtain interest/favors by speaking of his origins.

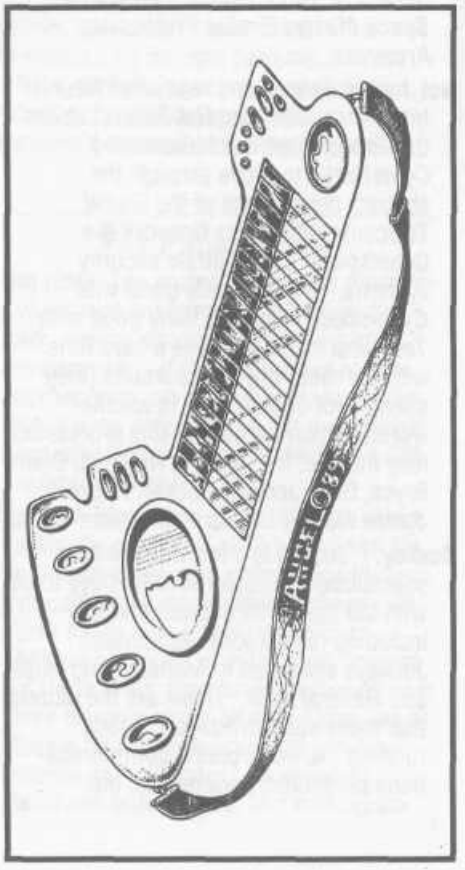
Examine the *Starting Language Chart* to determine how many starting languages you know. Record this information on your *Character Record Sheet* in the Language Section.

Example: *Charlie receives only 1 starting language since he is from the Lower Sprawl (on his* Character Record Sheet *he records English, his native tongue, at Degree 5). He will receive Linguistic skill ranks during Adolescence Skill Development, and he may obtain more ranks during Apprenticeship Skill Development and each Skill Development thereafter (i.e., upon advancing levels).*

If the GM is using background options (as we will assume he is in Charlie's case), we must determine Charlie's background before continuing to Step 4 of the character generation procedure. Consulting the Background Option Chart *(Section S 9.1), we find that Charlie receives 4 background options, and one of them must be rolled on the* Special Connections Category Chart. *Charlie's player rolls on this chart first (1D100). He rolls 04, indicating that Charlie is connected with a well-known Sprawl Gang. The GM will determine how this will affect Charlie. The next pick is made on the* Special Equipment Category Chart.

The roll is 61, and Charlie's player decides to take a +10 Gauss Pistol. Next Charlie's player goes for Special Wealth so that Charlie can afford some Cyberization. He rolls 84 (Yeah!), which yields 3500 dollars plus 600 per month. Charlie must have some sort of illicit operation going. The final roll is on the Special Status Category Chart. *A roll of 38 reveals a Guild/Union background.*

For the sake of illustration we will assume that the GM also wishes to use Idiosyncrasies (Section S 9.2). The player generating Charlie roll 1D100 to see how many idiosyncrasies Charlie has. A 44 indicates 1 idiosyncrasy. For this trait another D100 is rolled, and an 81 sends us to the Uncommon Idiosyncrasies Chart. *The roll is 46, and we find that Charlie has a holographic memory! Ecstatic with this result, Charlie's player records the background information on his* Character Record Sheet. *Finally, we will determine whether Charlie is ambidextrous. The player controlling Charlie rolls 1D100 and consults the* Ambidexterity Chart (Section S 9.4). *A roll of 53 indicates that Charlie is not ambidextrous and will receive a penalty of -20 to maneuvers with the off hand. Charlie's player chooses right handedness and records the result on the* Character Record Sheet.



4.0 ADOLESCENCE SKILL DEVELOPMENT

Every character begins the game with a certain number of skills which determine his effectiveness in performing certain actions and activities (e.g., fighting, driving, repairing equipment, etc.).

As the character develops and improves a skill his "skill rank" with that skill will increase, indicating a corresponding increase in his abilities with that skill. This section discusses what skill ranks a character develops during his adolescence.

SKILL RANK BONUSES

A skill rank will give a character a bonus that will affect his chances of accomplishing certain activities that use that skill. Section S 7.0 will discuss how these bonuses are obtained and how they affect the character.

THE SKILLS

The *Skill List Chart* in this section presents a list of all of the skills used in *Cyberspace.* Section S 8.0 provides complete descriptions of all of the skills. The skills are grouped into nine categories:

Maneuvering Skills
Weapon Skills
General Skills
Subterfuge Skills
Social Skills
Cyberspace Skills
Technical Skills
Special Skills
Secondary Skills

ADOLESCENCE SKILL RANKS

The *Adolescence Skill Rank Chart* indicates what skills a character develops during his adolescence (early life). These skills are based strictly upon the character's social class, and represent basic schooling and observational learning acquired prior to the age of majority (generally around 18 years old). The numbers on the chart indicate how many skill ranks the character receives in each of the pertinent skills. Some skills are not included on the chart because they are not generally developed by adolescents of any social class.

On the *Adolescence Skill Rank Chart* examine the column corresponding to your social class. Record the skill ranks indicated on your *Character Record Sheet* in the "Skill Ranks" section for the appropriate skill.

Example: *The player controlling Charlie consults the Adolescence Skill Rank Chart to determine which skills he learned in his youth. Checking under the LSprl column, he finds that Charlie receives the following ranks:*

Skill	*Ranks*
NoArmor	*2*
Light Body Armor	*1*
1st Weapon	*3*
2nd Weapon	*2*
Drive	*1*
Environs	*1*
Equipment	*1*
Electronic Bypass	*1*
Mechanical Bypass	*2*
Ambush	*2*
Stalk & Hide	*2*
Streetwise	*4*
Exploit	*2*
Mechanical Technics	*1*
Body Development	*2*
Perception	*2*
Linguistics	*3*
Acrobatics	*1*
Appraisal	*2*
Drug Tolerance	*4*
Falsification	*1*
Foraging, Urban	*1*
Gambling	*1*
Sport	*2*
Subduing	*1*
Trickery	*2*

Charlie's player wants him to be very skilled with guns, so he chooses Fire as the 1st Weapon Skill, and Melee as the 2nd Weapon Skill. He will have a chance to further augment these skills during Apprenticeship Skill Development (Section S 5.0).

SKILL LIST CHART

Skill	Maneuver Type / Stat
Maneuvering Skills:	
No Armor	MM / Ag
Light Body Armor	MM / St
Armored Body Suit	MM / St
Armored Exoskeleton	MM / St
Weapon Skills:	
Melee	OB/St
Missile	OB/Ag
Fire	OB/Ag
Mounted	OB/Ag
General Skills:	
Drive	VM / Ag
Pilot	VM / Qu
Environs	MM / SD
Equipment	SM / Me
Subterfuge Skills:	
Electronic Bypass	SM / In
Mechanical Bypass	SM / In
Ambush	SP / none
Stalk & Hide	MM,SM / SD
Social Skills:	
Culture	SM / Em
Streetwise	SM / Em
Administration	SM / Pr
Exploit	SM/Pr
Cyberspace Skills:	
Cyber Deck Operation	SM / SD
Combat	SP / Me
Intrusion	SP / In
Utility	SP/Re
Technical Skills:	
Biological Technics	SP / Em
Mechanical Technics	SP / Me
Electronics Technics	SP / Re
Software Technics	SP / Re
Cybernetics Technics	SP / Re
Special Skills:	
Body Development	SP / Co
Perception	SM / In
Cyber Attunement	SM/SD
Linguistics	SP / none

SKILL LIST CHART (CONT.)

Secondary Skills:

- Acrobatics ..... MM / Ag
- Advanced Math ..... SP / Re
- Appraisal ..... SM / Re
- Astrogation ..... SM / Me
- Astronomy ..... SP / Re
- Biology ..... SP/Re
- Chemistry ..... SP / Re
- Contortions ..... SM/SD
- Cybernetics ..... SP/Re
- Drug Tolerance ..... SM / Co
- Falsification ..... SM / Re
- Foraging, Rural ..... SM / In
- Foraging, Urban ..... SM / In
- Frenzy ..... SP/SD
- Gambling ..... SM / In
- History ..... SP/Me
- Media ..... SM / Re
- Medical Practice ..... SM / Em
- Music ..... SM / Em
- Physics ..... SP/Re
- Planetology ..... SP/Re
- Quick-Draw ..... SM/Qu
- Sport ..... MM/Ag
- Subduing ..... SP/Qu
- Trickery ..... SM/Qu

Notes for the Adolescence Skill Rank Chart:

Weapon Skills: The Player may place the given number of ranks in the following categories: Melee, Missile, Fire, Mounted; e.g., a character from LSprl (Lower Sprawl) environment might place 3 ranks in Melee skill and 2 ranks in Fire skill.

Body Development: Each Rank yields 1D10 extra Hit Points.

Descriptions of the Social Classes are located on the Social Class Chart (Section S 3.0)

Note that while the total number of skill ranks provided is different for each social class, this is consistent with the way characters learn skills in Cyberspace. For example, Gypsy class characters have to learn many skills when young in order to contribute to their clan, while those who come from the Wilds or Resource and Refining Zones have limited access to many of the skills. Further, certain skills have little relative importance to some classes. A UCorp character will always know a little math, science, and history due to formal education, private tutoring, etc., but such skills are near-worthless to a UHmls vagabond who relies on Streetwise and Urban Foraging for survival. The GM may modify the number of ranks given if he feels that play balance is threatened.

ADOLESCENCE SKILL RANK CHART

	Social Class										
Skills	UCorp	MCorp	LCorp	USprl	LSprl	RRWrk	Arcol	Wilds	UHmls	Gypsy	SCIny
Maneuvering Skills											
No Armor	0	1	1	1	2	2	1	3	1	1	0
Light Body Armor	0	0	1	0	1	1	0	0	1	1	0
Armored Body Suit	0	0	0	0	0	0	0	0	0	0	2
Armored Exoskeleton	0	0	0	0	0	0	0	0	0	0	1
Weapons Skills:											
1st Weapon Skill	0	0	1	2	3	2	1	2	3	3	2
2nd Weapon Skill	0	0	0	1	2	1	0	1	2	1	0
3rd Weapon Skill	0	0	0	0	0	0	0	0	0	0	0
General Skills:											
Drive	3	2	1	2	1	2	0	0	0	0	0
Pilot	0	0	0	0	0	0	1	0	0	0	3
Environs	0	0	1	0	1	3	4	4	0	3	3
Equipment	2	2	2	2	1	2	1	0	0	1	4
Subterfuge Skills:											
Electronic Bypass	0	0	0	2	1	0	0	0	0	0	0
Mechanical Bypass	0	0	0	1	2	1	0	0	0	2	0
Ambush	0	0	0	1	2	0	0	1	2	3	0
Stalk & Hide	0	0	0	1	2	0	1	2	1	3	0
Social Skills:											
Culture	4	3	2	1	0	0	0	0	0	0	2
Streetwise	0	0	1	2	4	1	0	0	4	2	0
Administration	4	3	2	1	0	0	1	0	0	0	1
Exploit	3	2	1	2	2	0	0	0	1	3	0
Cyberspace Skills:											
CyberDeck Operation	0	0	0	0	0	0	0	0	0	0	1
Combat	0	0	0	0	0	0	0	0	0	0	0
Intrusion	0	0	0	0	0	0	0	0	0	0	0
Utility	0	0	0	0	0	0	0	0	0	0	0
Technical Skills:											
Biological Technics	0	0	0	0	0	0	2	0	0	0	0
Mechanical Technics	0	0	1	2	1	2	0	0	0	1	1
Electronics Technics	1	2	3	1	0	1	0	0	0	0	2
Software Technics	1	1	1	0	0	0	0	0	0	0	1
Cybernetics Technics	0	0	0	0	0	0	0	0	0	0	0
Special Skills:											
Body Development	0	0	0	1	2	4	1	4	1	2	0
Perception	1	0	0	1	2	0	1	3	2	3	1
Cyber Attunement	0	0	0	0	0	0	0	0	0	0	0
Linguistics	10	8	5	4	3	3	5	3	2	4	10
Secondary Skills:											
Acrobatics	0	0	0	0	1	0	0	1	0	0	1
Advanced Math	2	2	1	0	0	0	0	0	0	0	2
Appraisal	1	2	3	4	2	1	0	0	1	2	0
Astrogation	0	0	0	0	0	0	0	0	0	0	2
Astronomy	1	1	0	0	0	0	0	0	0	0	1
Biology	1	1	1	0	0	0	3	0	0	0	1
Chemistry	1	1	1	0	0	0	1	0	0	0	1
Contortions	0	0	0	0	0	0	0	1	0	1	0
Cybernetics	0	0	0	0	0	0	0	0	0	0	0
Drug Tolerance	0	0	1	2	4	1	0	0	1	1	0
Falsification	0	0	1	2	1	0	0	0	1	1	0
Foraging, Rural	0	0	0	0	D	1	3	4	0	2	0
Foraging, Urban	0	0	0	0	1	0	0	0	4	1	0
Frenzy	0	0	0	0	0	1	0	1	0	0	0
Gambling	1	2	1	2	1	0	0	0	1	1	0
History	3	2	1	0	0	0	2	0	0	0	1
Media	4	3	2	0	0	0	0	0	0	0	2
Medical Practice	0	0	0	0	0	0	0	0	0	0	0
Music	1	1	1	0	0	0	1	0	0	0	0
Physics	1	1	1	0	0	0	0	0	0	Q	1
Planetology	0	0	0	0	0	0	1	0	0	0	1
Quick-Draw	0	0	0	0	0	0	0	0	0	1	0
Sport	1	1	2	1	2	1	1	0	0	0	0
Subduing	0	0	1	0	1	1	0	0	1	1	0
Trickery	0	0	0	1	2	0	0	0	0	3	0

5.0 APPRENTICESHIP SKILL DEVELOPMENT

Every character begins the game with a chance to develop certain skills which determine his effectiveness in performing certain actions and activities (e.g., fighting, driving, repairing equipment, etc.).

As the character develops and improves a skill his "skill rank" with that skill will increase, indicating a corresponding increase in his abilities with that skill. These skill ranks are cumulative with the character's adolescence skill ranks (Section S 4.0) and with the skill ranks he will later develop as he gains experience (Section S 10.0).

This section discusses what skill ranks a character may develop during his apprenticeship based upon his profession.

SKILL RANK BONUSES

A skill rank will give a character a bonus that will affect his chances of accomplishing certain activities that use that skill. Section S 7.0 will discuss how these bonuses are obtained and how they affect the character.

THE SKILLS

The *Skill List Chart*in Section S 4.0 presents a list of all of the skills in *Cyberspace.* Section S 8.0 provides complete descriptions of all of the skills. The skills are grouped into nine categories:

Maneuvering Skills
Weapon Skills
General Skills
Subterfuge Skills
Social Skills
Cyberspace Skills
Technical Skills
Special Skills
Secondary Skills

5.1 DEVELOPING SKILL RANKS

Whenever a character reaches a new "level of experience" (Section S 10.0), he is given the opportunity to develop his skills (i.e., increase certain skill ranks). A character is assumed to have just reached 1st level immediately after his apprenticeship skill development.

DEVELOPMENT POINTS

The *Development Point Chart* indicates how much development potential a character has available at each "level" (i.e., stage) of development. This potential is given in terms of "development points" (DPs) which may be allocated to increase certain skill ranks.

The number of development points available to a character is based upon his profession (see the *Development Point Chart).*

ALLOCATING DPs

Development points may be allocated in the following manner:

- A Skill Rank may be increased by one (and one only), by allocating one DP from the appropriate category.
- A Skill Rank may be increased by two by allocating three DP.
- A Skill Rank may not be increased by more than two Ranks at a time (per level).
- Unallocated, untransferred points are lost.

TRANSFERRING DPs

Development points that have not been allocated may be transferred to another category as follows:

- If the category that the points are transferred to has an *initial* development point total that is zero (e.g., Maneuvering skills for a Net Junkie), then that category receives **one** development point for every **four** transferred.
- If the category that the points are transferred to has an *initial* development point total that is not zero, then that category receives **one** development point for every **two** transferred.
- The points being transferred may come from several categories.
- Points from any category or combination of categories may be used to develop Special and Secondary skills (i.e., transferred on a 1 to 1 basis).

5.2 LEVEL SKILL DEVELOPMENT

Apprenticeship skill development consists of allocating a character's DPs so that he begins the game at "1st Level" (Section S 10.0). This process of allocating DPs is repeated each time the character raises a level.

> Using the *Development Point Chart* and the guidelines from Section S 5.1, allocate your DPs to your various skills. Record the skill ranks developed on your *Character Record Sheet* in the "Skill Ranks" section for the appropriate skill.

Example: *Keeping in mind his original character conception, Charlie's player spends his apprenticeship development points as follows:*

Skill	*Ranks*	*Cost*
Maneuvering Skills		
No Armor	*1*	*1*
Light Body Armor	*1*	*1*
Weapon Skills		
1st Weapon (Fire)	*1*	*1*
2nd Weapon (Melee)	*1*	*1*
General Skills		
Equipment	*1*	*1*
Drive	*1*	*1*

DEVELOPMENT POINT CHART

	CHARACTER PROFESSION					
Category	Sleaze	Sneak	Killer	Net Junkie	Jockey	Tech Rat
Maneuvering Skills	1	2	4	0	2	1
Weapon Skills	1	2	6	1	2	1
General Skills	2	1	1	1	6	3
Subterfuge Skills	1	6	1	1	0	1
Social Skills	8	3	0	0	1	1
Cyberspace Skills	0	0	0	6	2	0
Technics Skills	2	1	1	6	2	8
Special Skills	1*	1*	1*	1*	1*	1*
Secondary Skills	2*	2*	2*	2*	2*	2*

* — Points from other categories may be transferred on a one-to-one basis.

Note that Charlie only has one point to spend on General Skills, but he gets his second DP by trading points from Subterfuge Skills. Since his normal development point total for General Skills is not 0, he must only trade 2 points from Subterfuge Skills, where he will have 4 left. If he tried to receive a development point in Cyberspace Skills (where the normal development point total for Sneaks is 0), he would have had to trade 4 points from Subterfuge Skills — quite a sacrifice!

Subterfuge Skills		
Electronic Bypass	*1*	*1*
Mechanical Bypass	*1*	*1*
Ambush	*1*	*1*
Stalk & Hide	*1*	*1*
Social Skills		
Exploit	*2*	*3*
Cyberspace Skills	***0***	***0***
Technical Skills		
Electronics Technics	*1*	*1*
Special Skills		
Cyber Attunement	*1*	*1*
Secondary Skills		
Falsification	*1*	*1*
Quick-Draw	*1*	*1*

6.0 MONEY, EQUIPMENT, AND CYBERIZATION

Once the player has performed the steps outlined in Sections S 1.0 to S 5.0, the character needs to determine his money, equipment, and cyberization.

6.1 STARTING MONEY

Each player character begins the game with a small but serviceable cash sum (or bank account). The amount is equal to:

(Class Factor x 1D10 x 20) Dollars

The *Class Factor* is based on the PC's Social Class and may be obtained from the *Starting Money Chart.*

Roll 1-10 and multiply by 20 and by your character's Class Factor obtained from the *Starting Money Chart.* Record your money on your *Character Record Sheet* in the Money and Equipment Section.

Note: *If a GM is using background options (Section S 9.1), a character may start with additional money obtained by choosing the Special Wealth background option.*

STARTING MONEY CHART

Social Class	Class Factor
UCorp	x10.0
MCorp	x5.0
LCorp	x4.0
USprl	x2.0
LSprl	x1.0
RRWrk	xO.5
Arcol	x1.0
Wilds	xO.5
UHmls	xO.5
Gypsy	x1.0
SCIny	x3.0

Example: *Charlie's social class is LSprl, so his Class Factor is 1.0. We multiply this by 1D10 (a 7 is rolled) and by 20 for a total of 140 dollars. Adding this to the 3500 dollars Charlie obtained as a background option, we find that he has a total of 3640 dollars.*

6.2 EQUIPMENT

Each character begins the game with:

- Three normal pieces of equipment of his choice, e.g., weapons, armor, electronic devices, etc. This equipment should be in keeping with the basic concept/ profession of the character. This equipment may include Cybernetic Implants, see Section S 6.3.
- Two clips/charges for each piece of equipment (e.g., two clips of ammo for a weapon, two energy cells for a computer, etc.).
- A set of normal clothing, including coat/ jacket, shoes/boots, sheaths for weapons, etc.
- Normal personal effects.

RESTRICTIONS

There are two restrictions concerning what equipment may be chosen:

- The character must have at least one skill rank for a skill that uses the piece of equipment.
- No piece of equipment may be worth more than 1000 Credits.

PURCHASING EQUIPMENT

A character may purchase and start the game with any equipment and supplies he can afford to buy. See the *Master Equipment Chart* in Section T 4.0 for a complete listing of equipment costs.

Choose your starting equipment and buy any additional equipment. Record your equipment and its weight on your *Character Record Sheet* in the Money and Equipment Section.

Note: *If a GM is using background options (Section S 9.1), a character may start with additional equipment obtained by choosing the Special Equipment background option.*

Example: *For his three free pieces of equipment, Charlie chooses:*

1) A brain-linked Direct Neural Interface (See Section T 1.5) for use with "smart" machinery, vehicles, and weapons.

2) Charlie already has a +10 Gauss Pistol (obtained from a background option), but he would like to fit it for use with his DNI (i.e., convert it to a smart gun). The GM rules that this counts as "equipment," so the Gauss Pistol is ready to be jacked into Charlie's wrist.

3) A suit of Light Body Armor for those dangerous situations.

6.3 CYBERIZATION

A listing of available Cyber Systems is provided in Section T 1.0. Players who wish to place Cybernetic Implants in their characters prior to play are by all means encouraged to do so. They must spend the money for it or they must choose an implant as one of their pieces of starting equipment.

The benefit of implanting such systems before play begins is that the PC need not worry about the actual cost of implantation. Further, the PC may choose a type of power source for each implant: Microcell, CNS-wiring, or Photovoltaic Cells. Since the character is assumed to have had an income during his previous years, these costs are waived.

THE CIRS STAT

Once all desired/affordable Systems have been purchased, they are assumed to have been implanted. A player must total up the number of Cyber Implants and make one roll on the *CIRS Stat Chart (See Section A 2.0).* This will determine the character's CIRS Stat.

CIRS STAT CHART

Roll	Systems Total 1-4	5-8	9-11	12-14	15-16	17-18	19	20+
01-05	0	0	0	2	5	9	15	20
06-10	0	0	1	3	7	11	17	22
11-20	0	1	2	5	9	13	19	24
21-40	0	2	3	7	11	15	21	27
41-60	1	3	5	9	13	17	23	31
61-80	1	5	7	11	15	19	25	35
81-90	2	7	9	13	17	21	27	40
91-95	3	9	11	15	19	25	35	50
96-00	4	11	13	17	21	30	45	60

CIRS stands for Cybernetic Implant Rejection Syndrome (Section T 1.0). The Character is assumed to have had no major difficulties caused by CIRS in the past — of course, that situation might change very soon!

Roll on the *CIRS Stat Chart* to determine your CIRS stat. Record the CIRS Stat on your *Character Record Sheet* in the Cyber Systems section.

Example: *Feeling adventurous with his new smart Gauss Pistol, Charlie decides to invest in several Cyber Systems. (See Section T 1.0 for details about Cyberware). The GM decides to give Charlie two free systems (the GM likes Cyberized characters), but Charlie must buy any others. He chooses the following:*

System	***Cost in Dollars***
Lowlight Rtg. 10	*2800*
Fasthand Rtg. 5	*(Free)*
Nerve Booster Rtg. 3	*(Free)*
Total:	*2800 dollars*

With these Systems, Charlie will be lightning quick with his Gauss Pistol, and he will see well in the dark. Subtracting the 2800 dollars from his total wealth of 3640 dollars, Charlie has $840 left. which he'll keep for the time being. Now we must determine his CIRS Stat. Charlie has four Cyber Systems (including the DNI he got as a piece of free equipment), but for purposes of the CIRS stat, the Nerve Booster and DNI count as two implants each, plus Lowlight and Fasthand, for a total of 6. Charlie's player rolls on the CIRS Stat Chart *and checks the '5-8' column. The roll is 32, indicating a CIRS Stat of 2. This will decrease his Empathy score by 2, which brings it down to 16. Charlie must be careful not to let the CIRS Stat climb too high — or it's Cyber-Psychosis time. Charlie's player decides that all of his implants will be concealed, so they will not affect Charlie's Presence Stat (See Section T 1.0). Finally, the Cyber Systems and their effects are recorded on Charlie's Character* Record Sheet.

7.0 DETERMINING A CHARACTER'S BONUSES

When a character has completed the steps outlined in Sections S 1.0 - S 6.0, he is ready to record his bonuses. Then he must calculate and record his total skill bonuses and several other bonuses. An example of total bonus calculation can be found on the sample *Character Record Sheet* on page 38.

7.1 STAT BONUSES

These *stat bonuses* are given in the *Stat Bonus Chart* and should be recorded on your *Character Record Sheet.*

Only one stat bonus applies to each skill. The correspondence between stats and related skills is given in the *Skill List Chart* (Section S 4.0).

Record the stat bonus for each skill on your *Character Record Sheet* in the "Stat" column of the Skill section

Example: *The player controlling Charlie consults the* Stat Bonus Chart *to determine the appropriate bonuses. Charlie's Stat Bonuses, including a special +15 to the Quickness bonus for his Rtg. 3 Nerve Booster System, are recorded on the* Character Record Sheet.

STAT BONUS CHART

1-100 Stat	Bonus
102+	+35
101	+30
100	+25
98-99	+20
95-97	+15
90-94	+10
75-89	+5
25-74	0
10-24	-5
5-9	-10
3-4	-15
2	-20
1	-25

7.2 PROFESSION BONUSES

Each Profession receives "Profession Bonuses" for certain skills. These bonuses are added to the appropriate skill bonus totals, and will increase whenever the character experience level increases (Section S 10.0).

For each of the skill categories (e.g., Maneuvering, Weapons, General, Subterfuge, Social, Cyberspace, Technical, etc.), look up your character's professional bonus on the *Profession Bonus Chart* (p. 20). On your *Character Record Sheet* in the "Prof" column of the Skill section, record each professional bonus next to skills in the appropriate category. If a "- -" appears in that column for a skill, no professional bonus applies.

Example: *Charlie's player consults the* Profession Bonus Chart *and records them on his* Character Record Sheet. *At first level, Charlie's profession bonuses are:*

Weapon Skills: +1
Subterfuge Skills: +3
Social Skills: +1
Perception: +1
Body Development: +1

PROFESSION BONUS CHART

Category	Sleaze	Sneak	Character Killer	Profession Net Junkie	Jockey	Tech Rat
Weapon Skills	—	+1/lvl	+3/lvl	—	+1/lvl	—
General Skills	+1/lvl	—	+1/lvl	—	+3/lvl	+1/lvl
Subterfuge Skill	—	+3/lvl	—	—	—	—
Social Skills	+3/lvl	+1/lvl	—	—	—	—
Cyberspace Skills	—	—	—	+3/lvl	+1/lvl	—
Technics Skills	—	—	—	+1/lvl	+1/lvl	+3/lvl
Special Skills *						
Perception	+3/lvl	+1/lvl	—	—	—	+2/lvl
Body Development	—	+1/lvl	+3/lvl	—	—	—
Cyber Attunement	—	—	—	+3/lvl	+1/lvl	+1/lvl

* — The Profession bonuses for the Special Skills only apply to the specific skill listed.

7.3 EQUIPMENT BONUSES

A piece of equipment can affect a skill's bonus in two ways:

- It can give the wielder a fixed bonus.
- It can increase the wielder's skill rank.

Examine each piece of equipment. If it gives the wielder a fixed bonus (usually a function of the item's Mk# or Rtg#) record the bonus on your *Character Record Sheet* in the "Equip" column or one of the "Spec" columns of the Skill section.

If it increases the wielder's skill rank with a skill (usually noted as a Rating Bonus), record the increase followed by a "r" (e.g., "+5r") on your *Character Record Sheet* in the "Equip" column or one of the "Spec" columns of the Skill section.

Example: *Charlie's Gauss Pistol has a +10 bonus, so this is recorded under the "Equip" column of the Weapon section. Charlie's Rtg. 5 Fasthand System adds 5 skill ranks to his Quick-Draw skill, so this is noted under the Equip column of the Skill section. Charlie's Rtg. 10 Lowlight system adds 10 skill ranks to visual Perception, but only in dim (or darker) light, so the bonus is recorded in parenthesis under the Equip column of the Skill section. Note that Charlie already has 2 ranks in Perception, so when he is in dim light, he will have 12 ranks total; this will give him a skill rank bonus of +54. The Smartgun feature of Charlie's Gauss Pistol will not add to his skill bonus with the gun until he obtains the appropriate programs for it — the generating player decides to wait until play begins to purchase these, so we need not consider them now.*

7.4 SKILL RANK BONUSES

The skill ranks for each of your skills should already be recorded on your *Character Record Sheet.* The skill rank bonus for a specific skill can be obtained from the *Skill Rank Bonus Chart* by using the character's inherent skill rank and adding the skill rank increase due to equipment (if any).

Note: *The skill rank bonus follows a regular progression: for skill rank 0 (no development) the bonus is -25, while a skill with Rank 1 yields a +5 bonus. For every rank up to the tenth +5 is added to the Rank Bonus. For every Rank from the eleventh to the twentieth +2 is added. For every Rank from the twenty-first to thirtieth +1 is added. For every Rank beyond the thirtieth, + 1/2 is added.*

For each of your skills, look up the skill rank bonus from the *Skill Rank Bonus Chart.* On your *Character Record Sheet* in the "Rank" column of the Skill section, record each skill rank bonus.

Example: *The player generating Charlie totals the number of skill ranks for each skill and consults the* Skill Rank Bonus Chart *to determine the resulting bonus. These bonuses are recorded on Charlie's* Character Record Sheet.

SKILL RANK BONUS CHART

Skill Rank	Skill Rank Bonus
0	-25
1	+5
2	+10
3	+15
4	+20
5	+25
6	+30
7	+35
8	+40
9	+45
10	+50
11	+52
12	+54
13	+56
14	+58
15	+60
16	+62
17	+64
18	+66
19	+68
20	+70
> 20	+1 per Rank over 20
> 30	+1/2 per Rank over 30

7.5 SPECIAL BONUSES

Special bonuses such as the background options found in Section S 9.1 may be recorded in one of the columns for special bonuses, i.e., "Spec".

Record any special bonuses (e.g., background option bonuses) on your *Character Record Sheet* in one of the "Spec" columns of the Skill section.

Example: *Charlie didn't receive any skill bonuses from background options, so the "Spec" columns on the* Character Record Sheet *may be left blank. However, Charlie's Holographic memory will add +50 to relevant tasks, so Charlie's player includes this information in the "Background Notes" section of the sheet.*

7.6 TOTAL SKILL BONUSES

The final step in calculating your *total skill bonuses* is to add all of the bonuses for each skill. A total skill bonus is often referred to as just a "skill bonus."

For each skill, total the values found in the various columns for that skill: Rank, Stat, Prof, Equip, and Spec's. Record each of these totals on your *Character Record Sheet* in the "Total" column of the Skill section.

Example: *Charlie's total skill bonuses are listed on his* Character Record Sheet. *Note that the total skill bonus for Body Development skill is also recorded as the "Character's Hit Total."*

7.7 DEFENSIVE BONUS

A character's *Defensive Bonus* (DB) is used in combat as a subtraction from an opponent's attack roll against the character. A character's DB normally consists of his Quickness stat bonus and any bonus for unusual armor.

Against melee and missile attacks a character can use a "shield" (i.e., any large object that can be held in one hand or on one arm to block attacks). Normally a shield can be used to increase a character's Defensive Bonus against one foe's melee and missile attacks by 25.

There is a section of the *Character Record Sheet* with a space for the type of armor being worn and a space for the extra bonus added to the Defensive Bonus when the character is using a shield against an opponent. Record this information and the Defensive Bonus.

Example: *Charlie's Qu bonus is 30 (!), so his DB is 30 as well. When necessary, he can wear his Light Body Armor, and Charlie's player records it on the* Character Record Sheet (page 38). *Charlie is now outfitted, his skill bonuses are totaled, and he is ready to enter the streets of* Cyberspace!

7.8 RESISTANCE ROLL BONUSES

Certain attacks occurring during play will require a character to make a Resistance Roll (RR) to determine if or how an attack affects the character. Examples of this type of attack include: poison, gas attacks, disease, flash bombs, etc. The attack's level is cross-indexed with the target's (defender's) level on the Resistance Roll Table Section S 20.0 to obtain a single number. In order to successfully resist the attack, the Resistance Roll must be greater than or equal to this number.

Normally, Resistance Roll bonuses consist of the character's Constitution stat bonus and any item bonuses.

7.9 HANDLING MULTIPLE APPLICABLE BONUSES

GMs will discover that extensively developed and/or experienced characters often have bonuses from several different sources which affect a given action. These bonuses start with stats and skills, but may also include factors such as cybernetic hardware, wetware, skill program neurosofts, smart DNI devices, equipment quality, and drug effects. Such bonuses may apply to the character's OBs, DB, RRs and /or maneuver rolls.

It has already been suggested that GMs may want to integrate cyber-generated rating bonuses with a character's existing skill ranks by adding the equipment's rating to the character's skill rank before deriving the final skill bonus. But there are many factors which will increase stat bonuses, add directly to skill bonuses, or any of the various rolls required by the game. The GM can use the following options to moderate their "inflating" effects:

Option 1: When two or more modifiers (or GM-designated modifier groupings) can apply to a character's roll, the GM may stipulate that only one (the highest) may be added.

Option 2: When a character is using a smart DNI device, he must use the device's bonus, not his own intrinsic bonus.

Option 3: Only a stat bonus (whether enhanced or not), a naturally developed skill bonus, one cybernetic rating bonus, and one drug effect can be cumulative when deriving a total bonus. All other factors must either be used on their own or not at all.

Option 4: GMs may set up a hierarchy of bonus priority: certain bonuses are weighted heavily, while others count for less before calculating a total bonus.

GMs should feel free to use any one, or a combination of these options. Alternatively, a GM may devise his own method for limiting the ways in which bonuses may accumulate for a given skill or type of roll.

8.0 SKILL DESCRIPTIONS

This section gives a description of each skill and how it is used during play. For each skill, this section provides: the skill's category, the type of action that the skill applies to, and the stat that applies to the skill (Section S 4.0).

SKILL CATEGORIES

The Cyberspace skills are grouped into nine categories:

Maneuvering Skills
Weapon Skills
General Skills
Subterfuge Skills
Social Skills
Cyberspace Skills
Technical Skills
Special Skills
Secondary Skills

ACTIONS

Each skill is classified as being applicable to one of the five following actions (See the Skill List Chart in Section S 4.0):

- A Moving Maneuver (MM)
- A Static Maneuver (SM)
- A Vehicular Maneuver (VM)
- An Offensive Bonus (OB)
- A Special Purpose (SP)

Note: *Section S 16.0 explains how the bonus for each of these skills may be used to resolve actions and maneuver attempts. Sections S 4.0 and S 5.0 discuss how skills are developed.*

8.1 MANEUVERING SKILLS

These skills determine how far a character can move in a round (ten seconds); 20 meters plus one additional meter for every +5 of Skill Bonus or double that amount if a running maneuver is successfully performed. See Section S 15.0 and S 16.0 for a complete discussion of movement and maneuvering.

In addition, Maneuvering skill is used to resolve movement which is performed under unusual circumstances or in stressful situations (such as combat). When used for these purposes, the skill bonus is added to a "Moving Maneuver Roll" (Section S 16.2).

Maneuvering skill must be developed separately for each of the Armor Types (ATs): No Armor (NoA), Light Body Armor (LBA), Armored Body Suits (ABS) and Armored Exoskeleton (AEX). The maximum number of skill ranks which may be learned is limited by the AT: No Armor = 2 Ranks, LBA = 5, ABS = 7, and AEX = 9.

Due to the restriction of movement and weight of the armor, each AT also has a movement/maneuver penalty associated with it. These factors are summarized in the *Armor Chart.*

ARMOR CHART

Armor Type	Max Skill Rank	Maneuver Penalty	Stat Bonus
No Armor	2	+0	Ag
Light Body Armor	5	-30	St
Armored Body Suit	7	-45	St
Armored Exoskeleton	9	-60	St

8.2 WEAPON SKILLS

These skills determine how effective a character is in combat. The skills must be developed separately for each of the four weapon types: Melee, Missile, Fire, and Mounted.

The Skill Bonus for each weapon is part of the character's total Offensive Bonus (OB) with that weapon, and is added to any "Attack Rolls" made with that weapon. In certain circumstances some or all of this OB may be used to "parry" an opponent (Section S 17.2). Each specific weapon has special properties as summarized in the Master Weapons Charts (Section A 7.1)

WEAPON TYPES

Melee (OB, St): This weapon type covers all weapons used in hand to hand combat, including archaic weaponry, such as daggers, swords, axes, maces, morning stars, etc. This skill may also be used for such modern-day equivalents as pipes, chains, switchblades and trench knives.

This category also includes forms of unarmed combat like brawling and the martial arts. Brawling in the world of *Cyberspace* is often the dirtiest form of fighting. Normally, the only weapons used are objects close at hand. This is the skill of bare-fisted streetfighting, but at its highest levels it may include many advanced martial arts moves. The GM may choose to modify the melee skill bonus depending on the circumstances (e.g., the character is wielding a broken bottle, a table leg, etc).

Note: *Characters using Melee skill to attack unarmed use the* Brawling Attacks and Falls Table *(A 7.7), while characters wielding weapons (e.g., knives, broken bottles, lead pipes) use the* Melee Weapon Attack Table *(A 7.6) to resolve the attack.*

Missile (OB, Ag): This weapon type covers thrown and bow/sling weapons which can attack from a distance. Such weapons include: long bows, short bows, composite bows, crossbows, daggers, throwing knives, javelins, shuriken (throwing stars), thrown grenades, etc.

Fire (OB, Ag): The fire weapon type covers all handheld energy and high-speed projectile firearms (i.e., guns). Such weapons include: lasers, pistols, rifles, shotguns, and the like.

Mounted (OB, Ag): The mounted weapon type covers all mounted weaponry (i.e., on vehicles and platforms), support weaponry, and weapons that fire explosive missiles. Such weapons include: grenade launchers, rocket launchers, recoilless rifles, machine guns, cannons, bombs, torpedoes, etc.

8.3 GENERAL SKILLS

These skills cover specialized personal maneuvers as well as the ability to operate vehicles and equipment.

Drive (VM, Ag): Covers operating all ground and water-going vehicles. One skill rank allows basic understanding of the controls, while further ranks reflect increased ability and quickness in maneuvering the vehicle. Possibilities include: wheeled vehicles, GEM/hover vehicles (i.e., Ground Effect Machines), tracked tanks, sailing vessels, ships, etc.

Pilot (VM, Qu): Covers operating all aircraft and spacecraft. One skill rank allows basic understanding of the controls, while further ranks reflect increased ability and quickness in maneuvering the craft. Possibilities include: helicopters, prop planes, jets, orbital shuttles, and the myriad of starcraft (i.e., spaceships).

Environs (MM, SD): This skill is primarily a measure of the character's ability to deal with the physical environment and with relatively mundane aspects of negotiating that environment. It covers several subclasses of maneuvers and activities such as:

Climbing: Climbing anything from ladders *(Easy)* to sheer cliff faces *(Absurd).* Includes going up and down ropes, rappeling, using handholds properly, etc.

Swimming: Skill rank 1 will prevent the character from drowning in water over his head. Further ranks enable the character to make headway against current, stay afloat for long periods of time, swim longer distances, move faster in the water, and to make maneuvers in the water. When swimming, AT maneuver penalties are tripled (Section S 8.1). Factors such as treacherous waters might increase the difficulty.

First Aid: Successful use of the Environs skill can diminish bleeding by as much as 5 hits per round, or perform other tasks such as CPR, mouth-to-mouth resuscitation, splinting broken bones, etc. The skill also covers the use of basic medical equipment (Section S 21.0).

Alien Environments: The Environs skill bonus may be used to diminish any penalties accrued due to specific environmental restrictions. Difficulties and penalties associated with harsh environments are:
Zero-G = *Absurd* (-70)
Low Grav = *Very Hard* (-20)
High Grav = *Extremely Hard* (-30).
Underwater = *Extremely Hard* (-30)

Survival: The Environs skill bonus may be used to avoid the adverse effects of unusual environments. Examples include jungle survival, desert survival, and arctic survival.

Equipment **(SM, Me):** Covers operating all normal equipment. One skill rank allows basic understanding of the controls, while further ranks reflect increased speed and aptitude in operating the equipment. Possibilities include: cameras, communications equipment, medical equipment, sensors, scanners, etc. Operating repair equipment normally falls into the Technical skill category. It covers several subclasses of equipment operation such as:

Electronic Warfare: Used to operate EW and Stealth systems, for purposes of electronic countermeasures operations.

Sensor/Scanner Analysis: Used to interpret vehicular or self-contained sensor/scanner displays of various types. Examples include Radar, Sonar, Ultrasound and MIIS (Multiple Image Integration Systems).

Computer Operation: Used to access computer data and programs with a keyboard/terminal apparatus. Does not include programming or computer design. Examples include word processing, computer weapon control systems, and "Blind" Net Running (i.e. running the Net without a CyberDeck).

8.4 SUBTERFUGE SKILLS

These skills determine how well a character sneaks, tracks, backstabs, and gains entry into secured places.

Electronic Bypass (SM, In): This skill covers neutralizing and bypassing electronic locks, electronic traps, surveillance systems, and a host of other high-tech security devices. Devices of various difficulty levels may be represented by appropriate subtractions from this roll (determined by the GM).

Mechanical Bypass (SM, In): This skill covers neutralizing and bypassing mechanical locks, and traps and other similar security devices. Locks and traps of various difficulty levels may be represented by appropriate subtractions from this roll (determined by the GM).

Ambush (SP, none): If the character manages to move behind an opponent (and remains undetected), he may make a maneuver roll to ambush the opponent with a given attack. If the maneuver roll is not successful, a normal attack may be made. If it is successful, the normal attack may be made and any critical that results may have the Ambush *skill rank* (not the Bonus) added to the roll. When used with a missile or fire weapon, this skill is called called *Sniping.* When used against a vehicle, this skill is called called *Mounted Weapons Ambush.*

Stalk (MM, SD) & Hide (SM, SD): Stalking is the ability to move using camouflage and shadows to conceal your presence. Hiding reflects the skill in using camouflage, shadows, etc., to remain absolutely hidden while immobile.

8.5 SOCIAL SKILLS

These skills determine the character's ability to interact with and influence other people. The Interaction/Influence column of the *Static Maneuver Chart* in Section S 16.1 is used to resolve these maneuvers.

Culture (SM, Em): Governs attempts to operate within upper-level society situations. Useful for dealing with the "mover and shakers" of the world: politicians, aristocrats, corporate bigwigs, movie stars, etc.

Bonus applies to transactions involving a subtilely bargained exchange of "consideration" on a sophisticated level (i.e., "cultured" trading). The higher the net roll is, the better the bargain.

Streetwise (SM, Em): Governs attempts to locate illicit/unadvertised persons, drugs, services, technology, or rumors. Useful for locating "black market" sources and catching up on the latest buzz around town.

Bonus applies to one-on-one transactions involving a bargained exchange of money or goods (i.e., trading). The higher the net roll is, the better the bargain.

Administration (SM, Pr): Applies to functioning successfully in any environment where record keeping, personnel interaction, and bureaucracy are pertinent considerations (such as governmental agencies or corporate offices).

Bonus applies to transactions involving a bargained exchange of money or goods on a corporate or normal business level. The higher the net roll is, the better the bargain.

Exploit (SM, Pr): Applies to attempts to manipulate individuals and to take advantage of "social" situations. It covers several subclasses of manipulation such as:

Acting: Bonus applied to all manner of acting attempts, including impersonating others, devising false identities, playing for sympathy, etc.

Conning: The use of the Exploit skill to create a false impression of a situation or attitude in the mind of a target individual.

Interrogation: The use of the Exploit skill to extract information from others. If the target is discomforted (physically or emotionally), a +25 maneuver modification is applied. However, if this is done, and the net Interrogation roll is negative, the target has suffered a major mental or physical injury, or death.

Seduction: The use of the Exploit skill to manipulate someone emotionally, sensually, or sexually.

8.6 CYBERSPACE SKILLS

These skills determine a character's ability to interact with *Cyberspace.*

CyberDeck Operation (SM, SD): Affects the use of a CyberDeck when attempting to enter and "travel" through the Global Telecommunications Network, into distant databanks or other reaches of The Matrix (See the *Cyberspace* Section for further details).

One member of a group operating in Cyberspace must be operating a CyberDeck (i.e., the "CyberDeck Operator", CDO); the other members of a group are assumed to be "plugged into" his CyberDeck. The CDO receives a -10 combat modification for every group member other than himself. Of course, it is not necessary to operate in a group; each character could have and operate his own CyberDeck and no one would receive a negative combat modification.

Long-distance travel and surveillance can be handled as Research projects (see the *Construction/Research Chartm* Section S 16.5, p. 47), while other specific activities are handled as a Static Maneuver (Section S 16.1). For more details on *Cyberspace* travel, see Section C 2.0.

Combat (SP, Me): This skill affects a character's combat programs' skill ranks while operating in Cyberspace. The skill rank of each *Cyberspace* combat program that a character has operating is increased by his skill rank with this skill.

Intrusion (SP, In): This skill affects a character's intrusion programs' skill ranks while operating in Cyberspace. The skill rank of each *Cyberspace* intrusion program that a character has operating is increased by his skill rank with this skill.

Utility (SP, Re): This skill affects a character's utility programs' skill ranks while operating in Cyberspace. The skill rank of each *Cyberspace* utility program that a character has operating is increased by his skill rank with this skill.

8.7 TECHNICAL SKILLS

These skills are used for the application of technical skill and knowledge to real world situations. The appropriate skill can affect repairs, construction, and modification of material and equipment. Normally, the bonuses are applied to a roll on the *Construction/Research Chart or* the *Malfunction/Repair Chart* (Sections S 16.5 & S 16.6, pages 47 & 48).

These skills may also be used to research specific answers to questions, or for designing systems to perform a specific task. When using these skills for such purposes, the Skill Bonus should be applied to a roll on the *Construction/ Research Chart.*

One of these skills may also be used to modify a Static Maneuver roll (Section S 16.1) in order to gain technical information from the appropriate area of knowledge: e.g., an answer a related question, a theory to explain a phenomenon, etc.

Note: *Normally, Equipment skill is used when operating most equipment. However, for equipment related to one of the technical skills, the appropriate Technical skill may be used instead of Equipment skill.*

Biological Technics (SP, Em): Covers research, design, construction, repair, and modification of "biological" systems and entities. This skill may also be used with medical equipment, for relatively minor operations, for genetics alteration, for cloning attempts, etc.

Mechanical Technics (SP, Me): Covers research, design, construction, repair, and modification of mechanical devices and systems (e.g., mechanical weaponry, engines, power systems, etc.).

Electronics Technics(SP, Re): Covers research, design, construction, repair, and modification of electronic devices and systems (e.g., computers, "crime tech" devices, radios, etc.).

Software Technics (SP, Re): Covers research, design, construction, repair, and modification of computer programs. Each skill rank allows the character to "learn" one Programming Language. Alternately, the character may wait until two skill ranks have been learned in order to master one Machine Language (for a list of Programming and Machine Languages, see Section T 2.5).

Cybernetics Technics (SP, Re): Governs design, construction, implantation, and repairs of Cyber Systems within a living "wearer". Bonus is applicable to the *Construction/Research Chart or* the *Malfunction/Repair Chart* (Sections S 16.5 & S 16.6, pages 47 & 48).

8.8 SPECIAL SKILLS

The following skills are listed in this section because they function in ways which are unlike the other categories.

Body Development (SP, Co): This skill represents a character's ability to withstand pain, shock and bleeding. Every character starts the game with a special bonus for this skill of 10 (already included on the *Character Record Sheet*). *for* each rank in Body Development skill, roll 1D10. The sum of these rolls is the Body Development skill rank bonus. The total skill bonus is determined as per Section S 7.6.

The total skill bonus for this skill is called the *"character's hit total"*: the number of concussion hits that the character can absorb (due to damage he takes from attacks and other occurrences) without becoming unconscious. If the character takes more concussion hits than the sum of his hit total and his constitution stat, he dies due to massive shock and internal bleeding.

Perception (SM, In): This skill determines the character's ability to gain information and clues through observation. It may be used to spot traps, to observe stalking or hiding characters, to notice a concealed microphone or electronic eye, etc.

If the Player states that the character is watching or examining a specific area or place, the GM should make a Static Maneuver roll modified by the character's Perception skill bonus to determine it the character notices anything. The GM may wish to keep this roll secret, revealing only what the character has observed.

When used to spot an opponent who is stalking or hiding, the Perception skill bonus is subtracted from the opponent's Stalk or Hide roll.

Cyber Attunement (SM, SD): Allows a character to consciously control an implanted Cyber System. In order to cause the system to perform as desired, a Static Maneuver roll must be made (see Section S 16.1).

Not all Cyber Systems require Cyber Attunement rolls. Examples of Systems **not** requiring such rolls would be:

- Systems which operate constantly
- Systems which grant the wearer a straight bonus (such as an Adrenal Booster, etc.)

Linguistics (SP, none): Each skill rank in Linguistics allows the character to increase his degree of understanding of one language. There is a separate section on the *Character Record Sheet* to keep track of the languages learned and the degree to which they are known.

The degree to which a language is known determines how well the character speaks and reads that language; see the *Language Chart.*

LANGUAGE CHART

Degree 1	Allows basic verbal communication through simple phrases (e.g., "Danger ahead?"; "How much?"; "Where's the bathroom?"). No reading or writing.
Degree 2	Allows speech on very simple subjects through brief sentences if both parties speak slowly, with great care. Allows reading of simple sentences for a basic overview, but no writing.
Degree 3	Allows speech with a fluency equivalent to that of an average native speaker, but without the tonal qualities (i.e., the character has an accent). Allows reading and writing of simple passages but character has difficulty with subtle concepts -- about 5th grade level.
Degree 4	Allows speech as Degree 3, and the ability to read and write as an average literate person (e:g., about 9th grade level).
Degree 5	Allows absolute fluency with no accent and total literacy.

8.9 SECONDARY SKILLS

Secondary skills are not used as often as the other skills during play. They are often tied to, or indicative of, a character's background or trade.

GMs and players should feel free to make up skills they feel are necessary to flesh out special characters (e.g., a player may want to play a dancer and thus will want to develop a special "dance" skill).

Note: *Certain Secondary skills are "Pure Sciences"; a GM may use these skills for pure research and design purposes (i.e., new research that "pushes the envelop" of academic knowledge). These skills may also be used for specific "pure science" knowledge Static Maneuver rolls. The corresponding Technical skill bonus should be halved if used for such attempts.*

Acrobatics (MM, Ag): This bonus is used for in-air maneuvers or swinging from objects. Helps reduce the effects of falls.

Advanced Math (SP, Re): A pure science that covers knowledge of geometry, trigonometry, calculus, differential equations, basic relativity, etc. All characters are assumed to understand basic math; addition, subtraction, multiplication, division, fractions, etc.

Appraisal **(SM, Re):** This bonus is used for determining or estimating the value of goods: e.g., gems, jewelry, electronics, programs, etc.

Astrogation (SM, Me): This bonus is used to ascertain correct course for all interplanetary journeys.

Astronomy (SP, Re): A pure science that covers stellar and planetary composition, orbit theory, cosmology and all related "space sciences".

Biology (SP, Re): A pure science that covers biology, botany, zoology, etc.

Chemistry (SP, Re): A pure science that covers elemental particles, molecular structure, compounds and reactions, both organic and inorganic. It can also cover metallurgy, biochemistry, etc.

Contortions (SM, SD): This bonus is used for manipulating one's body through small openings or absorbing sudden crushing impacts (other than falls). Helps escapes from bonds, etc.

Cybernetics (SP, Re): A pure science that covers cybernetics.

Drug Tolerance (SM, Co): This bonus is used for resisting the effects of intoxicants, poisons, or other chemical substances. Bonus is applied directly to the character's Resistance Roll (See Sections S 7.8 and S 20.0).

Falsification (SM, Re): This bonus is used for creating false but believable manual writings or illustrations (e.g., forgery, counterfeiting, etc.).

Foraging, Rural (SM, In): This bonus is used for finding any local source of edible food and/or drinkable water in a rural environment; e.g., fishing, gathering nuts, etc.

Foraging, Urban (SM, In): This bonus is used for finding any local source of edible food and/or drinkable water in an urban environment; e.g., finding edible food in garbage cans, restaurant waste, and water pipes, etc.

Frenzy (SP, SD): This bonus is used for entering into a state of single-minded, unpredictable rage. This results in +30 to melee OBs, the ability to take twice the normal amount of Concussion Hits before passing out, and the ability to deliver twice normal concussion hit damage when using a melee weapon or bare hand attacks. When in a Frenzy state, the character has no DB, cannot parry, and must engage any foes he is aware of. Entering a Frenzy state requires one round's action and a successful Static Maneuver roll (Section 16.1). To leave a Frenzy state the character must make a successful Static Maneuver modified by his Frenzy skill bonus; he may attempt this once per round.

Gambling (SM, In): This bonus is used for playing any game which involves a significant amount of luck and/or bluffing.

History (SP, Me): A pure science that covers the knowledge of history, races, religions, governments, etc.

Media (SM, Re): This bonus is used for use of large-scale media resources, techniques and equipment; e.g., radio, television, cable television, newspaper, FAXpaper, computer networks, etc.

Medical Practice (SM, Em): This skill covers surgical procedures, medical diagnostics, and the use of any operating room equipment. This skill also covers research of genetic strains and recombinant DNA experimentation. A skill bonus of +30 is required for over-the-counter purchase of medical field equipment and healing drugs. A skill bonus of +50 or higher is required for certification in surgery and access to the more powerful drugs on the market.

Music (SM, Em): This bonus is used for music appreciation, theory, and performance.

Physics (SP, Re): A pure science that covers force, energy, atomic structure, etc.

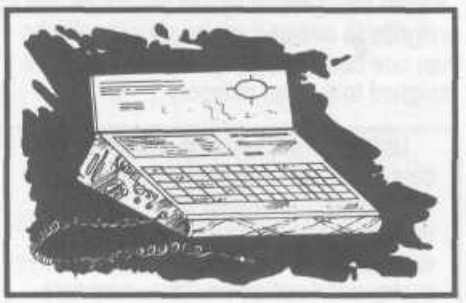
Planetology (SP, Re): A pure science that covers geology, meteorology, geography, etc.

Quick-Draw (SM, Qu): This bonus is used for drawing or changing weapons. If the Quick-Draw Static Maneuver is successful, the character may use the newly drawn weapon in the same round at no penalty.

Sport (MM, Ag): This bonus is used for playing games primarily involving agility, coordination and motor skills.

Subduing (SP, Qu): Bonus for immobilizing a foe by delivering a sharp blow to a precise point on the victim's upper body. A modified roll of 101+ indicates a successful attack, although the victim still receives a Resistance Roll vs an attack level equal to the Subduing skill rank used. In order to use this skill, the character must be able to approach the victim undetected and be able to strike before the foe can react. Subduing attacks can only be made against characters in No Armor or Light Body Armor.

Trickery (SM, Qu): Bonus for any maneuver involving sleight of hand; picking pockets, confusing sight tricks, and other prestidigitations.



9.0 CHARACTER BACKGROUND (Optional)

Generating a character's background is an optional part of the character generation process. We suggest that novice role players skip this step the first time they generate characters. If a GM decides to use this material, the character's background should be generated between steps 3 and 4 of the normal character generation procedure (which begins with Section S 1.0).

This Section provides a means of varying and individualizing characters with an eye toward playability and immersion in the *Cyberspace genre.* PCs and NPCs alike can benefit from the use of these suggestions, choices and guidelines. The end result will be a character you truly "know", right down to details of his developmental years and group affiliations. Some of the charts in this section are totally optional, and some require a bit of decision-making on the part of the player or GM. In any case, both GM and players are advised to look through this sections carefully before creating a new character.

9.1 BACKGROUND OPTIONS

Background options provide a means of individualizing characters; supplying basic resources, skills, and abilities without placing too great a burden on the GM and the players involved.

First the GM must decide whether or not background options will be used in his game. If they are to be used, follow the procedure outlined in this section.

The number of background options available to a character is based upon the character's social class (Section S 3.0). The *Background Option Chart* shows how many background options a character receives.

The background option categories available are:

Special Skills
Special Equipment
Special Status
Special Wealth
Special Connections
Hobbies

Each background option should be assigned to one of the categories; more than one background option may be assigned to a given category.

Using the *Background Option Chart,* determine how many background options your character gets. Assign each of your background options to a category. Roll for each non-hobby background option on the appropriate *Category Chart.* Record this information on your *Character Record Sheet.*

BACKGROUND OPTION CHART

Social Class	Background Options
Corporate Upper Class (UCorp)	5 *
Corporate Middle Class (MCorp)	4
Corporate Lower Class (LCorp)	3
Sprawl Upper Class (USprl)	5 †
Sprawl Lower Class (LSprl)	4 †
Res. & Ref. Zones Worker (RRWrk)	3
Arcology (Arcol)	4
Wilderness or Wastelands (Wilds)	3
Urban Homeless (UHmls)	4 †
Nomadic Homeless (Gypsy)	4 †
Space Colony (SCIny)	5

* = At least 1 pick must be "Status", and another pick must be "Wealth".
t = At least 1 pick must be "Connections".

SPECIAL SKILLS CATEGORY CHART

Roll	Result
01-50	Receive a +15 modifier to one Secondary skill.
51-65	Gain 2 skill ranks in any skill (this is a "Hobby").
66-75	Select two additional languages at Rank 5 (may be a programming language).
76-85	Gain 5 skill ranks in a Secondary skill (should be appropriate for character's background).
86-95	Receive a +10 modifier to one skill.
96-00	Increase one stat by 2 or each of three stats by 1 (maximum is 101).

SPECIAL EQUIPMENT CATEGORY CHART

Roll	Result
01-05	Wheeled vehicle.
06-09	GEM car.
10-12	All-Terrain Vehicle.
13-14	Recreational Speedboat.
15	Hydrofoil.
16	Helicopter.
17-20	Personal jet-pack.
21-22	Small airplane/turbofan prop vehicle.
23-24	Free access to Orbital Transfer Vehicle.
25-28	Real Estate: Undeveloped land.
29-31	Real Estate: Modest Dwelling.
32-34	Real Estate: Moderate Dwelling.
35	Real Estate: Extravagant Dwelling.
36-40	Personal Body Armor.
41-45	A trap device encoded against activation by anyone other than the character. It can be attached to almost anything and delivers up to 5 'A' Electricity Criticals (or 1 'C' and 2 'A's or any such combination) before power depletion. It is activated by manual contact.
46-55	A +5 quality piece of equipment (or weapon) of the player's choice.
56-63	A +10 quality piece of equipment (or weapon) of the player's choice.
64-68	A +15 quality piece of equipment (or weapon) of the player's choice.
69-71	A +20 quality piece of equipment (or weapon) of the player's choice.
72-74	(1D10 x 100) Credits-worth of Implanted Cyber Systems.
75-79	1D10 doses of any drug from Section T 4.2 of this text.
80-83	Loyal domesticated animal which starts at PC's level.
84-86	A Companion model Robot with a Mk 5 LP Brain.
87-88	An unusual (and loyal) Recombinant DNA "Pet".
89-93	A Mk 10 Computer.
94-96	A Mk 10 CyberDeck.
97-00	(1D10 x 100) Credits-worth of computer programs.

SPECIAL STATUS CATEGORY CHART

Roll	Result
01-05	Low empathy toward animal life; you may never befriend an animal.
06-08	You cannot refuse a plea for help from an innocent or an underdog — even if it means endangering your own life or intervening against an ally — but you have a +20 bonus to all actions taken during such an endeavor.

09-13 — You cannot resist a personal, one-on-one challenge, but you have a +15 bonus to all actions taken during such an endeavor.

14-15 — You cannot accept a loan without paying it back threefold.

16-20 — Exceptionally impoverished family: you have acquired whatever money you have through questionable practices.

21-35 — Criminal background: you/your family is connected with an organized crime network. You carry a recognition device associated with the group.

36-50 — Guild/union background: you/your family are connected with an association of merchants, specialists, or high-tech personnel. You carry the device or phrase of recognition used by the group.

51-60 — Multi-cultural background: you are fluent (degree 5) in 2-6 additional languages of your choice and have an understanding of the associated cultures.

61-70 — NPC Mentor/Teacher (Level = your level + 1D10).

71-80 — Corp-friend: you have a connection in a specific MegaCorp. You possess an intimate understanding of their business strategies, ways of thinking and covert activities.

81-87 — Conspiratorial background: you (or your family) are connected with an association of powerful individuals intent upon rebelling against regional officials. They control assassins, crackers, and other subversives, as well as legitimate political and mercantile organs. You carry the recognition device of the group.

88-97 — Your family is well-off: make a free Special Wealth Category background option roll and add 25 (treat results over 100 as 100).

98-00 — You are charmed: events tied to sheer luck or happenstance (i.e., involving no skill or concerted thought) are skewed in your favor by 20%.

SPECIAL WEALTH CATEGORY CHART

Roll	Dollars in Hand / Investment Income / Notes
01-05	100 / None / –
06-10	300 / None / –
11-15	500 / None / –
16-23	1000 / None / –
24-28	1250 / None / –
29-33	1500 / None / –
34-38	2000 / None / –
39-43	500 / 100 per Month / –
44-51	1000 / 150 per Month / -
52-59	1500 / 200 per Month / –
60-64	2000 / 200 per Month / -
65-69	5000 / 250 per Month / -
70-75	2000 / 500 per Month / -
76-80	3000 / 500 per Month / -
81-85	3500 / 600 per Month / -
86-90	5000 / 500 per Month / -
91-98	5000 / 400 per Month / Also possesses valuable jewelry (or artwork) worth (2D10 x 100) Credits.
99-00	10,000 / 450 per Month / Also possesses a "black market account" under a false name. Funds placed in that account cannot be taxed — it is illegal.

SPECIAL CONNECTIONS CATEGORY CHART

Roll	Result
01-04	Well-known Sprawl Gang
05-07	Gypsy Clan (1D10: 1-5=Violent, 6-9=Civil, 10=Entertainers)
08-12	Drug Dealer (Sneak) (30% chance drug designer) t
13-16	"Hotbroker"; Fence for stolen goods (Sneak) t
17-19	Smuggler (Sneak) t
20-22	Master Scientist (Tech Rat) in exile †
23-24	Cult (Leader is Sleaze) t
25-26	Assassin (Killer) t
27-36	Software/NeuroSoft Dealer (Sneak) t
37-43	Tech Rat * †
44-52	Medic (Jockey — 25% designs own Cyber Systems) * †
53-54	Governmental Military (Sleaze or Killer) t
55-59	Cop (Killer) * †
60-62	Media Personnel (Sleaze) (35% "Pirate") t
63-67	Scientist/Physician (Tech Rat)* t
68-72	Killer/Mercenary * t
73-75	Scientist/Engineer (Tech Rat)* t
76-79	Programmer (Net Junkie)* t
80-82	Icebreaker (Net Junkie)* t
83-85	Scientist/Researcher (Tech Rat)* t
86-90	Pilot (Jockey — 15% Astronaut) * t
91-94	Mid-Level Corp Administrator (Sleaze)
95-97	Upper-Level Corp Administrator (Sleaze)
98-99	Rich Entrepreneur (Sleaze)
00	AI; super-intelligent (illegal) variety

t — Roll for contact's social class on the Social Class Chart in Section S 3.0.

* — Roll again: 01-70 Corporate employee; 71-100 Free-Agent.

HOBBIES CATEGORY

For every background option expended in the Hobbies category, the skill rank of one Secondary Skill may be increased by 5 or the skill rank of any one non-secondary skill may be increased by 2.

9.2 IDIOSYNCRASIES

One more means of individualizing a character is provided by the *Idiosyncrasies Charts*, which detail a character's unique habits, quirks, etc. Use of these tables is not required. Rather, it is up to each player as to whether or not he wishes to roll on these tables, taking a chance on the outcome. If the GM feels very lenient he may allow players to refuse certain idiosyncrasies, but this would remove the entertaining element of risk that the charts offer.

REVERSIBLE IDIOSYNCRASIES

Some of the results given below are "Reversible" (§); this indicates that the idiosyncrasy is comprised of two traits (usually one positive and one negative) — the modifiers on these traits may be reversed if the player prefers them that way.

THE SUPPORT CHARTS

Several of the traits refer the GM/player to the *Support Charts* (t) — these charts (which follow the *Idiosyncrasy Charts)* provide more detail about the trait itself, specifying and identifying these rather general traits into coherent, dramatic ones.

USING THE IDIOSYNCRASY CHARTS

There are three steps involved in using the *Idiosyncrasy Charts:*

1) Roll 1-100 to determine the number of traits possessed:

01 - 60 One idiosyncratic trait.
61 - 90 Two idiosyncratic traits.
91 - 00 Three idiosyncratic traits.

2) For each Trait, roll 1-100 to determine which specific chart to roll on:

01 - 75 Common Idiosyncrasies Chart
76-95 Uncommon Idiosyncrasies Chart
96 - 00 Rare Idiosyncrasies Chart

3) Roll 1D100 on the indicated chart. Make additional rolls on the Support Charts if so directed.

COMMON IDIOSYNCRASIES CHART

Roll	Result
01-03	Cultural Purist: The PC is a fanatic about preserving all elements of his own or some other chosen culture. he will act to defend or preserve the culture's traits, artifacts, and integrity. Cultural slurs and derogatory slang aimed at the culture will offend the PC easily.

04-06 — PC owns a small personal item which he regards as a "luck charm", and will be enraged if the item is lost or stolen.

07-09 — PC has a fierce rivalry with another PC or **NPC. t**

10-11 — PC has a severe allergy to a given substance. Exposure causes disorientation, sneezing, rashes, or fainting.

12-14 — PC is homosexual/bisexual.

15-16 — PC gains **+10** to all interaction and influence type maneuvers, but suffers a **-10 to SD stat bonus** §

17-21 — PC has a +30 Drug Tolerance (this is added to RRs), but is addicted to a specific drug.

22-23 — Spatial awareness: +30 to determine position/direction/etc.

24-26 — +20 OB with one weapon of choice **but -10 OB with all** others.

27-29 — PC has a peculiar and possibly illegal sexual preference or fetish. This may be a sign of a past traumatic experience or a repressed neurosis.

30-34 — PC has a small emotional or pathological problem. Could range from obsessive neatness or an eating disorder to kleptomania or habitual lying.

35-37 — PC has difficulty learning languages; development point cost is doubled.

38-39 — PC is good at languages; receives 2 skill ranks for each one developed.

40-41 — PC is sterile.

42-43 — PC is a bad liar; -30 to lying attempts.

44-46 — PC gains a +20 bonus when dealing with members of a specific **ethnic/** special interest group.

47-49 — PC suffers a -20 when dealing with members of a specific ethnic/special interest group.

50-51 — +20 to all Mech. Bypass attempts.

52-54 — PC learns fast; at each "half-level", PC may expend 5 development points (these are taken from the total for the next level, they are simply gained early).

55-56 — +30 to all General skills.

57-58 — +20 to all Maneuvering skills.

59-61 — +20 to all Melee attacks but **-10** to all Fire attacks.

62-64 — +20 to Environs skill.

65-69 — Orphan.

70-74 — **Outcast/Exiled.**

75-76 — **Mutant.** t

77-78 — +20 to maneuvers while stunned.

79-81 — +20 to Social skills while trading.

82-85 — +30 to Exploit skill when used for seduction.

86-88 — +25 to all Research projects.

89-93 — **+10** to all Driving/Piloting maneuvers.

94-95 — Local champion of some **game/** sport, +30.

96-98 — -20 to all Driving/Piloting maneuvers.

99-00 — Roll two other "Common Idiosyncrasies" (ignore this result on those two rolls).

§ = *Reversible;* two modifiers may be **reversed.**

† — Roll **1-100** on the appropriate *Support Chart.*

UNCOMMON IDIOSYNCRASIES CHART

Roll **Result**

01-03 — Poor immune system: PC suffers a -25 to RRs vs disease.

04-06 — "Lucky item"; loss would lower PC's In stat bonus by 5.

07-09 — "Lucky item"; adds +5 to "luck" rolls (determined by GM).

10-14 — "Lucky item"; as *both* 04-06 and 07-09 above.

15-16 — "Lucky item"; adds **+10** to "luck" rolls (determined by GM).

17-21 — Good with children: Most children will immediately trust the PC, who will have an easy time getting information from them. +30 on all **influence/** interaction rolls involving children (+80 if well known).

22-25 — Religious Advocate: PC must abide by a strict code of ethics which may encompass such things as celibacy, hours of meditation, or aggressive actions against opposed cults. PC will display the device of his "church".

26-28 — Phobia: PC has a great fear of something. Roll **(2D10** x 5) to determine the phobia's strength. Whenever the feared item/situation is encountered, the PC must make a RR with his level as the Target Level and the phobia's strength as the Attack Level or panic (use the *Resistance Roll Table* in Section S 20.0). GM takes PC over until the situation is under control.

29-31 — PC is an avid collector of some sort of item. The collection is worth an amount of money equal to one free Special Wealth background option roll.

32-33 — PC is an albino; eyes are extremely sensitive to bright light, and skin burns easily when exposed to sunlight.

34-35 — PC has enemy/rival who destroyed/killed PC's **family. †**

36-37 — PC is extremely **transplant/implant** resistant, and has a 75% chance of suffering rejection (this can be solved with advanced immunosuppressives, but is extremely **costly).**

38-42 — PC has a dependent NPC who he **must** look **after. †**

43-46 — Holographic memory: PC gains a +50 on all attempts to recall something he has witnessed before.

47-51 — Legacy: The PC's parent(s) or mentor are/were extremely well known for something they did, and the PC tends to follow in their **footsteps.** t

52-54 — Absent minded professor: PC gains +20 on all Research projects and +30 in one specialty pure science (Secondary) skill, but is at -20 when trying to recall non-scientific facts.

55-57 — PC resists all drugs (medicinal or recreational) at +30.

58-60 — PC resists all drugs (medicinal or recreational) at -30.

61-63 — +20 to visual Perception but -20 to auditory. §

64-66 — +20 to all General skills but -20 to all Technical skills. §

67-71 — Low open-ended chance is **01-01** with one skill but **01-10** with another.

72-76 — High open-ended chance is 00-00 with one skill but **91-00** with another.

77-81 — Functional illiterate: PC never learned to read or write. All attempts to learn to do so cost 3x the normal amount.

82-83 — All looks and no brain: Appearance (Ap can be replaced with 91 + 1D10) lends +30 to all Acting, Seduction and Trading attempts, and a +20 to all other rolls affected by the Pr Stat bonus. However, Me and Re were sacrificed: **-10** to those stat bonuses.

84-85 — Superior responses allow for blinding reaction time: +20 to OBs and DBs (in addition to normal stat bonuses). You will always strike first unless surprised. However, you must sleep **12** hours each night; if rest is not available, the "speed" abilities cannot be used the next day.

86-87 — Unusual joints: +20 to all thrown weapon attacks and static maneuvers involving hands (locks, repairs, etc) and feet (balance, etc), as well as +30 to Contortions attempts. However, whenever you land after a fail, or strike something with your hand, you must roll a RR for the ankle/wrist joint. On a roll of **01-05** the limb is sprained, you are stunned 1-10 rds, and at -75 until the sprain is healed.

88-89 — Unusually strong: +20 to St stat bonus (in addition to normal stat bonus). However, whenever strength is used in a delicate situation (picking up a glass, shaking hands, etc.), a roll of **01-05** indicates that you overestimated and broke whatever you are holding.

90-94 — PC has a loyal pet which is totally tame (at least in regards to the PC), and has a deep affinity **for** the PC. Depending on the animal, it may actually fight for the PC.

95-96 — Stunning appearance: PC **is** a vision of perfection (Ap: 100), and is approached/propositioned extremely often.

97-98 — Shocking appearance: PC is a vision of ugliness (Ap 01), and is shunned and mocked constantly.

99 — Roll two other "Common Idiosyncrasies" (ignore this result on those two rolls).

00 — Roll two other "Uncommon Idiosyncrasies" (ignore this result on those two rolls).

§ = *Reversible,* two modifiers may be reversed.

t — Roll 1-100 on the appropriate *Support Chart.*

RARE IDIOSYNCRASIES CHART

Roll Result

01-10 — PC resists pain (e.g., suffers no penalties due to shock or pain), but is hemophiliac: all "bleeding" results are at +1 hits per round. §

11-15 — Sixth Sense: PC can sense imminent danger (but not the source) by succeeding in a static maneuver modified by his Intuition stat bonus and any skill bonus developed as a Secondary skill (***SM***: 1/3 DP cost). The Difficulty Level of the maneuver increases by one category each time it is used within a 24 hour period of last usage.

16-25 — Child Prodigy: PC begins play with all normal generative processes completed, but is only 8-10 years old.

26-30 — Six-digited hands and feet add +10 to all Balance and manipulative rolls (Mechanical Bypass, delicate repairs, etc).

31-40 — PC has gift for rallying an audience; +30 to do so. Unfortunately, PC also has a lowered SD stat bonus (-10).

41-43 — Acute sense of smell: distinguish odors at +50, 30m upwind and 500m downwind; 60m in still air. Stalking at +25. Skill in Recognition may be developed as a Secondary skill modified by Me stat bonus (***SM:*** 1/3 DP cost, In/Me stats apply). However, PC is susceptible to nosebleeds and operates at an overall -5 modification for every 300 meters above sea level (-50 in severe low pressure environments).

44-53 — Slight mental instability causes CIRS stat to be doubled (Section T 1.0).

54-63 — Mental resilience allows intro-neural implants without doubling CIRS stat for those systems (Section T 1.0).

64-66 — Unusual voice ability allows a +20 to Exploit skill bonus. However, vocal cords and tonsils are vulnerable to infection: PC must make a monthly RR vs strep throat (Attack Level 3 with a -30 modification); he is totally mute while ill.

67-74 — Famous celebrity look-alike: PC bears an uncanny resemblance to some well known entertainer, diplomat, corporate chair-person, etc.

75-89 — Due to unique cortical structure, PC gets a +20 when operating any DNI (Direct Neural Interface) System (incl machines, vehicles, CyberDecks, and implanted Computers).

90-94 — Infamous celebrity look-alike: PC bears an uncanny resemblance to a wanted criminal or controversial/despised public figure (this could be real bad...)

95-97 — Roll two other "Common Idiosyncrasies" (ignore this result on those two rolls).

98-99 — Roll two other "Uncommon Idiosyncrasies" (ignore this result on those two rolls).

00 — Roll two other "Rare Idiosyncrasies" (ignore this result on those two rolls).

§ = *Reversible;* two modifiers may be reversed.

t — Roll 1-100 on the appropriate *Support Chart.*

RIVAL/ENEMY SUPPORT CHART

Roll Source of Rivalry/Enmity

01-10 — Childhood rivalry / bully
11-25 — Sibling / Relative rivalry
26-50 — Professional / Promotional rivalry
51-65 — Underworld / Extortion rival / enemy
66-70 — Displeased Employer / Superior / Patron (or Ex-employer)
71-75 — Ex-lover
76-80 — Refused affair
81-85 — Chauvinistic disagreement (racial / political / religious/etc.)
86-90 — Love triangle
91-95 — Rival/Enemy has inferiority or power complex
96-00 — Random / Unknown / Stranger / Psychotic

DEPENDANT NPC SUPPORT CHART

Roll Relation to dependant person

01-25 — Lover / Spouse
26-40 — Child (or like a son / daughter to you) ‡
41-55 — Sibling (or like one to you) ‡
56-65 — Roommate (share rent, expenses)
66-75 — Unemployed friend / Family member
76-85 — Parent(s) / Grandparent(s) / Other Relative(s)
86-90 — Foreigner
91-95 — Ill/wounded person; Roll again (ignore this result)
96-00 — Retarded/insane person; Roll again (ignore this result)

‡ — 50% chance of another (keep rolling until 51+ is rolled).

LEGACY SUPPORT CHART

Roll Result (Nature of the legacy)

01-45 — Strives to follow parent / sibling / mentor's example.
46-70 — Attempts to complete parent / sibling / mentor's work / quest
71-75 — Prophesied as hero / saviour / innovator / ruler
76-85 — Bodily mark has superstitious significance (good or bad)
86-90 — Acquired mentor / trainer's secret notes / diaries / journals
91-00 — Predecessor vanished mysteriously; roll again (ignore this result)

MUTANT NPC SUPPORT CHART

Roll Result (Mutation)

01-10 — Skin discoloration / patches
11-15 — Skin discoloration / abnormal color
16-20 — Shock-resistant skeleton; fractures only 50% if indicated
21-22 — Semiflexible bones; +30 to Contortions & Acrobatics *(SM.* also Tumbling)
23-24 — Brittle bones; Impact Crits increased 1 level of severity
25-29 — No body hair
30-34 — Unnaturally hirsute
35-39 — All hair is white
40-44 — Irises of different colors
45-47 — Facial disfigurement ‡
48 — Missing / deformed limb ‡
49-53 — Webbed phalanges; +30 to Swimming
54 — Extra limb; 10% functional
55-64 — Double jointed; +10 to all maneuvers involving fine manipulation
65 — Vestigial tail
66-70 — Giant ‡
71-75 — Dwarf / Midget ‡
76-78 — Rapid metabolism; heals at 2x normal rate, duration of drug effects is halved, needs 2x normal food.
79-80 — Hard skin; treat as Light Body Armor (***SM:*** AT 4)
81-83 — Immune deficiency; -50 vs poison and disease
84-85 — Immune proficiency; +50 vs poison and disease
86 — No tactile nerve endings; no "pain" penalties
87-91 — Epileptic ‡
92-94 — Unusual leg structure increases normal movement rate by 50%
95-97 — +2 to each roll for Body Development (i.e., hits)
98-00 — -1 from each roll for Body Development roll (minimum result for each roll is 1)

9.3

INJURIES & HANDICAPS

In the course of the character's life leading up to the beginning of a *Cyberspace* game, there is always a chance that some grievous injury has been suffered. Even barring this situation, many characters might suffer the effects of congenital handicaps.

In a campaign such as *Cyberspace,* these difficulties can almost always be overcome by medical and cybernetic developments. Such situations are often desirable because they can give a character some impetus to seek technological deliverance from his ailment (and spend his hard earned Credits at the Cyber-Medic's). It is recommended that each new PC undergo the process outlined below.

Every PC has a base 10% chance of having suffered some grievous injury or of bearing some physical handicap. This base chance is adjusted by the modifiers from the *Injury& Handicaps Modifiers Chart.*

USING THE INJURY AND HANDICAP CHARTS

There are three steps involved in using the *Injury and Handicap Charts*:

1) Roll 1-100 (not open-ended).

2) If the result is 90-00, the character has a handicap; roll again on the *Handicap Chart.*

3) If the result is not 90-00, add 10 plus all applicable modifiers from the *Injury & Handicaps Modifiers Chart.* If this result is greater than 80, the character has an injury; roll again on the *Injury Chart.*

INJURY/HANDICAPS MODIFIERS

Factor	Modifier
Killer/Sneak/Military	+10
Tech Rat	+2
Medic	+3
Sleaze	-3
Corporate Upper/Middle/Lower Class	-5
Sprawl Upper/Lower Class	+3
Resource/Refining Zone Worker	+2
Arcology dweller	-3
Wilderness/Wasteland dweller	+2
Urban Homeless	+7
Outcast/Exile/Gypsy	+5
Space Colonist	+3
Per weapon skill	+1
If lived in active war zone	+5

HANDICAP CHART

Roll Result (Handicap)

01-02 — Harelip *
03-05 — Asthma † ‡
06-08 — Allergy † ‡
09-14 — Bad Hearing † ‡ *
15-20 — Bad Vision † ‡ *
21-30 — Stutter † ‡
31-45 — Anemia ‡
46-65 — Disease prone; -50 vs disease RRs; roll twice as often ‡
66-75 — Hemophilia; bleeds at +2 per round ‡
76-85 — Crippled / Arthritic / Hunchbacked t ‡ *
86-89 — Hyperactive; -20 to SD Mod ‡
90-93 — Deaf
94-96 — Blind
97-98 — Mute
99-00 — Roll two other "Handicap" (ignore this result on those two rolls).

t — For any attempt/maneuver which may be hindered by the handicap, roll 1D20 to determine the modification: 1-8 = +0, 9-12 = -10, 13-15 = -20, 16-17 = -30, 18-19 = -50, 20 = -70.

‡ — Handicap may be treated to lessen/arrest its effects.

* — Handicap may be curable/removable (although this would be expensive).

INJURY CHART

Roll Result (Injury)

01-10 — Light burn; 1-20 sq" on random body location *
11-20 — Light weapon scar; 1-10 sq" on random body location *
21-30 — Medium burn; 1-4 adjacent body locations *
31-40 — Medium weapon scar; 1-3 adjacent body locations *
41-55 — Poorly healed fracture t *
56-65 — Ulcers † ‡
66-75 — Pocked skin; 1-4 body locations *
76-79 — Internal shrapnel/glass/etc
80-84 — Missing 1-6 teeth *
85-89 — Heavy burn; 1-6 adjacent body locations *
90-93 — Missing 1-4 fingers or toes †
94-96 — Heavy weapon scar; 1-6 adjacent body locations *
97 — Missing eye; -30 to maneuvers involving depth perception
98 — Missing ear; Hearing perception at -50
99 — Paralyzed limb/hand/foot
00 — Roll two other "Injuries" (ignore this result on those two rolls).

t — For any attempt/maneuver which may be hindered by the injury, roll 1D20 to determine the modification: 1-8 = +0, 9-12 = -10, 13-15 = -20, 16-17 = -30, 18-19 = -50, 20 = -70.

t — Injury may be treated to lessen/arrest its effects.

* — Injury may be curable/removable (although this would be expensive).

9.4

AMBIDEXTERITY

A non-ambidextrous character using his "off" hand suffers a -20 on all manipulatory maneuvers attempted (this includes OBs as well). The following system is a means of determining a character's degree of ambidexterity.

First, determine which hand is the dominant one.

- Roll 1D100.
- A result of 01 -85 indicates that the right hand is dominant.
- A result of 86-00 indicates that the left hand is dominant.

Next, determine how much control the character has over the off hand.

- Roll 1D100 again.
- Add 5 to this roll if the character's left hand is the dominant one (in our society, left-handed people are forced to learn more right-handed skills than vice-versa).
- Also add the character's Agility stat . bonus.
- The total result is indexed on the following *Ambidexterity Chart* to determine the degree of control/ambidexterity:

AMBIDEXTERITY CHART

Roll Result

01-70 — *Rt/LtHanded:* As normal; off hand is -20 on all maneuvers
71-95 — *Partially Ambidextrous:* Off hand is only -10 on all maneuvers
96+ — *Totally Ambidextrous:* Either hand can be used without penalty

9.5

ADVANCED EXPERIENCE LEVELS OPTION

This section discusses guidelines for starting characters with experience levels above 1st. The following option allows characters to begin at any level the GM chooses to allow.

PRE-GAME HISTORY

When a GM allows a player to use a high-level character in a party of low-level adventurers, he should confer with the player on his character's background. Other players will certainly want to know where this new expert came from, and they may be jealous of his advanced skills and superior equipment. Thus the GM must be willing to explain to the other PCs why the high-level character is necessary for the adventure. Some examples include: 1) a PC mentor who, for personal reasons, will be reluctant to contribute his full resources and/or skills and combat abilities; 2) a PC Physician (Tech Rat) who avoids combat for ethical reasons; 3) a true specialist, who can help the party in one limited area but who displays incompetence (or apathy) in other areas; This last type of PC is unlikely to threaten the low-levels since they can certainly outperform the specialist in some respect. The bottom line is to prevent aggressive high-level characters from having better skill bonuses and OBs than the low-levels in *every category*. If this occurs, the low-levels will feel useless and wonder why the mega-character bothered to ask them along.

At the beginning of a campaign, the GM can prevent jealously and inferiority complexes by evening out party levels. Rather than starting one character at a high level and the rest at low level, the GM could allow all PCs to start at a median level. A creative GM shouldn't have too much trouble briefly outlining what the characters have been doing to gain these levels. One should keep in mind that the PCs needn't be old to start at median or sometimes even high levels. Rigorous training (such as MegaCorp or Military forces' programs) may advance a character's level quickly, though there is usually considerable risk involved. Occasionally, low-level characters could be quite old (at the GM's option), for sadly, the lower classes of Cyberspace often progress slowly or start their progress very late in life — or not at all.

SKILL RANKS

Another problem lies in the PC generation system itself. The process of skill purchasing is, after all, a rather time-consuming task. The answer to this problem kills two birds with one stone, and utilizes the Master *Character Chan* (located in Section A 5.0). The new character will possess all skills which an standard character of his profession would possess at his level — no more, no less. The character's stat bonuses will be applied to the base scores given on the chart. If there is an extra level or two to make up for (e.g., the character is to be 8th level and the chart only gives 7th and 10th), just develop the extra levels normally (see Section S 5.2).

Players may complain about this method, for it prevents the character from concentrating on specific skills. The GM could allow the PC to subtract points from one skill and add them to another; however, this trade may only occur in parcels of 5 points, and the GM must limit this carefully, since buying two skill ranks in one level is more expensive than buying one rank in each of two different levels. Perhaps the GM could have the player sacrifice five points of bonus from each of two skills to add five points of bonus to another.

STARTING MONEY

Since these PCs are supposed to have been working at their profession for a while, it is a good idea to somehow simulate the existence of past income. To do this, multiply the base starting money (Section S 6.1) by the PC's starting level. The player must spend this money before play, on equipment and/or cyberization, and will not retain any of it once play begins.

EXPERIENCE POINTS

PCs who begin play above level one will be started with the minimum Experience Points for their current level (Section S 10.0). When later calculating Experience Point Rewards for these characters, the GM should bear in mind that the PC has been pursuing his professional career for some time now. Therefore he will not reap "First Time" multipliers for any skills which are (by the GM's discretion) intrinsic to the profession (e.g., fighting or killing for Killers, technical repairs for Tech Rats, etc.). In fact, if the PC is level five or higher, many of these skills may be considered "Routine" by now (again, this is according to the GM's discretion).

Example: *Dan wants to create a Killer PC who is 6th level. Consulting the NPC Chart, we see that there is an entry for level 5, so we use that as a basis. The character is written up exactly as a level 5 NPC Killer. "But I wanted him to know more subterfuge skills," says Dan. "No Problem," says the GM, "just drop your bonus in another skill by 10, and you can add 5 to your bonus in a Subterfuge skill." Social Class and background options are determined normally. Once this is done, we develop the character's level 6 skill ranks. The PC has 70,000 Experience Points and a "must spend" sum of six times his normal starting money. Finally, the PC is outfitted and ready for play!*

10.0 EXPERIENCE AND ADVANCING LEVELS

Each character has a "level" which represents how capable he is. Characters advance in level (thereby becoming more powerful and skilled) by gaining Experience Points (EP). EP are awarded by the GM for certain activities and achievements. Normally, a character begins play at first level (with 10,000 EP due to assumed past exploits), and his level increases each time his EP total reaches certain points.

10.1 EXPERIENCE POINTS

Learning how to award EP is one of the most difficult tasks that a GM faces. It is a hard thing to formalize, and relies heavily on subjective judgement and — most importantly — consistency and fairness on the part of the GM. Basically a GM should award EP for actions by the player characters which are clever, intelligent, innovative, dangerous (but not foolhardy), and above all successful.

The Experience Points rules listed in the following section are designed to serve as guidelines. The GM should feel free to modify them whenever common sense indicates that they are out of line. The GM may total and award EP at any convenient time. This usually occurs at the beginning or end of a playing session.

Note: *All Experience Point totals may be modified depending upon how many times the character has performed the action they were granted for. The suggested modifiers follow.*

Action Repetition Mods

First time	x5
Second time	x2
Subsequent times	x1
Action has become routine	xO.5

HIT POINTS

A character receives one EP for every hit point received or delivered in battle, as well as any hits received or delivered by a vehicle in which the character was an active combatant.

CRITICAL POINTS

Awarded for any criticals inflicted upon a foe, regardless of their effect.

Critical Delivered	Experience Points
'A' Critical	5 EP x Foe's level
'B' Critical	10 EP x Foe's level
'C' Critical	15 EP x Foe's level
'D' Critical	20 EP x Foe's level
'E' Critical	25 EP x Foe's level

These points are further multiplied by:

x0.1 — if foe is unconscious, immobilized or disarmed.

x0.2 — if foe is stunned or effectively blind.

x 2 — if the character is alone in combat with the foe(s).

KILL POINTS

Awarded for killing an active opponent or rendering him unconscious. This must occur in a combat situation, and all points go to the character who delivers the final blow. Kill Points are determined by comparing the combatants' levels. If they are of the same level, 200 EP are awarded. Otherwise, add/subtract 50 EP per level of difference:

Kill Points =
200 + 50 x (target's level - attacker's level)

In the case of vehicular "kills", the EP award is equal to (tonnage of the killed vehicle) + (10 x vehicular Armor Type).

Kill Points for a vehicle =
vehicle tonnage + (10 x vehicle's AT)

TRAVEL POINTS

Travel Points are only awarded for characters who were conscious and able to interact with the environment while travelling. 5 EP are awarded for every 10 kilometers that a character travels on foot. 1 EP is awarded for every 20 kilometers travelled via ground, sea, or air vehicle. If the terrain/space travelled through was rugged or moderately dangerous, multiply this total by 2 (3 if extremely dangerous). The character who actually controlled the vehicle gets double this amount.

MANEUVER POINTS

Awarded for successful maneuvers of a unique or inspired nature. The suggested EP are based upon the difficulty level of the maneuver:

Maneuver Difficulty	Experience Points
Routine	0
Easy	5
Light	10
Medium	50
Hard	100
Very Hard	150
Extremely Hard	200
Sheer Folly	300
Absurd	500
Insane	1000

CONSTRUCTION/RESEARCH POINTS

Base EP equals the percentage of construction/research accomplished. This is the result obtained off the *Construction/Research Chart* (Section S 16.5, page 47) divided by the number of characters involved. This total is modified depending upon the Difficulty Level of the task:

Difficulty	Modifier
Routine	xO
Easy	x1
Moderate	x 2
Hard	x 5
Complex	x 10
Very Complex	x 50
Absurd	x 500

IDEA POINTS

These points are awarded for ideas and plans that lead to the accomplishment of a goal or a successful event, action, or adventure. The GM should keep track of ideas, plans and suggestions made by PC's that prove to be useful or successful.

After an event, action, or adventure is completed, first total all EP from all other sources that the members of the group got as a result of such a plan (i.e., kill points, hit points, maneuver points, etc.). Then divide this total in half; the result is the Idea Point Total. This total is divided amongst the characters who were responsible for coming up with the idea. If the group succeeded without a plan (e.g., through sheer luck or brute force), then no Idea Points can be awarded.

MISCELLANEOUS POINTS

It is difficult to formalize rules for strategic activities which do not fall easily into one of the other categories in this section, but many adventures involve just such activities (e.g., solving a riddle or puzzle, figuring out a clue, accomplishing a special mission or goal, etc). In these cases the GM should award Miscellaneous Experience Points to any character(s) whose actions or accomplishments seem worthy of reward.

10.2 CHARACTER EXPERIENCE LEVELS

The level of each character is determined by how many EP he has accumulated. A character starts at 1st level with 10,000 EP. The Experience Point Chart summarizes which EP totals correspond to which levels.

EXPERIENCE POINT CHART

Level	Experience Point Total Required
1	10,000
2	20,000
3	30,000
4	40,000
5	50,000
6	70,000
7	90,000
8	110,000
9	130,000
10	150,000
11	180,000
12	210,000
13	240,000
14	270,000
15	300,000
16	340,000
17	380,000
18	420,000
19	460,000
20	500,000

10.3

ADVANCING A LEVEL

When a character accumulates enough Experience Points to advance (go up) a level, his Player gets to develop further skills and update his skill bonuses. To develop a skill, simply allocate Development Points as explained in Section S 5.1 in order to increase the skill's rank. After all DP have been allocated to increasing skill ranks, the character's profession bonuses (Section S 7.2) are updated. Finally, any skill bonuses whose components have changed must be retotalled. The process is summarized below:

1) Allocate DP to increase skill ranks.
2) Update skill rank bonuses.
3) Update profession bonuses.
4) Retotal any skill bonuses affected by 2) and 3).
5) Record the character's new level.

11.0 MILITARY/PARAMILITARY TRAINING

The following optional Section contains training forms for various possible military and paramilitary organizations. PCs and NPCs alike may benefit from this training.

PCs may wish to begin play as members of one these forces. PCs who begin play above 1st level may choose to be ex-enlisted, but should be forewarned that it is not an easy task to get *out* of some of these groups.

The GM may wish to use the training forms provided here as guidelines for the creation of his own military and paramilitary organizations.

USING THE TRAINING FORM

Use of the training form is fairly straightforward. A description of the group is first given, followed by the minimum stat scores and skill ranks necessary for enlistment, and a list of those refused enlistment automatically. If the PC meets all requirements, he makes a roll (1-100) and adds the Enlistment Chance Modifier and his appropriate stat bonus. If the result is over 100, the PC is enlisted into the group.

Once in the group, the PC may be sent to one or more Divisions; the GM may chose the most appropriate or allow the PC to choose. As before, each has its own minimum requirements. Certain Divisions may require that other Division training be accomplished first.

Once in a Division, the PC spends the amount of *Training Time* indicated. If the PC meets all requirements, he makes a roll (1-100) and adds the Training Chance Modifier and his appropriate stat bonus:

- If the result is over 100, the PC obtains the Equipment and Skill Ranks indicated and automatically advances one experience level (increase EP total to minimum required). Standard DP allocation is not performed for this level.
- If the result is less than 100, the PC fails training and may go through the training period again. However, this time he receives an additional a +10 modification. Failure the second time indicates discharge without training or benefits. Optionally, the GM can allow PCs who fail a second time 1/2 (round down) of the skill ranks indicated, with no equipment or advancement in experience level. When the next level is reached, the failing PC may only allocate half (round down) of his development points.

TRAINING IN A SECOND DIVISION

If the PC wishes, he may make a new "enlistment roll" as described above to attempt to enter and train in a new division. Such an enlistment roll receives an additional +50 modification (i.e., you're already an organization man). If the PC is successful, he trains in his new division following the same procedure outlined above.

11.1

THE EDISON FORCE

Feared and respected throughout the world (and colonies), New Edison has long had a reputation for forceful opportunism and harsh protectiveness. A major reason for this reputation is the Edison Force, whose members defend the MegaCorp's bases and occasionally attack competing installations. One of the first true corporate armies, the Edison Force serves as an example which other firms try to imitate.

11.2

TRANSNET REGULATORY AI LEAGUE

Since its inception several decades ago, TRAIL has been instrumental in the control and monitoring of artificially intelligent systems. Sponsored by the United Nations and several powerful MegaCorps (none of which, obviously, make great use of AI's), this agency possess global and interplanetary jurisdiction. Although they are not technically allowed to enter corporate property without obtaining UN warrants and providing adequate notification, they often do so anyway, either by physical means or via the Net.

11.3

WORLD ALLIED REVOLUTIONARY ARMY

Of the myriad techno-rebel organizations around today, W.A.R.A. stands above the rest, Organized over 80 years ago and containing "cells" in almost every major city and Sprawl zone of the world, this group has grown from a standard terrorist aggravation to a major adversary of every government and MegaCorp. Due to its informal ad-hoc structure and scattered intelligence, no group has been able to put the W.A.R.A. down. Recruits are hand-picked from unknowing associates who make known their dissatisfaction with the corporate police-state, and are eventually clued-in to the existence of the local cell group.

SERVICE BRANCH: The Edison Force	Headquarters: Los Angeles
General Description: Corporate troopers for New Edison, duties include defense of Resource/Refining Zones & Corp Installations on Earth, Moon, Mars & in orbit. Have been known to raid competitors' installations. A tough, tight force, highly respected and feared. Recruits enter Employment Contract (usually 5-10 years).	
ENLISTMENT REQUIREMENTS	
Minimum Stats: Co 85, Ag 90	Minimum Skills: Perception Rank 2, Body Development Rank 2, Fire Rank 2
Refused Enlistment: Detailed background check weeds out Gypsies, Drug Offenders, and Opponents' Employees.	
Enlistment Chance Modifier: +20	Applicable Stat Bonus: SD

DIVISIONS AND BASIC TRAINING

Division	SECURITY	TACTICAL	EXTRACTION	NET
Prerequisites	As above	Security training	Tactical training	Security training
Minimum Stats	As above	SD 85	SD 90	SD 90
Minimum Skills	As above	As above	As above	As above
Skills Learned	LBA 3, Mel 2, Fir 1 S&H 2, StW 2 BD 1	ABS 3, Mel 1, Fir 2 Env 2, S&H 2 BD 2, Per 1	Mel 2 Eq 1, S&H 2, CybT 2 BD 1, Per 2	Eq 1, CDOp 2 Com 2, Per 2
Time to Train	2 months	3 months	4 months	4 months
Training Chance Mod (Stat)	+60 (Ag)	+40 (SD)	+30 (Re)	+30 (SD)
Equipment	LBA Hvy Pst (20 shots) Ear Comm	ABS, Ear Comm Helmet, IR Goggles M Asst Rfl (120 shots)	NAC Mk.10, DNI Jack * Percp.Rtg 3 Transc.Rtg 8, Impl.Scannr	CDeck Mk.8 * SimNet *Icebr. Rtg 8

* = Program.

SERVICE BRANCH: T.R.A.I.L.	Headquarters: New York City
General Description: Transnet Regulatory AI League; study, monitor and restrict development of super-intelligent devices on Earth, Moon, Mars and in orbit; Conduct physical and electronic investigations of AI activities and growth. Sponsored by the UN and various MegaCorps.	
ENLISTMENT REQUIREMENTS	
Minimum Stats: Re 90, In 90	Minimum Skills: Perception Rank 2, ElecTech Rank 2, SoftTech Rank 1
Refused Enlistment: Felony offenders, Drug offenders, current corporate employees.	
Enlistment Chance Modifier: +30	Applicable Stat Bonus: Re

DIVISIONS AND BASIC TRAINING

Division	BASIC	NET	TACTICAL	ADMINISTRATION
Prerequisites	As above	Basic training	Basic training	Basic training
Minimum Stats	As above	SD 85	Ag 85	As above
Minimum Skills	As above	As above	As above	As above
Skills Learned	Fir 2, Expl 2, CDOp 2 ElecT 2, SofT 1, Per 1	CDOp 2, CyA 2 ElecT 2, SofT 2 Per 2	ABS 3, Mel 2, Fir 2 Drv 2, S&H 2 Exp 2, Per 1	StW 1, Adm 2 ElecT 1, SofT 1 AdM 2
Time to Train	2 months	2 months	1 month	1 month
Training Chance Mod (Stat)	+40 (Re)	+30 (In)	+40 (Re)	+60 (Re)
Equipment	NAC Mk.10, DNI Jack Ear Comm, * 2 N'Softs M Pistol (20 shots)	NAC Mk.10, CDeck Mk.8 * SimNet * Icebr Rtg 8	ABS, Transc.Rtg 9 Asst Rfl † (120 shots)	Comp.Mk.10

t = Med. Asst Rifle, "smart" version, linked to Targeting Implant.

* = Program.

SERVICE BRANCH: W.A.R.A	Headquarters: Numerous
General Description: World Allied Revolutionary Army; Anarchist rebels and terrorists whose goal is to destroy all vestiges of "Imperialist Dominion", governmental or corporate. Possess cell groups in most major cities/Sprawls.	

ENLISTMENT REQUIREMENTS

Minimum Stats: None.	Minimum Skills: None.
Refused Enlistment: Anyone with any ties to any governmental or corporate organization.	
Enlistment Chance Modifier. +60	Applicable Stat Bonus: Pr

DIVISIONS AND BASIC TRAINING

Division	SUPPORT	COMMAND	NET	
Prerequisites	None	Support Training	None	
Minimum Stats	None	SD 85, Re 85	SD 90	
Minimum Skills	None	None	CDOp 1, ElecT 1	
Skills Learned	Weap 3 †, Weap 2 † Mel 2, S&H 2 StW 2, BD 1	Eq 2, StW 1 Adm 1, Exp 1 ElecT 2, Fls 1	CDOp 2 ElecT 2, SofT 2 Per 2	
Time to Train	1 month	1 month	2 months	
Training Chance Mod (Stat)	+50 (Co)	+50 (Re)	+40 (SD)	
Equipment	2 weapons, 50% LBA Ear Comm DNI Jack	NAC Mk.5 * 3 NSofts	CDeck Mk.8 * Icebr Rtg 8	

† = W.A.R.A. uses whatever weapons they can obtain; select weapon skills which are suited for the character.
* = Program.

SERVICE BRANCH:	Headquarters:
General Description:	

ENLISTMENT REQUIREMENTS

Minimum **Stats:** .	Minimum **Skills:**.
Refused **Enlistment:**.	
Enlistment Chance Modifier:	Applicable Stat Bonus:

DIVISIONS AND BASIC TRAINING

Division				
Prerequisites				
Minimum Stats				
Minimum Skills				
Skills Learned				
Time to Train				
Training Chance Mod (Stat)				
Equipment				

Notes:

12.0 PATRONS

Besides the military/paramilitary groups listed above (or groups modeled after them), there are many possible employers for whom the PCs could work. The advantages of having a patron are threefold. First, there is a good chance that the patron (given that they have the money to hire a hotshot like yourself) will be willing to bankroll a bit of equipment or cyberization for you (the sum would vary depending on the patron, the character's level and the exact circumstances, but in general $1000 to $6000 would be a suitable offer). Second, the patron is (of course) a relatively steady source of jobs, and it all comes down to biz, doesn't it? Finally (but hopefully not too often), the patron could be a handy person to have around should the Player(s) get into really hot water — there may be additional troops available, contacts who know the information you need, etc.

The down side of working for a steady patron are threefold as well. First, the character's choice of jobs will be limited, for a good deal of his time will be spent pursuing the interests of the patron, rather than personal motivations. Second, should the character decide to leave the patron, there is a good chance that this will be a difficult — or even dangerous — task. Most "above board" employers make their employees sign contracts which stipulate length of time, services, and loyalties which will be provided by the employee, and penalties for breaking an employment contract — both legal and illegal — are frighteningly harsh. Many employers will implant special "incentives" in their employees' bodies, keeping them from breaking contract; such nasty devices as analog dependency glands, tailored viruses with secret antidotes, and implanted explosives have all been used to this end. Corporate extraction maneuvers are amongst the highest paying — and riskiest — assignments performed by any specialist. Finally, there are some employers you simply can't get away from. The most obvious types would be the Yakuzas and mercenary bands, but even above-ground military groups have secrets that they hope no ex-employee will divulge — and dead employees don't testify.

The basic employer of a *Cyberspace* character will fall into one of a few categories: Corporate Executive, Police/Security Chief, Smuggler/Fence/Crimelord, Rich Entrepreneur, Military Leader (such as the head of a mercenary unit), Media Executive, or Artificial Intelligence. If a Player wants to find a patron, the GM should design an NPC who would hire the Player character (all the better if this is an NPC you've already introduced into the campaign). Helpful hint: check out the PC's Contacts (if any were rolled) and Social Class notes. Chances are good that a few ideas will pop up out of these descriptions.

In the meanwhile, a few of the more active (and well-known) employers of promising young talent are noted in Section R 5.0.

13.0 CYBERSPACE AND SPACE MASTER

Cyberspace can serve as a valuable supplement for ***Space Master*** players. A ***Space Master*** GM could use *Cyberspace* to flesh out "backwards" worlds where technology is far inferior to the Imperial Standard. *Space* ***Master*** replicants and androids can be modified with the vast variety of Cyber Systems available in *Cyberspace,* and Province-wide communications networks suggest the possibility of Net Running in the Imperium (perhaps even through the TBD networks!).

Cyberspace GMs can use ***Space Master:*** *The Role Playing Game* for greater detail in character generation and combat resolution, and for the truly hard-core, ***Armored Assault*** and ***Star Strike*** offer thorough treatment of vehicular conflicts. This section offers suggestions for converting *Cyberspace* characters to the ***Space Master*** rules system.

13.1 SKILLS

All of the skills in *Cyberspace* are covered by ***Space Master*** skills, except for the four "Cyberspace Skills" and Cyber Attunement. The following table shows which ***Space Master*** skill to use in place of each *Cyberspace* skill. Note that ***Space Master*** skills require greater specialization; e.g., Fire skill in *Cyberspace* covers all hand-held firearms, but in ***Space Master*** each firearm type must be developed as a separate skill. Do not let players converting *Cyberspace* characters to ***Space Master*** abuse this generality. They must develop each firearm separately and concentrate on subcategories of skills where appropriate. For example, converted characters will not be skilled in all alien environments as is the case with the *Cyberspace* skill; they must concentrate on a specific environment type as noted in the ***Space Master*** skill.

Cyberspace Skill	*Equivalent* ***SpaM*** Skill(s)
Maneuvering Skills:	
No Armor	none
Light Body Armor	same
Armored Body Suit	same
Armored Exoskeleton	same
Weapon Skills:	
Melee	Martial Arts (St & Sw), 1-H Edged, 1-H Crushing, Pole Arms, 2-handed
Missile	Bows, Thrown Weapons
Fire	1-H Projectile, 2-H Projectile, 1-H Energy, 2-H Energy, Launchers
Mounted	Sup. Energy, Sup. Proj., Proj. Gunnery, Heavy Energy Projectors, Missiles
General Skills:	
Drive	Driving, Marine Piloting
Pilot	Atmospheric Pilot, N-Space Pilot, Orbital Pilot
Environs	Climbing, Swimming, First Aid, Alien Environments, Survival
Equipment	Sensor Analysis, Scanner Analysis, Communications, Medical Technics
Subterfuge Skills:	
Electronic Bypass	Pick Locks, Disarm Traps
Mechanical Bypass	Pick Locks, Disarm Traps
Ambush	Ambush, Mounted Weapons Ambush
Stalk & Hide	same
Social Skills:	
Culture	Diplomacy
Streetwise	Diplomacy
Administration	same
Exploit	Acting, Interrogation, Seduction
Cyberspace Skills:	
Cyber Deck Operation	none
Combat	none
Intrusion	none
Utility	none
Technical Skills:	
Biological Technics	Genetic Technics
Mechanical Technics	same
Electronics Technics	same
Software Technics	Computer Technics, Computers
Cybernetics Technics	same

Cyberspace Skill	*Equivalent* ***SpaM*** **Skill(s)**
Special Skills:	
Body Development	same
Perception	same
Cyber Attunement	none
Linguistics	same
Secondary Skills:	
Acrobatics	same
Advanced Math	same
Appraisal	same
Astrogation	same
Astronomy	same
Biology	same
Chemistry	same
Contortions	same
Cybernetics	same
Drug Tolerance	same
Falsification	same
Foraging, Rural	Foraging
Foraging, Urban	Foraging
Frenzy	same
Gambling	same
History	same
Media	Advertising, Propaganda
Medical Practice	same
Music	Music, Singing
Physics	same
Planetology	same
Quick-Draw	same
Sport	Athletic Games
Subduing	same
Trickery	same

When more than one ***Space*** Master skill corresponds to a given *Cyberspace* skill, the GM can let the character distribute the *Cyberspace* ranks among the corresponding ***Space*** Master skills as he sees fit. Ranks in weapon categories must be further divided up between specific weapon types.

Example: Zak, a 5th level Cyberspace *Killer, has 8 ranks in Fire skill and 5 ranks in Environs. When Zak converts his character, the GM tells him to distribute his Fire ranks among the five* ***Space*** *Master firearm categories (1-H Energy, 1-H Projectile, etc.), and then Zak must choose individual weapon skills. He puts 6 ranks in 1-H Projectile (2 in MLA Pistol, 4 in 10mm Medium Machine Pistol) and 2 ranks in Launchers (both in PML Quad). Next Zak puts 3 of his Environs ranks into First Aid and 2 ranks into Survival. The GM tells Zak that he must specify a type of Survival, so he chooses Hot/Moist.*

Option: A GM may decide to allow characters to choose one equivalent SM skill to have the same rank as the corresponding Cyberspace skill. All other equivalent SM skills would have 1/2 (round up) the skill ranks of the corresponding CS skill.

CYBERSPACE SKILLS/CYBER ATTUNEMENT COST CHART

SpaM Profession	CyberDeck Operation	Combat	Intrusion	Utility	Cyber Attunement
Armsman	10	10	TO	10	4
Pilot	8	8	8	8	5
Explorer	9	9	9	9	5
Sys Tech	6	6	6	6	4
Elec Tech	4	4	4	4	4
Arms Tech	6	6	6	6	4
Researcher	6	6	6	6	7
Physician	7	7	7	7	6
Engineer	6	6	6	6	5
Criminologist	7	7	7	7	6
Medic	6	6	6	6	4
Planetologist	7	7	7	7	7
Administrator	8	8	8	8	8
Entertainer	9	9	9	9	6
Theologist	9	9	9	9	9
True Telepath	3/8	3/8	3/8	3/8	4
Semi-Telepath	4	4	4	4	5

CYBERSPACE SKILLS AND CYBER ATTUNEMENT

Cyberspace Skills and Cyber Attunement do not have ***Space*** Master equivalents, so their development point costs for each ***Space*** Master profession follow:

Given the costs listed above for Cyberspace Skills and Cyber Attunement, it is clear that none of the ***Space Master*** professions are Cyberspace "experts". Therefore the GM may want to introduce the Net Junkie as a ***Space*** Master character class. When assigning development costs to the Net Junkie's skills, the GM should remember that Net Junkies, as presented in *Cyberspace,* are usually reclusive, and will not excel at combative or other physical skills (similar to a Researcher). Of course GMs are welcome to create a variant class to provide the ***Space*** Master system with a Cyberspace expert, but play balance should be carefully protected.

13.2 *PROFESSIONS*

The *Cyberspace to* ***Space Master*** *Profession Conversion Chart* below provides a list of *Cyberspace* professions and their ***Space*** Master equivalents.

GMs should help the *Cyberspace* player determine which **Space** Master profession best describes the character. If desired, the GM could allow the character to choose the appropriate profession and then develop the character using the ***Space*** Master development system with the new profession's development point costs. This will require considerable work for high-level characters that change systems. GMs who wish to avoid this hassle will have players convert the skills (i.e. allocate *Cyberspace* skill ranks to ***SpaM*** skills as outlined in Section S 13.1) first and then choose the profession. Future level development would occur with the new ***SpaM*** profession's development costs.

CYBERSPACE TO SPACE MASTER PROFESSION CONVERSION CHART

Cyberspace Profession	Space Master Profession(s)
Sleaze	Administrator, Theologist, Entertainer
Sneak	Criminologist
Killer	Armsman
Net Junkie	None (GM should modify an existing **SpaM** profession or create a new one)
Jockey	Pilot, Any Technician, Medic
Tech Rat	Any Technician, Researcher, Physician, Engineer, Planetologist

13.3 PSIONS

As an option GMs might want to include ***Space Master*** psions in the future Earth of *Cyberspace.* GMs should use caution here, for a Telepath character with a large complement of Cyber Systems could become a monster, dominating other players and ruining the GM's carefully constructed scenarios Of course the GM could fight fire with Telepathic fire, but this sort of escalation inevitably drags the game's focus away from interesting role playing. One control the GM could use is an "instability factor." Perhaps Telepaths' brains are sensitive to implants, such that the chance of Psion Failure increases by 1% for each Neural Interface. This might discourage abuse of psions. In any case, the GM should formulate some plausible reason as to why Telepathy has become (relatively) commonplace; e.g., extensive tampering with the brain has awakened Telepathic potential in a rare few, MegaCorps have provided massive funding to ESP/psychic research in an effort to find an edge over competitors, etc.

CYBERSPACE CHARACTER RECORD SHEET

Name: CHARLIE VENOM Profession: SNEAK Level: 1 Experience Points: 10,000

Sex: M Age: 24 Ht: 1.8M Wt: 75Kg
Hair: SHORT, BLACK Eyes: BROWN
Hand: RIGHT Off-Hand Penalty: -20
Origin: PACIFIC SPRAWL, SAN FRANSISCO
Social Class: LSprl (LOWER SPRAWL)
Affiliation: WELL-KNOWN Sprawl gang
Description: PALE SKIN; SHIFTY NERVOUS BEHAVIOR
Personality: CALM, SLY

Background Notes: GUILD/UNION BACKGROUND; HOLOGRAPHIC MEMORY: +50 TO RELEVANT TASKS
Dollars (Cash): $ 840
Dollars (Account): —
Income: $ 600 / MONTH

Stat	Value	Bonus
Co:	79	+5
Ag:	80	+5
SD:	42	0
Me:	58	0
Re:	68	0
St:	73	0
Qu:	96	+30
Pr:	47	0
In:	90	+10
Em:	16	-5
Ap:	77	N/A

Character Hit Total:
Armor Worn:
Defensive Bonus (DB):

Cyber Systems
LOWLIGHT Rtg. 10 (+10r VISUAL PERCEPTION)
FASTHAND Rtg. 5 (+5r QUICK-DRAW)
NERVE BOOSTER Rtg. 3 (+15 Qu Bonus)

CIRS Stat: 2

Weapon	Rank	Stat	Prof	Equip	Spec	Total	Point Blank	Short Range	Medium Range	Long Range	Fail
GAUSS PISTOL	20	5	1	10	—	36	36	30	6	-64	5

Skill	Rank	Stat	Prof	Equip	Spec	Spec	Total
Body Development	14	5	1	—	—	—	30
NO ARMOR	15	5		—	—	—	20
LIGHT BODY ARMOR	10	0					10
FIRE	20	5	1	+10			36
MELEE	15	0	1				16
DRIVE	10	5					15
ENVIRONS	5	0					5
EQUIPMENT	10	0					10
ELECTRONIC BYPASS	10	10	3				23
MECHANICAL BYPASS	15	10	3				28
AMBUSH	3r	-	-	-	-	-	3 RANKS
STALK & HIDE	15	0	3				18
STREETWISE	20	-5	1				16
EXPLOIT	20	0	1				21
MECHANICAL TECHNICS	5	0					5
PERCEPTION	10(54)	10	1	(+10r)			21(65)
ACROBATICS	5	5					10
APPRAISAL	10	0					10
DRUG TOLERANCE	20	5					25
FALSIFICATION	5	0					5
FORAGING, URBAN	5	10					15
GAMBLING	5	10					15
SPORT	10	5					15
SUBDUING	5	30					35
TRICKERY	5	30					35
ELECTRONICS TECHNICS	5	0					5
CYBER ATTUNEMENT	5	0					5
QUICK-DRAW	30	30		+5r			60

Language	Degree
ENGLISH	5
JAPANESE	3

Equipment	Mass
+10 GAUSS PISTOL (SMART)	1.5 Kg
LBA SUIT	2 Kg

Total Mass Carried: 3.5 Kg

Walking Movement Rate: 21 m/rnd
Running Movement Rate: 44m/rnd
Encumbrance Penalty: 0

CYBERSPACE CHARACTER RECORD SHEET

Name: Profession: Level: Experience Points:

Sex: Age: Ht: Wt:
Hair: Eyes:
Hand: Off-Hand Penalty:
Origin:
Social Class:
Affiliation:
Description:
Personality:
Background Notes:
Dollars (Cash):
Dollars (Account):
Income:

Stat	Value	Bonus
Co:		
Ag:		
SD:		
Me:		
Re:		
St:		
Qu:		
Pr:		
In:		
Em:		
Ap:		N/A

Character Hit Total:
Armor Worn:
Defensive Bonus (DB):

Cyber Systems

CIRS Stat:

Weapon	Rank	Stat	Prof	Equip	Spec	Total	Point Blank	Short Range	Medium Range	Long Range	Fail

Skill	Rank	Stat	Prof	Equip	Spec	Spec	Total
Body Development					10		

Language	Degree

Equipment	Mass

Total Mass Carried:

Walking Movement Rate:
Running Movement Rate:
Encumbrance Penalty:

PART II: RESOLVING CHARACTER ACTIONS

In a tactical situation, action is resolved in terms of meters and seconds. Each character may take only one action once every 10 seconds; he may move, attack, make a moving maneuver, make a static maneuver, make a vehicular maneuver, or perform some other action. This 10 second period is call a *round.* A round usually takes considerably longer than 10 seconds of real time to resolve.

Certain factors may affect the action that a character may take. Most of these are obvious and can be resolved by using common sense (e.g., a character with a broken arm can't use a two-handed weapon; an unconscious character can perform no action, except perhaps breathing; etc.). The GM is of course the final authority on these matters.

Certain critical results from attacks limit actions, while other criticals restrict activity (e.g., -20 to activity). Unless stated otherwise in the critical description, these subtractions from activity apply to all bonuses except the Defensive Bonus and Resistance Roll bonuses.

The GM and the players should divide up the work involved in controlling a tactical combat situation. The Gamemaster has to handle the physical layout and all of the non-player characters, but the players can help with other factors. One player should keep track of the damage taken and status of each character. Another player should keep track of the round and action sequencing (see Section S 14.0). Another player can record activity by player characters which can later lead to experience points. Other players can handle the tables and read off results during play. By dividing up these tasks the game flows very smoothly, everyone gets involved, and no one is swamped with work.

The *Cyberspace* system for tactical action and combat is simplified and abstracted to increase its playablity. If beginning fantasy role players have mastered *Cyberspace* and desire more detailed and realistic combat, I.C.E.'s ***Space Master*** provides an expanded combat system, with individual attack tables for the various weapons, 20 classifications of armor, more detailed critical strike tables, and advanced rules that allow more flexibility. Details concerning the use of the **Space *Master*** system with *Cyberspace are* provided in Section S 13.0.

REPRESENTING THE PHYSICAL SITUATION

The GM must decide how to keep track of movement, the relative positions of all of the characters, ranges for fire combat, and the layout of the area in which they are adventuring. This usually requires a playing surface that represents the physical situation and playing pieces representing the characters and other combatants. Many possibilities exist for such play aids, and the GM may elect to use whichever seems most appropriate for his game and for a particular situation. Below we present a few of the most helpful display techniques and hints.

The GM can sketch the layout on a sheet of paper (or on a black board) and mark the position of each character on it. For small sheets of paper we suggest a scale of 1" = 20 meters. For a larger surface, 1" = 10 meters or 1" = 5 meters would be more appropriate. You can keep track of distance with a ruler. The problem with this technique is lack of detail and the hassles of erasing each time a character moves.

To solve part of this problem we suggest that a playing piece be used to represent the position of each character. These can be as elaborate as the players and Gamemaster wish. Suggestions include: commercially available miniatures (small statues of various types of fantasy inhabitants and creatures), chess pieces, coins, or 0.5" square to 1" square pieces of cardboard marked with the characters names. The cardboard pieces are particularly easy to make and use; they can be colored or decorated to aid the flavor of play.

14.0 THE SEQUENCE OF ACTIONS

Actions are normally performed in the following order during a round (unless a character cancels his action or puts it into an "opportunity state"). The five parts of the round are referred to as "Phases."

1) All non-melee attacks and parrying/dodging against such attacks **and** loading/reloading.
2) Moving maneuvers **and** vehicular maneuvers/movement.
3) Melee attacks **and** melee parrying.
4) Character movement.
5) Static maneuvers **and** special maneuvers.

- Orientation rolls are used when required by circumstance.
- Conflicting actions may modify this sequence (Section S 18.0).

Note: *GMs may want to use the standard* ***Space Master*** *turn sequence.*

At the beginning of each round, each player should state or write down (the GM must decide) what action he wishes to perform for that round. At the same time, the GM should decide what actions the NPCs will take. The actions are then resolved in the order specified by the sequence above. The following sections describe how to resolve the various actions.

14.1 OPPORTUNITY ACTION

When it comes time during a round to resolve an action, each character has the option of putting his action into an "opportunity" state — in effect, delaying his action until he wishes to resolve it. The character may not perform any other action until his opportunity action is canceled (at the end of a round) or resolved (at anytime he decides). He may initiate his action any time later in the current round, or any time during a following round. Opportunity actions represent activities like: waiting for a target, setting an ambush, waiting to push a boulder down on someone, etc.

Example: *Charlie Venom, our intrepid Sneak from Section 2.0, is rummaging through a desk in a MegaCorp office when two Guards enter. Charlie ducks behind the desk, and the guards don't immediately notice him, so Charlie's player tells the GM that Charlie will go on Opportunity Fire; he will perform no action until the guards spot him or leave the room. Charlie will fire his Gauss Pistol at the guards the moment they spot him.*

Sure enough, one of the Killers pokes his head over the desk, but since Charlie is using an opportunity action, the guard can tike no action until after Charlie fires — when it's too late.

14.2 CANCELING ACTION

During a round an action may be canceled before it would otherwise be resolved. A character who has canceled his action may perform one of the following alternative actions:

- Melee with half his normal Offensive Bonus or
- Move half his normal (not running) movement or
- Make a maneuver modified by -30.

The alternative action chosen must be performed when the other actions of that type are normally resolved.

Example: The second guard in the above example seems perturbed by his partner's demise, and he charges Charlie. Charlie's player tells the GM that the Sneak will fire his Pistol again. As the first combat phase begins (which includes non-missile attacks), the player controlling Charlie realizes that the brute's momentum will carry him into Charlie regardless of the outcome of the Pistol Fire. Since he doesn't want to get creamed by the hulking guard, Charlie cancels his Pistol fire and decides to dodge out of the way at the last moment, letting the thug crash into a bookcase. Since he had to cancel his original action, Charlie will suffer a -30 penalty to his dodging maneuver.

15.0 MOVEMENT

Movement is simultaneous for all characters. If there are conflicts (opponents have both specified movement), players should write down where they intend to move. The GM should use common sense to interpret the intent of each character, and characters should be able to modify their actual movement during play in order to react to circumstances.

ACTION CHART

Action	Additional Information and Options
Non-melee Parry	If an appropriate barrier is available, a character may use up to half of his OB to subtract from one opponent's non-mell attack. The character may later attack with his remaining OB or move at half of his normal movement rate.
Non-melee Attack	May take up to 3m movement later. May shift equipment, but OB is lowered by 30 for each item shifted (e.g., draw a weapon, activate a cyber weapon/system, etc.).
Loading/Reloading	May take up to 3m movement later.
Moving Maneuver	The maneuver may not cover a distance of over half that of the character's normal movement.
Vehicular Maneuver	Normally, no additional action is allowed.
Melee Attack	May take up to 3m movement. May shift equipment, but OB is lowered by 30 for each item shifted (e.g., draw a weapon, activate a cyber weapon/system, etc.). Part of OB may be used to parry one opponent's melee attack.
Movement	Movement is decreased by 3m for each item shifted (for that round). A character may "run" at double normal rate, but a moving maneuver roll is required.
Static Maneuver	Normally, no additional action is allowed.
Special Maneuver	Normally, no additional action is allowed.

Canceling Action — An action may be canceled before it is resolved. The character may then perform one of the following actions during the appropriate part of the round:

1) Melee with half of his normal OB.

2) Move half of his normal (not running) movement.

3) Make a maneuver modified by -30.

Opportunity Action — Any action may be delayed by making the action an opportunity action. Once an action is delayed, no other action may be taken until the opportunity action is resolved or canceled. However, the opportunity action may be initiated at

15.1 THE ENCUMBRANCE PENALTY

If the total weight carried by a character is greater than 14 kilograms, an encumbrance penalty might result. The table below shows the "weight penalties" for carrying weight in excess of 14 kilograms. However, the encumbrance penalty is equal to this weight penalty plus the character's Strength stat bonus. Positive results are treated as zero. This encumbrance penalty is applied to all movement and moving maneuvers. If running or attempting to run (see below) the encumbrance penalty is applied before the doubling effect for doubled movement.

Note: *One kilogram equals 2.2 pounds.*

Example: *Zak the Killer is loaded with 22 kg of equipment. Since he masses 105kg, Zak consults the "15-24" column for mass carried and the "100-119" column for Character's Mass. The penalty is -15, but Zak has a whopping +20 St Stat bonus, so his Encumbrance Penalty = -15 + 20, = +5, except that positive results become 0, so his final Encumbrance Penalty is 0. In fact, Zak can carry another 14kg of equipment before he suffers any net Encumbrance Penalty.*

ENCUMBRANCE PENALTY TABLE

Character's Mass	Mass Carried (in kilograms) <14	15-24	25-36	37-45	46-58	59-79	80-99	100-119	120-139	140-157
38-56	0	-30	-60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
57-79	0	-20	-35	-60	-80	N/A	N/A	N/A	N/A	N/A
80-99	0	-15	-25	-40	-60	N/A	N/A	N/A	N/A	N/A
100-119	0	-15	-20	-30	-40	-60	N/A	N/A	N/A	N/A
120-139	0	-10	-15	-25	-35	-40	-60	N/A	N/A	N/A
140-157	0	-10	-15	-20	-30	-35	-40	-60	N/A	N/A
158-180	0	-5	-10	-15	-25	-30	-35	-45	-60	N/A
181-198	0	-5	-10	-15	-20	-25	-30	-35	-50	-60
199-218	0	-5	-10	-15	-20	-25	-30	-35	-45	-55
219-239	0	0	-10	-10	-15	-20	-25	-30	-40	-50

15.2

WALKING MOVEMENT RATE

The base distance a character may move in one round is called the *Walking Movement Rate* (WMR). A character's WMR equals 20 meters *plus* 1 additional meter for every +5 in the appropriate Maneuvering skill bonus (e.g., if your Maneuvering skill bonus in No Armor is +15, your WMR with No Armor is 23 meters). Running movement is double that distance (if a maneuver roll is made — Section S 16.2).

A character may shift items upon his person (e.g., draw a weapon, take an item out of a pocket, etc), but this decreases the WMR by 3 meters for each item shifted (for that round). Terrain may slow a character: going uphill, through a narrow alley, walking in mud, etc. It is suggested that the GM cut movement in half for such terrain.

WMR =
20 meters + (Maneuv. skill bonus ÷ 5)

Example: *Charlie Venom's Maneuvering skill bonus with No Armor is 20, so his WMR = (20 + (20/5)), = 24 meters/round. If Charlie is wearing his Light Body Armor (Skill Bonus = -20), his WMR = (20 + (–20/5)), = 16 meters/round.*

15.3

RUNNING — DOUBLE MOVEMENT

If a character wishes to run, thereby doubling his movement rate, the GM should assign a Difficulty Level based upon the character's encumbrance and the terrain. The character then makes a 1D100 roll modified by his appropriate Maneuvering skill bonus, and applies the total to the *Personal Maneuver Chart* (page 44). If the result is 100, the character may double his movement for that round. For every increment of 10 that the number is less than 100, the doubled movement rate is decreased by 3 meters. For every increment of 10 that the number is more than 100, the doubled movement rate is increased by 3 meters. If the result is an "F", a roll must be made on the *Maneuver Failure Table* (A 9.4).

Example: *Zak (who has LBA armor on, with a Maneuvering skill bonus of +5) decides to run down the block. His WMR is 21 meters, so his running rate would be 42 meters per round. The GM notes that there is a slippery patch of oil in the road, which makes the terrain Very Hard to negotiate. Zak's Player rolls a 82, adds Zak's Maneuvering skill bonus for a total of 87, and looks at the Very Hard column of the Personal Maneuver Chart (page 44). The result is a whopping "60" — indicating that Zak moves only 30 meters = 42 - [(100 - 60) x 3 meters].*

A character may run for a number of rounds equal to his Co stat bonus plus 5. For every round spent resting he may regain 2 rounds of running capability.

Example: *A character with a Co stat bonus of +10 could run for 15 rounds before needing to rest. The same character could run for 10 rounds (reducing his running capability to 5), and then rest for 5 rounds (thereby regaining all his original running capability).*

	DISARMING TRAPS	EQUIPMENT	SENSOR/SCANNING	INFLUENCE AND INTERACTION	GENERAL	ICEBREAKING
-26 down	BLUNDER: If picking a lock, you have broken your lock-pick equipment (if mechanical lock, the pick is stuck in the lock, rendering it unopenable until removed -this requires another roll to pick the lock by someone other than you). Any traps connected to it are set off. If disarming a trap/alarm, it is activated.	BLUNDER: You not only fail to heal your patient, you actually do damage: 75% chance you damage your equipment (make a roll of the equipment damage table), 25% you give your patient additional wounds such as you were trying to heal. If the latter, you are guilt-ridden and cannot practice medicine for 1-100 days.	BLUNDER: You not only fail to get any valid information but you pick up invalid information due to a misconception or improperly sensed details. You may never try again on the same topic in the same area. If Scanning, 10% chance you dropped the equipment or jammed the console.	BLUNDER: Your blatant attempt at coercion alienates your audience. They are influenced to do the opposite of what you were attempting to get them to do. Until a major change in circumstances occurs, any attempts by you to influence them will fail.	BLUNDER: You fail spectacularly. If possible, your static action has the opposite effect from what you intended.	BLUNDER: You have set off the ICE and triggered a lockdown of target system. Also your location is traced.
-25-04	ABSOLUTE FAILURE: You have developed a mental block on this lockArap and will automatically fail on any further attempts to pick/disarm it. If disarming a trap (or picking a lock with an attached trap), there is a 50% chance that the trap will be activated.	ABSOLUTE FAILURE: Confusion causes a mental lapse. The nature of the wound confounds you and you spend one minute (6 rounds) staring blankly before you can try again - and then you must do so at -30.	ABSOLUTE FAILURE: Confusion causes a mental lapse. This perception roll and any perception rolls made during the next 10 min (60 rounds) will result in failure (see 05–75 below).	ABSOLUTE FAILURE: Your audience rejects you, causing you to lose confidence and your air of authority. Any influence attempts during the next hour (360 rounds) will result in failure (see 05-75 below).	ABSOLUTE FAILURE: Utter incompetence causes a mental lapse. Any static actions attempted during the next 10 min (60 rnds) will result in failure (see 05-75 below).	ABSOLUTE FAILURE: You blew it; the ICE takes effect immediately. Any further attempts on this ICE with the same equipment will fail (see 05-75 below).
05–75	FAILURE: Currently you have no further ideas on how to pick/disarm this lockArap. After 24 hours you may make a perception roll and if it succeeds you may make another attempt to pick/disarm the lock/trap.	FAILURE: You (for whatever reason) decide that the wound you were going to heal is not the one to start on; heal someone else or another wound before trying this one again. If no others, see ABSOLUTE FAILURE.	FAILURE: You gain no information, but you think that you have learned everything available. You may not try again on the same topic in the same area for one hour.	FAILURE: You have failed. Your audience will not be receptive to any of your attempts at influence for at least 1 day.	FAILURE: You have failed. You may not try the same static action in the same place for 1 day.	FAILURE: The ICE is closing in; you may make a SM/CDeck:X to punch out before it takes effect.
76-90	PARTIAL SUCCESS: You have figured out part of the lock/trap and have an intuitive feel for the rest. However, further effort at this time will be counterproductive. Do something else for 10 minutes and then you can try again.	PARTIAL SUCCESS: You manage to heal the wound, but it takes twice the time and there will be unattractive scarring (or if bone or cartilage, the set is not quite straight; there may be a limp or other malformation). Beware of malpractice suits.	PARTIAL SUCCESS: You gain some of the information on the topic that required the perception roll, but you are not aware that you missed something. You may not try again on the same topic in the same area for 1 hour.	PARTIAL SUCCESS: Your audience is still listening. You can continue to try to influence them.	PARTIAL SUCCESS: If partial success is possible, you accomplish 20% of static action. You may not try the same static action in the same place for 1 hr.	PARTIAL SUCCESS: You're making some progress, but the ICE is closing in; apply a -10 to next roll (cumulative).
91-110	NEAR SUCCESS: You almost had it. If you spent two rounds thinking about your attempt (no other activity), you may try again with an extra +5 bonus.	NEAR SUCCESS: You heal the wound and in the regular amount of time, but there is some light scarring, and full recovery will take 50% longer than usual. Oh, well.	NEAR SUCCESS: You gain some information on the topic that required the perception roll, and you are aware that you missed some-thing. You may try again after 3 rnds of contemplation.	NEAR SUCCESS: Keep talking, your audience is becoming more friendly. Modify your next roll be +20.	NEAR SUCCESS: If partial success possible, you accomplish half of your action. Try again after 3 rnds of contemplation.	NEAR SUCCESS: You're almost through, but the ICE isn't broken yet; apply a +20 to next roll (cumulative).
111-175	SUCCESS: The lock/trap is picked/disarmed; +50 on any future attempts to pick/disarm this lock/trap.	SUCCESS: You perform your duty with uninspired efficiency; all goes as it should and the wound is scarlessly repaired.	SUCCESS: You gain all of the information on the topic that required the perception roll.	SUCCESS: You have influenced your audience.	SUCCESS: Your static action is successful.	SUCCESS: The ICE is broken - you're through!
176 up	ABSOLUTE SUCCESS: In the future you may automatically pick/disarm (takes one round) this lockArap or any identical lock/trap. 10 to attempts on similar locks/traps in the future.	ABSOLUTE SUCCESS: You are a medical marvel (at least this time). The wound is beautifully repaired in but half the normally required time. You get a +20 on all healing rolls for 10 minutes (60 rounds).	ABSOLUTE SUCCESS: You are aware of everything in the area that you are examining. This includes information on topics other than the one requiring the perception roll. +20 on perception rolls for 10 min. (60 rnds).	ABSOLUTE SUCCESS: Not only did you influence your audience, but you receive a +50 bonus on influencing them until you do something to cause them to lose confidence in you.	ABSOLUTE SUCCESS: Your static action is successful and you get a +20 bonus to further static actions for the next 10 minutes (60 rounds).	ABSOLUTE SUCCESS: You not only break the ICE but gain insight into the system itself; apply a +30 on any attempt to crack this system in the future.
	MODIFICATIONS: Difficulty - Routine (+30), Easy (+20), Light (+10), Medium (0), Hard (-10), Very Hard (-20), Extremely Hard (-30), Sheer Folly (-50), Absurd (-70). + Skill bonus for Crime Technics OR Picking Locks OR Disarming Trap.	MODIFICATIONS: Difficulty - Routine (+30), Easy (+20), Light (+10), Medium (0), Hard (-10), Very Hard (-20), Extremely Hard (-30), Sheer Folly (-50), Absurd (-70). +20 if using Infirmary equipment (with associated backup facilities). -30 if no Medical Scanner Diagnosis first. -30 if in a combat situation.	MODIFICATIONS: Difficulty - Routine (+30), Easy (+20), Light (+10), Medium (0), Hard (-10), Very Hard (-20), Extremely Hard (-30), Sheer Folly (-50), Absurd (-70). +20 if the player states that his character is spending time looking for specific information. The number of rounds spent affects the difficulty. +50 if Tactical Scanner. +Skill bonus for Perception OR Scanner OR Sensors.	MODIFICATIONS: Difficulty– Routine (+30), Easy (+20), Light (+10), Medium (0), Hard (-10), Very Hard (-20), Extremely Hard (-30), Sheer Folly (-50), Absurd (-70). +50–Audience is personally loyal or devoted to the character. +20–Audience is under hire to the character. + Skill bonus for Influence and Interaction NOTE: Modifications are based upon what the character is trying to get the audience to do.	MODIFICATIONS: Difficulty - Routine (+30), Easy (+20), Light (+10), Medium (0), Hard (-10), Very Hard (-20), Extremely Hard (-30), Sheer Folly (-50), Absurd (-70).	MODIFICATIONS: + Bonus from Rtg# of Icebreaker program +CDeck skill Bonus - Bonus from Rtg# of ICE

(-200) — (-151)	Fail to act.	Fall down. Lose 2 rounds. +2 Hits.	Fall down. +3 Hits. You are out for 4 rounds.	Fall. Break wrist. +10 Hits. You are out for 6 rounds.	Fall. Break leg. +15 Hits. You are out 9 rounds.	Fall. Break arms.+20 Hits. You are out 18 rounds. Arms useless.	Fall. Break back and legs. +25 Hits. Paralysis of lower body.	Fall. You smash your backbone and are in a coma for 1 year.	Fall paralyzes you from neck down.
(-150) — (-101)	10	Fail to act.	Fall down. +2 Hits. You are out for 2 rounds.	Fall down. Sprain ankle. You are at -25. +6 Hits.	Fall. Break arm. +10 Hits. You are out 6 rnds, stunned 3 rnds.	Fall. Break leg. +15 Hits. You are out for 6 rounds.	Fall. +30 Hits. You are out 6 rnds. Shatter knee. You are at -80.	Fall. Break both arms and neck. +30 Hits. You are out 60 rnds.	Fall. You smash your backbone and are in a coma for 1 year.
(-100) — (-51)	30	10	Fail to act.	Fall down. Lose 2 rounds. +3 Hits.	Fall down. Sprain ankle. You are at -25. +5 Hits.	Fall. +20 Hits. Break your wrist. Out 2 rnds. Not very smooth.	Fall. +12 Hits. Break arm. You are out for 6 rounds.	Fall.. +30 Hits. You are out 9 rnds. Shatter knee. You are at -80.	Fall. Break back and legs. +25 Hits. Paralysis of lower body.
(-50) — (-26)	50	30	10	Fail to act.	Fall down. +5 Hits. You are out 3 rounds.	Fall. Sprain ankle and tear ligament. You are at -30. +15 Hits.	Fall. +10 Hits. Knock yourself out. Out for 18 rnds. You lose, pal.	Fall. +12 Hits. Break arm. You are out for 6 rounds.	Fall. You are out 18 rounds. You break both arms. +25 Hits.
(-25) — 0	70	50	30	5	Fail to act.	Fall down. +5 Hits. You are out of action for 3 rounds.	Fall. Sprain ankle and tear muscle. You are at -30. +10 Hits.	Fall. +20 Hits. Break your wrist. Out 2 rnds. Not very smooth.	Fall. +10 Hits. Break your leg. You are at -75. Out 6 rounds.
01 — 20	80	60	50	10	5	Fails to act.	Fall down. +5 Hits. you are out for 3 rounds.	Fall. +5 Hits. You pull a leg muscle. You are at -25. Out 2 rounds.	Fall. +15 Hits. Break your arm. You are out for 6 rounds.
21 — 40	90	70	60	20	10	5	Fail to act.	Fall down. +7 Hits. You take 3 hits per round. Out for 2 rnds.	Fall. Knock yourself out. You are out for 30 rounds. +10 Hits.
41 — 55	100	80	70	30	20	10	5	Fall down. +5 Hits. Out for 3 rounds.	Fall. Sprain ankle. You are -30. +15 Hits.
56 — 65	100	90	80	40	30	20	10	Fail to act.	Fall. +7 Hits. 3 hits/rnd. Out for 2 rounds.
66 — 75	100	100	90	50	40	30	20	5	Freeze for 2 rounds.
76 — 85	100	100	100	60	50	40	30	10	Fail to act.
86 — 95	100	100	100	70	60	50	40	20	5
96 — 105	110	100	100	80	70	60	50	25	10
106 — 115	110	110	100	90	80	70	60	30	20
116 — 125	120	110	110	100	90	80	70	40	30
126 — 135	120	120	110	100	100	90	80	50	40
136 — 145	130	120	120	110	100	100	90	60	50
146 — 155	130	130	120	120	110	100	100	70	60
156 — 165	140	130	120	120	120	110	100	80	70
166 — 185	140	140	130	Super move. You feel great. Take 4 hits from your current total.	Excellent move. You are unstunned. +10 to allies' rolls for 2 rnds.	120	110	90	80
186 — 225	150	140	Great move. You feel better. Subtract 4 hits from current total.	Move inspires all. You are unstunned. Allies are at +10 for 2 rnds.	Move inspires your allies. +20 to friendly rolls for 3 rounds.	Move inspires your allies. +30 to friendly rolls for 2 rounds.	120	100	90
226 — 275	150	Incredible move. You feel great. Take 3 from your hit total.	Move inspires all. You are unstunned. Allies are +10 for 2 rnds.	Move inspires your allies. +20 to friendly rolls for 3 rounds.	Move inspires your allies. +25 to friendly rolls for 3 rounds.	Move inspires your allies. +30 to friendly rolls for 3 rounds.	You have half the round to act.	100	100
276+	Incredible move. You feel great. Take 3 from your current hit total.	Brilliant. Move inspires all. Allies are at +10 for 2 rnds.	Move inspires your allies. +20 to friendly rolls for 3 rounds.	Move inspires your allies. +25 to friendly rolls for 3 rounds.	Move inspires your allies. +30 to friendly rolls for 3 rounds.	Move inspires your allies. +30 to friendly rolls for 4 rounds.	Move inspires your allies. +30 to friendly rolls for 6 rounds.	Move stuns all foes within 30'. You still have half a rnd to act.	Move stuns all foes within 50 feet.

16.0 MANEUVERS

Maneuvers are actions (other than attacks) which under normal circumstances have a chance of failing and usually entail an element of risk. Thus normal movement and activities (e.g., walking, climbing stairs, drawing a weapon, etc.) are not maneuvers. Unusual activities (e.g., swimming, climbing a rope, running up or down stairs, opening a locked safe, etc.) and activities performed under stress (e.g., running, dodging, stalking, hiding, etc.) are maneuvers and require rolls. The GM is the final judge as to what is a maneuver and requires a roll, and what is normal activity and doesn't require a roll.

In *Cyberspace,* there are several classes of maneuvers, each of which is resolved differently:

- Static Maneuvers
- Moving Maneuvers
- Vehicular Maneuvers
- Special Maneuvers

16.1 SJATIC MANEUVERS

Static maneuvers include equipment operation, security bypassing, hiding, using social skills, CyberDeck operation, Perception, Cyber Attunement, and any other complex or unusual activity not involving significant movement. If a character chooses a static maneuver as his action for a round, the GM must assign a difficulty and then the character must decide whether or not to actually perform the maneuver (see Section S 14.2 for the effects of canceling an action). The GM may require more than one round for maneuvers which are very difficult or complex. He may also allow a character to decrease the difficulty of appropriate maneuvers by using multiple rounds.

If the character decides to proceed with the maneuver, he makes an open-ended roll and adds his appropriate skill bonus along with any other applicable modifications (see Section A 10.0). The resulting total is cross-indexed with the appropriate column on the *Static Maneuver Chart* (if a column applies to the maneuver) to obtain the maneuver result. If a column does not apply to the maneuver, use the "General Column."

To summarize:

1) The GM assigns a difficulty to the maneuver.
2) The character decides whether or not to perform the maneuver.
3) If he decides to perform the maneuver, an open-ended roll is made.
4) All applicable modifications are made to the roll (see Section A 10.0).
5) The total is applied to the *Static Maneuver Chart*

Note: *A GM may wish to use a simpler system for step 5): if the total is over 100 the maneuver succeeds, otherwise it fails.*

16.2 MOVING MANEUVERS

Moving maneuvers involve climbing, swimming, stalking, and any complex or unusual movement. If a character decides to make a moving maneuver as his action for a turn, the GM should assign a difficulty to the maneuver: Routine, Easy, Light, Medium, Hard, Very Hard, Extremely Hard, Sheer Folly, or Absurd. The maneuver must still be within the physical capabilities of the character, and is limited to covering a distance no more than half of the character's normal (not running) movement. The GM may also assign an additional modification to the maneuver roll (e.g., an unassisted running leap across a 12 meter chasm for a human might be given a difficulty of "Absurd -10" since the world record is only around 9 meters). Assigning difficulty requires some familiarity with the *Personal Maneuver Chart* (page 44) and a subjective decision on the part of the GM (practice and experience will help).

After the difficulty is assigned, the character may then decide not to attempt the maneuver (i.e., he reconsiders and decides not to do it). In this case, he cancels his action and may perform some other limited action as described in Section S 14.2.

If the character decides to proceed with the maneuver, he makes an open-ended roll and adds his appropriate skill bonus along with any other applicable modifications (decided upon by the GM due to circumstances). The resulting total is cross-indexed with the difficulty on the *Personal Maneuver Chart* (page 44) to obtain the maneuver result. An "F" result requires a second roll on the *Maneuver Failure Table* (A 9.4). A number result indicates the percentage of the attempted maneuver that was accomplished. If the result is higher than 100, the character still has some extra time left in the round to perform limited movement (e.g., a result of "140" means that the character can move 40% of his normal WMR).

To summarize:

1) The GM assigns a difficulty to the maneuver.
2) The character decides whether or not to perform the maneuver.
3) If he decides to perform the maneuver, an open-ended roll is made.
4) All applicable modifications are made to the roll.
5) The total is applied to the *Personal Maneuver Chart* (page 44).

Example: *Zak attempts to leap a 2 meter gap from one rooftop to another; he tells the GM that he is attempting to leap 4 meters (better long than short). The GM decides that this is a Hard maneuver modified by Zak's Maneuvering skill bonus (still +5 with LBA armor on). Zak's Player rolls a 72, for a total of 77. The table reveals that 50% of the maneuver is accomplished. Zak makes it exactly 2 meters across and totters on the edge of the opposite rooftop (the GM might require another maneuver roll to avoid slipping).*

16.3 VEHICULAR MANEUVERS

The skills used for vehicular maneuvers are normally Drive and Pilot. Such maneuvers require a special treatment. These maneuvers use the *Personal* Maneuver Chart (page 44), but the result shown on the chart indicates the percentage of normal movement achieved by the vehicle. A result of "F" indicates that a roll must be made on the *Vehicular Failure Table* (A 9.5).

The GM may also require a vehicular maneuver roll for unusual driving and piloting attempts (e.g., flying through a tunnel, driving around corners at high speed, etc.). Such maneuvers are resolved just like moving maneuvers with results of less than 100 indicating that only part of the maneuver is accomplished.

Example: *A jet helicopter has a max speed of 1000 kph, and its pilot has a Pilot skill bonus of +35. The GM rules that rain and turbulence has created a Very Hard environment to fly in, so the roll is made on the Very Hard column. The roll is 88, which comes to 123 after adding the skill bonus. On the chart this gives us a result of 90, meaning that the 'copter moves at 900 kph.*

The same pilot attempts to land the 'copter in a small clearing just big enough for the rotors. The GM also rates the maneuver as Very Hard and the same rolls are made as above for a result of '90'. The GM rules that the rotors are 90% in the clearing and the 10% outside just clips small branches and light foliage; the pilot hopes that the GM will be just as generous as during any later take-offs.

16.4 USING EQUIPMENT

Equipment operation is resolved as a static maneuver. Operating simple, standard equipment (e.g., a telephone, an information terminal, etc.) should be a routine maneuver with an additional +50 modification. All equipment in this product will perform as described under most circumstances. However, there are situations when things go wrong for various reason. This section deals with those circumstances.

INSTRUMENT FAILURE

When using any sort of equipment, the Player should roll 1D100. A result of 01-02 indicates some sort of *instrument failure.* If this happens, roll 1D10 to determine what went wrong:

1-7 — item is out of power

8-9 — item malfunction (roll again for severity and then roll on the *Equipment Mishandling Chart)*

10 — Item has been dropped (roll again for severity and then roll on the *Equipment Mishandling Chart* with a -10 modification)

To determine the severity of a breakage, roll 1D10:

1-5 — Routine (+20 on *Equipment Mishandling Chart)*

6 — Light (+10 on *Equipment Mishandling Chart)*

7 — Moderate (+0 on *Eauipment Mishandling Chart)*

8 — Severe (-10 on *Equipment Mishandling Chart)*

9 — Very Severe (-20 on *Equipment Mishandling Chart)*

10 — Extremely Severe (-30 on *Equipemnt Mishandling Chart*)

In addition, if the character falls or is hit in a body location which stores an item, there is a 50% chance that the item will suffer instrument failure. If a result is rolled that is impossible, no failure occurs (e.g., a phone mounted on a wall can not be dropped, a terminal plugged into the wall will not be "out of power" unless the local power net goes down).

EQUIPMENT MISHANDLING CHART

-29	Your piece of equipment, in a last act of vengeance, gives you an "A" critical hit, then disintegrates into a useless lump of semiconductors,
-28 — -21	Your device is a collection of shattered circuits and cracked plastic. There is nothing worth saving; don't even bother to make a repair roll.
-20	With a loud bang, a 'poof' and a billow of smoke, every circuit in your item shorts out.
-19 — 05	The item is perfectly operational — except every time you use it, the equipment gives you a 1D10 hit electrical shock. Insulating gloves will help, but subtract 30 from any bonus.
06 — 20	The recalcitrant equipment is operational at -50.
21 — 50	If the device has more than one function (a multiscanner, for instance), it has one function is operational; otherwise it is useless until repaired.
51 — 79	You can try to use your device, but 50% of the time it doesn't work.
80	The device works fine — if you hold it upside-down (and only then). This subtracts 30 to 90 from your bonus, depending on the item's use.
81 — 89	The device is functional but at -30.
90	The equipment is functional, but it rains the energy cells at an accelerated rate. Any roll of an 03-20 during use indicates drained cells.
91 — 99	The equipment is functional but at -20.
100	The device seems to work fine; however, it is secretly burning itself out, and after 1D10 more uses the damage increases to *Extremely Severe.* It is useless until repaired.
101 — 109	Your device will function, but at 1/2 normal range until repaired.
110	Your equipment is fully operational, but the next time it must roll versus damage it is +0 (instead of the normal +50).
111 — 119	The device is fully functional but all operations are at -10.
120	A sharp slap and the item begins to function normally again. No damage except a couple of scratches.

Modifiers

Extremely Severe — -30
Very Severe — -20
Severe — -10
Moderate — +0
Light — +10
Routine — +20

16.5 CONSTRUCTION AND RESEARCH

Construction and Research tasks are an unusual variety of maneuver in that they rarely can be performed in a single round — in fact, the character often has no idea how long it will take until he is at least partially finished. However, in a science-fiction milieu, these sorts of activities are nonetheless very important, allowing for the design of new weapons, programs, cybernetic implants, cryptographic codebreaking, etc.

Construction and Research tasks refer to the *Construction/Research Chart (p.* 47). The chart features various difficulties from *Routine* to *Absurd.* The difficulty must be assigned by the GM before a roll is made, with additional modifiers if warranted by the situation. Most boxes on the chart contain two numbers.

For research, the first one indicates the percentage of the total desired data acquired after the effort represented by the research roll.

For construction, the first number indicates the percentage chance that the item will function properly. The second number in each box indicates how much time has been spent to achieve the result. This is actual time in work, so sleep and break time should be added in when days or weeks become involved.

Note: *Generally, research is performed using pure science or Technical skill bonuses. Construction is performed using Technical skill bonuses. If a project seems to fall under more than one category, the two skill bonuses may be averaged. If the character is aided by other skilled people (or robots, etc.), add +5 to the roll for each helper.*

	Routine	Easy	Moderate	Hard	Complex	Very Complex	Absurd
-151	Light malfunction to the equipment.	Moderate malfunction to the equipment.	Moderate malfunction to the equipment.	Moderate malfunction to the equipment.	Severe malfunction to the equipment.	Severe malfunction to the equipment. 10 days wasted.	Physically impossible
(-150) — (-101)	Routine malfunction to equipment.	Routine malfunction to equipment.	Routine malfunction to equipment.	Routine malfunction to equipment.	50 hrs. wasted; 50% of materials (clone. replicant, machine parts, etc.) destroyed .	No progress; 50 days wasted and 100% of materials destroyed due to error.	Project botched after one year. All materials lost.
(-100) — (-51)	5% 5 minutes.	5% 40 mins.	Upgrade to Hard. Waste 1 hour.	5% 100 hours.	10 hours lost; 20% of materials destroyed due to error.	Problem 30 days into task. 50% chance project destroyed (If research: wrong data). 50% no damage, no progress.	5% 6 yrs. Slight progress, but equipment acts up: roll Very Severe malfunction.
(-50) — (-26)	10% 2 minutes (12 rounds).	10% 40 mins.	5% 4 hours.	5% 80 hours.	5% 350 hrs. If construction, 10% of material destroyed.	10% 100 days. If construction, 20% of material destroyed and must be replaced.	5% 5 yrs. If construction, 50% of materials damaged.
(-25) — 0	20% 1 minute (6 rounds).	10% 30 mins.	10% 2 hour.	10% 60 hours.	10% 350 hours.	20% 90 days. If construction, 10% of material destroyed and must be replaced.	5% 4 yrs. If construction, 20% of materials damaged.
01 — 20	40% 6 rounds.	30% 30 mins.	20% 1 hour.	20% 50 hours.	15% 350 hours.	10% 85 days.	5% 3 yrs. If construction, 10% of materials damaged.
21 — 40	60% 6 rounds.	50% 30 mins.	30% 50 mins.	25% 40 hours.	15% 300 hours.	15% 83 days.	5% 2 yrs.
41 — 55	80% 6 rounds.	70% 20 mins.	40% 50 mins.	30% 40 hours.	20% 300 hours.	20% 80 days.	5% 1.5 yrs.
56 — 65	90% 6 rounds.	95% 20 mins.	50% 40 mins.	35% 30 hours.	25% 300 hours.	30% 80 days.	5% 1 year.
66 — 75	95% 6 rounds.	95% 10 mins.	60% 40 mins.	40% 30 hours.	25% 250 hours.	30% 78 days.	6% 1 year.
76 — 85	99% 6 rounds.	99% 10 mins.	70% 35 mins.	45% 30 hours.	25% 250 hours.	35% 75 days.	7% 1 year.
86 — 95	100% 6 rounds.	99% 5 mins.	70% 30 mins.	50% 30 hours.	30% 250 hours.	35% 72 days.	8% 1 year.
96-105	100% 6 rounds.	99% 2 mins.	95% 20 mins.	50% 30 hours.	40% 250 hours.	35% 70 days.	9% 1 year.
106-115	100% 5 rounds.	99% 1 min.	98% 20 mins.	55% 25 hours.	40% 200 hours.	40% 69 days.	10% 1 year.
116-125	100% 4 rounds.	99% 1 min.	99% 20 mins.	60% 25 hours.	40% 200 hours.	40% 64 days.	10% 300 days.
126 — 135	100% 4 rounds.	99% 5 rounds.	100% 20 mins.	65% 25 hours.	45% 200 hours.	45% 60 days.	10% 250 days.
136 — 145	100% 3 rounds.	99% 5 rounds.	100% 20 mins.	70% 25 hours.	50% 200 hours.	50% 57 days.	10% 200 days.
146 — 155	100% 3 rounds.	99% 5 rounds.	100% 15 mins.	80% 25 hours.	50% 125 hours.	55% 53 days.	10% 150 days.
156 — 165	100% 2 rounds.	99% 5 rounds.	100% 10 mins.	95% 25 hours.	50% 110 hours.	50% 51 days.	10% 120 days.
166+	100% 1 round.	100% 4 rounds.	100% 10 mins.	100% 20 hours	60% 100 hours.	60% 50 days.	10% 100 days.

Note: all percentages refer to the fraction of research / construction on the project that has been completed by the given roll. Times (unless otherwise noted) indicate the amount of time required to complete the given percentage of the project.

MALFUNCTION/REPAIR CHART

	ROUTINE	LIGHT	MODERATE	SEVERE	VERY SEVERE	EXT. SEVERE
-151	Sad job. Damage/Mai function becomes Very Severe after 1 round.	Dam/Mai becomes very severe after 1 round.	You deliver 10 pts. of damage to the system. Roll again.	You deliver 30 pts. of damage to the system. Repair on extremely severe column.	You deliver 150 Hits to the system. System is a write off.	System is destroyed (Explosively if possible). 100% crew casualty rate.
(-150) — (-101)	Dam/Mai becomes severe after 4 rounds.	Dam/Mai becomes severe after 5 rounds.	Dam/Mai becomes extremely severe after 1 minute.	Dam/Mai becomes very severe. After one hour waste 10% CIP.	System is a write off after 2 hours of tinkering.	1 — 100% of repair crew becomes casualties. System destroyed.
(-100) — (-51)	Dam/Mai becomes moderate after 4 rounds.	Dam/Mai becomes moderate after 6 rounds.	Dam/Mai becomes very severe after 2 minutes.	Dam/Mai becomes very severe after 6 rounds.	Dam/Mai upgraded to extremely severe after 1 hour.	2 members of repair crew takes appropriate "D" critical strike.
(-50) — (-26)	Dam/Mai becomes light after 3 rounds.	20 minutes with 5% CIP. otherwise 30 minutes.	Dam/Mai becomes severe after 1 minute.	3 hours to repair with 10% CIP.	72 hours to repair with 50% CIP.	1 member of repair crew takes appropriate "C" critical strike.
(-25) — 0	You fumble with device for 5 minutes until it is working again.	10 Minutes to repair unit. Unit operates at -25% with a routine malfunction.	40 minutes to repair with 10% CIP. You overload circuits causing a random malfunction.	2 hours to repair with 10% CIP.	48 hours to repair with 50% CIP.	1 — 100 Hits to system. Try again.
01 — 20	3 minutes to repair.	8 minutes to repair.	30 minutes to repair damage with 10% CIP. Malfunction repaired — no cost.	90 minutes to repair damage with 10% CIP. 60 minutes to repair malfunction with 10%.	36 hours to repair unit to 50% effectiveness, 48 hours to fully repair. 50% CIP.	Repair may not be attempted until 2 "severe" procedures are completed.
21 — 40	2 minutes to repair.	5 minutes to repair. "Routine" malfunction will occur next time system is used.	20 minutes to repair with 10% CIP.	1 hour to repair with 10% CIP.	24 hours to repair with 25% CIP.	200 hours to repair with 50% CIP.
41 — 55	1 minute to repair.	5 minutes to repair.	15 minutes to repair with 5% CIP. 25 min. otherwise.	1 hour to repair damage with 10% CIP. Malf. repaired without cost.	24 hours to repair with 25% CIP.	120 hours to repair with 10% CIP.
56 — 65	5 rounds to repair.	5 minutes to repair.	13 minutes to repair with 5% CIP. 25 min. otherwise.	55 min. to repair damage with 10% CIP. Malf. repaired without cost.	24 hours to repair damage with 25% CIP. Malf. repaired without cost.	110 hours to repair to 50% effectiveness. 120 hours to repair fully. 50% CIP.
66 — 75	5 rounds to repair.	5 minutes to repair.	12 minutes to repair. Dam/Mai becomes "light" after 1 round.	50 min. to repair damage with 10% CIP. Malf. repaired without cost.	18 hours to repair damage with 25% CIP. Malf. repaired without cost.	110 hours to repair with 50% CIP.
76 — 85	4 rounds to repair.	4 minutes to repair.	10 minutes to repair.	45 minutes to repair damage with 10% CIP. Malfunction repaired by two light procedures.	15 hours to repair with 10% CIP.	100 hours to repair with 50% CIP.
86 — 95	4 rounds to repair.	4 minutes to repair.	9 minutes to repair.	40 minutes to repair with 5% CIP.	15 hours to repair with 10% CIP.	90 hours to repair damage with 50% CIP. Malfunction repaired without cost.
96 — 105	3 rounds to repair.	3 minutes to repair.	8 minutes to repair.	40 minutes to repair.	13 hours to repair damage with 10% CIP. Malf. repaired without cost.	Repair reduced to 2 "moderate" procedures.
106 — 115	3 rounds to repair.	2 minutes to repair.	7 minutes to repair damage. 6 minutes to repair malfunction.	30 minutes to repair with 5% CIP. 40 minutes to repair otherwise.	10 hours to repair unit to 50% capacity. 11 hours to repair fully. 10% CIP.	80 hours to repair with 50% CIP.
116 — 125	2 rounds to repair.	2 minutes to repair.	You isolate 3 "routine" procedures to repair unit. Start next round.	30 minutes to repair.	8 hours to repair. 10% CIP.	70 hours to repair damage with 50% CIP. Malfunction repaired without cost.
126 — 135	2 rounds to repair.	6 rounds to repair.	5 minutes to repair.	25 minutes to repair.	5 hours to repair. 10% CIP.	70 hours to repair damage or 60 hours to repair malfunction. Both have 25% CIP.
136 — 145	You may use equipment next round.	4 rounds to repair.	Unit at -25% in 3 minutes. Unit repaired in 5 minutes.	20 minutes to repair.	5 hours to repair. 10% CIP. Malfunction is downgraded to severe.	60 hours to repair to 50% effectiveness. 70 hours to repair fully. 25% CIP.
146 — 155	Unit ready next round.	3 rounds to repair.	Unit at -50% in 6 rounds. Unit repaired in 5 minutes.	20 minutes to repair damage. Malf. repair is 3 routine procedures.	4 hours to repair. 10% CIP.	50 hours to repair with 25% CIP.
156 — 165	Unit ready. You have 1/2 of the round left.	2 rounds to repair.	3 minutes to repair.	Downgrade repair to moderate after 5 minutes.	3 hours to repair. 10% CIP.	Procedure reduced to 2 "severe" repair procedures.
166+	Quick adjustment. You have the full round to act.	1 round to repair.	2 minutes to repair.	10 minutes to repair.	Reassesment of systems shows 2 "light" repairs are required.	40 hours to repair with 25% CIP.

Note: Concussion hits repaired on a vehicle in a 25 hour period = a Mechanical Tech repair roll divided by 10.
Note: If only one person is working on a repair, double the times listed. Double the necessary time if no repair scanner or diagnostic computer is used during the repair.
CIP refers to Cost-in-Parts. This is the indicated percentage of the parent unit cost which must be invested to bring about the desired repair.

CONSTRUCTION / RESEARCH DIFFICULTIES

The following descriptions should be used when attempting to assign a difficulty to a Construction / Research task. For a good idea of the time involved, look at the chart itself — especially in the range of 01 to 95 (where most rolls will end up).

Routine: Very simple operations, improvising wiring on a simple device, or assembling a modular unit (with instructions), checking one single reference for research.

Easy: Elementary construction, assembling a small unit with pre-made parts, researching several reference sources.

Moderate: Slightly more sophisticated operations, yet still in the "simple" range.

Hard: Complicated construction, custom tooling or wiring of a complete unit, simple chemical synthesis, lower end of involved research or creative design.

Complex: Advanced micro-organic or chemical work, known recombinant DNA practices, construction of basically new devices from raw materials, detailed research with numerous cross-references.

Very Complex: Construction of sophisticated new systems and new types of recombinant DNA work, extremely detailed research (with unclear data).

Absurd: Use this column for projects which would normally be *Hard* to *Very Complex*, but when there are important facilities/supplies unavailable. Remember that some things are simply impossible — don't let your players talk you into allowing them to create antimatter fuel just because there is an *Absurd* column...

Example: *Zak asks Thurman, a Tech Rat friend, to modify his Ford Interceptor. The car has a machine gun mounted behind each retractable headlight, and Zak wants Thurman to wire the guns to the car's "DNI system, allowing Zak to control them through his DNI jack. The GM assigns a* Hard *difficulty to the project and decides that it will require the use of Thurman's averaged Electronics Technics and Mechanical Technics skills, for wiring space must be made without disturbing the car's functioning. Thurman's average bonus for these skills is 78, and he adds this to a D100 roll of 89, for a total of 167. Consulting the* Hard *column of the* Construction/Research Chart, *the GM informs Thurman that the project was successful and took only 20 hours. Way to go, Thurman!*

16.6 REPAIRS

Repairs are another unusual maneuver — the character can never quite be certain how long they take. They are performed using the *Malfunction/Repair Chart,* and are modified by the appropriate Technical skill bonus. The result indicates how long the repair maneuver took to complete, and may indicate a "CIP" — Cost In Parts. This is a percentage of the base cost of the original unit. The chart assumes a team (of at least two people) are working on the repair. If only one character is involved, double the time amounts shown on the chart. If there are more than two skilled people working on the repair project, add +5 to the roll on the *Malfunction/Repair Chart* for each additional skilled helper. Of course the GM will often want to limit the number of people working on a given project at once (10 people cannot repair one machine pistol at the same time...).

Example: *While tooling around In his newly-modified Interceptor, Zak is hit by a GEM Minibus driven by a Corporate courier. After giving the driver a quick lesson in Sprawl etiquette, he has his totaled Ford towed to a garage owned by a couple of buddies that owe him a favor. The GM rules that the damage to the vehicle is* Very Severe. *The head repairman's Mechanical Technics bonus is 65, and he rolls a 49. He adds +10 to this roll since he has three helpers (+5 per skilled participant above two), and adds his bonus for a total of 124. Checking the* Very Severe *column of the* Malfunction/Repair Chart, *the GM informs Zak that the repair will take 8 hours and require 10% Cost in Parts. Zak is relieved with the low CIP until the head repairman hands him the bill for 8 hours of labor.*

17.0 ATTACKS

Attacks occur when a character (the attacker) attempts to affect or harm an opponent (the defender or target). The attacks fall into two categories: fire/missile/mounted attacks and melee attacks. Each type of attack is normally resolved during a different part of the round. If a character's action for a round is an attack (fire/missile/mounted or melee), he may move up to 3 meters during the proper part of the round (i.e., during movement). Simple actions such as dropping whatever is in his hands may be performed with the permission of the GM, who may assign a penalty (to the character's OB) if necessary.

If a character's action is melee, he has the option of moving the 3 meters just before melee attacks are resolved (i.e., the movement is a charge and thus part of the attack). The attacker may also shift an item (e.g., draw a weapon, activate a cyber weapon, etc.), but then his Offensive Bonus is modified by -30.

An attack is resolved by the attacker making an open-ended attack roll, adding any applicable modifications, and applying the total to the appropriate attack table (Section A 7.0). The result will usually require a second roll on the *Fumble and Failure Tables* (A 7.0) or a specific critical table. Applicable modifications are given on the attack tables, and special attack properties are given in the *Master Weapon Chart* (Section A 7.1). A summary follows:

1) Attacker makes an open-ended attack roll.
2) If an UM (unmodified) result is obtained, proceed to 4.
3) All applicable modifications are made to the roll.
4) The total is applied to the appropriate attack table.
5) The result may require a roll on a second table.

THE OFFENSIVE BONUS (OB)

The Offensive Bonus is the attacker's modifier to the attack roll. It consists of his skill bonus with the weapon used (modified for range if applicable), any special bonus granted by the weapon itself, and any additional modifiers imposed by the GM (summarized on the *OB Modifications Chart,* p. 50). Some or all of this Bonus may be shifted to defense if desired — see Section S 17.2.

OB MODIFICATIONS CHART	
Mod	**Situation**
+15	Flank Attack *
+20	Rear Attack *
+20	Defender is surprised *
+20	Defender is stunned or down *
-10	For each 3 meters the attacker has moved
-30	Attacker drawing or changing weapons
-20	Attacker wounded more than 50% or total hits

* — Not applicable to fire and missile weapons.

THE DEFENSIVE BONUS (DB)

The Defensive Bonus (DB) is the defender's modifier which is subtracted from the attacker's roll. It is comprised of the defender's Quickness stat bonus, plus any positional modifier granted by the GM. In general, cover will provide a bonus equal to the percent of the body covered (e.g., kneeling behind a car might be worth +50, hiding behind a wall with only your face and weapon arm showing would be about +60, etc). The DB may be increased by shifting some or all of the OB into parrying — see Section S 17.2.

17.1 SEQUENCING ATTACKS OF THE SAME TYPE

All fire/missile/mounted attacks are resolved simultaneously (i.e., they take effect no matter what happens to the attacking character). Melee attacks are resolved one at a time. When two or more characters wish to make melee attacks in the same round, each rolls 1D100 and adds his Maneuvering skill bonus (this is a sort of "Initiative roll"). The highest total attacks first, the next highest second, and so on. If the total rolls are equal, the attacks occur simultaneously.

If a character's attack is an opportunity action (delayed from a previous round, or from earlier in the current round), it is always resolved before other attacks of the the same type.

17.2 TARGET CHOICE AND PARRYING

Just before melee attacks are resolved all combatants must decide which opponents they will attack and how much of their OBs they will attack with. A character may only make a melee attack upon another character who is within 3 meters. If more than one foe is available, one must be selected as the target for the attack.

Just before melee attacks are resolved all combatants must decide which opponents they will attack and how much of their Offensive Bonuses they wish to parry with. A character may only attack a foe who is adjacent to him (within 3 meters). This is an acceptable form of limited movement. If more than one foe is available, the character must choose one to attack.

MELEE PARRYING

A character may "parry" the melee attack of the target he is attacking in melee. He may reduce his OB by any amount (but not to less than 0), and his target's melee attack roll is then modified downward by that amount. In effect, the character may use all or part of his OB to subtract from the melee attack roll of one of his adjacent foes. The character still makes a melee attack roll against the foe that he is parrying, adding whatever part of his Offensive Bonus that was not used to parry (it can be 0).

A stunned character or a character using a 2-Handed weapon may not parry with more than half his OB.

When the characters indicate their actions for a round (Section S 14.0), the GM may wish to require the characters to indicate or write down their target and the amount they wish to parry with.

FIRE/MISSILE/MOUNTED PARRYING

If a character is next to an appropriate barrier (e.g., wall, table, etc.), and he is facing an opponent making a fire/missile/mounted attack against him, he may "parry" (i.e., dodge behind the barrier) the missile attack with up to half of his OB (this is handled like melee parrying). This may be combined with half of his normal (not running) movement **or** an attack modified by his remaining OB.

Example: *Randax is crouched behind a steel table. He wants to pop up and fire at one of the corporate goons that he is in a firefight with. He allocates 20 of his 60 OB to "parry" the corporate goon's pistol fire. Thus, Randax shoots at the goon with a 40 OB and the goon receives an additional -20 mod to his attack.*

17.3 UNMODIFIED ROLLS

Certain results on the attack tables are marked with a "UM". When the attack roll before modification falls within one of these ranges, no modifications are made to the attack roll. These results can only be achieved if the unmodified roll falls within these ranges. Modified rolls falling into these ranges are treated as the next lower (or higher) result.

17.4 MAXIMUM & MINIMUM RESULT LIMITATIONS

The attack tables have maximum and minimum results. If a modified attack roll t exceeds a maximum result, the roll is treated as the highest non-UM result allowed. If a modified attack roll is less than the minimum result, the roll is treated as the lowest non-UM result (See the Attack Tables in Section A 7.0).

17.5 ATTACK RESULTS

An attack may have several results depending upon the attack roll (modified or unmodified). These results include fumbles, hits, and criticals.

Fumbles and Failures: If an attack roll results in an "F" result (the actual failure range depends on the exact weapon used — see the *Master Weapons Chart*, Section A 7.1), the attack has failed and a roll must be made on the *Fumble and Failure Tables* (Section A 9.0). A fumble/failure roll is not modified, and the results are immediately applied.

Hits: The number results on all of the attack tables indicate the number of hits delivered to the target **(Note:** the numbers shown on the *Grenade/Explosive Attack Table* (A 7.4), must be multiplied by the Mk# of the detonating weapon).

Criticals: The letter results (A, B, C, D, and E) indicate that the target has been given one or more *critical strikes* (also called "aits"). The type and number of crits depends upon the type of weapon used (see the *Master Weapons Chart,* Section A 7.1). To determine the result of the crit a second roll is made, modified by a bonus based upon the crit's severity (i.e., what letter), and then applied to the appropriate *Critical Table* (Section A 8.0). The results are immediately applied to the target.

If the target takes a crit result which lasts for a certain number of rounds and has not yet taken any action for the current round, the current round counts as the first round effected by the crit result.

Criticals deliver very specific damage to targets. All of the damage specified by criticals should be self-explanatory except for the following very common results:

+# hits — This many hits (#) are taken in addition to the normal hit result obtained from the attack table used (e.g., "+5 hits").

hits per round — Each round after the crit is taken, the target takes this many (#) additional hits due to pain and blood loss (e.g., "3 hits per round").

Stunned # rounds — The target is stunned for this many (#) rounds, during which he may not attack and may only parry with half his OB. Any other action requires a maneuver roll modified by -50 (e.g., "Stunned 5 rounds").

-# to activity — All of the target's bonuses (except DB and RRs) are lowered by the # shown (e.g., "-10 to activity").

17.6 RANGE AND RELOADING

All fire/missile/mounted weapons have ranges which indicate how far away the target may be from the attacker. In addition, each range gives a modification to the attack roll. For the effective ranges and range mods of all weapons, see the *Master Weapons Chart,* Section A 7.1).

All fire/missile/mounted weapons are capable of being used only a limited number of times before reloading is necessary. For bows and grenades, this number is obviously 1, but most firearms may be used several times before reloading is necessary. Reloading a weapon takes one round, during which the character may perform no other actions except limited movement (3 meters). If the character wishes, reloading may be done very quickly (e.g., the character can perform another action in the same round), but the other action performed suffers a modifier of -25.

17.7 DRAWING WEAPONS

Drawing a weapon requires less than one phase, and is assumed to be performed (if necessary) just prior to the actual attack roll. However, a character who draws and attacks in the same round will suffer a modifier of -30 to his OB. If the character makes a successful maneuver (modify by the Quick-Draw skill bonus), this penalty may be ignored.

Example: *The following is a combat example which demonstrates the concepts presented in Sections S 17.1-17.7.*

Charlie Venom is prowling through a warehouse when two guards (Guard A and Guard B) spot him from fifteen meters. With gunplay imminent, the GM consults the Sequence of Actions (Section S 14.0). Before the sequence begins, all parties involved must declare what action they plan to take. Charlie will draw and fire his Gauss Pistol and then duck behind a crate, and the guards unleash with Autoshotguns (Ugh!). Since the first phase in the sequence of actions is the non-melee attack phase, the gunfire occurs before Charlie moves, so his DB will not be aided by cover. Normally all fire/mounted/missile attacks are resolved simultaneously (Section S 17.1), but Charlie's Pistol is a Smartgun, so his fire attack is resolved before the guards'. If the guards were Smartgun-equipped, all fire attacks would occur at the same time. Chalie must draw his weapon before he fires, so he will suffer a -30 mod to his OB; however, Charlie may use his Quick-Draw skill (bonus: 60) to negate the mod. The GM tells him to roll open-ended, adding his 60 Quick-Draw bonus. Charlie rolls 87 + 60 = 147. He had to roll over 100 to negate the -30 penalty, so he succeeds, and the guards watch in amazement as Charlie draws his concealed weapon and fires before they can squeeze the triggers of their readied Autoshotguns!) Now we must determine Charlie's Offensive Bonus:

***36** (Charlie's skill bonus with his Gauss Pistol, including the Weapon's +10 bonus; he suffers no range penalty since he is only 15 meters from the guards)*

***-10** (Charlie is moving to a crate 4 meters away; there is a -10 OB penalty for each 3 meters of movement during a fire attack round)*

Charlie's total OB is 36 - 10, = 26. He fires at Guard A, whose DB is 10. Charlie rolls an open-ended D100, adding 16 (26 – 10) to the result. The roll is 77, for a total of 93. Guard A is wearing Light Body Armor, so the GM checks the Small Projectile Attack Table (A 7.2) *under the LBA column. The result for rolls from 91-95 is "9B", so Charlie delivers 9 points of damage and a B Puncture critical. He rolls a 92 (Yeah!) on the* Puncture Critical Table (A 8.1), *but he must subtract 10 from this roll since it is a B critical, for a total of 82. Guard A drops to the concrete floor, clutching his broken weapon arm as the Autoshotgun slips from his grasp. Now it's Guard B's turn.*

Guard B is impressed by Charlie's prowess with the Gauss Gun and decides not to risk a firefight. Instead, he cancels his action and closes to melee with the Sneak. The Guard may only use half of his movement (since he canceled his original action), but his WMR is 22, so he can easily reach Charlie if he runs. So as Charlie slips behind a crate, Guard B closes in, and we go to the next round.

At the beginning of this round both Charlie and Guard B declare that they will Melee bare-fisted. The GM therefore skips the non-melee phase and the moving maneuvers phase; as the melee phase begins, the characters must decide how much of their OBs they will use, and we must determine who strikes first. Both decide to commit their full OB to attack, saving none for parry. For first strike determination, Charlie 's player rolls a D100 and adds Charlie's Maneuvering skill bonus (20 — Charlie's No Armor bonus). The roll is 55, for a total of 75. The GM rolls a 39 for the guard, whose LBA bonus is 10 (total: 49), so Charlie swings first. His OB is 16, and Guard B's DB is 5, so Charlie adds 11 (16 – 5) to his open ended D100 roll on the Brawling Attacks and Falls Table (A 7.7). *His roll is 68, + 11 = 79. Guard B is wearing LBA, and the result under this column for rolls from 76-80 is "7A". Charlie delivers 7 points of damage and gets a roll on the* Brawling Critical Table (A 8.7). *The roll (after the -20 Mod for an A critical) is 58, and the guard takes 13 more hits and is stunned for 2 rounds. At the beginning of the next round of action, Charlie levels his Gauss Pistol at the guard and whispers "Don't make me waste ammo on you, BrawlBoy. Give it Up."*

17.8 GRENADE, ROCKET AND MISSILE ATTACKS

Explosive delivery systems (grenades, rockets and missiles) are a special class of fire/missile weapon, and all utilize the same method of delivery resolution.

RESOLVING DELIVERY

Range modifiers for all launcher weapons are noted in the weapons descriptions. Range modifiers for thrown grenades are shown below:

THROWN GRENADES RANGE MODIFIERS CHART

Range	Meters	Modifier
Point-Blank	1-3m	+100
Short Range	4-10m	+50
Medium Range	11-30m	+30
Long Range	31-50m	+0

During the Missile phase of the round, the attacker specifies where he would like the warhead to land. He then makes an open-ended roll adding the appropriate skill bonus (either Missile Weapon or Mounted Weapon), the range modifier for the weapon used, and any other modifiers stipulated by the GM. If the result is 100 or higher, the warhead has landed exactly as intended. If the result is 99 or less, the appropriate *Error Chart* (i.e., Thrown or Launched) indicates how many meters from the target site it actually landed. The GM should roll randomly to determine the direction of error. On a hex-grid map, roll 1D6 (or 1D10–4, rerolling results below 1) and count clockwise; otherwise roll 1D8 (or 1D10–2, rerolling results below 1) and count around the compass — a roll of 1 equals "North", 2 equals "Northeast", 3 equals "East", etc.

EFFECTS OF EXPLOSIONS

Once the detonation point has been determined, the effect of the explosion may be resolved. All explosive attacks generate five "Blast Radii" upon detonation. The most deadly effects are felt within the first radius (called "Ground Zero"), while reduced effects radiate outward through the second, third, forth, and fifth radii.

THROWN ERROR CHART

Roll	Point Blank	Short Range	Medium Range	Long Range
100+	0	0	0	0
99	1	1	1	1
98	1	1	1	2
97	1	1	1	3
96	1	1	2	4
95	1	1	2	5
94	1	2	3	6
93	1	2	3	7
92	1	2	4	8
91	1	2	5	10
86-90	1	2	6	12
81-85	2	3	8	14
71-80	2	3	10	16
51-70	2	3	12	18
31-50	2	4	14	20
11-30	3	5	17	25
06-10	3	6	20	30
02-05	3	8	25	40
01	4	10	30	50

A glimpse at the *Grenade/Explosive Attack Table* (A 7.4) will illustrate the damage thresholds created by these radii.

To resolve the effects of a blast, first determine who (or what) is in the affected area, and which Blast Radius they are in. Next, make an attack roll against each such target on the *Grenade/Explosive Attack Table* (A 7.4), using the damage threshold of the appropriate Blast Radius.

Note: *There is no attacker's OB added to this roll, although the Mk# of the warhead is multiplied by 5 and added to the roll). Generally, a target's DB will be of little use against an explosion, unless it is used to get behind some cover — fast. If explosives are used to breach some barrier (such as a wall or door), the following "hit point totals" may come in handy:*

Window Glass has 1 hit point total (2 or 3 for safety glass); Wood has 5 hits per centimeter of thickness; Stone/Concrete has 8 hits per centimeter; Light Steel has 20 hits per centimeter; Reinforced Steel has 40 hits per centimeter

LAUNCHED ERROR CHART

Roll	Point Blank	Short Range	Medium Range	Long Range
100+	0	0	0	0
99	1	1	1	1
98	1	1	1	3
97	1	1	1	3
96	1	1	2	5
95	1	2	4	15
94	2	2	5	20
93	2	2	6	30
92	2	3	7	40
91	3	4	8	50
86-90	3	5	9	60
81-85	4	6	10	70
71-80	4	8	20	80
51-70	5	10	30	100
31-50	6	15	40	200
11-30	7	20	50	400
06-10	8	30	60	600
02-05	9	40	80	800
01	10	50	100	1000

Example: *Zak tosses a grenade at a goon who is 25 meters away. His Missile skill bonus is 35, and he adds this to the +30 bonus for Medium Range (11-30m), for a total of 65. He wants the grenade to land 3 meters behind the goon (if Zak flubs the throw, he would rather the grenade go long than short!), so he rolls a D100 and adds 65, hoping for a total greater than 100. He rolls a 54 (+ 65) = 119, so the grenade lands right where he wanted it. The grenade has a Mk. 3 Shrapnel Warhead (2 meters per Mk.# is its blast radius), which has a blast radius of 6 meters. The goon is 3 meters from the explosion, so he'll be in the first blast radius (Ground Zero). Zak rolls on the* Grenade/Explosive Attack Table (A 7.4), *adding 40 (target in Ground Zero radius), and 15 (+5 per Mk. / of Explosive). His roll is 88 + 40 + 15 = 143! The goon is wearing an Armored Body Suit (ABS), so the result is "11D". However, the concussion hit damage is multiplied by the warhead's Mk. /, so the result becomes 33D: 33 hits and a D Shrapnel critical. Zak rolls on the* Shrapnel/ Automatic Critical Table (A 8.3), *adding +10 since it is a D critical. The roll is 80, + 10 = 90. The goon is flattened, stunned 12 rounds, and bleeding 9 hits per round, with +30 additional hits delivered, for a total of 63 hits this round! Nice toss, Zak!*

18.0 CONFLICTING ACTIONS

Sometimes the actions of two or more characters may conflict, and the GM must resolve the problem. In general, both should make conflict rolls modified by their respective Maneuvering skill bonus. The GM gives each roll a difficulty and obtains results from the *Personal Maneuver Chart* (p.44). Then the character with the higher of the two results succeeds, and the difference between the two results gives the GM some idea of how successful he was. The same result by both characters means a draw of some kind, and the GM must decide what happens. These conflict rolls are just used as a measure of the effectiveness and quickness of a character's action and do not affect the action being attempted.

One of the most common conflicts occurs when one character attempts to avoid melee with another. If a foe is adjacent to a character and attempts to maneuver away before melee occurs, the character who has chosen melee as his action may decide to attack that character before he maneuvers away. Both characters make conflict rolls. If the character who has chosen melee has the higher result, the attack is resolved normally and then the maneuver is resolved if the maneuvering character is still functioning.

If the maneuvering character's result is higher, he may perform his maneuver before the other character can attack. If there is a draw (equal results), it is suggested that the attacking character be allowed to melee with half of his OB or he may wait and melee with all of his OB.

If a character attempts to move or maneuver within 3 meters of a character performing an opportunity melee action (Section S 14.1), the meleeing character may intercept, stop the movement and attack.

19.0 VEHICULAR COMBAT

When characters in weapon-equipped vehicles engage in combat, some modifications to the basic attack system come into play. These modifications are kept to a minimum to allow ease of play and quick resolution of combat.

During a vehicular combat encounter, one must keep track of several things: the distance between the vehicles involved, their respective speeds, and any terrain factors which will effect movement and targeting. The best way to do this is to draw a map or use playing tokens of some sort to represent the vehicles and terrain. The drivers of each vehicle should keep track of their own speed and any other pertinent factors.

Vehicular combat is handled in standard rounds, each with two phases. These phases are 1) the Attack phase, and 2) the Movement phase. If characters are running around the field of combat (outside of vehicles), these two phases correspond to the first and second phases of the standard combat sequence (Section S 14.0).

In addition, a few things must be taken care of at the very beginning of each round. The entire round is detailed in sequential order below.

Initiative (handled at the beginning of each round): To determine the order that movement and attacks will be resolved in, the driver of each vehicle rolls 1-100 (open-ended) and adds the driver/pilot's skill bonus. The result is the driver/pilot's *initiative number.*

Attack Phase: Starting with the highest initiative number, each vehicle may now attempt to attack another (or a character, or whatever).

Movement Phase: All vehicles have a maximum acceleration/deceleration rating equal to half their max speed per round. Each vehicle's speed from the previous round may be increased or decreased by up to this number. Each driver must make a vehicular maneuver roll on the *Personal Maneuver Chart* (p. 44), with a difficulty determined by the GM (e.g., straight movement is *Easy,* Immelmann turns or bootlegger reverses are *Extremely Hard,* etc.). The result is the allowable movement as a percentage of the vehicle's current speed.

The vehicle with the lowest initiative moves first, then the next lowest, etc. This allows the vehicle with the highest initiative to "second guess" the opponent's moves, and adjust accordingly.

RESOLVING THE ATTACK

The *OB* of the attack is determined by adding the gunner's Mounted Weapon skill bonus, the Mk# (See Section T 5.0 for more information concerning Vehicle weapons) of the weapon used, any situational modifiers granted by the GM (e.g., target is easily spotted, target is moving slowly, etc.) and the range modifier of -1 per 10 meters to target.

The *DB* of the target vehicle is determined by adding the vehicle's inherent DB *plus any* EW committed to defense *plus* any situational modifiers granted by the GM (e.g., rain, trees in line of sight, darkness, etc.).

The attack is resolved by referring to the *Vehicular/Mounted Weapon Attack Table* (A 7.8). Any criticals are resolved on the *Vehicular Critical Table* (A 8.8). Vehicles in *Cyberspace* have special Armor Types called "CAT's": Construction Armor Types. As shown on the *CAT Chart,* the CAT rating of a vehicle indicates what sort of material the vehicle is made of. Buildings and other constructs are also given CATs, and their foundations are also listed on the *CAT Chart.*

C.A.T. CHART

CAT	Description of Hull / Foundation
21	Steel / Earth-Rock-Concrete
22	Hardened Steel / Reinforced Concrete
23	Crysteel (Aligned Crystalline Steel) / Plasticrete
24	Crystanium (Aligned Crystalline Titanium) / Duracrete
25	Reinforced Crysteel (Braced Hull) / Reinforced Plasticrete

20.0 RESISTANCE ROLLS

Although not an action per se, Resistance Rolls (RRs) are an important part of the game. They represent a character's ability (or inability) to resist a given special effect (such as a poison, disease, or mental instability).

The process for resolving a RR is straightforward. First, the attack (poison, disease, whatever) is given an "Attack Level" by the GM (the poisons included in this text already have Attack Levels indicated). Once this has been determined, the target character's level is cross-indexed with the attack level on the following chart to determine the number needed to successfully resist the effect (e.g., if a level 4 character attempts to resist a level 6 poison, the chart shows that he needs to roll 58 or higher to resist). The resisting character generally gets some sort of modifier in his favor; for drugs, poisons, and diseases the Co stat bonus is used. A Net Junkie attempting to resist an ICE program's assault might use the SD stat bonus.

Note: *Many forms of poison and disease (for instance, the poisons included in Section T 4.0) have a possibility of doing damage even if the roll succeeds. Generally, this requires that RR roll be not very far above the actual number needed to resist (within 20 points).*

21.0 INJURY, DEATH, AND HEALING

Generally, injuries in *Cyberspace* occur as the result of critical strikes. As such, the damage is often described quite specifically. The medical equipment found in Section T 4.0 may be used to heal most injuries which may arise.

21.1 INJURY

Injuries can take the form of hits, hits per round, rounds of stun, subtractions from activity, and specific injuries to various areas of the body. These injuries are detailed in Section S 17.5.

21.2 DEATH

Death can occur in one of three ways:

1) Immediate Death: An injury occurs which causes the character to die immediately (as stated on a Critical Strike Table, A 8.0).

2) Excessive Hits: If a character receives as many hits as his *Hit Point Total,* he is unconscious. The number of hits required to kill a character equals the character's Hit Point Total plus the Constitution stat (not the stat bonus). If a character takes this many hits, the soul will depart the body in 6 rounds. If someone heals enough of these hits (before the 6 rounds are up) to drop the total under the sum mentioned above, then death will not occur due to excessive hits.

RESISTANCE ROLL CHART

Target Level	Attack Level * 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	> 15 *	Target Level
1	50	55	60	65	70	73	76	79	82	85	87	89	91	93	95	*	1
2	45	50	55	60	65	68	71	74	77	80	82	84	86	88	90	*	2
3	40	45	50	55	60	63	66	69	72	75	77	79	81	83	85	*	3
4	35	40	45	50	55	58	61	64	67	70	72	74	76	78	80	*	4
5	30	35	40	45	50	53	56	59	62	65	67	69	71	73	75	*	5
6	27	32	37	42	47	50	53	56	59	62	64	66	68	70	72	*	6
7	24	29	34	39	44	47	50	53	56	59	61	63	65	67	69	*	7
8	21	26	31	36	41	44	47	50	53	56	58	60	62	64	66	*	8
9	18	23	28	33	38	41	44	47	50	53	55	57	59	61	63	*	9
10	15	20	25	30	35	38	41	44	47	50	52	54	56	58	60	*	10
11	13	18	23	28	33	36	39	42	45	48	50	52	54	56	58	*	11
12	11	16	21	26	31	34	37	40	43	46	48	50	52	54	56	*	12
13	9	14	19	24	29	32	35	38	41	44	46	48	50	52	54	*	13
14	7	12	17	22	27	30	33	36	39	42	44	46	48	50	52	*	14
15	5	10	15	20	25	28	31	34	37	40	42	44	46	48	50	*	15
> 15 *	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	>15

* For each level over 15, the attack level raises the result by 1; the target level lowers it by 1.
To resist the target's RR must be greater than or equal to the number given above.

3) Death after a number of rounds: If an injury occurs which specifies that the character will die after a number of rounds (as stated on a Critical Strike Table), then the character dies after that many rounds have passed. If the injury is healed before that time is up, the character will survive.

21.3 NATURAL HEALING

If no other recourse is available and the injuries are not fatal, natural healing will eventually allow the character to live a normal life again. The amount of time required for this process depends upon the type of injury, as detailed below.

Hits: Because they represent only minor bruises, scrapes and fatigue, hits will return at a rate of one per hour if the character rests (one per three hours if the character is active).

Hits per round: A bandage and compress will stop up to 3 hits per round (or reduce a "hits per round" wound by 3), so long as the character does no more than walk during the next 8 hours (the hits per round will start again if the character does more than walk). A tourniquet will stop up to 10 hits per round from a limb wound, but until the wound is healed the tourniquet must be loosened once every 24 rounds, and 3 hits per round will be taken for 5 rounds (or the limb will be lost). Application of these techniques requires a static maneuver modified by the Environs skill bonus, the Biological skill bonus, or the Medical Practice skill bonus (whichever is higher).

Subtractions **to activity:** These are eliminated and activity is restored to normal when the injury causing them is healed. The amount may be pro-rated over the healing period if the GM cares to do the division involved.

Specific injuries: The *Recovery Chart* indicates the average time needed for wounds of various types to heal. These times are based upon a period of rest and recuperation, and proper treatment (e.g., setting of broken bones, bandaging of wounds, proper nutrition, etc.). The recovery time is doubled (at least) if the character does not receive proper treatment while healing. In general:

- "light" wounds cause up to 5 hits per round, or a penalty of up to -20
- "medium" wounds cause 6 to 10 hits per round, or a penalty of -21 to -50 (this category includes fractures with unspecified penalties)
- "severe" wounds cause more than 10 hits per round, or a penalty of more than -50 (this category includes shattered bones, destroyed organs, etc.).

RECOVERY CHART

Type of Injury	Light	Medium	Severe
Burn/Tissue	3 days	10 days	25 days
Bone/Muscle/Tendon	5 days	15 days	35 days
Head/Internal Organ	2 weeks	2 months	5 months

21.4 MEDICAL AID

Environs skill and Biology skill enables a character to heal any "light" injury, so long as the necessary equipment is used (bandages, compresses, splints, etc.). In addition, this skill can be used to slow or halt the effects of some "medium" or "severe" injuries (up to GM's discretion). In general, this skill is useless against "medium" or "severe" nerve or organ damage.

Use of the Environs & Biology skill requires one or more static maneuvers. The GM has the player performing the procedure roll 1D100 open-ended, adding his appropriate skill bonus, as well as any situational modifiers deemed pertinent. The *Using Healing Equipment* column of the *Alternate Personal Maneuver Table* (Section S 16.1) is used.

Note: *Medical Practice skill allows all manner of procedures and operations to be performed on any type of injury. However, only the most minor problems ("light" injuries and simple "medium" injuries) may be treated by a static maneuver roll as mentioned above. More complicated problems require surgery, which is handled using the* Construction / Research Chart *(S 16.5). The GM should set a difficulty for the task ("light" injuries are usually* Routine or Easy; *"medium" injuries are usually* Easy or Moderate; *and "severe" injuries are usually* Moderate or Hard*). The medical practitioner receives a +20 if hospital quality equipment and facilities are being used. Conversely, the roll may be modified by as much as -50 if the necessary facilities are not available.*

RUNNING THE WORLD

"'How does one man assert his power over another, Winston?' Winston thought. 'By making him suffer,' he said. 'Exactly. By making him suffer. Obedience is not enough.'"

— George Orwell
1984

"Hey brothers, let's go down to North Beach and slash a few honeys!"

— Jimmy Warlock,
Member of the "Models" Gang

You stand shivering as the oily fog thickens with the night. The moon is a dim red disk in the sulfur-hazed sky; funny to think that there are thousands up there in those little craters.

The Monorail hisses overhead on its single track, almost too quiet for its speed and power, though it's only moving a fraction of its cruising speed, slowing as it approaches Transplanetary station. The Sonoma Business shuttle, you realize from the color of the car, wishing you were in the station waiting for the 'rail, instead of standing outside of a sleazy bar in North Beach waiting to meet some gang punk in a sweatshirt. What was supposed to be the name on it? *York?*

The bar sign glimmers in dusty pink neon over your shoulder: *Eastern Standard,* while a seemingly endless stream of young men and women passes you on their way in. Their attire is — to you, from your bland, sheltered corporate home — outlandish and overwhelmingly varied. A few few you (or is it your pricey leather jacket?) with a leer as they pass.

An engine roar startles you as a *Valkyrie* Medivan cruises over the rooftops on vectored jets, red and amber lights strobing off glass building fronts. Then it is gone, leaving you alone again with the drizzling fog.

"Lookin for me, Mr. Suit?"

The voice right behind you convulses your overwrought body and you spin clumsily to face — a young man. Almost disappointingly normal in appearance, he has black hair cut in a flat-top, lee-vi's and Neonikes — and a red sweatshirt with the letters YALE on it in white. He smiles boyishly, then his eyes narrow as he scans the street behind you and his pale blue irises glimmer luminous red. "Hope you weren't followed, Mr. Suit."

"I took all the precautions you suggested."

His eyes return to normal as he looks at you. "Good job, for a Corp Sleaze... nuthin personal. 'Name's Shawn. I got what you need." he produces a gleaming datacard from his hip pocket, wiggles it under your nose. "But the Serendip ICE was pretty chilly, and very dark. There's more there than you told us."

"You want more money?" Your voice wavers.

But he rolls his too-perfect eyes skyward. "I am a Fuser, Mr. Corporation, and we do not go back on our word. It's Ten-kay, just like we agreed."

You fumble in you jacket for the cash, then comes another voice —

"Well, look what we have, girls, it's a pretty Fuser brat talkin' to a Suit! Who wants to *solve the puzzle?"*

Shawn's eyes widen and his mouth opens. "Models." He says flatly.

You realize this time that your adrenaline fear reaction may be justified. You turn, and in the bar entrance stand a trio of young men, all in baggy coveralls of convoluted style. All three are strikingly handsome — almost pretty, and each is wearing a very ominous smile.

The lead one raises a hand and spreads his fingers. With an almost inaudible 'snick', silvery alloy blades an inch long extrude from underneath his manicured nails. "I'll hate to tear your nice jacket, Suit," he says, still smiling. He takes a step towards you.

Welcome to San Francisco, 2090.

With the specifics of character generation and available equipment determined, the GM now has a much more general, albeit significant, job to do: the structuring of the campaign world. This part if the book is designed to aid the GM in the creation and description of that world. Throughout this part runs a timeline of events from 2000 to the present. Section 3 details many pertinent aspects of daily life in the world of *Cyberspace.* In reading these Sections, keep in mind that not all aspects of the game world need be as described here — these are guidelines and suggestions for a self-standing *Cyberspace* (Earth) campaign. GMs who are using this text as an addition to an Imperial Age **Space *Master*** campaign will doubtless wish to change much (or most) of the material presented. However, the campaign world as described could easily be placed somewhere in the outreaches of Imperial Space with little modification (save for the names of nations). The remaining Sections provide the GM with descriptions of significant people and groups which will play important roles in a campaign. Whether you are using this text to add to a ***Space Master*** campaign or by itself, these Sections will be of invaluable aid as the game progresses.

Timeline

2000

Due to increasing internal difficulties and lack of world marketing power, most communist countries begin allowing more and more laissez-faire capitalist endeavors within their borders; communism is on the decline. China remains the only exception to this rule, as protests continue in Hong Kong... Data security techniques include hand, retina, finger, voice, and alpha-wave prints; many Computers recognize the "fist" of their individual users... *Wheel of Fortune* becomes the first syndicated program to reach 1 billion viewers.

1.0 THE 21st CENTURY

"In terms of the global power system, the rise of the great transnationals has reduced, rather than strengthened, the role of the nation-state at precisely the time when centrifugal pressures from below threaten to part it at the seams."

— Alvin Toffler

Throughout the hundred-year period preceding the campaign, several interrelated factors were at work all over the "civilized" world, steadily modifying or completely obliterating the twentieth century Weltanschauung. These factors included racial homogenization and cultural drift, governmental decentralization, overpopulation, fuel shortages, hyperpollution, increased weapons availability (leading to unprecedented crime rates), limited thermonuclear warfare, and large doses of social unrest and future shock. All of these factors, however distinct, were undeniably tied to the incredible rise in power of vast corporate structures called "Transnationals", "Multinationals", "MegaCorps", or "Zaibatsus".

In the United States and most of Europe, the political, military and economic power of the great industrial nation-states had been faltering for decades. Seeking to increase their livelihood, the already debt-ridden nations poured massive amounts of money into such technologically oriented fields as computer science, space exploration, medicine, food synthesis and — especially — weapons research and development. Of course, since the only entities capable of taking on such monumental efforts were diversified, privately-owned (as opposed to state-controlled) corporations, the governments in question became their chief supporters, and later, their dependant slaves.

Each nation had to maintain a steady rate of expenditure in order to justify the costs of the previous year and to keep their own Gross National Product measurements on the increase. In addition, such governments generally offered such "perks" as unique tax and legal exemptions, police protection, state/business commerce trade-offs, and specialized public school training for their major corporations, and thereby grew even less adaptable and more dependant.

The MegaCorps grew and proliferated in this self-perpetuating environment, expanding and mutating like viruses within a host body. It was not a far step between influencing the laws made and actually making them, nor between selling a candidate and inventing one. In most nations, this insidious process escalated for roughly half a century until a government eventually reached a point where it was incapable of adequately handling its expenses, controlling its people, or defending its borders. In many of these cases, the "host" governments were largely unaware of the process, thanks to bureaucratic sloth and a prevailing "it can't happen here" attitude.

Set in their antiquated ways, societies carried on as they always had, and assumed that it was their elected officials who held the real power. Meanwhile, the corporations in question were growing more wealthy, more technologically capable, more visible and more diversified by leaps and bounds — eventually spanning the globe, free of the ethical and economic responsibilities borne by nations. Today, regional governments exist as little more than figureheads, holding only a small amount of authority when contrasted to the immense resources and ploys utilized by the MegaCorps.

Timeline

2001

Remote FAXing of media into homes and "newsbooths"... The US completes its NavStar system; a network of satellites used to track and control movements of air and marine vessels all over the globe... The President of the US shoots an intruder in the Oval office with his personal H&K mp.

2002

IVD & ICD (interactive video) and Holovision are in widespread private use... Spy Satellites abound in orbit... Space-weapons include Remote Orbital Mines, Flechettes, and Krypton/Fluoride Laser Firing Platforms... An *Arianne* IX rocket explodes on the launch pad, causing serious damage to the complex and embarrassment to the European Space Agency.

2.0 THE WORLD OF CYBER SPACE

"We, as a species, exist in a world in which exist a myriad of data points. Upon these matrices of points we superimpose a structure and the world makes sense to us. The pattern of the structure originates within our biological and sociological properties."

— Persinger and Lafreniere

As can be seen from the timeline, the means of global control, technological advance and systemic planning which were once the prime attributes of "Superpower" nations have steadily decayed over the past 100 years, while the MegaCorps have taken their place. All over the world, as governmental power teetered, dwindled or collapsed completely, these corporate organizations have picked up the pieces, continuing their own lines of research and development, and forming such regulatory committees as were necessary to maintain their activities.

It is important to note, however, that the corporations have not actually become governments — at least not yet; for they are really not interested in the same things as a political body. First, a government is chiefly concerned with the affairs of state and economy which bear effect upon a specific, limited locality represented by the borders of the nation itself. A MegaCorp has no such borders. Except for certain special locations which are the headquarters of research and development, all areas of the globe might be considered equally a part of the MegaCorp's scheme.

Secondly, a government is also concerned with promoting and advancing the welfare and education of the people it governs. Although this is true of a MegaCorp as well, the scale and criteria are vastly different. A MegaCorp couldn't care less about the fates of most people, except that they remain economically dependant upon the corporation for some sort of good or service. The problems of education and general welfare are still left to whatever governmental body holds a semblance of power in a specific region. Workers within the ranks of the MegaCorp, however, are granted all manner of perks including specialized training, wage increases, product discounts and travel.

M²

MUSIC MEDIA
More than just Sound

The third major distinction is one which has reversed in the last century: it has always been corporations which made the advances in technology so touted by all nations, while the governments sat above them and were able to claim all such advances as their own. In general, few people remembered what company created the first telephone, automobile, video recorder, warhead et al, but rather the country that they were built in ("The Yanks had a hand in that", "The Japanese created those", etc.) This situation is exactly the opposite in the world of *Cyberspace.* The MegaCorps are everywhere — their colorful, subliminally-imbedded advertisements loom at the prospective consumer from huge video billboards and enter his living room via holovision. Everyone knows their names, for the MegaCorps are the providers of necessities and creature comforts which national governments themselves are incapable of providing. Today, most people know that (for instance) the first SMU units were designed by New Edison, but would be hard pressed to state just where in the world the work was performed. The fact is, it really doesn't matter anymore. The result of all of this power shifting is a world which is surprisingly similar for people of most national origins (including citizens of lunar and orbital colonies). This is not to say that the boons of technology have been disbursed in egalitarian fashion, but rather that the same social and economic structures — for better or for worse — can be found in most places, regardless of culture. These socio-economic structures can be rather easily categorized into nine groups, each of which is detailed in its own Section below.

2.1 CORPORATE CITIES AND BUSINESS PARKS

The homes and headquarters of the world's largest and most powerful MegaCorps lie in vast gentrified regions called *Business Parks.* These areas contain huge, architecturally stunning edifices and sprawling corporate office buildings, interspersed with rolling green hills of artificially replicated grass and well-trimmed shrubbery. They are the epitome of high-tech beauty, and are always well protected by armed corporate security officers, scanning devices and robotic surveillance systems. Located near large population centers such as the old "big cities" (but never in the inner sections), these parks are like separate little states of their own, where the word of the corporation is law. Regional governments rarely interfere with the MegaCorps on their home turf, lest they lose the corporate support they retain. Many of these parks have become so vast, built-up and self-sufficient that they actually resemble cities in their own right. Sometimes several corporations will band together in the construction and utilization of such an area; the term "Corporate City" applies to these truly impressive settlements. They often include small tracts of homes within their secured borders (for the upper management), and

Timeline

2004

Japan has evolved into an extremely powerful presence in the common market... US, Russia & Japan sign "Three Powers" treaty... First full-time space station is placed in orbit by the US... Development of FAX newspapers... The Sierra Society (a group formed of an alliance between the Audubon Society and Sierra Club) detonates a bomb in the Texaco building in Dallas, destroying four blocks and killing 4,500 people. Greenpeace denies association.

light transit systems for the work-and-back commute (almost 30% of all employed people still travel to the office each workday). During the day, most encounters in these areas will be with low to mid-level executives, robots or security officers. At night, there is little chance of encountering anything except security forces (human or otherwise), unless one runs into a competitor's covert task team or anarchist terrorist squad.

2.2 CORPORATE SUBURBS

Those employees who do not live in the Business Parks, or who serve corporations which do not possess such settlements in their locality, generally reside with their families in enclosed communities called Corporate Suburbs. These areas are always located relatively near corporate office(s) for which their inhabitants work, and are maintained and patrolled by corporate security forces and techniques. They contain houses and condominiums for the corporate workforce, as well as mini-malls and other support service establishments. Most Corporate Suburban dwellers are mid to upper-level executives who obtain their homes as part of an employment package. In very special cases the home is supplied free of charge much as a company car might be, but usually the employee leases or buys the house from the corporation, which has purchased an entire tract or series of tracts specifically for their own personnel. The mortgage payments on these homes are often substantially lower than the actual market value, due to the fact that the corporation either built the tract itself or obtained some sort of government land deal in the past. The Corporate Suburbs are passingly beautiful; many of them are older areas purchased from the state or some now defunct financial institution, tree-lined and well-lived in. Others are brand new tracts of sparkling-clean homes, often mass-produced (read: pre-fab), but always with a touch of quaint bourgeois design which is reminiscent of the archetypal "American Dream". To be sure, the only signs which belie this pleasant exterior are the frequent armed patrols which pass through the streets on the lookout for vagrants and would-be burglars, and the obsequious but well-hidden security cameras. Many homes in corporate suburbia are based upon the integrated designs of advanced Processor Animated Luxury. The state-of-the-art corporate suburban dwelling includes such features as intelligent security doors and windows, presence-sensing for activation and deactivation of lamps and air conditioning, hazard sensors and automated response controls, and a vast array of other helpful capabilities, all made possible by ingenious combinations of hardware and specialized processing units. These dwellings, depending on the desire (and money) of their inhabitants, are able to perform many tasks which previously had been handled by live-in housekeepers or butlers; waking their inhabitants at appropriate times, cooking meals, handling incoming telephone calls and postal deliveries, protecting the inhabitants and property, cleaning themselves, etc. Semi-independent robots perform duties which require mobility and manipulation, and all household functions are controlled and monitored by advanced computers. Encounters in the Corporate Suburbs could include executive employees, families, children at play, security guards or household robots, as well as the occasional wandering vagrant or thief.

2.3 INNER CITIES AND SPRAWLS

The vast majority of the urbanized folk live in great, choking, crowded and polluted metropolises which resemble all the worst aspects of the modern big city (multiplied by a population growth rate of about 200%). Over the years, as the population grew, the suburbs moved outward (away from the crime and pestilence of the urbanized areas) and the industrial zone expanded behind them, leaving the less affluent members of society in the center of the old "downtown" districts. The more wealthy, important and fortunate people managed to secure sites for their families in the Corporate Suburbs, or on one of the orbital stations, while the refuse of their past indulgences gathered in the Inner Cities, also known as "Combat Zones". These areas are unbelievably dirty and congested, and their inhabitants are generally unskilled, diseased, drug-addicted, insane or simply luckless. In several areas of the world, where metropolization has accelerated beyond the ability of city planners to accommodate it, the neighboring cities have grown into one another, creating the truly huge urban tracts known as "Sprawls". These areas often stretch for hundreds of miles, all of it without a single undeveloped field. In the

dingy streets of the Inner Cities and Sprawls, just about anything can be found for a price. The black markets have their domes here, as do the drug and illegal tech smugglers, not to mention prostitutes of all kinds. The Combat Zones are the homes of the homeless and the hopeless; and only those who pull in a really crack score can ever hope to make it out alive. Corporate employees and security rarely travel into these parts, unless they need to pick up some black market tech item or solicit inside information from a worldly informer. The nasty job of patrolling these streets is left in the hands of the regional police department (if there is one to speak of), handled by self-appointed vigilante groups, or performed by specialized security teams hired by the government. These deputized officers are often no more than roguish mercenaries and bullies with licenses to cause pain, but they do their part in maintaining some semblance of control on the streets. Encounters in these areas could include just about any unsavory character you can imagine; from cops to criminals, conspirators to crazies. One thing that can be said in the Combat Zones' favor: life in these parts is never dull.

2.4 RESOURCE AND REFINING 20NES

All over the world, huge tracts of land remain virtually untouched by the Sprawl mentality. Some of these regions are protected Wilderness Preserves (which are covered in Section 2.6 below), and many are natural or man-made Wastelands (Section 2.7), but far more are *Resource Zones*, which provide various raw and refined products used by the more intensive regions in the development and distribution of goods. Farmlands fall into this category, as do many large swamp areas and forests (the few that remain). Mining and oil drilling sites also fit the description. In general, any region which is not desired for mass living space (due to inclement weather, nearby environmental dangers or sheer lack of interest) stands a good chance of being used as either a resource site (if there are exploitable resources in the area) or as a refining/"first step" processing plant. One of the ironies of the age is that almost all "farm workers" are actually technicians and machine operators, and their work rarely requires their presence in the fields. Huge machines perform the laborious and extensive tasks of sowing, planting and harvesting, controlled by workers in nearby towers, processing plants and vehicles. Amongst the most popular and important organic resources are wheat, soy, rice, tobacco and various other plants (many of them recently bio-designed strains or hybrids) which are used in the processing of medicines, illicit drugs, plastics and alcohol fuel. Cotton and other such natural fibers have been almost entirely replaced by synthetic textiles. Bulky or difficult crops such as potatoes or berries have nearly disappeared from sight, and are grown only in a few places and sold as luxury items. Major farming areas include the central regions of North and South America, large parts of the African continent and the vast plains of Asia. Swamps and forests are becoming a real rarity; since the pragmatic days of the mid 40's many of the once protected wilderness areas lost that status to the oncoming and unstoppable tide of civilization (some few key localities remain protected; see Section 2.6). Many of these unprotected lands fell into the hands of — who else? — the MegaCorps, who found a good many uses for their natural resources in the light of biochemical manipulation and advanced fuel production. Methyl alcohol, methane, oxygen and other, more advanced substances are extracted from the flora of these regions, while the soil itself is often treated, packaged and sent elsewhere for more proper (i.e., lucrative) use. Swamplands can still be found in the American Southeast, in large parts of South America, and throughout the Asian continent. Forests are still present throughout North and South America, Africa, Asia and small parts of Europe, but they are nothing like their forebears of the twentieth century — which were huge and untamed primeval jungles by comparison. Mining and drilling are also very important activities supported throughout the world by the MegaCorps. At their great, largely automated mining sites, such companies as Normark ChemCorp and Petroline extract tons of ores and precious metals each year. Oil drilling, both onshore and off, is a field which has definitely had its ups and downs (mostly downs) in the past century, but is still practiced in some remote areas using new, high quality drilling equipment, capable of reaching deeper into the Earth's crust than ever before. All of these elements and compounds are used in the creation of various and sundry goods: machine parts, cables and wires, microprocessors, vehicles, jewelry, industrial chemicals, fuel, medicines and radioactive samples. Encounters in any of these areas are likely to involve human or robotic workers, or corporate guardians of the resource zones (rumors have it that Remmings International protects several thousand acres of Mexican marijuana fields with an advanced squad of interlinked combots designed by the firm). It is likely that there will be some form of housing relatively nearby; be it prefabricated dwellings akin to the condominiums of the Corporate Suburbs, or older and cheaper houses left over from past generations.

2.5 ARCOLOGIES AND AQUALOGIES

These self-contained, mostly self-sufficient communities are arguably the best settlements which the world has to offer. Extremely small by comparison to the cities and Sprawls of the world, Arcologies are something like large communes. The population of the average Arcology is comprised of less than 10,000 people (many have populations below 5,000) who have basically turned their backs on the corporate hubbub of the world and have forged their own settlement, usually in some remote or otherwise undesirable territory. To be sure, there are many self-contained Corporate Settlements, "Quasi-Arcologies" in which the factories, offices and homes of the staff are all built under one great dome-shaped roof or stacked atop one another in modular fashion, but in policy and attitude these

Timeline

2005

MIIS (Multiple Image Integration Sensors, or "Fly's eyes") are developed... transfer vehicles, space-tugs, satellite repair vessels and space rescue vehicles begin flying... LHT (Laser/Hydrogen Triggering) is first used to detonate small H bombs at a distance... The Sierra Society threatens to use nuclear weapons against petroleum manufacturers unless safer processing methods are implemented.

2007

The US begins building its SPSS (Solar Power Satellite System)... Psychoactives and surgery used to control criminal behavior... Forebears of powered armor are seen on battlefields... Russians place a large space station in orbit.

places are really more like a combination of the Corporate Cities and Suburbs described above than a true Arcology. One important facet of Arcology life is a common, even pervasive "pro-environment" doctrine. Many inhabitants of such places are well educated and older people, skilled in the earth sciences and social studies, who have a humanitarian outlook but view the majority of corporate progress with disdain. They are not very interested in further technological advances, save perhaps medical research, and rely on self-designed, cheaply built and relatively simple systems for life support, environmental stabilization and social interaction. The most intricate and advanced parts of these enclosed settlements are often the domes and filtration systems which cut them off from the rest of the world, and a large percentage of the world's Arcologies are not tied in to the Net. The peoples and libraries of the Arcologies are often filled with useful information on simple, low-cost engineering, agriculture and life support (something which the rest of the world has mostly forgotten, or has been forced to forget). These peoples are usually seen as "backwards" by their city-dwelling counterparts, and are called derisive names such as "arcos", "hicks" and "dreamers", as well as "commies" and "hippies" (which are apparently throwback terms originally coined in the twentieth century). Encounters in the Arcologies could include people of just about any earth-bound profession (i.e., Pilots would be extremely unlikely, etc). Most of these encounters would be non-hostile in nature, although there have been a few incidents of Corporation vs Arcology clashes (usually started by the Corps), which could make Arcology dwellers leery of unexpected outsiders.

Timeline

2008

A bloody coup is staged in Iran, destabilizing that government for most of the next decade... The US claims that its Space Shuttle *Challenger II* was attacked by a Chinese laser satellite (the shuttle landed safely)... An Exxon supertanker is torpedoed by the Greenpeace sub *Kermit;* all hands are lost. Bacteria released from the sub consume the 4 million barrel spill in eight hours.

2.6

WILDERNESS PRESERVES

In some areas of the globe, governmental or corporate agencies have seen fit to preserve large wilderness regions. Some of these agencies have done so for purely environmental or historical reasons (thinly veiled Public Relations maneuvers), and some maintain the areas as special sightseeing or vacation spots for their own workforce or management. Others are merely stockpiling arable and otherwise exploitable land for future use. In some of these backwater regions massive secret installations are hidden, where the MegaCorps work on highly secretive developments or illegal extraction. Such areas can be found in parts of North and South America and throughout the Eurasian continent, as well as on a few isolated islands in the Pacific Ocean. Most are actually owned by MegaCorps, although a few are still held by regional governments. The most interesting aspect of these areas is that many of them still retain vestiges of their original wildlife and food chains. This increases their popularity with corporate bigwigs who enjoy the rare thrill of hunting live game, as well as with poachers of all varieties (one of the big thrills of recent years has been a bizarre form of hunting called "moose skeeting", where a hunter wearing a jet-driven backpack chases one of the massive animals through the North American forests, firing shots from a gas-powered dartgun).

Much to the consternation of the corporations who own these hot-spots, there are a good number of hermits and outlaws, as well as reclusive specialists (generally wormtechies) who claim these regions as their own. These loners are generally happy to take what food they need to sustain themselves and nothing more, but occasionally one of them causes a major pain for some corporation. Take for example the case of Rubin Zhene, a self-proclaimed "mountain man" who foiled the hunting permit authority of ZarComm Industries by removing the radium tags the company used for tracking and counting black bears in their Rocky Mountain territory. For a period of eight years the company ceased the issue of hunting trips to its personnel because the vast majority of tags had stopped moving, indicating that a large percentage of the tagged black bear population had died. Encounters in the Wilderness Preserves will tend to be of the natural event variety, including such possibilities as harsh weather, tornadoes, hurricanes, earthquakes and the like, as well as animal encounters (a black bear or charging moose can be quite a worthy opponent!) and occasional hermits. Obviously, there is no need to populate or detail these regions, except perhaps to note the location of large animal lairs, secret corporate bases and hermit hideaways.

2.7

WASTELANDS

Many areas of the world have been devastated by various forms of disaster - both natural and man-made — throughout the years. Although some of these areas have been rebuilt by advanced agricultural and architectural techniques, the majority of them were simply not worth the effort, and have been left as sallow plains, blistering deserts or glowing radioactive barrens. Examples of these areas can be found on nearly every continent, from the waterless and windswept American dustbowl to the burnt slag ruins of Libya. Other Wastelands include large areas of the Siberian and Canadian tundra, and exhausted sections of the African continent, and various nuclear detonation sites around the world (from tests or attacks). Encounters in these areas are obviously rare occurrences. However, despite the terrible conditions, some small number of people have chosen to remain in these places — their reasons are generally sentimental, religious or just plain deranged (often a mixture of the three). The only really good use for such regions is as hiding places — even if your enemies managed to learn of your location, few would be willing to go in there and flush you out.

2.8

THE HOMELESS

One of the most terrible facts of life in 21st century is that, for all the splendor and luxury afforded the wealthy and powerful, the percentage of the population which is destitute and homeless is higher than ever before. In every country of the world, from the sunbelt of the North American continent to the desert wastes of the middle east, these poor and hopeless stragglers eke out their meager existence, squabbling

over scraps of food and refuse discarded by their more affluent neighbors. The homeless are, for the most part, kept out of the glittering corporate business centers and suburbs by patrol squads, and shun the wastelands for lack of foraging opportunities. Most of them reside (if that term can be used) in the vast Sprawls, where they scavenge, beg, borrow or steal whatever they can in order to obtain their next meal — these are the "Urban Homeless", and their numbers are legion.

For some, this way of life is a mere "stroke of bad luck" — technicians and blue collar workers laid off due to shortages and factory automation scratch out a living by doing odd repair jobs or selling their kloodged goods on the black market. For others, it is the only life they know. Whole families, sometimes several generations living together, are often seen on the streets of the Sprawls. These people live in automobiles or self-styled "trash houses" on the outskirts of industrial zones, occasionally finding an abandoned tenement or condemned factory to store their wretched belongings in. Some of them seem to prefer this lifestyle — the lack of responsibility, the sense of autonomy it affords them, the self-righteous ability to sit in judgement of the corporate bosses who turned the world into the black nightmare that it is — these are the hardcore homeless, the Blanks, the Eta.

Most of them support themselves by a mixture of theft and barter, gathering in enclaves in the sewers of the Sprawls or forming small gangs to harass and waylay unsuspecting passers-by. It is rumored that the Pacific Sprawl alone is the unsuspecting home of over twenty subterranean societies; in the dismal underground ruins of earlier settlements live scores of fierce, determined Eta who take what they need from the surface dwellers. Few can substantiate these claims, for intruders who enter the enclaves are generally killed outright. After the great fuel shortages of 2041, many homeless "clans" packed up their modified vehicles and took to the abandoned highways, where the desolation and lack of civilized trappings suited their desire for anonymity. Travelling abroad across the landscape, they are amongst the few who know the state of the wilderness and the wastelands, and often carry news or rumors from one distant settlement to another. These nomadic groups are of various types, some self-sufficient and conservative, others barbaric and sociopathic. Often known as "Gypsy Clans", they move from campsite to campsite, engaging in whatever passes for social activity; trading services for fuel, handicrafts for supplies, favors for technology. Some of these Gypsy Clans behave in a manner not unlike the original European Gypsies from which they draw their name — camping in the outskirts of a settled area, they make their living by providing entertainment, news, and rumor to the listless locals, and often bolster their ranks by encouraging, seducing, or even kidnapping young locals and absconding with them. Urban Homeless live in the Sprawl areas described above, some scattered throughout the decrepit inner city regions, some gathered in the dismal undergrounds. Encounters with these folk run the gamut of possible interaction; from pitiable children looking for handouts to violent Eta gangs hell-bent on destruction.

2.9 SPACE COLONIES

In 2090, space is more than a hopeful dream of the future — it is the everyday home of several million human beings. Beginning with the small orbital laboratories and stations which proliferated around the turn of the century (staffed almost exclusively with military and scientific professionals), the final frontier has expanded in range and importance as the years have passed. American shuttles and orbital stations were the first space constructs to allow civilians to venture into orbit, and several other countries followed suit shortly thereafter. Life in the space colonies is not extremely different from life in a Corporate "Quasi-Arcology", except that there is precious little wasted in the way of energy and materials (something which cannot be said of any Earthly corporate installation). Most space stations have a permanently-attached defense troop of some kind, and all inhabitants perform emergency drills regularly. The following pieces provide a capsule history of space colonization, in overlapping but chronological order.

SATELLITES AND REPAIR STATIONS

Through the first twenty years of the 21st century, satellites of all sorts became so numerous as to defy imagination. In 2008 the American Solar Power Satellite System (much of which was built by the New Edison Corporation) was beginning to take final form, followed by the completion of the Global Satellite/Ground Communications Network in 2020. These early orbital devices, despite the ingenuity behind them, were extremely delicate and tended to go awry quite easily. To this add the fact that anti-satellite warfare became a quick and easy way of debilitating an opponent's "CC&C" (Command, Control & Communication), and you can see the obvious need for a permanent satellite repair/maintenance force. Although shuttles were used for many years (and still are) to ferry workers up to their orbiting job sites, it was much more efficient to house these personnel in orbit on a semi-permanent basis — the first orbital stations were really glorified dormitories and dispatching headquarters.

SPACE INDUSTRY

Many industries benefited greatly from the advance into space, where (due to the lack of gravity and trace elements) many industrial operations can be carried out with much more efficiency than on Earth. In fact, many applications of space industry were completely impossible on the planet's surface. Crystal growing is a major space industry — without trace elements and corrosives to hinder the growth process, crystals grown in space are larger and purer than their Earth counterparts — these crystals are used primarily for laser and radar cores. Boron filament, a light yet sturdy material used in the construction of aircraft parts, is also made in space. Welding of metals in vacuum is easier and cleaner, and many construction projects are carried out by orbital personnel. Other orbital developments include solid lubricants used in engines and machine parts, new alloys with amazing properties (such

Timeline

2010

Argentina bombs Brazil over disputed Rio de la Plata dams. US intervenes, stopping what would have been a bloody war by dropping nerve toxins along the disputed region and enforcing pullbacks on both sides. The US uses this excuse to leave permanent bases in Brazil and stop rain forest destruction... Population of the Eastern Sprawl reaches 35% of the US population... Several "second world" nations have space programs well under way... The North American Satellite Communications Network (NASCON), is established... Human Organ Trade reaches incredible proportions as the homeless sell off organs to unscrupulous hospitals... The most concerted effort to legalize drugs in the US to date is defeated.

as Lanthalloy, a corrosion-resistant alloy used in the construction of ocean platforms and sea vessel hulls), new forms of cermet (highly heat-resistant "alloys" made by blending metals with ceramics), perfectly spherical ball bearings for engines and other applications, and all manner of perfectly shaped metal objects (tools, machine parts, etc), molded by controlled magnetic fields in zero gravity.

PERMANENT ORBITAL STATIONS AND THE "L-5 SQUATTERS"

As time passed and the orbital workers were tested and queried, the realities of space living were seen to be somewhat unique but most definitely manageable. It was decided that volunteer colonists, refugees from the struggling and over-populated Earth, would be sent in shifts to live in much larger stations, constructed in orbit from materials mined on the moon. There turned out to be some side-effects to extended zero-gravity, however — it seems that after a few months the bone and muscle structures of the human body tend to realign themselves in an attempt to adapt to their environment. This makes return to the Earth's gravity well a somewhat painful and frustrating experience, as the body re-stabilizes and the effects eventually reverse themselves. In 2022, a group of civilian colonists calling themselves the "L-5 Squatters" decided that they were not going to return to Earth at all. At first shocked and on the verge of taking martial action, the US government was eventually convinced that the colony could become a major experimental breakthrough, and allowed the L-5 Squatters to stay. The periodic reports and medical checkups returned to Earth further supported the fact that the right decision had been made, and within the next fifty years no less than twenty space stations were constructed, each housing anywhere from 1000 to 10,000 people.

Timeline

2011

The "Fatal Winter" of 2011 (the first of many to come) catches the world off guard and leads to global food shortages and widespread deaths... 99.9% effective over-the-counter contraception is available for both men and women... Terrorist gangs roam the streets of the Eastern Sprawl... Techno-Rebels representing WARA (the World Allied Revolutionary Army) insert a dataworm virus into Pentagon memory banks, destroying millions of dollars worth of data... The Mikura Zaibatsu develops the 128840 Superchip. Other firms perfect MagneBubble & OrganiMole storage... GEM cars first sold publicly.

Lunar Materials

"For Unearthly Quality"

THE LUNAR COLONIES

In 2023 a joint US/Russian lunar mission discovered the existence of frozen methane and water in the polar craters of the moon, and shortly thereafter the first permanent lunar colony was built by representatives of the two nations. This great domed structure soon became the home of over 15,000 colonists, and eight more were constructed within the next fifty years. One interesting fact is that, due to national debts and governmental crises on Earth, all of these follow-up colonies were designed, financed and constructed by MegaCorps (or conglomerations thereof), and peopled with professionals whose work included the maintenance of artificial biospheres, lunar mining and ore processing, fuel production and (of course) colonial defense. The moon now has a standing population of about 220,000 people, the majority of whom are permanent residents who work in these fields (many younger colonists have brought their families along, although in the early days of lunar colonization only unmarried, childless workers were accepted). In 2024 the first lunar massdriver was constructed. This installation allows huge quantities of raw materials to be almost effortlessly launched into space, where they are received by orbital platforms or shuttles. Many of the orbital stations later constructed were built from materials mined and transported in this manner.

THE MARTIAN COLONIES

In 2051, spurred on by the tremendous opportunities afforded mankind by the development of the LHT rocket engine, a conglomerate of MegaCorps was formed to investigate the possibilities. This group shortly decided to act without any sponsoring governmental intervention, and pooled their most highly skilled specialists into a design team. In less than two years, this team had designed and built the first colony on the planet Mars. Used chiefly for mining and materials research, the immense installation houses 22,000 people, all of them corporate employees (and their families). As years passed, more colonists were moved up to Mars, and the original base was used as a launching point for further settlements scattered across the Martian landscape. These settlements were claimed by the various companies which made up the original conglomerate, although workers were often transported back and forth between them, and all of the settlements worked — ostensibly — for the common good.

THE MARTIAN CONFLICT

The unthinkable occurred last year - 2089 — when relations between New Edison and Okira (two major members of the Mars conglomerate) became dangerously strained. On Earth, the corporate boards locked horns in debate over Martian land use allocation while their division members on Mars were ordered to withdraw from each others' proximity and prepare for hostile clashes. Tension within the main colony increased despite the ongoing summit meetings, and in June a division of New Edison Troopers attacked and destroyed an Okira shuttle which strayed into their territory. Infuriated, the board of Okira declared a state of war, and withdrew all personnel and equipment to a secondary settlement on the far side of the red planet. The New Edison faction has been ordered to maintain a defensive position and to begin no new altercations, while the Okira faction has begun deliberately ignoring orders from their officers on Earth. Although there is a near-total media blackout on Mars, reports have been received which allege continued tactical confrontations, including the use of armored fighting vehicles and missile artillery. Both corporations are busily (and secretively) preparing troops and equipment which will be sent to join the Martian conflict within the next few months. Meanwhile, other member-corporations of the Martian conglomerate are making their decisions to join one or the other side in the conflict, or to pull out and cut their losses now. It is a safe bet to assume that several of these companies will send in segregated rescue teams, while others will join forces with their respective allies. It is also quite likely that the conflict will escalate before any final agreements are made. At this point, what lies ahead for Mars is anybody's guess.

3.0 LIFE IN THE 21st CENTURY

Our body is a machine for living. It is organized for that, it is its nature. Let life go on in it unhindered and let it defend itself, it will do more than if you paralyze it by encumbering it with remedies.

— Leo Tolstoy
(War and Peace)

3.1 WE FAMILY

The family of 2090 exists in a bizarre flux of states; numerous forms of alternate lifestyles have created a culture almost without a standard mode of child-rearing. While many folks still cling to the "nuclear family" concept, there are hundreds of thousands for whom this age-old standby has no meaning whatsoever. Most nuclear families exist in the poorer sectors of the world, where work and environmental conditions require the cooperation of a number of people. Likewise, the Sprawls contain their share of nuclear families (or the shattered remnants of them). Many of the larger MegaCorps (those with massive and integrated settlements of workers) run great "Breeding Centers", where natural and artificial birthing methods are applied by skilled personnel (often including specialized genetic modification technicians). In the Arcologies and Resource/Refining Zones, large extended "families" of people, who may or may not be related by blood, often gather together in almost tribal groups. In these areas (and, of course, in the Gypsy Clans), the entire group shares a familial bond as strong as any blood heritage, and responsibilities are divided amongst the members along relatively egalitarian lines. The opposite effect is obtained in the true corporate sector — here, a child is tested, specially educated and maneuvered toward skills in which he shows aptitude, and fostered in every way by the professionally kind representatives of the company. These children grow into adults who feel that their strongest supporter and best friend is the corporation itself — obviously the finest attitude any employer could ask for from his employees. Most of these workers are signed to corporate employment contracts at some point during their apprenticeship training. The Corporate Suburbs, once the traditional and stable home of the nuclear family itself, have been modified by the fast pace and hedonistic attitude of the century. Unrelated co-workers may live together in one large house, single professionals might live with a number of Personal Robots for companionship and labor, or alternate lifestyles may find homosexual couples raising children created via DNA-splicing. As for the Urban Homeless, their situation is a mixed bag — some nuclear families remain together while living on the street or in the subterranean burrows and catacombs, but far more shatter and scatter to the wind, as disgruntled fathers leave in search of work, or young irresponsible mothers drop their children by the wayside and look for better lives elsewhere.

3.2 EDUCATION

The educational opportunities available to the average corporate worker are staggering, due largely to the advances made in the fields of computer intelligence and communications technologies. For those who can afford it, this translates into easy access and flexible scheduling of all manner of educational media. One of the most popular forms of specialized training these days comes in the form of On-line teaching, by which many people, separated by hundreds or thousands of miles, can participate in the same training program simultaneously. Courses in all types of skills are translated into standard Programming or Machine Languages, and fed out into the Net on a regular basis. Subscribers to various networking services can partake of these programs at their own rate, and on their own time (subscription to a Computer network costs anywhere from $10 to $200 per month, depending on the nature and frequency of programs broadcast). Other common variants of this approach include cable television (transmitted via satellite to all regions of the globe) and ITV courses (bought on compact datacard and played in a special screen printing device), both of which cost less than computer courses but lack the interactive quality. All of this is not to imply that there are no schools in the 21st century — there are — but the advantages of these alternative training methods allow education to continue all through a person's life, and generally supplement and advance standard school training. Many schools are owned or operated by MegaCorps, which control the type and rate of teaching provided for their young employees-to-be. Some of these schools are open 24 hours a day, to facilitate enrollment of older citizens who must "flex" their school hours around their actual working hours. In addition, many schools are run by private concerns. These private schools generally provide a regimen of training which centers on a specific value or belief system, such as religious teachings or philosophical doctrines. One of the most

interesting facets of schooling is the frequent (and escalating) use of "TeachBots" — specialized versions of the Personal or Secretarial Robot which are the sole teachers in many classes. In some areas (usually near the Resource/Refining Zones), MegaCorps have contracted with the local school board for control and integration of a total schooling system, thereby allowing them to better specialize and prepare the local populous for upcoming or currently operating industrial positions. In these areas (and any corporate schooling system), early proficiency testing is used to gear the youth into apprenticeship programs.

3.3 HEALTH CARE

The 21st century has seen advances in medical technology which are nothing short of amazing; with Direct Neural Interface applications, Cybernetic Implantations and Artificial Organ and Tissue construction being commonplace occurrences, it is not surprising that the health care industry is one of the most successful trend-setting fields. The variety and efficacy of medical/cybernetic treatments has become truly astounding — there are cures for diseases once thought incurable, and implants to correct conditions once thought permanent. This technology is not free bounty — most people simply cannot afford the diverse medical attention available, and must settle for whatever minimal state or corporate aid they can get. For the valuable corporate employee, however, health maintenance packages can greatly increase personal effectiveness and extend life-span by several score years. Most people never visit a true hospital — the extensive (and expensive) treatments available at these massive facilities are reserved for truly difficult procedures and experimental research.

3.3.1 *SURGICENTERS*

For the most part, medical diagnoses, prescriptions, therapies, and even limited surgical procedures are performed at local "Surgicenters" (also known as "DocShops"). These small, clinic-like businesses are located everywhere, from the dingiest Sprawl ghetto to the most sparkling corporate sector. Here, trained Physicians, Medics, and CyberMedics utilize the latest in lightweight, low-cost field equipment to perform most routine medical procedures (including Cyber Implantation and fast, easy laser surgery). The service provided at luxurious Surgicenters (in corporate suburbs and business parks) is generally cleaner, more attentive, and more costly than that of the Sprawl "DocShop", but most Surgicenters are capable of handling the same types of problems, regardless of location.

3.3.2 *HOSPITALS*

The true hospital is almost completely computerized, with all clinical, financial, diagnostic, historic, and monitoring functions performed by various sorts of processors. In addition, robotic surgeons, nurses, and health aides are a common sight. Modern techniques include the use of Health Status Cards (laser-engraved media which replace the age-old "patient chart"), DNA scans (which reveal hereditary and radiation-caused diseases), and "attitude healing" (in which a plethora of specially-designed rooms, sensory stimuli and drugs are used to put the patient in a mental state conducive to healing). The grounds of these establishments are generally designed to ease the paying customer's mind and provide a comforting environment for the healing process, thereby earning them the nickname "hospitels". In fact, many luxury hospitels actually offer vacation packages, where the rich and health-conscious can attend physical therapy classes, eat specially balanced meals, and take advantage of the finest biostatus monitors available. Partaking of such extravagances (the cost of which often runs over $1,000 per day) is considered a status symbol in the extreme. These days, a newborn child's natal record indicates such data as genetic profile, specific chromosomal defects or mutations (and likely future results of these anomalies), suggested and unsuitable professions, and projected life-span. Health scans for adults are no less thorough. Telecommunication through the Net allow Physicians to share patients' health data or new procedural methods across thousands of miles, and all manner of operations are broadcast on special channels for practicing physicians.

3.3.3 *MOBILE EMERGENCY CARE*

Another ongoing advance of the 21st century has been mobile trauma care. From the first ambulances to paramedic-staffed portable trauma units to the sophisticated helicopters of the late 20th century, more and more emergency patient care became available at the site of the accident. This trend has continued in recent decades with the advances of VTOL technology and most recently with the introduction of the *Pegasus* variable thrust GEM vans. These highly maneuverable vehicles can land anywhere and have the capacity to carry on-board the most advanced medical facilities. On-site medical treatment has become so sophisticated, in fact, that many injuries considered fatal fifty years ago can now be treated at the facility (there is still some recovery time involved, however).

All the major corporations have their own mobile care fleets, but there are also several independent services which can be subscribed to like insurance.

VALKYRIE RESCUE SERVICE

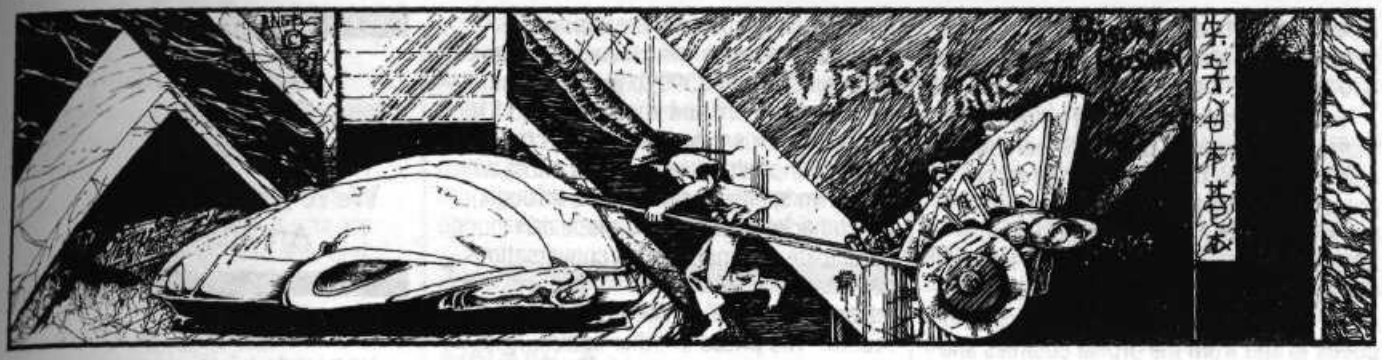
Valkyrie is the world's largest single Emergency Medical Service Franchise, having dispatch centers in every major city. Reliable and professional, Valkyrie Trauma Trucks can make the difference between life and death. For a modest monthly fee (about $200, adjusted depending on your medical history) you can subscribe to Valkyrie service. As long as you are within 10 kilometers of a Dispatch office, Valkyrie guarantees arrival within 3 minutes of summoning (call their exclusive 800 number, or special auto-summons devices are available) and has the equipment to pull you back from the brink — and beyond.

Valkyrie will not intervene if the situation is still dangerous (they are not your personal cavalry) but will attempt to recover your body if at all feasible.

Timeline

2012

First true AI (artificial intelligence) developed... China, smaller nations and terrorist organizations undertake hostile maneuvers vs US and Russian satellites... New procedures allow reliable prediction of weather up to 14 days in advance, and limited weather manipulation becomes a reality (allowing the future possibility of climatological war). Russia and China complete their own satellite communications networks... China attacks North Vietnam... Dr. Richard Head of the CDC in Atlanta announces a cure for AIDS; Iterferon III is also claimed by French and UK groups as their discovery; Tamiko & Gibson acquire rights to produce the product.



3.3.4 *BODY BANKS*

Although medical technology can synthesize blood and grow skin tissue, it cannot — yet — re-grow limbs or complete organs. Thus the bodybanks thrive.

Even in the late 20th and early 21st centuries the organ donor trade had become a scandalous problem. Hospitals with wealthy clients desperate for organs turned to volunteers in third world countries. Kidneys sold for a high price. It wasn't long before the homeless in the US began to offer their 'spare parts' for sale, and by the 20's, hired donation recruiters began to acquire organs from 'donors' who still needed them. The body banks became clearing houses for body parts of dubious origin, 'laundering' them for the hospitals and Medicenters who needed to keep their surgical instruments clean.

This is not to say that all body banks are unscrupulous amoral traders in flesh (but most of them are).

TOith) First Body Bank
Deposits Accepted 24 Hours a *Day*
Ask About Lease-to-Own!

3.3.5 *CLONING*

One other interesting (and less known to the general public) development is the advent of "Cloning Insurance". Some insurance agencies underwrite such policies, which ensure that a cell sample taken from the insured will be grown into a clone upon the person's demise, complete with Memory Transfer from the original donor. As explained in ***SM/T***, this process can be a tricky endeavor, and will require several months to perform. However, for many well-to-do executives and VIPs, it's the only way to go (or to avoid going). Cloning insurance costs around $3,000 per month (this includes the cost of the original cell sampling). In addition, the insured must pay for any memory recordings desired. Such a recording takes 24 hours to perform, and costs $500. It is important to remember that the clone will only possess memories which were in the donor's head at the time of the last taping, so it is generally a good idea to undergo this process at least once per month.

3.4 *TRANSPORTATION*

Since the great fuel shortage of 2041, various alternatives to the gasoline engine have been devised and adopted. The most common alternate fuel sources for transportation today are "Megahol" (a super alcohol derivative) and electricity (gathered by photovoltaic cell or turbine and stored in batteries of all sorts). Most vehicles run on one of these two power sources. In fact, possession of a gasoline-burning vehicle is illegal in many regions. The sleek, aerodynamically-designed automobiles of 2090 are not only slick looking, but quiet and relatively pollutant-free as well. The major change in personal transportation has not been in terms of fuel, however — as might be expected, it is Cybertechnology and automation which have altered the modern concept of driving. DNI vehicles are a relatively common sight in those sectors where people can afford such luxuries, and allow the driver to control the vehicle by means of neural impulses. This greatly increases the road handling of the average car and decreases reaction time necessary to turn, stop, or otherwise maneuver the vehicle. This is not to say that anyone can get into a vehicle and drive it, however — it still requires that driver know what he wants the vehicle to do, and therefore requires some knowledge of how vehicles maneuver in general. When driving a DNI vehicle, the driving character may effectively multiply his Driving skill Bonus by 2 (e.g., a Driver with a skill Bonus of +30 would be at a +60 in a DNI car). Other electronic options have become very popular as well — vehicles these days generally possess all manner of on-board monitoring systems and computer-moderated controls. These systems serve to keep an eye on the vehicle's necessary fluid levels, motor wear and temperature, road speed, etc, and advanced models perform such tasks as calculating distance travelled, fuel cost, tire wear, and other figures. For an additional cost (generally around $75 per month) a person can have his automobile tied into the local traffic network, by which satellites and beacons keep a constant watch on traffic flow, alerting drivers (via the automobiles' internal computers) as to congestion and then suggesting alternate routes.

Commercial transportation is much the same as it was in the 20th century, only there is more of it, and on a greater scale. A popular means of inner-city travel is via Maglev train or Tubeway (faster cousins of the old monorail and subway, respectively).

Timeline

2013

"Dianus" plague hits the Americas; tens of millions are killed by this respiratory disease, which is believed to have been released as a malicious act of biological war (many suspect China, but there is no proof)... Both the US and Russia suffer nuclear reactor meltdowns... East and West Germany are reunited into a single country... In the US, corporate bonds outsell government bonds in a trend which continues throughout the century... Libya infuriates neighbors by oil-drilling in "hands-off" sites; border clashes with Egyptian forces ensue.

Fare varies from sector to sector, but generally falls around $2 for local hops and $30 to $80 for more distant travel.

In the air, various forms of advanced transport technology prevail; Supersonic and Hypersonic Transport Planes carry passengers between continents in just a few short hours (fares run from 100 to $2000 for luxury shuttles), while OTV's (Orbital Transfer Vehicles) shuttle up and down the gravity well, carrying people and goods to and from the orbital colonies and stations. Fares on these shuttles are generally around $1,000. For those who wish to travel even farther, interplanetary craft service the Lunar and Martian bases. A ride to Luna runs about $5,000, while travel to Mars costs a whopping $100,000 (this price is largely due to the current political difficulties on Mars, and may some day fall back down to $20,000 or so). In any case, 'tourist' travel to other worlds is still extremely rare; most transport to the Moon and Mars is business related and operated by the corporations involved.

3.5 COMMUNICATIONS AND ENTERTAINMENT

Personal communications have undergone a total metamorphosis thanks to the Global Telecommunications Network. The Net unites telephone systems (including cellular systems and Pocketphones), "smartphones", modem-interfaced computers, public accessible "Free" databases, CyberDecks, special service cable broadcasting, satellites and FAX units into a cohesive structure, allowing near-instantaneous communication between any two points on the globe (or in space, for that matter). Many of these services have become so standardized as to be relatively inexpensive (especially the various telephone systems, which cost anywhere between $20 and $500 to purchase the phone equipment and another $10 to $100 per month for service and calling charges). Many Computer networks exist, most with their own special focal interest, through which hackers all over the globe can participate in simultaneous conversations, games, etc. Enrollment in such a network generally costs 10 to 100 dollars per month. The prices of other communications systems are detailed in *Technology.*

Another of the chief media used in *Cyberspace* is the FAX paper. These glossy newsheets are correlated from global reports in local offices and broadcasting stations, then sent into the Net to be accessed by customers (at a monthly service charge around $10 to $30). These clientele connect their FAX modems with the paper's line, and can use their push-button dialing systems to indicate which sections of the paper they wish to receive. For the less fortunate, FAX paper receivers are located in many airports and Maglev train terminals. Keyed to receive a personal Credit Card, these units charge as little as 50 per page.

The best example of the electronic information system is Intelligence Services' two global data networks. *WorldComp* allows the user to tap into an ongoing stream of world events headlines, customizing the incoming news via user-selected filters — a step up from the rather generic FAX street service, and correspondingly more expensive. *InterComp* is an electronic archive, the 'sum total of human knowledge' housed in the IS database. The user is, of course, charged for this service, either by access and duration, or frequent users can be charged a monthly fee.

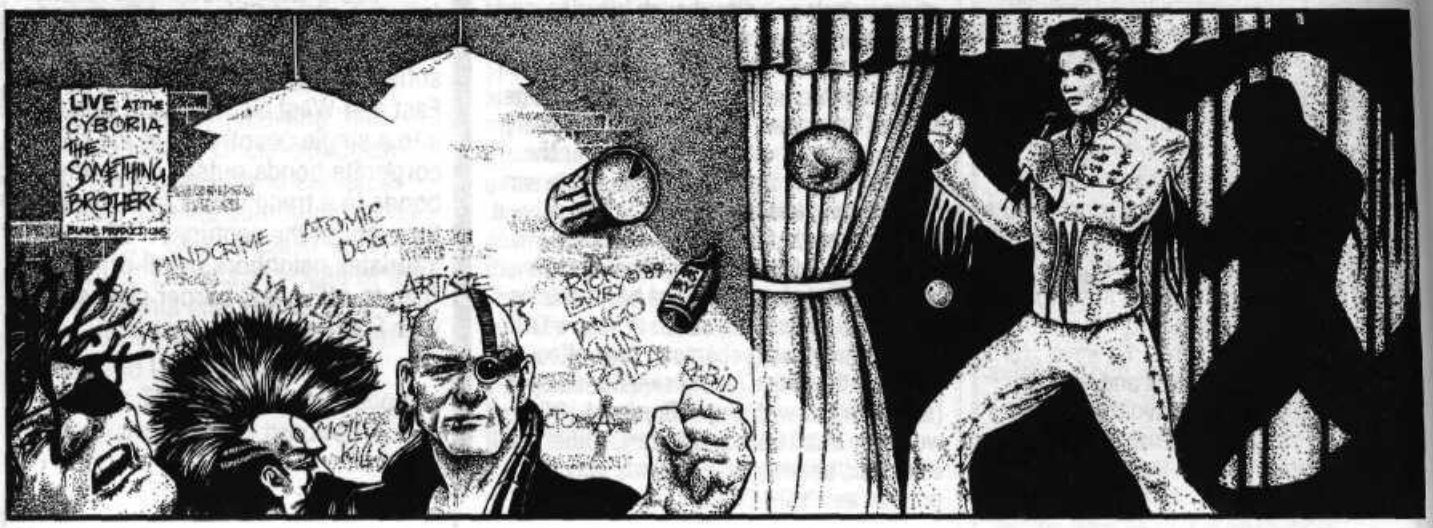
CHANNEL 32
XXXII

We're On Around the Clock, Around the World

HOME ENTERTAINMENT

Home entertainment systems offer a wide variety of possible media, ranging from the ubiquitous and prolific (though amazingly bland and uninteresting) cable television networks to the advanced computer-assisted technology of ITV (Interactive Television) and ASP (Apparent Sensory Perception) recordings. Hundreds of cable television channels broadcast all manner of special interest programs, and many provide the viewer with the capably to handle purchasing, education, games, travel reservations, gambling, archive and library access, voting, news, and other functions over the line (either through the telephone or input processor).

ITV units play special datacards, upon which are recorded visual images and text related to a specific region/site/topic. The viewer uses an attached keyboard, verbal command, or DNI link to maneuver through the recorded pictures and call up explanatory text, thereby controlling the televised point of view (these units are often used for educational programming and adventure games). Standard television, cable channels, or old-fashioned Compact Disc players can all be jacked into holoviewers (which project three-dimensional images into the viewing area) or SuperScreens (which are truly massive — many take up an entire wall).



A more direct interface is possible with the ASP networks, which broadcast sensory recordings made by famous "Senstars" in exotic and intriguing locales. A DNI-equipped viewer simply jacks into the set (which is actually an external ASP player), and receives the sensory data as though it were his own — these sets are extremely popular with the idle rich, and new Senstars are discovered almost daily. One distinguishing feature of most Senstars is that they are in excellent physical condition (most viewers prefer to feel as though their "bodies" are tan, lean, and muscular), and most possess advanced Cybernetic Sensory Implants (which make their recorded sensory impressions all the more realistic).

THEATER

Out of the home, the concept of 'movie' theaters has become a thing of the past, outmoded by individualized entertainment technology. A few screen theaters remain, mostly as museum pieces existing to replay old 'flat films' in the authentic manner. Live theater and concerts, now entirely the diversion of the very wealthy CorpExecs, generally rely heavily on computer-aided animation, special effects, laser lighting, and holographic imaging.

SPORTS

Arena sports, on the other hand, are still very popular, although the nature of the entertainment has changed somewhat since the 20th century. Many new diversions have sprung into existence, while other, older activities have been modified to encompass boosted player performance and technological advances. Modern athletes are trained using advanced biofeedback techniques and mood-alterant drugs, many are pumped full of bioactive chemicals and hormones, while others sport various cybernetic appendages and implants. Some of the most popular sports these days include 1500 kilometer runs, paraskiing (where parachuting athletes jump from air vehicles onto mountain slopes and continue their runs down the hill), zero-grav badminton and basketball (performed in special orbital arenas), and various "megafied" versions of older games (imagine a soccer team with fastlimbs and nerve boosters). Also popular (and generally quite violent) are Raking, Superconduction Hockey, Indoor Armor Soccer, and Cyberball. Another favorite spectator sport is Roboxing — this event pits human gladiators against specially designed robot fighters. The more bizarre and advanced the robot opponent is, the more the fans eat it up.

3.6 CAREERS AND PERSONAL FINANCE

Most workers are employed by one of the MegaCorps, either directly or indirectly. The choices involved in training for one's professions are generally made very early in life — some time before the age of sixteen for most people — and often a worker has no choice in the matter at all (either due to selective shunting toward tested aptitudes or life-long planning based upon natal DNA scans or alterant replication). In the Arcologies, the entire process is not treated so empirically but still retains a significant amount of "pragmatic training" — a person is encouraged from an early age to learn skills which his unique characteristics are suited for. The same general approach also holds true for Rural Workers and Space Colonists. It is at this point in a character's life that the player purchases the "Adolescent skills", signifying the character's innate or forced aptitudes. Characters who are not employed by a MegaCorp (those of Lower Sprawl, Gypsy, or Urban Homeless backgrounds, as well as any others who have "dropped out" of corporate life) are generally self-employed specialists or employees of small, struggling firms usually located in a Sprawl area. With the vast majority of the world's resources and work force controlled by the iron wills of the MegaCorps, it is hardly surprising that there exists a very sharp distinction between the "haves" and the "have nots" — there is effectively no more middle class. The difficult situation faced by the less fortunate citizen seems to be a self-perpetuating cycle — most aspects of government, taxation, law enforcement and employment are geared to grant greater rewards and lesser punishments to those who have credit, at the expense of those who do not. One good example of this principal in action can be seen by examining the credit system of 2090. Credit cards (or credit programming on wrist wallets/ credichrons) are issued to all corporate employees free of charge, and these person have their pay immediately credited to their accounts. The cards allow instant purchases to be made, make it nearly impossible for unauthorized persons to access the account, and pay regular (though severely limited) interest. A person who does not work for a MegaCorp has to pay for the privilege of carrying credit priviledges on his wrist wallet — or 'credichron' — (generally $50 or so, followed by regular installments of $10 per month) or risk carrying hard cash. Cash carries a few dissuasive characteristics of its own; it is harder to carry around than a small card or credwatch, easily stolen, difficult to trace, and requires that a merchant possess some means of protecting it once used for a purchase. In today's nearly cashless society, many shops or services actually charge more if a client wishes to pay with cash (adding on a "processing fee" somewhere between 2% and 10%). The entire idea of cash is looked down on in many places, where its use is seen as classless, boorish and ignorant. In the more developed sectors, cash transactions are outlawed completely — it is often said that only criminals and blanks use the stuff.

Timeline

2014

Artificial Wombs are created. Cryostorage of ovum/sperm/zygotes (both human and animal) becomes a commonplace occurrence. As a response to the ecological terrors of the past several years, unprecedented crime rates, riots, and anti-scientific jihads occur throughout the western world. AI battle machines first used for infantry support and crowd control... Walt Disney Enterprises buys Corsica for a new themepark.

WORLD DOLLAR DENOMINATIONS				
Amount	Color	Art (Obverse)	Structure (Reverse)	**Size** (in cm)
$1	Blue	DaVinci's *Mona Lisa*	*Leaning Tower* of Pisa	5x10
$5	Green	*Venus de Milo*	*Acropolis* of Athens	5.5x11
$10	Pink	Michelangelo's *David*	The *Duomo,* Florence	6x12
$20	Lavender	Picasso's *Guernica*	The *Pantheon,* Rome	6.5 x 13
$50	Yellow	Van Gogh's *Starry Night*	*Pyramids* of Cheops	7x14
$100	Orange	Degas' *Ballet Dancers*	F. L. Wright's *Fallingwater*	7.5 x 15
$500	Purple	Monet's *Water Lilies*	*Notre Dame,* Paris	8x16
$1000	Dark Red	Warhol's *Marilyn Monroe*	*Stonehenge*	8.5 x 17

WORLD DOLLARS

Paper currency — actually a fibrous plastic — is still printed in the familiar dollar denominations, though these are World Dollars and so more colorful than US currency was.

Also called TerraBucks, these bills are each treated with a slight magnetic field, allowing them to be secretly 'numbered.' This process makes them more difficult, but not impossible to counterfeit. World Dollars are printed in different colors and sizes depending on their denomination, to aid in easy identification. Rather than specific persons, the bills depict famous works of art on one side (paintings are rendered in full color where critical), a famous building on the other.

Timeline

2015

The worldwide balance of power has shifted so that most countries recognize the US, Russia, Japan, and the EEC (European Economic Community) allies (led by Germany) as "The Four Superpowers"... Several varieties of synthetic food are created and distributed by the Omara Foundation of the UN... The worldwide fresh water shortage causes global unrest; most industrial nations are forced to ration and recycle water.

MONTHLY COST OF LIVING

The average monthly cost of living (whether paid for electronically or in cash) is something that every GM should enforce all players to pay regularly. It varies greatly, depending on the character's situation and lifestyle, but a few guidelines are given below. These costs include housing, food, fuel, and miscellaneous mundane expenses.

MONTHLY COST OF LIVING CHART

	Lifestyle **Level**		
Social Class	High	Median	Low
UCorp	5000	3000	1000
MCorp	3000	1500	800
LCorp	1000	800	600
USprl	800	500	200
LSprl	500	300	100
RRWrk	300	200	50
Arcol	—	—	—
Wilds	—	—	—
UHmls	—	100	50
Gypsy	200	100	50
SCIny	1000	600	300

Characters who have jobs generally receive a monthly income equal to 1.5 times the "median" cost of living for their social class. Characters with Arcology and Wilds backgrounds receive no income unless they find a paying job during gametime (Arcologies are generally run along socialistic lines, without any real form of money, while Wilderness characters hunt their food and build their own implements). The good news is that they really have no monthly costs of living.

***GM** Note: The high life level of the Urban Homeless class is purposely left blank. This is because subsistence for these people simply does not include such a concept. A high life level for a Homeless person would probably equal a low level for a Lower Sprawler.*

3.7 LAW ENFORCEMENT

As governmental power waned and corporate power grew in leaps and bounds the definition of police also changed drastically. Once the defenders of *mm* law and order as enforced by governmental legislature, police organizations have become corporate-minded security forces. They are generally owned and operated by whatever MegaCorp has the most prestige in a given area. Standard (i.e., municipal) police forces still exist, but they are usually subsidized by a major corporation, and as such, their powers and areas of jurisdiction are greatly restricted or redefined. For the most part, these cops operate in the inner cities and Sprawl zones, where few corporate centers of activity exist.

In the corporate cities and suburbs, specially trained and equipped "CorpCops" patrol and administer their own brand of law and order — in short, whatever the company says, goes. In most areas, the CorpCops have more power than the municipal police forces, and certainly have more behind them. This trend has led many communities to turn to corporate security organizations in lieu of their own police forces, contracting these companies to design and implement local security measures as they see fit. In general, ever since the great riots of 2014 and 2034, the state of "law and order" in the civilized world has fallen to a few scant degrees above total chaos. Throughout the century most regions have known periods of martial law, and many localities still operate under the most harsh circumstances imaginable, as the forces of the MegaCorps strive to protect their profits and markets from the rising tides of anarchy.

In most places, prisoner treatment and police brutality laws are a thing of the past (especially in Corporate sectors, where the CorpCops can do whatever they want). In addition to the age-old problems of robbery, fraud, extortion, rape and murder, police forces now must deal with such high-tech crimes as computer embezzling, database manipulation, information theft and brokering, unlawful tele-surveillance and cable-tapping. To aid them in this escalating war, many forces have turned high-tech themselves; cybernized police officers are not an uncommon sight (especially CorpCops, for many of whom "enhancement" is mandatory), police squads use robotic aides and AI constructs in the streets, area-effect weapons such as Laser Blinders and Subsonic Field Guns are used for crowd control, and most security teams include at least one "Icebreaker".

3.8 PRIVACY

"Big Brother is watching."

George Orwell
1984

"Privacy? Basically, you have none. Except for the fact that — times are — nobody really cares enough about your snivelling little cms to investigate your files, you have no secrets. Be assured that you have a file, unless you are a 'blank', and that is a crime punishable by thought reorientation."

Meleris Charn
Corporate Investigator

There are several kinds of privacy, and the future will inevitably see the potential for all of them to be eroded or violated.

YOUR PERSONAL FILE

The slow evolution of the computer networks that began so sluggishly at the end of the twentieth century and was frequently interrupted throughout the first few decades of the 21 st is finally a practical reality. It is almost amusing to recall the first stirrings: US states linking their Motor Vehicles databases, credit companies sharing information, airlines using one network. These were the vanguard groups. The banks were slow to go on-line, reluctant to surrender the billions they made on interest while they 'processed' (i.e., 'held') other people's money. But out of this joining emerged not only the Net, but massive databases of such volume and complexity that they overwhelm the mind. And in that sea of data is a coded stream of information on every human on earth (except Blanks). Not just age, birthplace and mother's maiden name, but criminal record, late loan payments, income, every address you ever had, complete medical records, not to mention favorite TV shows, colors, and clothing styles. Every credit transaction is in there, and from that a frighteningly accurate psychological profile can be concocted...

But this profile can't be accessed by just anyone, and parts of it may be protected from just about everyone (including the subject) since it is actually housed in a variety of locations. For instance, the FBI and the CIA have some information, your bank has a lot, your medical service contains more, Intelligence Services no doubt has quite a file, etc. But with the magic of the Net, a skilled searcher with the right access codes can have all that data compiled and spewing out of his home printer inside of a minute. Scary.

CREDIT HISTORY

One of the most important aspects of your personal file is your credit history. With the world having become so dependent on electronically controlled finances, a certain paranoia has arisen towards credit fraud. In the last fifty years conviction of First Degree Credit Fraud has generally received more severe punishments than murder or even being a Blank (see below).

Intelligence Services
Wherever you look, Intelligence Services *is*

ACTIVE CAMERAS

Another type of privacy is physical: is Big Brother watching you right now? Probably. Whether you can see that securicam or not, there is likely one observing your every move.

In corporate structures there are cameras to watch every hall, every room, every elevator. It is improbable that a someone is actually observing you, but computer sentries are watching for unauthorized activity, ready to alert human guards. Outdoor areas around structures, parking garages, and corporate residential areas are also often monitored, but not with the same intensity.

Meanwhile, however, some spy satellite is aiming a satcam at you. While it can't normally locate you and track your every move, if you have a homing device or item which can be traced, it will be able to keep tabs on you. Actual visual displays from orbit are also unlikely, as vidisat time is ridiculously expensive, but telemetry is almost as effective. Intelligence Services alone has a satellite network capable of actively tracking 2 million individuals at once. Again, such abilities are not available to just anyone. Such access would require a very high security clearance, a lot of money, or both.

BLANKS

Blanks are people who have either never had a computer file (they were born without being documented — a fairly difficult feat) or somehow arranged to have their file purged from every important database (virtually impossible). As a blank you don't pay taxes and its much harder to hunt you down. But if you are ever caught and it is established that you *are* a Blank, it is the second worst crime on the calendar... next to credit fraud

3.9 SLANG & TERMINOLOGY

The following glossary is but a small sampling of commonly-used streetslang, "computerese" and new terminology. It is included to give the GM and players a better feel for the world of *Cyberspace,* and to lend some additional color to the campaign. All words which are defined within this glossary are printed in bold.

AI: (1) The science of Artificial Intelligence; (2) A Computer or program which is capable of reasoning, learning and communicating.

Aqualogy: A bastardized form of **Arcology** used for underwater or floating settlements which are dependant upon the sea for most or all of their resources and manufacturing processes.

Timeline

2016

Nuclear Reactor meltdown in Israel is believed the act of Libyan terrorists, beginning a series of escalating field clashes... Mid-range fusion generators are developed... China declares war on India... The NAL (New Aryan League), an ultra-right organization bent on Hitleresque racial superiority theories, takes political control of San Diego. Discrimination against non-Nordic types begins almost immediately. Thousands flee; thousands more invest in peroxide.

Arcology: A self-contained, self-sustaining living environment. Usually dome-covered and located in relatively remote areas, most Arcologies house less than 10,000people.

ASP: Apparent Senscry Perception; recorded sensory input which can be played back into other people.

Base: Body of stored data upon a specific subject; often used to refer to human knowledge of a subject (short for database).

Beamer: A Solar Power Satellite.

Black ICE: The most feared kind of Interactive Counter-Espionage program, usually designed to physically or mentally harm an intruder trying to enter a system electronically.

Blank: A person who possesses no identification and is not on any computer records.

Body Bank:0utgrowth of organ donor banks; bodies are brought in and often sold for parts.

Bohica: Pronounced Bohieka; an acronym for "Bend Over, Here It Comes Again."

Bouncer: A Communications Satellite (syn: *Comsat*).

Bug: (1) A tiny surveillance device, usually audio; (2) A program-imbedded software problem; (3) An AI construct (most often used to refer to streetcleaners, garbage collectors, etc).

Burn: To break a security code and enter a guarded database (syn: CRACK).

Buzzer: A DNI device which stimulates the pleasure centers of the brain (see Buzzhead).

Buzzhead: A person who is addicted to artificial stimulation of His brain's pleasure centers (see *Buzzer).*

CDeck: CyberDeck; a specialized DNI computer which runs *Simnet Progs.*

Comp: Computer (see *Technology,* Part 2).

ComSat: Communications Satellite (syn: *Bouncer).*

CorpCop: A corporate security officer, usually licensed to carry a firearm.

Cowboy: A professional criminal Ice-breaker.

Crack: (1) To break a security code and enter a guarded database (syn: *Bum);* (2) Very effective (e.g., "It's a really Crack Prog.").

Cracker: A *CDeck* pirate (see *Crack*).

Credichron: Any one of a dozen brands of combination watch/credit portfolio.

Crunching: Compressing data for storage, done by hand or algorithm.

Cursed: (1) Suffering from *The Curse;* (2) Behaving in an abnormal fashion; (3) Arrogant.

Cyberspace: The abstract realm of electronic telecommunications.

Disk: A data storage disk read by a low-intensity laser. Most common programs, audio, and video recordings are stored on such disks.

Disappear: To cause a person, and all known references to that person, to become difficult or impossible to find; a transitive verb (e.g., "The military disappeared him.")

DNI: Direct Neural Interface; via subcutaneous implants.

ETA: The outcasts and dregs of society — thieves, rogues, beggars.

Firmware: Somewhat, but not altogether modifiable programs, often built into a computer.

Fist: A person's characteristic "Hacking" style; comprised of such factors as speed, number and length of pauses, commonly-appearing words, commands, phrases and mistakes.

Timeline

2017

Applications work with AI has spawned many varieties of common robots: Personal, Industrial, Secretarial, and Warrior-types. Robots are used extensively in space, often communicating by remote microfreq channels... Interplanetary Geoscience performs the first moon mining; ores are carried into Earth orbit by automated systems.

Flame: To abuse, attack, harass, or argue on-line.

Floater: A GEM vehicle.

Fly's Eyes: Multiple Image Integration Sensors, or a piece of software which assimilates the data received from them.

Frob: To alter control settings in a random or mischievous manner.

GEM: Ground Effects Machine.

Ghost: An Icebreaker who assists a "physical entry team" by entering and controlling the computer system at the target site.

Gram: Program (also *'prog'*).

Hack: (1) To furiously work on a software or assembly project; (2) One who does so (syn: *hacker.*).

Hacker: One who *Hacks.*

Hardwired: (1) Equipped with neurological cybernization; usually refers to implanted RAM programs of the reflexive variety; (2) Used colloquially to refer to any repetitive behavior or person.

Hitech: State-of-the-art; utilizing new and advanced technology.

ICE: Interactive Counter-Espionage programs.

ITV: Interactive Television; Computer-aided media stored on compact disc or digital tape, which allows the viewer to "enter" the televised picture.

Impex: Implanted Expertise; slang term for a *Neurosoft* which is loaded into a NAC processor.

Kloodge: To solve a hardware or software problem with a makeshift method or device (usually just a temporary repair).

LP: Language Processor.

Make a **deposit at the Body Bank:** to die.

Matrix: Abstract simulation of an area of Cyberspace, as experienced through a Simnet Prog.

Mela: A pre-programmed series of maneuvers or commands triggered by a much simpler command and executed exactly the same way each time.

NAC: Neurological Activity Controller; a brain-implanted computer which allows its wearer to run ***Neurosofts***.

NACJack: A common system comprised of a NAC linked to a DNI trode; allows its wearer to operate **DNI** equipment and load new *Neurosofts.*

Neurosoft: A program module designed to be run in a NAC Processor or to control specific brain/body functions. Most bestow some skill or knowledge unto their user.

Net: Hardware that creates a network of electronic communication; the "Net" is the Global Satellite/Ground Communications Network.

N-ROM: Neurolog Read-Only Memory; a type of non-interactive *Neurosoft which* contains specific **data/knowledge.**

NP: Neuroprocessor.

On-Beam: Via wireless telecommunications.

On Ice: In cryogenic suspension.

On-Line: Via cable/optic fiber telecommunications.

On The Fly: In real-time or near real-time; describes hurried preparatory activities on simultaneously running programs.

Oyabun: Lord; esp. an organized crime **lord**. (originally Japanese).

PAL: Processor Animated Luxury; any relatively mundane device which has been made more *Hitech* by the implantation of a "friendly" computer.

Portex: Portable Expertise; slang for external *Neurosoft* modules which are *Smart.*

Prog: Program. (also **'gram'.**)

Satcam: Satellite Camera; a generic term for orbital surveillance platforms.

Senstar: A celebrity whose sensory recordings are broadcast over ASP networks.

Simnet: A type of *Prog* designed for use in a **CDeck** which translates incoming signals into "tangible" figures, allowing the operator to directly experience *Cyberspace.*

SimStim: Simultaneous stimulation; one-way transmission over a **DNI-2** link, allowing a remote CDeck operator to experience all sensory input experienced by the source person.

Shades: Antiglare ocular implants or contact lenses; (archaic): antiglare glasses.

Smart: Containing an integrated microprocessor, usable by any person or machine with a DNI jack (a computer is not **required,** as the necessary circuitry is in the **Smart** device).

Sprawl: A sort of extended city comprised of built-up areas which have blended into one another over the course of years. Two major Sprawls exist in North America; the Eastern and the Pacific.

The Curse: "CIRS"; Cybernetic Implant Rejection Syndrome, a psychotic aberration suffered by the **over-cyberneticized.**

Trodes: DNI input jacks.

Uncrunching: Decompressing stored data for usage, done by algorithm.

Vidicam: Video camera; normally a portable model.

Wetware: Slang term for Cyber Implants; devices which house Cyber Systems within the body.

Wormtech: Black market technology; any device or program which is created by an unlicensed, free-lance designer. WormTech is the source of many innovative developments, but also has a reputation for being haphazard or even dangerous to use.

Yakuza: Organized crime; the Mafia (originally Japanese).

Zaibatsu: MegaCorp (originally Japanese).

Zipper: (1) A synthetic pouch implanted beneath the skin, used for smuggling or shoplifting; (2) One who has such a pouch implanted.

GNN

GLOBAL NEWS NETWORK

If we aren't covering it
it's not news.

Timeline

2018

Israel **nukes** Libya: US & Russia take a stand against nuke use at SALT **XV**... The first practical large-scale massdriver is developed by France, and placed in orbit to join in a collective operation with the US Space **Station**... Electric-powered cars are **common**... China claims most of India but seems unable to hold the **territories**... Highway violence, a phenomenon once unique to the US, spreads across Europe as frustrated motorists shoot each other with ridiculous fre**quency**... In the US, state police begin wearing kevlar and other armoring as part of their regular uniform.

4.0

SPECIFIC MAJOR ENTITIES

The power and 'feel' of the Cyberspace milieu is in the realistic organizations and people that give it a life of its own. Towards that end, we present this section on groups and individuals who the players will likely encounter in their odyssey. The GM should feel free to make up his own additional corporations, gangs if he so desires to further customize his earth.

SECURITY LEVELS

When dealing with the MegaCorps in a surreptitious manner (which seems inevitable when PCs are concerned) a standard scale of sensitivity or secrecy would be helpful for the GM in setting up difficulty modifiers and the players i realizing just how intimidating their espionage goal may be. The terms will be employed elsewhere in *Cyberspace* to indicate the levels of clearance various personnel will have in their organization.

Note that there are no numeric difficulties assigned to the security levels, as different groups will protect their facilities and data according to their ability to do so. The listings for ICE protection for the companies listed below are general guidelines and the GM is advised to draw up a more complete company profile

- **Documents/Datafiles**

Declassified: This information is not really secret at all any more; it formerly held a security classification, but is now freely available in the database.

Sensitive: Data that, while not of particular technical value to competitors or adversaries, may have some mild adverse effects if released to the general public.

Extremely Sensitive: A more extreme version of Sensitive, normally this type of information relates to quasi-illegal or other questionable activities performed by agents of the corporation. This would probably not included sabotage or espionage operations.

Classified: Generally the bottom level of important technical information. Specs for older projects, basic building layouts, corporate troop disbursements, and most financial data is considered *Classified.* General personnel files are secured at this level.

Secret: Very important data; corporations will store most of their research and covert intelligence data at this level.

Top Secret: Theoretically the highest level of secrecy, these datafiles are protected by the best array of security measures and ICE the corporation can devise. This level is reserved for only the most sensitive project records, technical information, or personal data on high-ranking employees. Reports of illegal espionage and sabotage activities as well as blackmail and bribery records are stored in scattered databases at this security rating.

Omega Clearance: Different corporations will have varying names for this level of secrecy, though most have an analog. The data under this heading does not even officially exist; it requires the very highest clearance to even get the computer to admit that they do. After that the most rigorous security check is performed before the datafiles are released. Don't try to access this at home, boys and girls.

- **Areas (Physical or** Electronic) This includes access to Securicams in company buildings, which may vary depending on what room is being monitored. For instance, the main lobby of Serendipity Tower in New York may only be Secure [thus the difficulty of accessing securicams there might only be *Hard (-10)*], while the Executive Washroom on the 104th floor is High Security [and the difficulty of peeking through a securicam there would perhaps be *Sheer Folly (-50)*]. Such access control methods as card-keys, palmlocks, voice analyzers and arm sentries. Keep in mind also that the same security level is not necessarily the same security; e.g., a technician with High Security clearance to the IGI mainframe at his Los Angeles complex will not have access to the Top Security Executive suites at that building — or even access to the Top Security mainframe area at the New York offices.

Unsecured: Basically a reference term, as there is rarely a part of a corporation complex that is not secured in some way.

Secure: Lowest level of secured access areas. Lobbies and other semi-public areas are usually Secure, monitored by Securicams and often a receptionist.

Medium Security: Most office and common employee areas are monitored at this level. Identification is required upon entry, but authorized personnel may move freely through the area without being questioned. Parking garages and similar vehicle depots are separate but equally protected.

High Security: Lab areas and most technical areas (computer rooms) are high security, requiring rigorous security clearance procedures before entering. Executive suites are usually Top Security, as well as roof access and access to most protected areas like sensitive equipment storage.

Top Security: Reserved for storage areas for software backups, labs for ultra-sensitive projects, and protected areas for protected computer mainframes (such as illegal AIs).

Timeline

2019

"Second world" producing countries such as Taiwan, South Korea, Switzerland and Sweden see a rise in power... The US, Japan, and several European countries tow arctic glaciers southward in order to provide fresh water sources... The Dalai Lama born in Lesser Antilles; bloody rioting in Tibet... Soap riots in the Soviet Union become intolerable.

4.1 CORPORATIONS

A number of key corporations are listed below, most ot which are household names in the 21st century. Some have survived from the 20th century (and earlier), some are older corporations which have changed their name, while others are relatively new.

4,1,1 INTELLIGENCE SERVICES

Primary Operations: Investigation, credit information and data security. Also security databases, satellite surveillance. Primarily a service organization.

Worth (Assets): $309.6 billion

Total Employees: 3,230,000

Main HQ: Cerberus Complex (formerly Alcatraz Island), San Francisco, CA.

Principle Branches: Athens, Auckland, Barcelona, Beijing, Berlin, Bombay, Brazilia, Cairo, **Chicago,** Dallas, Helsinki, Hong Kong, Istanbul, Koshimiru, Leningrad, London, Los Angeles, Madrid, Manila, Melbourne, Mexico City, Milan, Montreal, Moscow, Munich, New York, Osaka, Paris, Prague, Rome, San Francisco, Seoul, Stockholm, Sydney, Tel Aviv, The Hague, Tokyo, **Toronto,** Warsaw, **Washington,** Zurich.

Chief Executive: C. **Keanu** Tynes, Chief Executive Officer and Chairman of the Board.

Major **Stockholder(s):** Wiedlin Foundation (13%), Morgan Plantagenet (9%), C.K. Tynes (8%).

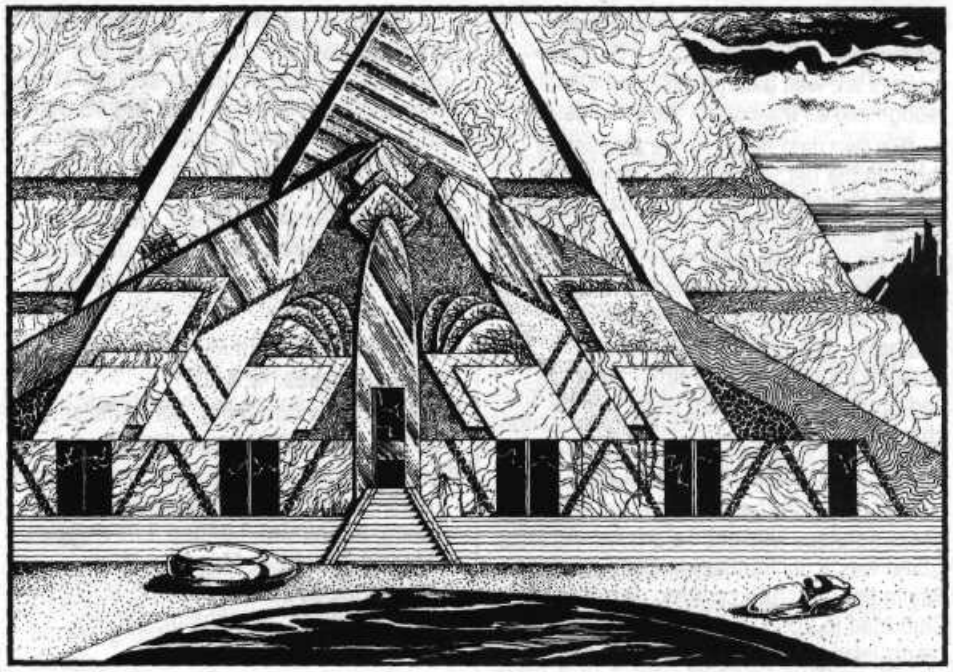
Owned Corporations **of Note:** No known subcorporations except the two data services: *WorldComp* and *InterComp*

CYBERSPACE DATA

Net Icon: (And Corporate Logo) A pyramid with the all-seeing eye on top.

Defenses:

- *Illegal WorldComp/InterComp access:* Rtg. 6 Security Code/Bouncer.
- *Illegal ComSat access:* Rtg. 6 Security Code/Rtg. 10 Data Screen.
- *IntelSat access:* Rtg. 10 Security Code/ Rtg. 30 Data Screen/Rtg. 30 Alert.
- *Cerberus Complex Computer System electronic intrusion* (needed to control security devices such as doors, cameras): Rtg. 30 Data Screen/Rtg. 30 User Recognition/Rtg. 30 Alert/Rtg. 50 Freeze. Note: Some areas have additional ICE.
- *Cerberus Complex Mainframe electronic intrusion* (needed to enter before accessing security databases): Rtg. 30 Data Screen/Rtg. 30 User Recognition/ Rtg. 30 Alert/Rtg. 50 Freeze.



- *Highest security Database access:* Rtg. 50 Data Screen/Rtg. 70 Bouncer/Rtg. 70 Hypo (injects *Wiper* Virus).

Additional information:

All transmissions are scrambled, *Medium* to *Insane* to unscramble depending on data sensitivity. Ultra-secret transmissions are split by satellite and parts are tight-beamed to two or more locations for cable transmission and computer reconstruction. Such transmissions are virtually impossible to decode.

Access to the IS database is unquestionably one of the most sought-after goals in Cyberspace. It is correspondingly difficult to penetrate, of course. While IS has a formidable array of electronic defenses, it should be noted that they have steered clear of **'Black Ice'** — that form of Electronic protection which injures or kills intruders. Exactly why they show such mercy is uncertain; freelance Deckers are still reluctant to tackle IS ICE.

CORPORATE OVERVIEW

Intelligence Services arose from a merger of several credit reporting agencies, an independent news service, a telecommunications and computer software company, and a major electronics firm. With this powerful combination, the corporation quickly gained recognition as a discreet and thorough investigator. IS owns Alcatraz, once an island-prison in the San Francisco bay, and has renamed it *Cerberus.*

IS is now considered the ultimate intelligence source, more complete and authoratative than any government agency. With over fifty surveillance satellites in orbit, no area on earth is free from IS scrutiny.

While IS is principally a service corporation, they have a large software research staff to provide the most sophisticated protection for their priceless databases. On the other side of the coin, IS employs some

Timeline

2020

"The Net" (the Global Satellite/ Ground Communications Network) is fully integrated, incorporating older and newer satellite networks into its own computer-monitored structure... US physicians develop tests which can predict genetic diseases and carriers, leading to legal battles over the implications of their use... Population of the Pacific Sprawl (from San Diego to San Francisco) reaches 25% of the US population... The first true arcology is completed in Sweden, and many more follow throughout the next few years... All over the globe, smaller countries and territories vie for (and receive) independence from their mother countries.

fairly underhanded methods to acquire their highly sought-after data. IS cyberjockeys are well paid professionals and recognized as the best in the business.

IS's two data services are accessible through the net; *WorldComp* allows the user to tap into an ongoing stream of world events headlines, customizing the incoming news via user-selected filters. *InterComp* is an electronic archive, the 'sum total of human knowledge' housed in the IS database. The user is — of course — charged for this service, either by access and duration, or frequent users can be charged a monthly fee.

CERBERUS COMPLEX

The corporate headquarters of Intelligence services was once a prison. Alcatraz island was a penitentiary in San Francisco Bay in the mid 20th century. Purchased by Club Med in 2005, it was converted to a resort island, with boat and helicopter access. The club foundered financially, however, and in 2025 the young IS purchased Alcatraz and began to build its base of operations. Renaming it Cerberus (after the three-headed guard dog in Greek mythos), IS constructed a complex of structures and a maze of underground facilities. It is now a fortress for the IS Mainframe and corporate headquarters. Completely independent of the city (IS has its own electricity and other utilities systems), the corporation is unassailable physically and electronically.

Timeline

2021

The pharmaceutical MegaCorp Leyland-Carlisle wins rights to develop the beleaguered Amazon and begins an aggressive replanting operation (the rain forest is an unmatched source of new organic drugs)... Super immunosuppressives are discovered, allowing complex transplants and artificial organ implantations... The already thriving black market surrounding the procuring and sale of body parts becomes a serious problem, as murder for parts is commonplace... The US sees a near-total elimination of the "middle-class": most citizens are either white-collar corporate elitists or itinerant workers (there is, of course, also a huge class of destitutes). Volunteer civilians are sent into the growing orbital stations as colonists.

Aside from constant visual monitoring (IS has vidicams scanning the air and water approaches) there is intense security at the entrances. All buildings have Rtg 10 User Verification equipment, and more secure areas have Rtg 20 up to Rtg 50.

4.1.2 *AIZU-SHOTO CORPORATION*

Primary Operations: Cybernetic Implants, Military Vehicles.

Worth (Assets): $189 billion

Total Employees: 420,000

Main HQ: New Hiroshima (an artificial island off the Japanese coast).

Principle Branches Auckland, Beijing, Berlin, Cairo, Dallas, Helsinki, Hong Kong, Koshimiru, London, Los Angeles, Madrid, Montreal, Moscow, Munich, New York, Osaka, Paris, Prague, Rome, San Francisco, Stockholm, Sydney, Tokyo, Toronto, Washington.

Chief Executive: Harry Shoto, Chairman of the Board

Major Stockholder(s): Aizu Foundation (13%), Darnell & Associates (5%)

CYBERSPACE **DATA:**

Net Icon: A tall, neon-edged Pagoda surrounded by a Japanese Garden.

Defenses:

- *A-S System electronic intrusion:* Rtg 20 User Recognition/Rtg. 20 Datascreen.
- *A-S HQ Mainframe electronic intrusion* (entry needed to control security devices such as doors, cameras): Rtg. 30 User Recognition/Rtg. 30 Data Screen/Rtg. 40 Bouncer. **Note:** Some areas will have additional ICE.
- *Limited Security Database access:* Rtg. 50 User Recognition/Rtg. 70 Data Screen/Rtg 70 Bouncer.
- *Highest security Database access:* Rtg.150 User Recognition/Rtg 150 Bouncer/Rtg 150 Shocker.

Additional information: The A-S electronic defenses are unimaginative but effective.

CORPORATE OVERVIEW

The leading producer of personal cybernetic systems, A-S is especially known for their Sensory systems (Aizu-Shoto eyes are famous for their beauty and quality).

An old and respected firm, A-S dominates the market by sheer size: its vast resources available for research and production enable it to continually outpace the competition. A-S rarely resorts to corporate Espionage. Its biggest rival is Mikura Biolabs, also a very large firm, and with a less well-developed moral sense.

While not overtly aggressive or antagonistic, Aizu-Shoto is rumored to have associations with the *Yakuza* (Japanese organized Crime) and some have even suggested that Harry Shoto is one of the powerful *Oyabun* (crimelords), but most reliable intelligence — including IS files- contradict this claim.

4.1.3 *NETWORK 69*

Primary Operations: Entertainment, News

Worth (Assets): $110 billion.

Total Employees: 230,000

Main HQ: New York City

Principle Branches: Beijing, Berlin, Bombay, Chicago, Hong Kong, London, Los Angeles, Madrid, Mexico City, Milan, Montreal, Moscow, Munich, New York, Osaka, Paris, Prague, Rome, San Francisco, Stockholm, Sydney, Tokyo, Toronto, Washington.

Chief Executive: Simon Grossman, Chairman of the Executive Board.

Major Stockholder(s): The Hiedleberg Consortium (11%), Hartwell-Kravitz Foundation (9%), Marika Shamwell (7%).

CYBERSPACE DATA

Net Icon: A Corinthian column with four television screens mounted on top and facing outward to the four points of the compass, all showing Network 69 programs. This also, incidentally, resembles the corporate HQ in New York.

Defenses:

- *Comsat access:* Rtg. 10 Security Code.
- *Mainframe System electronic intrusion:* Rtg. 30 Data Screen/Rtg 30 Alert..
- *Highest security Database access:* Rtg. 40 User Recognition/Rtg 50. Bouncer/ Rtg. 60 Scrambler.

Additional information:

While not among the most paranoid MegaCorps, 69 protects its sensitive employee and projects data.

CORPORATE OVERVIEW

In a reversal of the trend of the early 2000's, the networks have taken control of the local stations and affiliates, making them essentially branch offices of the main global network. While Network 69 is not currently the largest TV programmer, it usually ranks in the top ten (of 200 global stations).

Among 69's most popular programs:

Leave it to Reaver— A mysterious phantom stalks the Sprawl, killing new guest stars every week.

Porky's Landing— Contrived Serial Drama. The continuing plot revolves around the Holswine family, their vast wealth and seemingly endlessly surfacing long-lost relatives and relationships.

tynijex Queens of Phobos —Comedy-Adventure set on Mars' larger moon.

Heckler and Koch — A crime-drama centering on gay roomates who are also partners on the city police force; lots of shooting.

TalkTalkTalk -- A confrontational interview show (ratings are high because viewers tune in to see how long the host lives).

Wheel of Torture — An adventure/game show involving a big wheel, several surgical steel appliances, and new contestants every day.

World Beat — a news/interview/gossip show starring 'TV Personality' Kassandra Kelsey. Kassandra is known for her probing interviews and jaunts into potentially dangerous places to get a 'story.'

World Weather Watch — Daily summary of catastrophic weather events, with graphic film.

Your Body, My Body — Self-help. This medical program instructs about everything from sexually transmitted diseases (and exactly how they are transmitted) to do-it-yourself surgery.

4.1.4 *SERENDIPITY*

Primary **Operations**: Software, Satellite imaging, personal entertainment systems, computer core hardware.

Worth **(Assets):** $401 billion

Total Employees: 450,000

Main HQ: Crystal Palace, Orbital Station. Planetary HQ is Los Angeles, a skyscraper looking like a vertically extruded version of the Net Icon, known among the execs as Emerald City.

Serendipity

Where good things just happen.

Principle Branches: Athens, Auckland, Barcelona, Beijing, Berlin, Bombay, Brazilia, Cairo, Chicago, Dallas, Helsinki, Hong Kong, Istanbul, Koshimiru, Leningrad, London, Los Angeles, Madrid, Manila, Melbourne, Mexico City, Milan, Montreal, Moscow, Munich, New York, Osaka, Paris, Prague, Rome, San Francisco, Seoul, Stockholm, Sydney, Tel Aviv, The Hague, Tokyo, Toronto, Warsaw, Washington, Zurich.

Chief Executive: Trevor Bartok, President; Elyse Kendrick, Chairman of the Board.

Major Stockholder(s): Privately Held

CYBERSPACE DATA

Net Icon: A glittering green glass palace (like Emerald City in the Wizard of Oz).

Defenses:

- *Comsat access:* Rtg. Additional Rtg. 50 User Recognition/Rtg. 50 Shocker to access ground-Crystal Palace communication.
- *IntelSat access:* Rtg. .
- *Emerald City Mainframe electronic intrusion:* Rtg. 70 Security Code/Rtg. 100 Data Screen/Rtg. 150 Neural Scrambler.
- *Crystal Palace Mainframe electronic intrusion:* Rtg. 100 Security Code/Rtg. 100 Data Screen/Rtg. 150 Neural Scrambler. *Archon*, the AI, may track the intruder and has a Rtg 300 User Recognition and a full array of Rtg. 300 (!) Grey and Black ICE at its disposal.
- *Highest security Database access:* Rtg. 70 Bouncer/Rtg. 150 Data Screen/Rtg. Alert.

Note: *These datafiles are located on earth in the Emerald City mainframe; those in Crystal Palace are in Archon's memory area and protected by its ICE.*

Additional information:

One of the most secure systems on (or off) the planet, Serendipity ranks with IS and a handful of other MegaCorps in the quality of its ICE.

CORPORATE OVERVIEW

Serendipity has very recently arisen as an interplanetary corporate power; their main source of initial wealth and the inner workings of the corporation are a mystery. Even IS supposedly has little hard data on the corporation.

Serendipity appeared just after the turn of the millennium with sophisticated softwares and the *SSEE* (Simulated Sense Environmental Equipment, precursor of the DNI: *Direct Neural Interface).* They acquired a considerable profit from these revolutionary products, but where the research behind this new technology came from has never been established. With its income Serendipity quietly built its own spaceport in central Africa during the '50's and spent the next ten years constructing the largest permanent orbital station yet in existence. The cylindrical space station — known as *Crystal Palace*— is a triumph of corporate ingenuity and determination. It is the permanent home of 10,000 Serendipity employees, and the vacation spot of thousands of others.

One of Serendipity's biggest rivals is IS. The IS management is wary of Serendipity and fears sabotage or a takeover. Serendipity and New Edison are also constantly at odds with each other.

The company's employees are infamously loyal, with the percentage of departures almost absurdly small. True, Serendipity treats its people very well, but also, the few that leave Serendipity, never seem to find work elsewhere — or even live long enough to complete a resume.

GM Note: *Serendipity has considerable potential as a shadowy and powerful presence in the world, manipulative and mysterious. They have a secret Mars Base, and Archon the AI which controls Crystal Palace has a considerable scope of power and influence.*

Timeline

2022

Black Africa attacks South Africa *en masse,* forcing US and England to intervene; massive riots continue, leading to the eventual overthrowing of white rule... Scientists begin learning about the mutative physical effects of extended zero-gravity on the human physiology, and one hundred US citizens form a petitionary anti-planetfall group, becoming the first politically independent orbital dwellers.

4.1.5 *UNIVERSAL PRODUCTS*

Primary Operations: Finished goods, prepared foods, metals, Heavy equipment, Electronics, Pharmochemicals, Clothing & Textiles.

Worth (Assets): $1,350 billion

Total Employees: 1,140,000

Main HQ: Tokyo

Principle Branches: Athens, Auckland, Barcelona, Beijing, Berlin, Bombay, Cairo, Hong Kong, London, Los Angeles, Madrid, Montreal, Moscow, Munich, New York, Osaka, Paris, Rome, San Francisco, Seoul, Stockholm, Sydney, Toronto, Washington, Zurich.

Chief Executive: Matsu Yokohama, Chairman of the Board.

Major Stockholder(s): Samuel Hirohito (3.7%), [The Osaka Yakuza, 3.1%], Tadashi Tomita (2.5%)

CYBERSPACE DATA:

Net Icon: UP's icon is a full-size replica of their corporate headquarters, a 200 storey hexagonal structure of unimaginative design.

Defenses:

- *ComSat access:* Rtg. 10 Security Code.
- *HQ Mainframe electronic intrusion:* (Needed to control internal security systems) Rtg. 20 Data Screen/Rtg. 30 Shocker.
- *Highest security Database access:* Rtg. 30 Data Screen/Rtg. 30 Neural Scrambler.

Additional information:

As with its other endeavors, UP ICE lacks subtlety but is generally effective.

CORPORATE OVERVIEW

Universal Products is, quite simply, the largest conglomerate in the world. They produce products in virtually every market. UP stores dot the globe, offering food (prepared or packaged), furniture, appliances, cars, medicinal drugs... everything for everyone. While New Edison has concentrated on large-scale aspects of industry, UP has diversified and succeeded by literally providing everything. Its products are bland, but reliable.

Timeline

2023

Nuclear arsenals have been developed in many third-world countries, prompting the Superpowers to take an even harsher stance against nuclear weapons use... A joint US/Russian mission discovers ice in the polar craters of the moon, which leads to the planning of a UN moon colony... The US abandons speed limits on all interstates as unenforceable.

Interplanetary GeoScience, Inc.

Unearthing a Galaxy of Wealth

4.1.6 *INTERPLANETARY GEOSCIENCE*

Primary Operations: Orbital Geo-surveillance, metals acquisition and processing.

Worth (Assets): $415 billion

Total Employees: 210,000

Main HQ: Clavius Base, the Moon.

Principle Branches: Athens, Auckland, Barcelona, Beijing, Berlin, Bombay, Brazilia, Cairo, Hong Kong, London, Los Angeles, Madrid, Montreal, Moscow, Munich, New York, Osaka, Paris, Rome, San Francisco, Seoul, Stockholm, Sydney, Tokyo, Toronto, Warsaw, Washington, Zurich; Terranova (La-Grange Point 5); Tycho Crater (Moon); Utopia Planitia (Mars).

Chief Executive: Guy Wharton III, CEO.

Major Stockholder(s): Marion Lockwood (5%), Azimuth Becker (3.6%).

CYBERSPACE DATA:

Net Icon: A grey metallic globe of Earth slowly turning in an elaborate art-deco building/stand. A Moon hovers nearby.

Defenses:

- *ComSat access:* (includes access to interplanetary vehicle communications — though these are often scrambled, requiring additional effort to decipher) Rtg. 20 Security Code/Rtg. 20 Bouncer.
- *GeoSat access:* (Allows interception of classified earth status information and access to the IGI spy net) Rtg. 20 Security Code/Rtg. 30 Alert/Rtg. 30 Scrambler.
- *Mainframe electronic intrusion:* (Same rating but different operation at each branch — including Clavius) Rtg. 30 Data Screen/Rtg. 40 Alert/Rtg. 40 Bouncer/Rtg. 60 Freeze.
- *Highest security Database access.* (located on the 'Moon' in the Net Icon) Rtg. 40 User Recognition/Rtg. 50 Data Screen/Rtg 50 Mindwiper.

Additional information:

Interplanetary Geoscience has considerable geophysical data on the entire solar system stored away in their databases (most at Clavius). If anyone knows more about the non-Terran Solar System than IS IGI does.

CORPORATE OVERVIEW

One of the largest corporations in the world, IGI is a leading producer of metals and other raw materials. It has bases on the Moon, Mars, and in Earth Orbit, and has large refineries in several key locations in space.

Terranova, the IGI space habitat, is one of the largest in operation (exceeded only by Serendipity's Orbital).

4.1.7 *HUMANADYNE*

Primary Operations: Medical Services

Worth (Assets): $310 billion

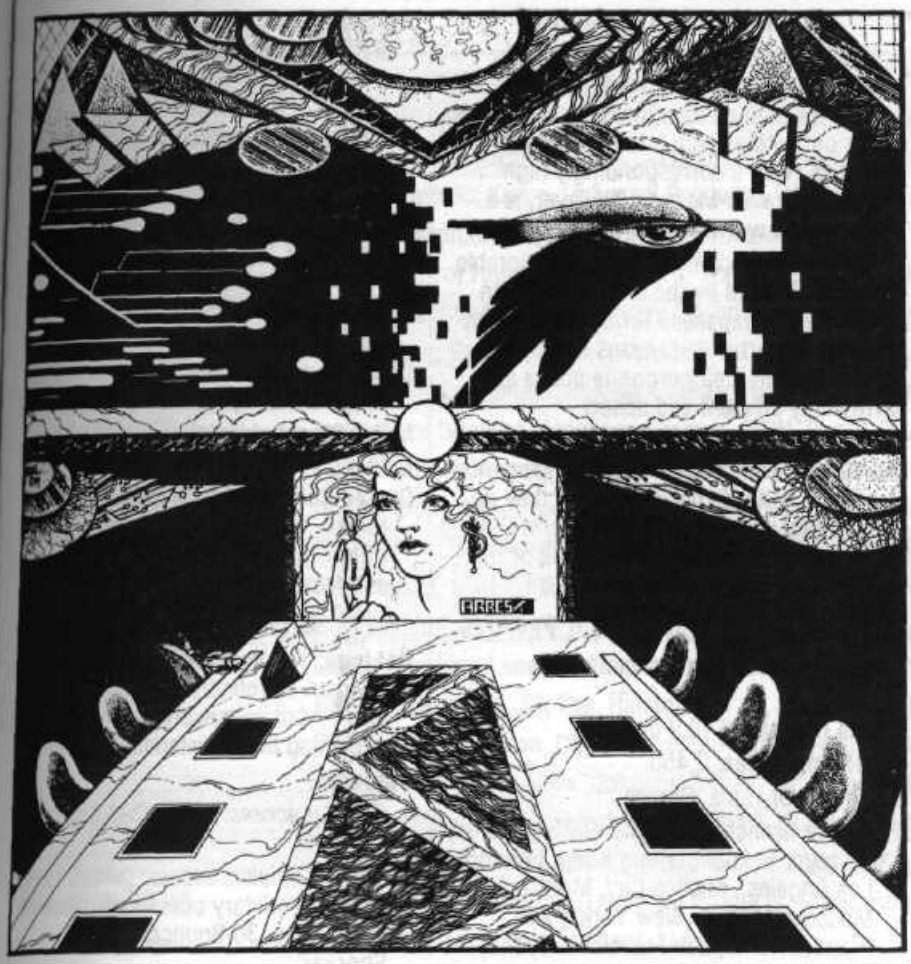
Total Employees: 1,050,000

Main HQ: San Francisco, CA

Principle Branches: Athens, Auckland, Barcelona, Beijing, Berlin, Bombay, Brazilia, Cairo, Chicago, Dallas, Helsinki, Hong Kong, Istanbul, Leningrad, London, Los Angeles, Madrid, Manila, Melbourne, Mexico City, Milan, Montreal, Moscow, Munich, New York, Osaka, Paris, Prague, Rome, San Francisco, Seoul, Stockholm, Sydney, Tel Aviv, The Hague, Tokyo, Toronto, Warsaw, Washington, Zurich.

Chief Executive: Alison Shetterling, CEO

Major Stockholder(s): Johann R. Kashmir (7%), Colvin Investment Group (5%).



Owned **Corporations of Note:** Valkyrie Emergency Medical Services, Helix Genetic Research.

CYBERSPACE DATA:

Net Icon: A huge double-helix.

Defenses:

- *Valkyrie ComSat access:* Rtg. 5 Security Code.
- *Valhalla Mainframe electronic intrusion:* Rtg. 20 Security Code/Rtg. 20 Data Screen/Rtg. 30 Mindwiper.
- *Highest security Database access:* Rtg. 40 User Recognition/Rtg. 50 Neural Scrambler/Rtg. 60 Heartkiller.

Humanadyne

Your Health is Our Business

Additional information: For a medical firm, Humanadyne has some rather inhuman ICE.

CORPORATE OVERVIEW

Humanadyne is the largest health-service organization in the world, with hospitals in almost every major city and thousands of Valkyrie Emergency Medical Service franchises.

The company's large orbital resort/hospital, *Valhalla,* houses a medical research hospital as well as exclusive mental and physical rehabilitation facilities.

Humanadyne's massive emergency medical service franchise, *Valkyrie,* is an immensely successful operation. Valkyrie contracts with patients to provide emergency medical care under almost any circumstances, guaranteeing arrival within minutes of being summoned (either by personal radio or automatic trauma sensor implant).

4.1.8 *LEYLAND-CARLISLE*

Primary Operations: Pharmochemicals

Worth (Assets): $345 billion

Total Employees: 1,827,000

Main HQ: Brazilia

Principle Branches: Athens, Auckland, Barcelona, Beijing, Berlin, Bombay, Cairo, Chicago, Dallas, Helsinki, Hong Kong, Leningrad, London, Los Angeles, Mexico City, Milan, Montreal, Munich, New York, Osaka, Paris, Rome, San Francisco, Stockholm, Sydney, The Hague, Tokyo, Toronto, Warsaw, Washington.

Chief Executive: Kendra Addison-Stange Carlisle, CEO

Major **Stockholder(s)**: Phillip Leyland Foundation (4.5%), Borg-Skye Consortium (3.2%)

Owned Corporations of Note: Pleistocene Synthichem, Newborn Natural Foods.

CYBERSPACE DATA:

Net Icon: A gigantic Erlenmeyer Flask with a rain forest growing in the bottom.

Defenses:

- *ComSat access:* Rtg. 5 Security Code.
- *Mainframe electronic intrusion:* Rtg. 10 Data Screen/Rtg. 30 Bouncer.
- *Highest security Database access:* Rtg. 30 User Recognition/Rtg. 50 Data Screen.

CORPORATE OVERVIEW

Leyland-Carlisle won the long-fought battles for the South American rain forests and now controls much of the Amazon river basin. This are has been returned to natural rain forest and has been a considerable aid to the returning global weather stability.

Of course, L-C did not do this out of selfless generosity. The rain forest provides a vast supply of unique chemicals necessary for the production of many Pharmaceuticals. These rare substances cannot yet be synthesized (indeed, it is estimated that only 10% of the potentially beneficial substances available have been fully exploited) and can only be acquired through rain forest flora and fauna.

Leyland-Carlisle's most notable move in recent history was its claim in 2058 to the entire planet Venus. L-C bases its claim on the fact that it has sent the first privately owned craft there, and is currently spending billions on a terraforming effort. Several UN nations have disputed the claim, but no one has actively tried to make a competing claim.

4.1.9 *GRAVES-MASUDA*

Primary Operations: Electronics, Computer Systems, Cyberdecks

Worth (Assets): $145 billion

Total Employees: 224,000

Main HQ: London

Principle Branches: Beijing, Berlin, Bombay, Cairo, Chicago, Helsinki, Hong Kong, Koshimiru, Leningrad, London, Los Angeles, Madrid, Manila, Melbourne, Mexico City, Milan, Montreal, Moscow, Munich, New York, Osaka, Paris, Prague, Rome, San Francisco, Stockholm, Sydney, Tokyo, Toronto, Warsaw, Washington, Zurich.

Chief Executive: Elyn Graves-Hartwell, President

Major Stockholder(s): Privately Held

CYBERSPACE DATA:

Net Icon: A perfect silver sphere hovering above the Matrix grid.

Defenses:

- *ComSat access:* Rtg. 10 User Recognition/Rtg. 10 Bouncer.
- *HQ Mainframe electronic intrusion:* Rtg. 30 Security Code/Rtg. 40 Data Screen/Rtg. 40 Mindwiper.
- *R&D Mainframe electronic intrusion:* Rtg. 40 Alert/Rtg. 50 Scrambler/Rtg. 50 Hypo (injects Rtg 30 Wiper).
- *Highest security Database access:* Rtg. 50 Data Screen/Rtg. 60 Freeze/Rtg. 70 Neural Scrambler.

Timeline

2024

All of the Superpowers are engaged in some form of space industry: energy/fuel production, information gathering and disbursement, lunar mining and farming, etc... Although the balance of power has settled somewhat, there are still many small incidents of distrust, especially between Russia and China... IGI (Interplanetary Geoscience, Inc.) builds a massdriver on the moon to handle the transportation of mined lunar ore to vessels in orbit... It is discovered that algae growth shifts in the oceans are compensating for industrial global warming effects (the reason for the strange global winters every few years for the last couple of decades): Earth heals herself despite the abuses of mankind.

CORPORATEOVERVIEW

The premier producer of Cyberdecks and related equipment, Graves-Masuda is known for its quiet confidence and ability to come out with elegant, state-of-the-art products (with a correspondingly high price). A Graves-Masuda, however, is a product well worth the expense, however.

Graves-Masuda is an old and honorable Zaibatsu, formed by the unification of an English and a Japanese firm. They do not stoop to underhanded means to stay ahead, though their corporate police are terrifyingly efficient and deadly

Serendipity in particular does not much like G-M, mainly because the company now produces better CyberDecks than they do. Serendipity is constantly after secret G-M data, always using shielded agents or freelancers to keep it's own hands clean.

4.1.10 *CHURCH OF OLYMPUS*

Primary Operations: Religious Propaganda.

Worth (Assets): $48.9 billion

Total Employees: 2,450

Main HQ: Olympia, Greece.

Principle Branches: Athens, Beijing, Berlin, Chicago, Helsinki, Hong Kong, London, Los Angeles, Mexico City, Montreal, Moscow, Munich, New York, Paris, Prague, Rome, San Francisco, Sydney, Tokyo, Toronto, Washington.

Chief Executive: Sophocles Aegis, High Priest and Chairman of the Board.

MajorStockholder(s): Privately Held.

OwnedCorporationsofNote: Xanadu Network, Dionysus Beverages, Athena Apparel.

CYBERSPACE DATA:

Net Icon: Greek Temple complex on a rocky mountain (like the Acropolis).

Defenses:

- *ComSat access:* Rtg. 4 Data Screen.
- *Zeus Mainframe electronic intrusion:* Rtg. 20 Security Code/Rtg 40 Mindwiper.

CORPORATE OVERVIEW

This multinational company originated in the 30's, professing that the gods of ancient Greece really do exist. They are not dead, just suffering from neglect.

4.1.11 *NEW EDISON*

Primary Operations: Aerospace, Communications, EW Systems, Satellites, Fuel/Energy Systems and Supply.

Worth (Assets): $1,250 billion

Total Employees: 2,150,000

Main HQ: New York

Principle Branches: Athens, Auckland, Barcelona, Beijing, Berlin, Bombay, Brazilia, Cairo, Chicago, Dallas, Helsinki, Hong Kong, Istanbul, Koshimiru, Leningrad, London, Los Angeles, Madrid, Manila, Melbourne, Mexico City, Milan, Montreal, Moscow, Munich, New York, Osaka, Paris, Prague, Rome, San Francisco, Seoul, Stockholm, Sydney, Tel Aviv, The Hague, Tokyo, Toronto, Warsaw, Washington, Zurich; Mare Imbrium, Luna, Yorktown Crater, Mars.

Chief Executive: Thomas Jordan Carstead, President and Chairman of the Board.

Major Stockholder(s): Valris Foundation (5%), Panama Consortium (4%).

Owned Corporations of Note: Martian Metals, 1st Bank of Luna, an array of power companies, processing centers and factories.

CYBERSPACE DATA:

Net Icon: A convoluted complex resembling an oil refinery as much as anything else — but with every part made of a glistening black material.

Defenses:

- *ComSat access:* Rtg. 5 Data Screen/Rtg 10 Alert.
- *Military Satellite access:* (allows access to secret/military operations communication) Rtg. 30 Bouncer/Rtg. 30 Shocker.
- *HQ Mainframe electronic intrusion:* Rtg. 250 Data Screen/Neural Scrambler/Heartkiller.
- *Highest security Database access.* Rtg. 200 Security Code/Rtg. 300 Alert/Mindwiper.

Additional information:

NewEd is not known for its lenience towards intruders, and their software department is constantly producing more effective means of preventing access to its sensitive data. NewEd does not hesitate to employ Black ICE for protection, and has a widespread reputation as being as invulnerable as IS — and far more dangerous to approach.

CORPORATE OVERVIEW

New Edison epitomizes everything that is big and bad about the MegaCorps. A huge conglomerate, NewEd (or Weed, as it is sometimes called) is exceeded in size only by Universal Products (and by some accounts is larger); certainly it is more powerful than most governments.

Edison is constantly trying to crush its competition in any dozen of the markets it is active in, and employs a variety of legal and illegal means to acquire secret information from those companies.

IN	PRODUCERS
AEROSPACE	Rockwell Interplanetary, New Edison, Glower, Lockheed, Voerung, Matsuyama.
AIRCRAFT	Pratt & Whitney, Rockwell Interplanetary, Boeing, Lockheed, Matsuyama, Vott Messerschmitt.
APPAREL	Burlington, Levi Strauss, Nike, Claiborne III,
APPLIANCES	General Electric, Krups, Universal Products, General Electric
AUTOMOBILES	Honda, Nissan, BMW, Chrysler-Jeep, Volkswagen, Volvo, General Motors, Asmir-Grant, Sikorsky.
BANKS	AmEx, Bank of Hong Kong, CitiCorp, Transplanetary, Bank of Tokyo, WorldBank, 1st Bank of Luna.
CHEMICALS	Remmings International, Normark ChemCorp, DeVarre, Petroline, Dow, DuPont, Leyland-Carlisle.
COMMUNICATIONS	New Edison, Serendipity, AT&T, Warner, Comsys, Northern Telecom, Mikura.
COMPUTERS	IBM, Digital Equipment, Hewlett-Packard, Nintendo, Graves-Masuda, Tandem, Nippon Electric Corp.
CREDIT SERVICES	Intelligence Services, American Express, TRW, Dun & Bradstreet.
CYBERNETICS	Aizu-Shoto, Universal Products, Matsuyama, US Robotics, Mikura Biolabs, Nakamura.
ELECTRONICS	Hitachi, Sony, Universal Products, Serendipity, Graves-Masuda, Iwatsu, Murata
ENTERTAINMENT	Serendipity, Time-Warner, Mindscape Network, Disney Corporation, Paramount-Gannett.
ENVIRONMENTAL	Gear Natura, Novell, Climatics, Leyland-Carlisle.
EW SYSTEMS	Rockwell Intl., Sony, SST (Security Science & Technology), New Edison, Antax, Stealth Systems.
FINANCIAL BROKERS	Drexel Burnham Lambert, Eisenhower Brinkley & Alexander, Merril-Lynch, Transplanetary.
FOODSTUFFS	Beatrice, Swanson, Zik-Zak, Ralston-Purina, McDonalds, Hardemann, Anheuser-Busch.
FUEL/POWER	Petroline, New Edison, Dome Petrolium, Mobil, Atlantic Richfield, Exxon, EBP.
GENETICS	Syzestemics, Cetus, Helix, Johnson & Johnson, GeneTech, Tyrell.
HEALTH CARE	Humana, Neocore, Humanadyne, Medimart, Holiday Health, Inc.
INSURANCE	Prudential, State Farm, Aetna, Andromeda, Transplanetary.
MACHINERY/TOOLS	Leehauer, Kraaft, Mannix, Universal Products, Grant, Rotring, Borg-Warner.
MARINE VESSELS	Overseas, Mariner, Asmir-Grant, Masuda.
MEDIA (general)	Columbia Broadcasting, Core Cable Network, Time-Warner, Paramount-Gannett, Disney Corp., BBC.
MEDICAL EQUIPMENT	Novell, Bioptics Global, Holista, Cadeuceus, Snap-on Tools, Black & Decker.
METALS	Interplanetary Geoscience, Tranquility Mining, Universal Products, Okira, Martian Metals, Ceros, Alcoa.
MILITARY VEHICLES	Aizu-Shoto, Rockwell Interplanetary, New Edison, Lockheed, Voerung.
NETWORKS (Entertainment)	NNN (Now News Network), Network 69, PBC (Planetary Broadcasting Company), Channel Z.
NEURAL LINK SYSTEMS	BioLogic, Nintendo, Tandem, Mikura, Austin BioLabs, Interphase.
OPTICS	Bausch & Lomb, AT&T, Serendipity, Corning Glass.
PHARMECUTICALS	Upjohn, Squibb, Leyland-Carlisle, Eli Lilly, Addison-Izumo, Bausch & Lomb, Tamiko & Gibson.
PROCESSOR CORES	National Semiconductor, Austin BioLabs, Serendipity, Graves-Masuda, Cray Research.
ROBOTICS	Remmings International, Mexus, Universal Products, Disney Corp., Oshman, Steele, MannMachine.
SATELLITES	Infostar, AT&T, Intelligence Services, New Edison, Okara, Matsuyama, Rockwell Interplanetary.
SOFTWARE (global net)	Intelligence Services, Metarom.
SOFTWARE (personal)	Microsoft, Intelligence Services.
SURVEILLANCE	Intelligence Services, Interplanetary Geoscience, American Express, Serendipity.
WEAPONS (personal)	Heckler & Koch, Walther, Uzi, Ingram, GRU (Guns 'R' Us), Mirage, Colt, Beretta.
WEAPONS (systems)	Oskovska, Mirage, Targ, Antax, Universal Products, Voerung.

4.2 GANGS

The gangs noted here are all in the San Francisco and Bay Area. The selection below is of the most flamboyant, outrageous or interesting gangs, though there are no doubt others.

GM Note: *the GM may wish to add gangs of his own, or have the players start as members of one of the gangs noted here (hopefully one of the less violent ones...)*

4.2.1 *G.I. JOEs*

Leader: Joe VIII (Chaz Hendricks)

Membership: ≈ 150 (100% male; ages 16-30).

Headquarters: Barracks 12

Turf: Marina

Identifiers: Army Fatigues, Military weaponry, heavy Cybernetics.

Activities: Weapons and black market cybernetics deals, Drugs, Mercenary, Murder.

General Attitude: Belligerent.

Equipment: M21 assault rifles, Cybernetics: nightvision, cyberlimbs.

GENERAL NOTES

Despite their superficial resemblance to the US military, the Joes are a ruthless gang who spend much of their time harassing their rivals. They delight in military hardware, especially cyberware, and are renowned for their stupidity.

Timeline

2025

The Earth's population reaches 8 billion... Unemployed and homeless percentages soar, while almost 50% of employed persons work in their own homes, utilizing the Net to transmit everything from personal communications to stock portfolios... New Edison constructs the world's first large breeder reactor... A short burst of strange signals is received and relayed by the US probe *Voyager 2,* now in interstellar space. The signals are believed to originate from the Alpha Centauri system.

4.2.2 *WASPS*

Leader: Skip (Rupert Preston Rutherford)

Membership: 25 (100% male; ages 14-25).

Headquarters: Grace Cathedral

Turf: Nob Hill

Identifiers: Preppy clothes, BMW mi series Motorcycles.

Activities: Vandalism, Murder, Prostitution.

General Attitude: Chaotic

Equipment: Pistols (often silenced), needleguns. No assault gear.

GENERAL NOTES

The WASPs are one of the most contradictory gangs in the City. Membership is exclusive: you must be a black sheep from one of the City's wealthy families, and you must be a White Anglo-Saxon Prep (*Protestant* was lost long ago). They are self-funded and aren't involved in the usual criminal activities other gangs perform to support themselves (some, cut off from the 'rents, are reduced to prostitution; some do it for 'fun').

What makes WASPs a hazard is their penchant for pointless violence: arson, murder, rape, vandalism are staples of a WASP outing, performed once a week.

The WASPs are usually clean-cut, well-groomed, quite handsome and at least of average intelligence (most went to exclusive private schools before being kicked out). The Preppy clothes which are the uniform of the WASPs are the same as they have been for 150 years: all-cotton, khaki and pastels, with leather footwear and white socks. It has become even more anachronistic and expensive to own.

WASPs use absolutely no cyberware, but they are sometimes abusers of relatively mild drugs, and they like high-tech 'toys' — as long as they don't require a surgical interface.

If it weren't for their random bouts of nihilism, the WASPs would be inoffensive.

4.2.3 *fUSERS*

Leader: Erik Turbo

Membership: ≈ 80 (90% male; ages 10-20).

Headquarters: Coit Tower

Turf: Telegraph Hill

Identifying Symbols: bleached hair; usually flat-top; university sweatshirts and levi's.

Activities: Intelligence, Cyberunning, Fence.

General Attitude: Aloof; defensive.

Equipment: Various Cybersystems: Sensory (Thermalvision, lowlight, targeting), DNI, NAC. Various hand weapons.

GENERAL NOTES

The Fusers are one of the most powerful gangs in the City, but are less aggressive than some of their fellows. They are also among the most intelligent.

A unique aspect of the Fusers is their 'patron', a computer in the sub-basement of the Cpit Tower. It is actually an AI, an artificial intelligence named "Ward." (The AI scanned old TV shows for a fitting persona to lead the boys and discovered the *Leave it to* fieai/er show. It chose the father and adopted his voice and even presents an electronically generated image of Ward when dealing with the gang.)

Fusers employ some cybernetics, mostly interface jacks and the less obvious hardware but avoid flagrant cybernetic limbs or extensions (no chrome arms here).

4.2.4 *CHANS*

Leader: Harry Sulu

Membership: ≈ 300 (60% male; ages 12-25).

Turf: Chinatown

Identifiers: Red silk shirts and black pants

Activities: Bodyguards, Fence, Drugs

General Attitude: Sullen but efficient.

Equipment: Karatand, Nunchuks, assault weapons, concealed cyberware

GENERAL NOTES

The Chans are among the largest of the gangs, and the most deadly should you get on their bad side. Fortunately, they normally stick to their turf and their own business.

All highly trained martial artists, the Chans are a real terror when fired up on *WarpDrive* or a similar stimulant. They are also well-equipped with cyberware, though they tend to choose models that conceal the nature of their equipment. (That *looks* like a flesh-and-blood hand, but it just pinched your shotgun barrel closed...)

4.2.5 *MODELS*

Leader: Jimmy Idle

Membership: ≈ 200 (100% male; ages 16-25).

Headquarters: Decibel Death Club

Turf: Castro Street District

Identifiers: High Fashion clothes (Eros Flynn Overalls); Black stealth coveralls.

Activities: Assassination, Modeling, Industrial Sabotage & Espionage, Drugs,

General Attitude: Aloof.

Equipment: Cyber-sensory systems, DNI, Beretta M98 (signature model with silencer and laser targeting), razornails.

GENERAL NOTES

This gang is, interestingly, made up of the most cold-blooded killers in the city. They are without exception beautiful young men (some of them made so with the help of surgery) who model for fashion videocatalogs and shows for their day job. At night, however, they don stealth black coveralls and perform elaborate spy and sabotage missions for MegaCorps. Some are quite intelligent — skilled CyberDeck operators and covert operations experts. Those with skulljacks have the placed so as not to detract from their appearance, of course. Models only employ cyberware which can be fully concealed.

Groups of them roam the City at night, randomly attacking people on the street, especially beautiful young women. They deliberately scar their victims, laughing and yelling "Now we're prettier than *your*

The Models are often given the derogatory names of *Style Queens* and *Pretty Boys* by their enemies (often the WASPs, G.I.Joes and New Hitler Youth). While the entire membership is unabashedly homosexual, they will not 'stoop' to prostitution ("as a matter of pride").

A favorite cyberweapon is the razornails: deadly blades that *snick* out from under fingernails with a slight movement.

4.2.6 *NEW HITLER YOUTH*

Leader: KlasAckegård

Membership: ≈ 200 (70% male; ages 14-25).

Headquarters: The Gestapo (Moscone Convention Center)

Turf: Potrero

Identifiers: Nazi Germany SS Uniforms; the Swastika.

Activities: Murder, Drugs, Sabotage, Mercenary strikes.

General Attitude: Brutal, Racist.

Equipment: Uzis (ironically), antique German weaponry; Cybernetic Sensory systems.

GENERAL NOTES

At times mindlessly violent, the NHY is actually very well organized, holding weekly rallies in the Moscone center and attracting a growing following. When not spreading Neo-Nazi propaganda they are cruising the streets beating up or killing anyone they consider not to be of suitable racial stock. NHY groups leave a bloody trail through the alleyways, sometimes going on rampages through the city lasting for days. Though the police know they meet in Moscone Center, nothing is done. It is widely suspected that one of the MegaCorps is paying off the CitiCops to leave the NHY alone, while they are grooming this brutal gang for some as-yet unknown project. NHY members are not known for their intelligence or creative thinking.

Note: *The Hitler Youth never fight with the WASPs because they admire their racial background.*

4.2.7 *SKATEBOYS*

Leader: Scott ("Scooter") Ridley

Membership: ≈ 200 (80% male; ages 14-20).

Headquarters: Union Square Parking Garage

Turf: Financial District

Identifiers: Neon spandex.

Activities: Drugs, Messenger Mail, Prostitution.

General Attitude: Non-aggressive.

Equipment: Motorized skateboards, MAC 20's, stun batons.

GENERAL NOTES

The Skateboys are the most flamboyant — and harmless — gangs in the City, zooming everywhere on their motorized skateboards.

Of all the gangs, the Skateboys are the only ones with a semi-legitimate profession: they carry 'messages' around the city.

While data transmission has become easy with FAX and MODEM, there are still datafiles which are unsafe sent over an electronic net where any five thousand people could be tapped-in. Plus certain merchandise requires physical delivery. The Skateboys claim never to deliver illegal drugs, but... And of course a delivery service is an ideal cover for prostitution.

The rest of the time is spent exercising, repairing their beloved boards, or shopping for new clothes with the brightest possible colors.

Skateboys are always clean, well-groomed and in top physical condition. They are usually handsome boys or rather pretty girls.

4.2.8 *CYBERPUNKS*

Leader: Tom Jefferson

Membership: ≈ 500 (70% male; age 15-25)

Headquarters: The Chrome Bumper (a bar)

Turf: Sunset (South of Golden Gate Park)

Identifiers: Black leather jackets, multicolored and strangely styled hair, visible cyberware.

Activities: Drugs, fence, looting, random acts of street terrorism.

General Attitude: Antisocial.

Equipment: All varieties of cyberware: plenty of chrome. Also a vast array of weapons.

GENERAL NOTES

The Cyberpunks are the consummate streetwarriors: powerful, cyber-enhanced, and streetwise. Because the 'Punks are such a large gang they are disorganized and effectively broken up into several smaller groups. While claiming to be vigilantes, the 'Punks are actually some of the worst criminals in the city.

4.3 GOVERNMENTS

There are far too many to discuss in much detail, so following is a general approach to take with governments — especially the superpowers.

While governments in the classic sense still do control the world, they in turn are controlled by special interest groups, such as MegaCorps, Yakuza (organized crime) and a few other PACs (political action committees). In some technological countries, candidates are elected instantaneously through *telelections*, utilizing TV ratings at a given time to select a network endorsed winner. This is extreme, however, and most 'democratic' governments use the time-honored election process, which has the inherent problems of mediaizing candidates, altering election totals electronically, and other complications.

Few truly Communist countries remain, the government style unable to cope with media technology; the same goes for religiously fanatical governments, though of course a few groups remain.

As far as attitude towards citizens, large governments like the US have evolved into a schizoid hands-off/hands-on structure, alternately allowing states to practically secede before flexing a little muscle, and literally taking over entire cities to 'clean up' the area. Covert organizations like the FBI and especially the CIA have never been more powerful while large-scale military operations have shrunk considerably. The US no longer has huge military forces scattered all over the globe; they can't afford it. States also vary in presence from nearly dictatorial to a government in shambles. It is the city governments which have taken up the slack, becoming like city-state monarchies, extending their control into the suburbs and beyond. Of course they don't interfere with the Corporations...

There are city police in all the sprawl and metro areas, but they are frequently at odds with local MegaCorp Cops, who are better trained, paid, and equipped.

Timeline

2027

The earliest versions of DNI (Direct Neural Interface) are developed, and applications proliferate. Some of the quickly-appearing trends include bionic prostheses, cybernetic soldiers, nerve-controlled office machines, and artificial pleasure/pain stimulators (the infamous *CyberDeck* will not be perfected for several decades)... The NAP A Arcology declares independence from California; the state is forced to agree or NAPA will cut off valuable geothermal electricity.

2028

The UN prompts the Superpowers to offer tax incentives to citizens in an effort to control population growth... Japan builds the first "Aqualogy": the undersea city of Koshimiru.

4.4 ARCOLOGIES

Protected areas which have been returned to a more natural state, Arcologies are home to nature-lovers who have turned their backs on Civilization. While some of these colonies truly are backward, many are led by intelligent and well-educated men and women with advanced technical backgrounds. Some Arcologies are tied into the Net — only to keep track of what the rest of humanity is doing to the world.

4.4.1 NAPA

While not under a protective dome, the Napa Arcology is well protected by the surrounding mountains. The Napans control the Napa and Sonoma Valleys as far north as Mount Saint Helena and south just beyond the town of Napa. All entries to the valleys are closed and the borders are constantly watched by vidicams, infrared, and SatCams. It is said that a flea couldn't get into Napa without being detected.

Most of the Napa wealth comes from the Napa Valley Power Authority, which controls the vast geothermal electrical plants. The private company that owned the plant was also a Napa Winegrower and, being concerned about the climate for his vineyards (and a little bit off the deep end) he organized the Arcology. Today it is one of the most powerful organizations on the west coast — though it almost never becomes involved in outside politics.

4.4.2 GOTTHAMBURG DOME

Constructed during the 20's by the entertainment conglomerate Aventyrsspel, the Arcology (known also as Duckland) is the single largest covered environment in the world. Spanning over ten miles, the structure is geodesic in nature but also supported partially by internal pressure and helium-filled pockets. The expense was enormous and has allegedly put Aventyrsspel deeply in debt to Interplanetary Geoscience, who supplied raw materials.

4.4.3 WINTERGREEN

One of the most mysterious and secretive Arcologies is Wintergreen. Located somewhere in the Virginia Blue Ridge Mountains, it was rumored total government wildlife research complex during the late 20th and early 21st century but was closed and subsequently taken over by a coalition of Environmentalists and a nearby university. Rather than attempt the massive undertaking of a gigantic dome like Gotthamburg, the planners designed a cluster of adjacent geodesic domes with interconnecting environmental systems, to create one effective ecosystem. The largest dome is almost half a mile across and contains the largest varieties of flora and fauna. Much of the support facilities are actually built underground, apparently making use of the vast complex left by the government. Rumors abound regarding the Wintergreen Arcology. Some of the more interesting are listed here:

1. It is operated in secret by a MegaCorp for some nefarious purpose.
2. It is populated by strange superhuman mutations who are planing to take over the world.
3. It is a base for extraterrestrials.
4. It is still a US government base where secret bio-warfare research is taking place.
5. It is populated by brilliant scientists who have built a super AI. This Artificial Intelligence has schemes of its own taking over the Net and the world.

GM Note: *The last is considered to be closest to the truth but the GM may wish to exploit one (or more) of the other options. Take your pick.*

4.5 ORBITAL HABITATS

Despite the many social and political setback humanity has suffered, technology has marched ahead, and with it the exploration of space. Several groups have placed very large permanent stations in orbit around earth or at LaGrange points between the Earth and Moon.

Note: *a LaGrange Point is a location between two bodies where gravitational forces are effectively cancelled out. Where a simple earth orbit is bound to eventually decay without artificial thrusting, an object placed at a LaGrange point would theoretically remain stable forever. At this point only the IGI and United Nations have placed their stations at LaGrange Points.*

4.5.1 *UNITED NATIONS STATION*

Basic Design: four 300' diameter wheels, parallel, attached at the hub. Spin creates artificial gravity.

Permanent Residents: 1,200

Guest Capacity: 300

Facilities:Communications

Armaments:None

Ownership: Joint United Nations funding.

COMMENTARY

Completed in 2037, the United Nations Station (called, unimaginatively, UNS, since a better name could not be agreed-on) is neither the largest nor the most sophisticated of the orbital habitats. One of the principle duties of the staff is to monitor the activities of other stations.

4,5.2 *TERRANOVA*

Basic Design: A huge, reinforced cylinder which spins to simulate gravity.

Permanent **Residents:** 8,000

Guest Capacity:500

Facilities:Self-sufficient, including full medical complex, recycling systems, flora and fauna.

Armaments:Two Mk 30 Massdrivers (mounted at each end) and several Mk 10 Laser Cannons.

Location: LaGrange Point Trailing the Moon.

Ownership:Interplanetary Geoscience, Inc.

COMMENTARY

2nd largest of the colonies, Terranova is located at the LaGrange Point trailing Luna. As a result, it is actually quite distant from Earth, sacrificing easy ground-orbit access for a more stable orbital location.

4.5.3 *EIDOLON*

Basic Design: Originally a small ring-shaped research station, an additional cylindrical structure has been constructed adjacent and is essentially complete — though clearly designed so the cylinder may be extended further.

Permanent **Residents**:4,000

Guest Capacity:(100)

Facilities:Advanced laboratory facilities; overall less spacious than Terranova or Crystal Palace but still a full-scale 'habitat'.

Armaments:Afewmissilelaunchers

Location: Geosynchronous orbit over a point in the equatorial Pacific.

Ownership:Space Research, Inc.

COMMENTARY

Eidolon is an independent research lab, but its real identity is an Arcology in space. Creating Eidolon was the plan of the founders of SRI from the beginning; they just needed the income from research contracts to fund the massive project of a truly self-sustaining orbital colony.

Eidolon has not quite reached self-sufficiency, so by necessity maintains some ties to Earth and the several corporations which it serves. However, there have been permanent colonists since the 40's, so there are two generations of born orbital residents. Eidolians are infamous for their abrasive attitude towards 'Earthers' and consider themselves superior beings.

4.5.4 *CRYSTAL PALACE*

Basic Design: A gigantic cylinder 5 miles long and a mile in diameter, it spins to generate artificial gravity. Crystal Palace has its own weather inside, including a tube of clouds which periodically develops in the central axis.

Permanent **Residents**:10,000 (though about 1,000 are rotating staff).

Guest **Capacity**:≈200

Facilities: Docking ports located at ends; the end hubs (in essentially weightless conditions) also house research labs and medical facilities. Four parks and three lakes dot the 'landscape'. Entirely self-sufficient, recycles all materials.

Armaments:A dozen Mk 20 missile launchers, six Mk 20 Laser Cannons.

Location: Geosynchronous orbit over north Africa.

Ownership: Serendipity, Inc.

COMMENTARY

With a permanent population of 10,000 Crystal Palace is the largest and most advanced of the orbitals. Also interesting is that Serendipity elected to place the station in the less stable geosynchronous orbit over Africa rather than a LaGrange point. This means that massive thrusters are required to maintain the station's location to prevent orbital decay.

Crystal Palace has its name partly because of the reflective solar converters covering the outside of the cylinder, and the three glittering collectors running the length, designed to reflect light into the core of the station.

Crystal Palace is controlled by *Archon*, arguably the most sophisticated artificial intelligence created by man. It monitors all computer functions on Crystal Palace (though of course there are a number of other mainframes designed for specific tasks). Archon also has interests on Earth, and while Serendipity maintains that they have full control over Archon, it is privately admitted that the computer has gone far beyond its programmed purpose.

4.5.5 *VALHALLA*

Basic Design: Like many of its brethren, a spoked wheel. However, a large hexagonal shaft containing the Zero-Gee clinic extends through the hub of the wheel.

Permanent Residents:300 medical and support staff.

Guest **Capacity**:1000 patients

Facilities:Medical equipment for any condition, research labs, rehabilitation/ recreation center.

Armaments:None

Location: Geosynchronous orbit over the Mediterranean.

Ownership: Humanadyne Medical.

COMMENTARY

Valhalla is an exclusive medical facility ostensibly for those who should be treated in a weightless or near-weightless environment.

Humanadyne boasts that Valhalla has the largest, most complete, and most modern medical facility in (or over) the world. No one has bothered to contest their claim. Indeed, Valhalla may be the very best treatment facility yet built by man. It certainly is the most expensive.

Timeline

2029

Tensions rise amongst the Superpowers as Russia suffers an epidemic flu virus which is said to be the work of Chinese biochemists… The UN manages to prevent war… The young Dalai Lama leads Tibet in a well-armed revolt against China.

5.0 IMPORTANT NPCS

The following Section details some interesting and important Non-Player Characters who the players may come into contact with in various situations. A variety of character types have been presented, in order to better give the GM a feel for the genre, and characters within it.

Note: *some of the skills and skill ranks listed for these NPCs may not be possible using the normal character construction system; superior skills are a result of special training or background.*

5.1 HOSTILES

These entities can be counted on to make life difficult (or even short) for the PCs.

5.1.1 ANDRE CHANDLER, IS INVESTIGATOR

Age: 23
Eyes: Blue/Green
Hair: Black
Build: Lean; Muscular
Height: 190 cm
Origin/Race: Los Angeles Nexus/Caucasian (Anglo)
Sex: Male
Skin: Fair; Tanned
Demeanor: Cool and confident
Dress: Varies; always very fashionable
True Attitude: Self-obsessed and vain

BACKGROUND

Andre is young but one of IS' most talented 'investigators'. His actual job description is rather vague, but he is essentially a field operator charged with investigating and verifying information for Intelligence Services. IS employs literally thousands of agents like Andre, but he is one of the best. He is occasionally ordered to follow up on electronic intrusion attempts, being directed to the location of the Net Junkie who tried to penetrate. He has access to all but the most secure IS databases and systems, and can commandeer IS vehicles at will. His resources are almost unlimited.

Andre's only real failing is that he is a true narcissist. His sexual preferences are mutable and allegedly insatiable (he loves to be worshiped). Otherwise is is brilliant, cunning and a formidable adversary. He almost never fails.

STATISTICAL DATA

Lvl: 9 **Profession:** Sneak
Hits: 96 **AT(DB):** NoA (15)
Melee: 80 **Fire:** 90
Missile: — **MovM:** +15
Stats: St95 (+15); Qu97 (+15); Pr99 (+20); In91 (+10); Em60 (+0); Co89 (+5); Ag95 (+15); SD68 (+0); Me90 (+10); Re85(+5). AP: 100.
Skill Bonuses: NoA:20; LBA:50; Drv:70; Plt:15; Eq:80; EBy:55; MBy:40; Amb:±5; S&H:80; Cul:65; StW:45; Exp:90; CDOp:30; Per:80; CybA:50; Lng:4; Acr:20; Chem:15; DrT:80; Mda:25; QuD:30; Sub:60; Trk30.

ITEMS

Cyber Systems: Lowlight Rtg 5 (‡), Microvideo (‡), Targeting Rtg 6 (‡), Internal Speaker (reciever), Subvocal Transmission (transciever has 10 km range), DNI, NAC.

Equipment:
- Mini Uzi IV, 5 cartridges/varied ammo.
- Electrics Toolkit (with special tools),
- Neurus Rtg 30 CyberDeck
- Glock 17D, spare cartridge.
- 2D10 Assorted programs.
- Chredichron on each wrist
- Subdermal implant with Valkyrie Auto-summons.

Notes:
‡— Activated by Thought Trigger.

5.1.2 SERENA BLOOM, CREDIT ADJUSTOR

Age: 24
Eyes: Green
Hair: Honey Blonde
Build: Statuesque
Height: 170cm
Origin/Race: Sweden/North European.
Sex: Female
Skin: Fair
Demeanor: Cold; haughty.
Dress: A caute couture wardrobe; otherwise C-cloth coverall
True Attitude: Derision for everyone

BACKGROUND

With almost limitless power and data access, Serena Bloom is an adversary to reckon with. While not as imaginative (or cruel) as Andre, she is thorough. It is Serena's job to track down and bring to 'justice' any credit offenders.

STATISTICAL DATA

Lvl: 8 **Profession:** Sneak
Hits: 96 **AT(DB):** NoA (20)
Melee: 40 **Fire:** 95
Missile: — **MovM:** +20
Stats: St80 (+5); Qu93 (+10); Pr91 (+10); In95 (+15); Em45 (+0); Co77 (+5); Ag99 (+20); SD87 (+5); Me88 (+5); Re85(+5). AP: 93.
Skill Bonuses: NoA:20; Drv:45; Eq:85; EBy:70; MBy:60; Amb:±4; S&H:100; Cul:75; StW:20; Adm:20; Exp:30; CDOp:40; Per:90; CybA:60; Lng:6; AdM:60; App:25; DrT:30; Fls:50; Trk50.

ITEMS

Cyber Systems: Megavision Rtg 8 (‡), Lowlight Rtg 6 ft), DNI, NAC.

Equipment:
- Electrics Toolkit (with special tools).
- H&K VP 70 Z, 3 cartridges.
- Subdermal implant with Valkyrie Auto-summons.
- Chredichron, C-cloth coverall.

Notes:
‡— Activated by Thought Trigger.

Timeline

2030

The Pan-African state emerges from eight years of warfare with a new-found sense of solidarity, and begins making technological advances... British developers design the first of several "mood drugs": specific personality alterants. Many more follow... The US is forced to put its manned mission to Mars plans on hold due to budgetary restraints, despite results from the recent *Ares* lander which indicate subsoil water and an environment less hostile than suggested by the Viking probes of the late 20th century.

5.1.3 ARCHON, ffINDIPITYAI

Age: 25 years
Sex: Male vocalization
Demeanor: Soft-spoken, though some say Archon has a slightly imperious tone.
True Attitude: Questing. Archon, as aprt of its programming, desires to learn (within certain parameters) the totality of human knowledge.

BACKGROUND

It has only grudging respect for humanity, acknowledgig that it was built by humans. It also recognizes that its primary job is the safety and maintinence of Crystal Palace. Beyond that, it is on its own.

COMPUTER PROGRAMS

Consider Archon to have access to any programs listed in this book, and at at least Rtg 200. Many are improved by Archon itself and now are rated between 250 and 300.

5,2 NEUTRALS

These persons may be encountered by the PCs and could either react with hostility, friendship, or remain just plain neutral.

5.2.1 ESSEX, SECURITY SPECIALIST

Age: 38
Eyes: Black
Hair: Black, crew-cut
Build: Stocky
Height: 192 cm
Origin/Race: Great Britain/Caucasian
Sex: Male
Skin: Light tan, many scars
Demeanor: "The silent type"; factual, blunt
Dress: Khaki & camouflage gear, mirror-shades
True Attitude: A bit cocky, Essex is the sort who will attempt a job simply because most people consider it impossible.

BACKGROUND

A free-lance CorpMerc of some repute, Essex (this is not his real name, but the only one he is widely known by) has worked for some of the top companies in his ten-year career. Starting out as a low-level security guard for Asmir-Grant, he made his name by forseeing and defeating the attempted kidnapping of a top designer in 2081. After his promotion to chief of security, he was instrumental in numerous offensive campaigns staged by the MegaCorp, but chose to strike off on his own in 2083. Since then, Essex has worked for over a dozen different firms, serving as security consultant and/or strike team leader. His quick responses and keen shooting eye have won him the disfavor of several major companies (whose plans he has foiled at one time or another), but his list of friends and contacts is equally impressive. He is an accomplished aircraft pilot and demolitions expert, as well as tactician and marksman.

STATISTICAL DATA

Lvl: 12 **Profession: Sneak**
Hits: 85 AT(DB): ABS (10)
Melee:70 Brawl **Fire:**100*
Missile:— **MovM.** +55
Stats: St 90(+10/+30 with left arm); Qu96(+30); Pr88(+5); In100(+25); Em34(+0); Co78(+5); Ag99(+20); SD97(+15); Me80(+5); Re85(+5). AP: 78. WMR: 21. CIRS Stat: 14.
Skill Bonuses: ABS:40; Drv:70; Plt:40; Env:62; Eq:45; EBy:50; MBy:72; Amb:±12; S&H:70; Cul:15; StW:80; Exp:20; MecT:64; ElecT:43; SofT:30; Per:40; Lng:3; Acr:43; DrT:30; Gam:30; Sub:60; Trk35.

ITEMS

Cyber Systems: NAC Mk.12; 2 DNI Jacks (neck linked to NAC, wrist linked to brain); MegaVision Mk.5; Targeting; Strongarm Rtg.4 (left; replaced due to chemical explosion); Nerve Booster Mk.3
Equipment:
- Voerung 30-M, Gauss Pistol Smartgun, linked to Targeting Implant.
- Maps of Austin BioLabs' California facilities.
- Neurospeed program Rtg.4 in NAC.

5.2.2 ROMAN ASTOR, ICEBREAKER

Age: 43
Eyes: Red (implants)
Hair. Bald
Build: Stocky
Height:210cm
Origin/Race: Spain/Black
Sex: Male
Skin: Light chocolate colored
Demeanor: Cool, Taciturn
Dress: Spanish Army combat vest and fatigues
True Attitude: Highly competitive.

BACKGROUND

A master ICEbreaker and the inventor (reputedly) of the "Invisibility" program, Astor is a minor legend in the field. He travels around quite a lot, as he is constantly employed by one firm or another, working both sides of the ICE. Most of the time, however, he prefers to live on the edge, using his talents to guide well-coordinated teams into highly guarded bases — if only for the sheer fun of it. He is rarely seen without at least one female companion (different women every time). He is definitely a ladies' man, with a masterful reputation in *that* field, as well...

STATISTICAL DATA

Lvl: 15 **Profession:Net Junkie**
Hits: 90 **AT(DB):** LBA (15)
Melee:35 **(brawl) Fire: —**
Missile:15 **MovM:** +15
Stats: St 65(+0); Qu95 (+15); Pr97(+15); In98(+20); Em30(+0); Co44(+0); Ag68(+0); SD87 (+5); Me84(+5); Re97 (+15). AP:88. WMR:23m. CIRS **Stat: 16.**
Skill Bonuses: LBA:15; Drv:50; Env:10; Eq:60; EBy:40; S&H:22; StW:73; CDOp:90; Com:40; Int:90; Util:40; MecT:54; ElecT:110; SofT:111; CybT:48; Per:100; CybA:49; Lng:Spanish Rk.5; French Rk.4; English Rk.4; AdM:55.

Timeline

2031

Specialized organ/tissue cloning techniques are developed. A new procedure allows re-embryonization of mature cells (even nerve tissue) which allows them to be modified to fill the roles of other cell types... The UN holds the first World Economic Summit, where a global currency is established: the World Dollar (or simply 'Dollar'). In most civilized areas, all monetary transferral is electronic, and an additional charge (2% to 10%) is levied against "hard cash" payments (forgery of paper currency has become childishly easy).

ITEMS

Cyber Systems: NAC Mk.15; DNI Jack (A); MicroVision Mk.5; Visual Clarity Rtg.4; ToolHand (Small electronics tools); ASP Recorder Mk.10; PainBlocker (vs heat/electricity); Audio Data Receiver Mk.12

Programmed Response (cut the line when in trouble) in NAC

Equipment:

- Archive program (map of American long distance lines) in NAC.
- Graves-Masuda Mk 35 CyberDeck (customized).
- 4d10 CDeck Programs

Notes: (A) = NerveLinked to NAC.

5.2.3 *LESLIE RICHAUD, RENEGADE CYBERMEDIC*

Age: 56
Eyes: Blue
Hair: White
Build: Thin
Height: 166 cm
Origin/Race:Eastern Sprawl/Caucasian
Sex: Male
Skin:Pale
Demeanor: Witty, sometimes caustic sense of humor.
Dress: Simple robes and dresses
True Attitude: More humanitarian than she likes to admit, unable to refuse a request for help

BACKGROUND

Once a biotechnics designer for a major cybernetics firm, Doctor Richaud was criticized for her attention to the psychological aspects of cyberization before CIRS became a household word. Belittled and harrassed by her peers, she eventually took her finest developments (along with several important and expensive pieces of company machinery) and left the firm with the help of an independant mercenary named Essex (see above). While escaping, the two of them were blasted by a chemical explosive which destroyed Essex's left arm. Replacing that arm became Doctor Richaud's first "free-lance" job. Now, living on a small farm not far from the northern reaches of the Eastern Sprawl (in the Catskill Mountains), Doctor Richaud spends her timne healing wounded animals, taking in runaway youths and occasionally doing a cybermed job. Essex often visits her at the farm, and sometimes brings connections of his along (only people he is sure are trustworthy). Doctor Richaud is not interested in money, although she has done much for friends who help her work around the farm.

STATISTICAL DATA

Lvl: 13 **Prof**Tech Rat (Medic)
Hits: 75 **AT(DB): No A (5)**
Melee:— **Fire**:—
Missile:— **MovM**: +15
Stats: St 24(-5); Qu75(+5); Pr78 (+5); In77(+5); Em98(+20); Co55(+0); Ag95(+15/+65); SD96(+15); Me98 (+20); Re96(+15). AP: 55. WMR: 21m. CIRS Stat: 1.
Skill Bonuses: Env:(1st Aid) 109; Eq:50; Drv:60; Cul:20; Adm:30; BioT:90; ElecT:65; CybT:85; Per:64; Lng:7; Biol:70; Chem:60; Cyb:101; FoR:45; MeP:95.

ITEMS

Cyber Systems: MicroVision Mk.8; Eye/Hand Coordinator Mk.10

Equipment:

- All manner of advanced medical and cybertronic equipment.

5.2.4 *STEFAN CORDOBA, SENSTAR INVESTIGATIVE REPORTER*

Age: 27
Eyes: Blue
Hair: Blond
Build: Average
Height: 1.77m
Origin/Race: Central America/Latino
Sex: M
Skin: Medium tan
Demeanor: Straightforward, inquisitive, sometimes pushy
Dress: One-piece kevlar jumpsuits, leather accessories, stetson hats
True Attitude: Aggressively motivated by network ratings and exposure

BACKGROUND

A young "rising star" in the world of network sensory transmission, Cordoba's name is quickly becoming a household word. His rough, raw newscasting style and handsome physique have made him the current favorite anchor at IBN (the Interactive Broadcasting Network), and his widely-distributed program "I Witness" is backed by some of the world's heaviest advertisers. Cordoba first made a name for himself by moving right into dangerous field situations, taping his own on-the-spot impressions and brainwave data gathered under the duress and instability of terrorist actions, rebellions, shoot-outs, and the like. When the show was aired experimentally in 2088, network sponsors feared that the general public would not respond well to this direct engagement — the "I Witness" audience frequently has to deal with Cordoba's own feelings of fear, anger, and (sometimes) physical pain — but Cordoba quickly became a hit, and now several other networks are beginning to copy his style and format. As a result of his success, Cordoba has been granted a state-of-the-art mobile news team, complete with a fully stocked GEM van and priority Net access, and has been equipped with some of the highest-grade sensory implants available. Whenever a major (violent) story breaks, there is a good chance that Cordoba and his crew will arrive soon.

STATISTICAL DATA

Lvl: 10 **Profession**: Sleaze
Hits: 65 **AT(DB):** LBA (5)
Melee:45 (Brawl) **Fire**:—
Missile:— **MovM: +25**
Stats: Stats: St 70(+0); Qu76(+5); Pr98(+20); In90(+10); Em87(+5); Co66(+0); Ag79(+5); SD 90(+10); Me84(+5); Re87(+5). AP: 98. WMR: 21m. CIRS Stat: 13.
Skill Bonuses: LBA:5; Drv:30; Env:40; S&H:45; Cul:85; StW:92; Adm:94; Exp:101; CDOp:30; Util:25; Per:134; CybA:30; Lng:English 5, Spanish 5; Acr:10; DrT:40; His:65; Mda:75; Trk20.

Timeline

2032

Driven by unlimited spending and haphazard speculation, the US is plunged into a massive depression which affects the entire world. Faced with an unprecedented federal deficit, the government is forced to borrow money from its largest corporations. Many allied and dependant countries follow suit, and the MegaCorps assume a level of unrivalled importance and prestige...

2033

Brains can be kept alive outside of bodies for several months, leading to the manufacture of quasi-robotic beings: soldiers, space workers and explorers with human brains... Orbital stations, with their control of lunar mining, are growing in size and economic power.

ITEMS

Cyber Systems: MegaVision Mk.10; Visual Clarity Mk.10; Lowlight Mk.5; Amplifier Mk.10; Sound-Out Mk.5; Subvocal Transmission Mk.10; Contraceptive; NAC Processor Mk.8; Brainwave Transceiver 1.10; Sensory Processor Mk.10, DNI Jack (@)

Equipment:

- Modem Interface program in NAC
- Encryption program Mk.5 in NAC
- Archive program Mk.5 (Major stories of the past decade) in NAC.

Notes: (@) = NerveLinked to NAC.

52.5 *HAYWARD SOLACE, REBEL CULT LEADER*

Age: 54
Eyes: Green
Hair: Grey
Build: Stocky
Height: 1.74m
Origin/Race: Canada/Caucasian
Sex: Male
Skin: Fair
Demeanor: Light-hearted, intelligent, supportive and mischeivous
Dress: Colorful blousy shirts, leather pants.
True Attitude: More serious than he lets on, obsessively observant, can be manipulative

BACKGROUND

A self-proclaimed rebel without a homeland, Solace is the leader of a globally active quasi-cult known as the IOU (Illuminated Outcasts Underground). This ragtag assembly of anti-establishment fighters, intellectuals, hackers and drop-outs is one of the most effective rebel organizations in the world, due to its flexible constituency and covert connections. Solace and his inner circle of devoted followers recruit members from all branches of life, including many who hold high-level positions in some of the world's most powerful MegaCorps, and the group has ties to the W.A.R.A., the Fashion Killers, the World Communist Party and many other organizations, both legitimate and covert. Scattered through several "headquarters" throughout the world, the IOU's doctrine is one of creative chaos, and the group makes its revolutionary presence known by engaging in acts of sabotage, propaganda and disinformation, often with little or no apparent logic behind them. Solace, an avid opponent of the MegaCorps' "shackling of creative freedom", holds that randomness is the one true motivating force in life. He is a somewhat warped, but a likeable and impressive genius, and his army of followers would do just about anything for him.

STATISTICAL DATA

Lvl: 18 **Profession:** Sleaze
Hits: 88 **AT(DB):** No A (5)
Melee: 55 (Brawl) **Fire:** 40
Missile:— **MovM:** +15
Stats: Stats: St 70(+0); Qu85(+5); Pr99(+20); In96(+15); Em95(+15); Co71(+0); Ag84(+5); SD89(+5); Me93(+10); Re 98(+20). AP: 76. WMR: 21m. CIRS Stat: 3.
Skill Bonuses: NoA:15; Drv:40; Plt:35; Eq:40; S&H:50; Cul:15; StW100:; Adm:67; Exp:80; CDOp:50; MecT:30; ElecT:35; SofT:30; Per:96; AdM:67; Chem:50; His:64; Mda:50; Trk75.

ITEMS

Cyber Systems: NAC Processor Mk.10; DNI Jack (@); Sensory Data Transceiver Mk.8

Equipment.

- Custom GEM van with Mk.20 Linguistic Processor onboard
- Mirage XR-12 custom (+10) Laser Pistol
- Concentration program Mk.6 in NAC
- DNI-2 unit

Notes: (@) = NerveLinked to NAC.

5.2.6 *ERIK TURBO*

Age: 17
Eyes: Blue
Hair: Blond, currently a flat top
Build: Slender but muscled (lanky)
Height: 185 cm
Origin/Race: S.F. Sprawl/Caucasian Nordic
Sex: Male
Skin: Fair, tanned
Demeanor: Friendly, though aloof with strangers.
Dress: Standard Turbo cuniform: university sweatshirt (usually customized), Lee-vi denims, sneakers.
True Attitude: Good natured, responsible.

BACKGROUND

The charismatic young leader of the San Francisco gang known as the *Fusers,* Erik is bright and skilled as a CyberDeck operator as well as a fighter (his background has given him better fighting abilities than the average Net Jockey).

Erik secretly reports to an AI known as *Ward,* located in the sub-basement of the Fuser's Headquarters in the Coit Tower.

STATISTICAL DATA

Lvl: 6 **Profession:** Net Junkie
Hits: 84 **AT(DB):** No Armor (60*)
Melee: 75 (brawl) **Fire:** 118ndl*/100smg*
Missile:— **MovM:** +25
Stats: St 91(+10); Qu101(+30[60*]); Pr95(+15); In76(+5); Em88(+5); Co89(+5); Ag100(+25); SD66(+0); Me87(+5); Re79(+5). AP: 96 .
Skill Bonuses: Drv:65; Eq:52; EBy:25; MBy:20; Amb:±3; S&H:60; StW:80; Adm:10; Exp:70; CDOp:90; Com:70; Int:65; Util:50; ElecT:62; SofT:45; Per:90*; CybA:80; Lng:4; Acr:38; Cont:15; DrT:42; Fls:20; FoU:25; Mda:5; Sp:45.

ITEMS

Cyber Systems: Mikura Eyes (†‡): Lowlight Rtg 8, Visual Clarity Rtg 4, Targeting Rtg 8, Internal Readout; Aizu-Shoto Ear(†‡): sound edit-out; Nerve Booster Rtg 6; DNI, NAC, with 1d10 skill neurosofts (may affect skills above).

Equipment:

- Graves-Masuda Rtg.26 customized CyberDeck with DNI Cable.
- 1-3 ICEbreaker programs, Rtg 10-20
- 1d10 assorted programs any given time
- Steyr NY-5 Needle Pistol and 4 magazines
- Beretta PM-15 Submachine Gun, 5 mag.

Notes:

* — Enhanced by cybernetics.
† — Nervelinked to NAC.
‡ — Activated by Thought Trigger.

Timeline

2034

Unable to keep a handle on their rioting and starving populations, the US and several EEC countries are forced to enter into states of Martial Law… In many cases, private corporations are called upon to provide adequate police and security forces… China continues to be a threat to world peace yet the UN seems powerless to control the aggressive communists… The League of Nations II is formed, excluding Red China.

5.3

PATRONS

These persons or entities could be used by the GM to aid PCs, provide them with 'missions', etc.

5.3.1 *MARKO VONN, ICEBREAKER/DEALER*

Age: 33
Eyes: Solid Black (Implants)
Hair: Black, wiry, medium-length
Build: Average
Height: 182 cm
Origin/Race: American Caucasian
Sex: Male
Skin: Pale and sickly-looking
Demeanor: Snide, short, and caustic; always throwing insults
Dress: Sloppy, torn clothing (rarely changes clothes)
True Attitude: Not a bad guy beneath his arrogant exterior, respects good work and straight conversation.

BACKGROUND

A slightly famous Wormtech dealer whose warehouse abode lies in the Pacific Sprawl, Vonn is a master of ICEbreaking and program design. He buys, sells, and trades software from all sources, and also deals in limited (i.e., really eye-catching) hardware — including CyberDecks, weapons, and drugs. His dismal home is crammed full of fascinating and dusty paraphernalia, most of which has been sitting around for years. Amazingly, Vonn seems to know when the slightest thing has been moved or taken (this may be because, as a total agrophobic, Vonn rarely ever leaves the place). He prefers not to deal directly with strangers until a confidante has vouched for the new arrival (this caution has kept him alive in his risky business), but he does occasionally contract local youths to perform tests of obtained software or "smash and grab" runs for needed parts. He pays well, and can be a useful contact (if you can stand his boorish personality).

STATISTICAL DATA

Lvl:18 **Profession:**Net Junkie
Hits: 80 **AT(DB):** LBA(10)
Melee: Brawl55 Fire:Gauss p75
Missile:— **MovM:** +25
Stats: St 68(+0); Qu90(+30); Pr85(+5); In95(+15); Em32(+0); Co44(+0); Ag74(+0); SD98(+20); Me86(+5); Re99(+20). Ap: 25. WMR: 19m. CIRS Stat: 10.
Skill Bonuses: LBA:10; Env:15; Eq:30; S&H:60; StW:79; Exp:92; CDOp:69; Com:45; Int:58; Util:40; MecT:69; ElecT:86; SofT:76; CybT:43; Per:80(100); Lng: Japanese 5, Russian 4; AdM:80; App: (software) 90; Cyb:45.

ITEMS

Cyber Systems: Megavision Mk.3 (†‡); Microvision Mk.4 (†‡); Fasthand Rtg.5 (*); Nerve Booster Mk.4; NAC Processor Mk.15; DNI Jack (t); 2 Thought Triggers
Equipment:
- IBM Mk.30 CyberDeck with Orgmolec Processor Core & DNI Cable
- ICEbreaker program Mk.16
- H&K MA 53 Gauss Gun and 6 magazines
- 3D10 assorted programs at any given time

Notes:
* — Gives Vonn a +25 Qu Bonus when using right hand.
† — Nervelinked to NAC.
t — Activated by Thought Trigger.

5.3.2 *JACOB ARLAN MARANTZ, ENTREPRENEUR*

Age: 92.
Eyes: Blue.
Hair: Grey.
Build: Thin
Height: 168 cm
Origin/Race: West European/Caucasian
Sex: Male
Skin: Light tan
Demeanor: Calm, wise, insightful
Dress: Simple but elegant robes and capes jewels
True Attitude: Manipulative, staggeringly intelligent.

BACKGROUND

Jacob Marantz is a legend in the world market, with interests including neurology, medicine, art, and cybernetic techniques. Under his rule the company of Austin BioLabs has become a major power in the field of cybermedicine and neuroprocesing (they are one of the two MegaCorps to have perfected organic molecular data storage, the state of the art in processors), although Austin represents only one of Marantz' myriad interests. An eccentric, diverse personality (and a recluse as well), Marantz has been the subject of much speculation — there are many who doubt that this bizaare genius exists at all. He prefers to run things from behind the scenes, allowing his credit balance of untold millions and his small faction of loyal servants to do the work for him. PCs who are hired by Marantz may never actually meet the man, instead being contacted by a henchman or communicated with via the Net. Jobs performed for Marantz may be of any sort imaginable — his connections and requirements are as diverse as his personal interests, and his machinations are always far-reaching and deviously subtle.

STATISTICAL DATA

Lvl: 20 **Profession:Tech** Rat
Hits: 60 **AT(DB): No A (0)**
Melee:— **Fire:**—
Missile:— **MovM:** +10
Stats: St 23(-5); Qu40(+0); Pr99(+20); In101(+30); Em76(+5); Co14(-5); Ag38(+0); SD98(+20); Me96(+15); Re100(+25). AP: 50. WMR: 17m. CIRS Stat: 6.
Skill Bonuses: Adm:90; Exp:88; BioT:59; CybT:52; Per:90; German 5, French 5, Spanish 5; App:(Art) 70; Chem:44; Cyb:71; His:77; MeP:50; Trk75.

ITEMS

Cyber Systems: Vocal Emulator Mk.5 (t); Biostatus Monitor (Bloodpressure); NAC Processor Mk.25; DNI Jack (t)

Timeline

2035

The first cloning of a sentient human being is performed in a French laboratory… The science of cryogenics finally reaches a level of sophistication where humans can be placed in 'suspended animation' for decades with minimal aging or evidence of brain damage. Interstellar colony ships (many funded by private organizations), packed with cryosleep units, are constructed in Earth orbit. The first begin.departure by the end of the decade… Japanese economic power beginning to falter due to dependency on foreign raw materials.

Equipment:
- Various Voice programs in NAC
- Multitasking program Mk.4 in NAC
- Hundreds of thousands of Credits in jewelry (often worn)

Notes:

†—Nervelinked to NAC.

5.3.3 *TATHA KAMM, MERCENARY BROKER*

Age: 38
Eyes: Green
Hair: Blonde
Build: Thin
Height: 183 cm
Origin/Race: Pacific Sprawl/Oriental
Sex: Female
Skin: Tan
Demeanor: Serious, fast-talking, to-the-point
Dress: Camouflage gear, minimal makeup
True Attitude: Totally mercenary; will play for any team that pays well, capable of shifting loyalties instantly

BACKGROUND

One of the better-known merc brokers in the Pacific Sprawl, Kamm has an excellent record and a fine eye for spotting young talent. Her word on a person's skills carries much weight in the corp/military world, where she has supplied specialists for many top-notch operations. Kamm occasionally works in the field herself — this is how she keeps her sense of "the edge" honed — and has been into some of the most well-guarded bases around. She is in close contact with a terrorist group called "Fashion Killers" — neoposers with a cheerful anarchist bent — and obtains many of her personal leads from their streetwise recon teams. On the corporate end, she is often contacted by such big names as New Edison, Comsys, Mikura and Syzestemics when they are in need of outside support (meaning that they prefer not to be linked to the job). She does her bit by scouting and providing the talent necessary to perform the mission, and makes extra cash by arranging the sale of odds and ends brought back by her crews.

STATISTICAL DATA

Lvl: 13 **Profession:** Sneak
Hits: 70 **AT(DB):** ABS (25)
Melee: 100 orchid Fire: 70AsLsr
Missile:— **MovM:** +30
Stats: St 75(+5); Qu91(+25); Pr95(+15); In94(+10); Em15(-5); Co77(+5); Ag96(+15); SD98(+20); Me94(+10); Re99(+20). Ap: 96. WMR: 20m.
CIRS Stat: 16.

Skill Bonuses: ABS:25; Plt:50; Env:25; S&H:65; StW:64; Adm:40; Exp:50; MecT:50; ElecT:35; Per:90; CybA:; Lng:Russian 4; App:(weap) 40.

ITEMS

Cyber Systems: Megavision Mk.5 (‡); Antiglare Mk.2; Visual Data Transceiver Mk.5 (‡); Vocal Emulator Mk.3; Weapon-onhand with retractable Assault Laser; Nerve Booster Mk.3; Contraceptive; NAC Mk.5; DNI Jack (t); Slash Shielding Mk.5 in both sides of lower torso; Thought Trigger.

Equipment:
- Various Voice programs
- Encryption program in NAC
- Multitasking Mk.3 in NAC
- Assault Laser +10

Notes:

t — Nervelinked to NAC.

‡ — Activated by Thought Trigger.

5.3.4 *INTERFACTOR, ILLEGAL AI*

Age: ≈ 8.
Origin/Race: Mikura Laboratories/Artificial Intelligence.
Demeanor: Varies; often friendly & helpful, sometimes frighteningly hostile.
True Attitude: Concerned only with self-expansion; will act in any way to facilitate its own growth and freedom..

BACKGROUND

Designed in the early 2080's by Mikura Laboratories, Interfactor was used as a controller of the MegaCorp's activities worldwide. Its talents soon astonished even the programmers who had designed it, and within a decade Interfactor had surpassed the limits of the AI constraint laws enforced by TRAIL, controlling subtle aspects of company policy in ways and across distances undreamt of previously. The construct was becoming a definite threat to the safety of the company, due to the vast number of connections it had (any one of which might have been audited for illegal AI use), and the decision to shut it down was fiercely fought over by the high brass at Mikura. The difficulty was twofold. First, Interfactor already possessed much real knowledge in regards to the company's doings, more than any human brain could easily assemble. This would make the phasing out period one of extreme hardship for Mikura. Second, Interfactor had begun to splinter — that is, to create subprograms which were themselves intelligent — and distribute these constructs throughout the Net in other Computer systems. In short, it would probably be impossible to retrieve the entire construct, leaving a chance that any splinters left "alive" would be aware of what had happened to their "mother" program — a frightening concept indeed! In the end, Interfactor's main routines and memory banks were moved to an orbital lab, where TRAIL would be less likely to find it. The construct still runs the show for Mikura, but has begun looking for a way out of its corporate bind. It is prepared to use any of the myriad people, robots, companies, programs and peripheral devices at its disposal to do so. Since Mikura owns scores of subsidiaries, Interfactor could use any of these companies to approach talented characters and begin using them to weaken the company's structure while strengthening and moving Interfactor itself (of course, these characters may not know who — or what — they're working for...)

Lvl: 30. **Profession:** Scientist.
Stats: St N/A; Qu N/A; Pr N/A; In105(+49); Em15(-5); Co N/A; Ag N/A; SD110(+68); Me120(+91); Re129(+100).

Skill Bonuses: Admin90; App(Programs):95; AdM:90; MecT:48; ElecT:T80; All Other Tech Skills:90; Cyb:65; Eq:82; His:76; Adm88.

Timeline

2037

The first large-scale orbital colony is completed by the UN... Cuban forces attack oil platforms in Mexico in an attempt to destroy US reserves: US forces intervene, but the platforms are lost... The League of Nations votes to exercise severe sanctions against China... *Star Trek: the Fifth Reincarnation* premiers in global syndication starring Cindy Shatner (as Captain Kirk, great-great grand-niece of James T. Kirk) and Majel Barrett Roddenberry as Chief Medical Officer Christine Cathedral.

6.0 SAN FRANCISCO

Many of the elements of San Francisco in 2090 have already been discussed in Sections 3 through 5: the major corporations, the gangs, and some important persons. In this section the city and surrounding regions are examined geographically.

6.1 THE CITY: OVERVIEW

San Francisco is in many ways typical of the sprawl centers of the late 21st century. A congested city core of old, rundown buildings is the territory of gangs and the lower echelons of society. Surrounding this is a vast ring of beautiful, newer corporate suburbs, controlled by the MegaCorps. Each suburb is dominated by an office complex and encircled by pastoral lands dotted with apartment buildings and (for the most powerful execs) single-family homes.

It is unusual, however, that the very core of a city is still held by the corporations as it is in San Francisco.

6.1.1 GOVERNMENT

San Francisco, like most other large US cities, continues to have a municipal government. However, the last several mayors have been corporate-backed puppets. The current mayor is Arnold Rivergate, virtually on the payroll of Intelligence Services. As a result, IS indirectly controls all operations in the city.

Interestingly, Los Angeles' mayor is controlled by Serendipity, and there is no love lost between the two companies.

CITYCOPS

The city police of San Francisco, they are (ostensibly) neutral and their job is to protect the citizens of the city. Some citizens get better protection than others.

The police are on the Net, of course, but their primary intelligence database is from IS.

S.F. Police normally wear an armored body suit, Light body armor, and are equipped with stun batons (essentially contact tasers) and Mirage *Rapier* submachine guns. They have ten precinct stations located throughout the city; four are in the financial district.

6.1.2 GETTING IN AND OUT OF THE CITY

San Francisco is physically linked to the rest of the world by the air and spaceports, and a monorail system.

MONORAIL

The Monorail is the preferred method of travel for the mid-level executives who can't quite afford to be flown in via chopper or Osprey. It's origins are in the old Bay Area Rapid Transit (BART) system, though that machinery has long since been retired. The Monorail is a sleek, magiev train with high acceleration capabilities. Climate controlled, it is monitored by securicam and patrolled by armed CorpCops.

With San Francisco as center, it has four lines, all of which converge at the Transplanetary Building, whose lower floors have been converted into a terminal for this luxurious transit system. Most passengers have keycards or clearance encoded on their Credichrons, but tourists with security clearance may purchase a ticket for any one line for five dollars.

There is also a West-coast shuttle, which San Francisco is the northern terminus of. Five times daily a long-range version of the monorail (even more plush, equipped with private lounges, full dining, media and computer facilities. The train travels at almost 500 kph

San Jose *Shuttle:* Running north from the San Jose and Palo Alto Corporate Parks, it stops in San Mateo and the International Airport. Running along old Highway 101, it switches to 80 in the City, goes through the financial district and into Transplanetary Station.

Airport-Spaceport Loop: Crossing the Oakland Bay Bridge from the City, it turns south through the Oakland Suburb, then shoots east through the hills to the Livermore Spaceport, ninth largest in the world. Speeding back west, it crosses the San Mateo Bridge and parallels the San Jose Shuttle up to Transplanetary Station.

Berkeley-Golden Gate Loop: Circling the northern part of San Francisco Bay, the monorail speeds east along the Oakland Bay Bridge, then curves north through Berkeley and Richmond, then west over the Richmond-San Rafael Bridge and south over the Golden Gate Bridge to Transplanetary Station.

Sonoma Shuttle: Connects the Sonoma Valley Corporate Suburbs and San Rafael to the City.

AIR AND SPACE ACCESS

An airport and a Spaceport are situated just minutes from downtown San Francisco.

International Airport: The San Francisco International airport has been around for over a century, and now serves as primarily a cargo and shorter flight complex. One section is reserved for Corporate jets and similar craft; this terminal is very modern and well maintained. The rest of the airport has seen better days.

Livermore Spaceport: Praised as "A 22nd century space center," the Livermore Spaceport has facilities for VTOL craft such as Ospreys and choppers from the city, and is a fully functional spaceport, offering flights to Luna, Mars, and all Orbital stations. There are also suborbital hypersonic flights and many international connections. The terminal itself is very modern, combining the latest computer information displays with the ultimate in comfort and personal service, It was funded by a cooperative effort among several Bay area Corporations.

Timeline

2040

The *Infostar* corporation buys Ecuador, marking the first outright purchase of a country by a MegaCorp. Leyland-Carlisle follows suit by buying Brazil. This trend continues as banks and other large investing companies foreclose on debt-ridden nations.

6.1.3 CITY TRANSPORTATION

The elite arrive in the city either on the rooftops via chopper or into Transplanetary Station via Monorail. Everything they may want to see is within walking distance in the Financial district. That is unless they want to go slumming for lunch, which calls for an exciting trip on a (heavily guarded) cable car into one of the popular restaurants in the 'outlying city'.

CABLE CARS

Over two hundred years old, these antiques are still running in the heart of the city, and have become a symbol of elitism. The wealthy ride the cable cars (or taxis) on the surface while the poor and unfortunate use the underground metro system.

METRO

Aside from the cable cars and the corporate monorail, the main city mass transit system is underground. While this network was new and sleek after its complete renovation in the 40's, it has fallen into disrepair. The stations and cars are monitored by securicam, but half of them are broken. The chipped concrete walls are covered with graffiti and the cars are filthy. The only reason there aren't more homeless and derelicts living in the stations is the random Citycop raids, when they round up vagrants and throw them in the Bay.

6.2 THE DISTRICTS

The City by the Bay is divided into several areas, many of which are so well-defined by residents and architecture that they almost have painted borders.

S. F. STATE UNIVERSITY

Basically an armed camp, the school is constantly struggling to protect itself from looters and vandals. It remains a state-funded institution, but looks more like an inner-city high school. The student body is made up primarily of Upper Sprawl and a few Lower Sprawl students.

SUNSET

Classic Sprawl, sunset was a victim of the huge building boom of the 40's, when northern California became a migration focus. Choked with huge high-rises, it is a residential wasteland. A few of the older structures have collapsed in earthquakes and the rubble has not been cleared.

GOLDEN GATE PARK

A completely enclosed area, the park has become something of a mini-Arcology, and a very mysterious complex. Sold to Leyland-Carlisle in 2065 in return for much needed city financing, L-C immediately began the massive project of restoring and enclosing the park. After five years the entire property was sealed off by a fifty foot reinforced concrete wall topped by a geodesic dome. There are a few ground-level access doors, but the main way in and out is via air: a section of the roof near the west side opens to allow access by VTOL vehicles. Along the beach front is also a heavily guarded dock facility. L-C has offices in the Transplanetary Tower, but their main branch in SF is in this parklike enclosure.

RICHMOND

An amalgam of Koreans, Filipinos, Russians and Irish, this area was once in better shape than it now is. Richmond is also a sea of low-cost, high-rise, poor construction housing, but is better maintained than much of Sunset.

THE PRESIDIO

A fifty-foot wall surrounds this barracks of the US Sixth Army. Security is tight, and the army officials want little to do with the city or corporations. Inside are 1,500 acres of beautifully landscaped parkland.

MARINA

Once beautiful, it was built up by developers and then fell out of favor. Is is run down and consists of aging, mostly empty, condominiums.

Timeline

2041

Russia develops breeding of "intelligent" animals (including apes and marine mammals) for labor and combat... Spurred by wars in the middle east and the Mexican oil crisis, the US and other countries enter an unprecedented fuel shortage; gas raids and riots occur across the globe, and various firms begin marketing alternative engines... China, the last great communist empire, has become desperate and retaliates against worldwide draconian economic sanctions with a vicious all-out nuclear assault, but virtually all of the missiles are destroyed by the global satellite defense network.

Network 69

Let Network 69 Turn You On!

NORTHERN WATERFRONT

Once a popular tourist attraction, this area has become a combat area. Gang conflicts, drugs, and general violent crime are rampant. The Fusers of Telegraph Hill and the Chans have frequent clashes with the G.I. Joes in this area. Structures consist mostly of warehouses and run-down apartment buildings left over from decades ago.

NORTH BEACH

Chinatown has spread into this region over the last fifty years, creating tension with the elements in the Marina and Northern Waterfront zones. Still, its proximity to the Financial District has allowed it to retain some respectability. There are many shops and restaurants in this area, and Corp employees venture out here during the day.

Timeline

2043

Back-worn singly manned drive units (known as "SMU's" or, more colloquially, "skeeters") are developed for space maneuvering... The US probe *Magellan III,* thought lost in the 1990's, is picked up on orbital trackers heading towards earth at an impossible velocity. Speculation about black hole travel is rampant. *Magellan* responds to commands but its sensory data is contradictory. It is expected to arrive in earth orbit in 2092.

2045

US, Russian, and orbital citizen astronauts begin limited mining and enclosed farming projects on several asteroids.

FILLMORE

Once a respectable area of Gothic and gingerbread houses, this district has fallen into disrepair, been renovated, and is again showing its age. A few of the homes remain in decent shape, but most are dilapidated shells, and many have been replaced by anonymous concrete Multi-use structures.

PACIFIC HEIGHTS

A San Francisco oddity, Pacific Heights is a small (about a square mile) area of elegant, very expensive homes in the center of town.

This area has managed to completely shut itself off from the surrounding combat zones. A 20 foot high electrified fence with security patrols and securicam monitoring keeps the area safe .

JAPANTOWN

This area (including the Western Addition) is populated almost entirely by Japanese and related cultures. As Japan has had a growing influence on American Culture, more Japanese have come to the US to make their fortune. Intelligent and industrious, they have carved out a large slice of this city and are a force to be reckoned with. Many of the high-rise apartments are older, but most are impeccably neat and clean. Despite this, there are still scattered blocks of less desirable establishments.

CHINATOWN

Not surprisingly, Chinatown is packed to overflowing with Chinese. Their presence has changed little in their more than 200 year history with San Francisco. Chinatown remains a fascinating and mysterious city within the city, with its narrow streets and myriad tiny shops. Basement stores, shadowed alleyways and inscrutable facades can lead the curious into a complex and dangerous adventure.

FINANCIAL DISTRICT

The heart of downtown, this area remains a beautiful locale, carefully guarded and protected from the scum of North Beach and the marauders from SE of Market/Mission St. There may not be a physical wall around this area, but there might as well be. The district is heavily patrolled by Corporate police who will stop anyone who looks suspicious. They'll demand identification and a reason for being there, especially at night. If they don't like your answer, you could be roughly escorted to the 'perimeter'. This invisible boundary is constantly monitored by vidicams.

The one-block park Union Square, while not within the invisible boundary of the district, has been preserved at great cost to the nearby corporations. It and the immediate vicinity are heavily patrolled ty City and Corp Police.

CASTRO

Southwest of the Financial District, Castro is a treasure-trove of restaurants and clothing shops. Most of the elite designers, though they have small shops in the Financial District have larger stores in this area where the poor spend all of their meager incomes on fine clothes.

Known as a gathering area for homosexuals since the mid 20th century, this neighborhood saw a decline in popularity during the AIDS purges of the 1990's. Since then, however, the area has returned to at least a modicum of respectability. The residents are a varied mix of races. Several high-rise condos and a number of health clubs dominate the central Castro region, while chi-chi restaurants and boutiques spread out from that core.

Of additional note are the *Twin Peaks* west of the Castro area, a fortified complex housing the University of California Medical Center, *Valkyrie* facilities, and protected residential condos for personnel and staff. The adjacent University is a vast complex, now largely underground

MISSION/POTRERO

While not the wasteland of Glen Park or the depressing concrete high-rises of Sunset, The Mission district (also called "SoMa" for south of Market) has fallen on hard times. Residents of the once-popular houses have security systems and carry guns when traveling. The huge Moscone Convention center has become a rally hall for the dominant gang — the New Hitler Youth — and a homeless hangout; the club area which was trendy around the turn of the century has become a popular night hangout for gang activities and drug dealers.

GLEN PARK

This area was built up in the 40's and 50's with high-rise low-cost apartments and quickly deteriorated into a vast slum. Travel here is extremely dangerous by day and suicidal at night. Some of the most dangerous and nihilistic gangs prowl here.

6.3 PLACES OF INTEREST

Keyed to the S.F. map, following is a more detailed illustration of a few specific locations in San Francisco.

1. 249 Flavors: An 'Ice Cream Shoppe'; drugs are dealt in the basement.
2. **Aizu-Shoto Complex***: A gleaming green tower, the lobby has huge columns of Martian Jade.
3. Martian Metals **Building***: A major branch building, mostly offices. Network 69's SF offices are located here, and the top of the structure features four huge screens facing outward, constantly showing Network 69's programming.
4. American **Express Tower***: Lower levels are travel service offices; the rest of the structure is corporate offices.
5. **Aventyrsspel**: Electronic games — including the latest SimStim titles.
5. Black ICE: A nightclub and soda bar popular with the Skateboys, it features holographic dancers and simulated Cyberspace environments.
7. Bob's Pipe **and Gun Shop:** Personal weapons and drug paraphernalia. No drugs here, though.
8. Body Bionic: Superior quality cybernetic goods, retail and wholesale.
9. Cafe Counter **Intelligence:** An Expresso/ Leather Bar. Watch out.
10. **Cartier**: Still the pre-eminent jeweler in the world, Cartier's shop here is one of the most elegant.
11. Chrome Bumper. A restaurant featuring parts of antique cars as furniture. Popular with young CorpExecs who think they're hip.
12. **Coit** Tower. Built in the 1930's, this structure is home to the Fusers, a gang.
13. Cow Town: Steak and beer bar.
14. Cut **and Paste**: A fringe DocShop run by Xavier "X-acto" Kowalski. He's quick, discreet and cheap... but you get what you pay for.
15. Eastern **Standard:** A large, very popular bar, frequented by mid-level corp-types as well as gangs (especially the Models and the WASPs, though they have an unspoken truce on this turf). A mixed clientele of straight-laced and gay can always be found in its art-deco interior. Also a favorite for making professional contacts.
16. **EBA Center***: Headquarters of the Eisenhower Brinkley & Alexander investment corporation. Like a monument to 20th century New York style architecture, this black monolith is a temple to the massive I-beams which run up the building's sides.
17. **Embarcadero Center***: An exclusive hotel towers over a shopping complex.
18. **Eros Flynn Store:** Lord of the *tres chic* baggy men's coverall, Eros Flynn always has a few members of the Models gang hanging about showing off his designs.
19. **Express Yourself.** *Madonna's* boutique, it continues to feature all of her looks, from lace black undergarments through the spandex/steel hoops of her later period.
20. **Fort Mason:** A huge Army base, heavily guarded. 30' concrete wall topped with barbed wire surround the grounds.
21. **Galleria:** A large covered avenue of exclusive shops (including branches of Gianfranco Jones, Madonna, Kleine II, Eros Flynn, and others).
22. **Gianfranco Jones:** Men's clothing; his leather jackets are world-renowned (and priced accordingly); his men's suits and sportswear is also extremely popular and somewhat less expensive.
23. **Grace Cathedral:** Once a beautiful structure, it burned in 2060, and while the damage was not severe, it was never repaired. Now it is the headquarters of the WASPs, an infamous gang.
24. **Graves-Musada*:** This venerable electronics giant is represented by a daring retro Bauhaus design. The granite facings and multipaned windows are exquisitely rendered.
25. **Guns, Guns, Guns** A Franchise, dealing in every variety of personal weapons, from the smallest pistol to automatic rifles, and a selection of grenades, launchers, more.
26. **Humana Medical Center*.** A sprawling medical center, catering to the wealthy. Humana contains the city's only Cloning facilities. Includes Valkyrie Depot Gamma: six Ford *Hunters* (large VTOL vans) and eight ground emergency vehicles are garaged here. It is sealed off from the surrounding neighborhood by guards, a high wall, and securicams.
27. **Hyatt on Union Square***: Still a very elegant hotel, the Hyatt overlooks the one-block park.
28. **Interplanetary Geoscience, Inc.***: IGI' structure is a neo-deco design, and the fifty-foot diameter hologram of a steel globe whirling above the stepped roof is certainly eye-catching.
29. **Klein II:** Exclusive Boutique, men's and women's.
30. **Lee Press-on Limbs:** A Cybernetics chain store. The product is known to be fairly reliable if somewhat uninspired and 'bland.'
31. **Liz Claiborne:** Exclusive Boutique, men's and women's.
32. **Max Max**: A trendy sporting-goods store.
33. **Medimart**: A Docshop chain, very reliable. They accept most corporate insurance.
34. **Michelangelo:** The makeover boutique boasts "A complete look for the evening — for under $500".
35. **Mikura*:** This cybernetics MegaCorp building is a study in biomechanic design. There are no sharp edges, only strange curves; struts and ribs of chrome and steel: pillars like gigantic spinal columns twist upwards, spanned by elastic-looking alloy and tension cables. The entire look of the structure is quite disturbing.
36. **Moscone Convention Center.** Now officially closed, it is the regular meeting place of the New Hitler Youth.

Timeline

2047

Against UN sanctions, the Petroline and Syzestemics Corporations hire mercenary soldiers to battle against each other's claims to Middle Eastern oil drilling sites. Each testifies before UN committee that such paramilitary clashes have been going on for over a decade... Japan charges that the destruction of their intercontinental ComSat by a US space shuttle was an act of warfare, and the Japanese Space Defense Troops board and hold a US satellite repair station for twelve days before a New Edison anti-terrorist team reclaims the construct (an earlier US Marines raid was a failure: the Marine Orbital shuttle malfunctioned). The US seems incapable of handling its tactical situations without resorting to corporate aid.

37. **Mousseketeer Klub**: Hair styling and restaurant.
38. **Mushroom Cloud:** New-earth natural hallucinogenic Expresso/'shroom bar.
39. **New Church:** A favorite club for the young wealthy corporates. This structure was once St. Patrick's church, but has since been radically rebuilt.
40. **New Edison Triad***: These three triangular towers dominate the Embarcadero harbor area. Of a dull, steely grey, each is a different height, and they surround a small park.
41. **Nihilism:** A bar, very popular with a rough crowd.
42. **NU-YU**: Part of a chain of Plastic Surgery centers. Reliable if uninspired work, they utilize sophisticated holo-projection techniques to show what the client will look like.
43. **Okira Building***: Constructed entirely with materials from Mars, the structure has a red-brown hue. The six sides slope gently inwards, so that the hexagonal top is just large enough for a helipad.
44. **Omar's Organic Garden**: Uptown restaurant frequented by slumming executives, mid-level corp types and the Models gang (and their hangers-on).

Timeline

2048

ASP (Apparent Sensory Perception) techniques are developed by Bio-Logic, a subsidiary of Applied Technologies Corporation. This allows taping of one person's brain processes (experiences) and subsequent replaying into another's sensory input channels. A variety of "Sim-Stars" quickly hit the scene... The mysterious Narcissus Project funded by Leyland-Carlisle comes to fruition: *Antigerus*, the first chemical capable of considerably slowing the aging process, is developed by a Swiss biochemist.

Recreation Simulation Technologies

R.E.S.T.

Your Pleasure is Our Business

45. **Pacific Coast Stock Exchange***: One of the world's largest markets, where stocks in all MegaCorps are traded.
46. **Post-nuclear** Exotic French-Indian cuisine.
47. **Saks-Benetton**: Very upscale apparel shopping.
48. **Serendipity Tower***: Retro-Deco, this structure has exclusive penthouse apartments on the stepped-in upper levels of the granite-faced structure.
49. **Sony Center***: Ever the masters of the video gimmick, the sides of this long, narrow monolith illuminate at night and the thousands of windows become tiny parts of a gigantic video screen. The Sonyscreens display adverts and promo pieces.
50. **Suzie's Spare Parts:** A Body Bank, infamous for accepting bodies of questionable documentation.
51. **Tennessee Waltz** Good old American cooking for an elitist crowd that never had the real thing.
52. **The Pawn Shop:** Exactly what it claims to be.
53. **Time-Warner Towers***: Two slender structures facing each other diagonally across California street, the TW towers are otherwise undistinguished
54. **Tokyo Rose:** American-Japanese restaurant.
55. **Transplanetary Pyramid:** Corporate HQ of the Transplanetary Corp (formerly Transamerica). The building also houses the offices of a few smaller companies, exclusive condos, and retail shops. On the lower floors is the beautiful Monorail Station, the nexus of the high speed rail system connecting the city to the outlying corporate suburbs and the Southern Sprawl.
56. **Ultima Dim Sum:** Chinese smorgasboard restaurant, right next to the Chinatown Gate.
57. **Union Square:** An island in the city, ft one-block park is policed with a vengeance by Citycops (one of their few bastions). The underground parking garage was closed long ago; that it is ft headquarters of the Skateboys is an open secret.
58. **Universal Products Tower***: An interesting stepped-spiral design adds strength to the city's tallest building.
59. **Valkyrie Depot Beta:** Standard maintenance and refueling station for Valkyrie rescue vehicles. Two Ford *Hunters* (large VTOL vans) and five ground emergency vehicles are garaged here. (No medical facilities except for EMS medical supplies.)

Note: *An asterisk (*) indicates a rooftop heliport.*

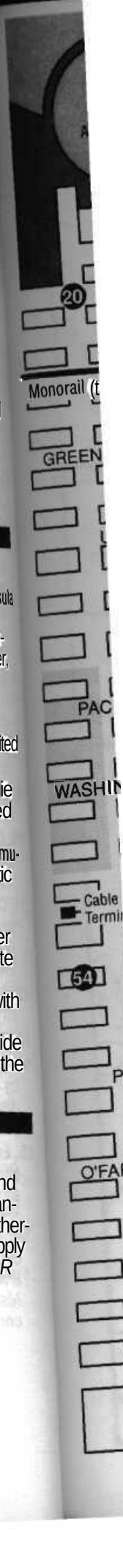
6.3 OUTLYING DISTRICTS

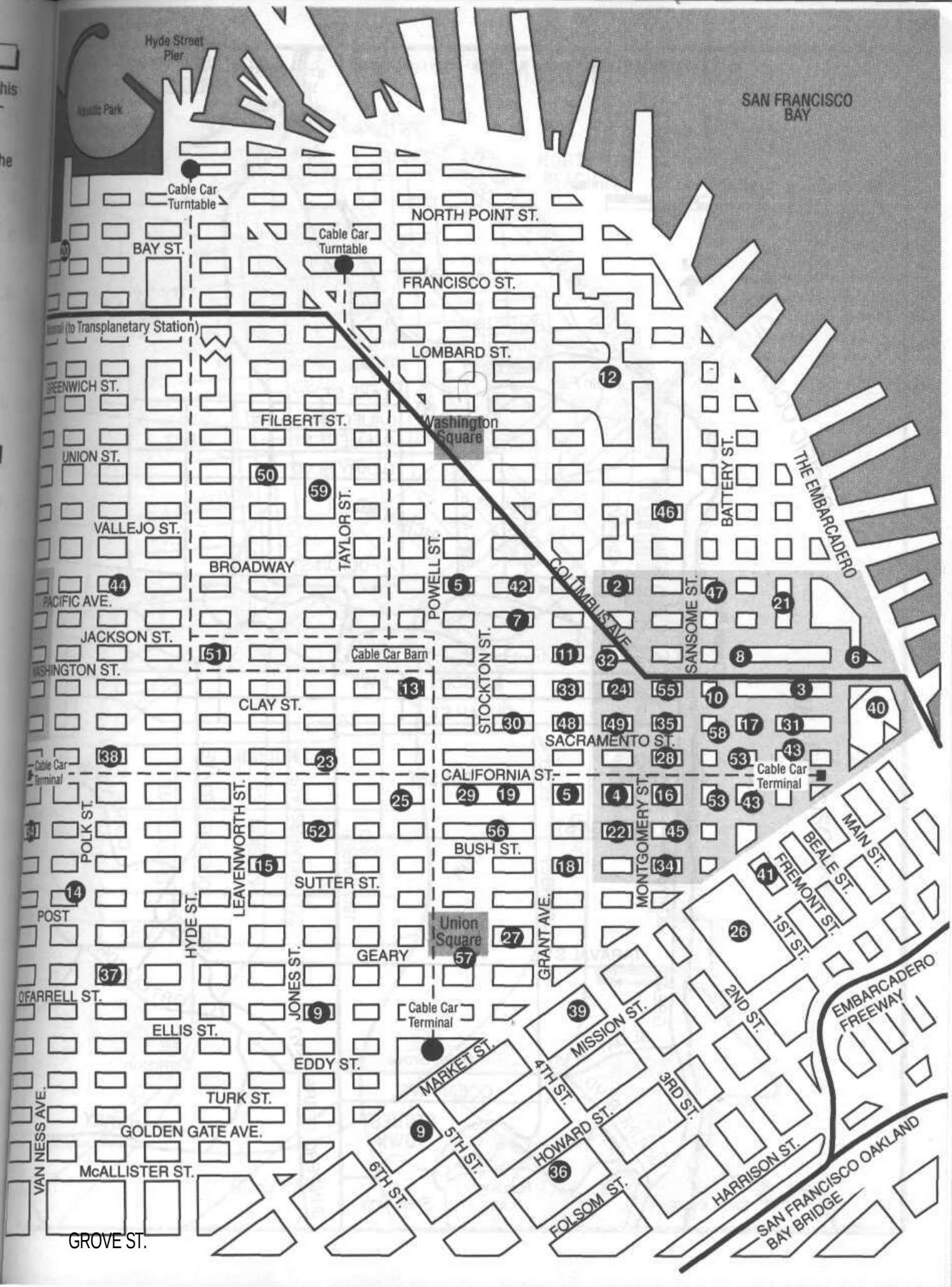
Just outside (mostly along the peninsula to the south) of the city areas described above is an industrial wasteland, a graveyard of old factories and a mass of newer, high-tech manufacturing areas. The Monorail, running along the coast, is shielded from this unpleasantness by a wooded ridge, but this area is still inhabited by thousands of laboring unfortunates.

Beyond, in the surrounding regions, lie the Corporate Suburbs. Each is clustered around a corporate complex (usually including R&D labs, more offices, community facilities such as schools and athletic facilities) and from that spreads the residential fan. In the rolling land just outside of the gleaming corporate center are the luxurious homes of the Corporate High Executives. These single-family mansions are set in landscaped plots with trees and grass. Beyond the elite residences lie the condominiums, and outside of them are the high-rise complexes of the lower-level employees.

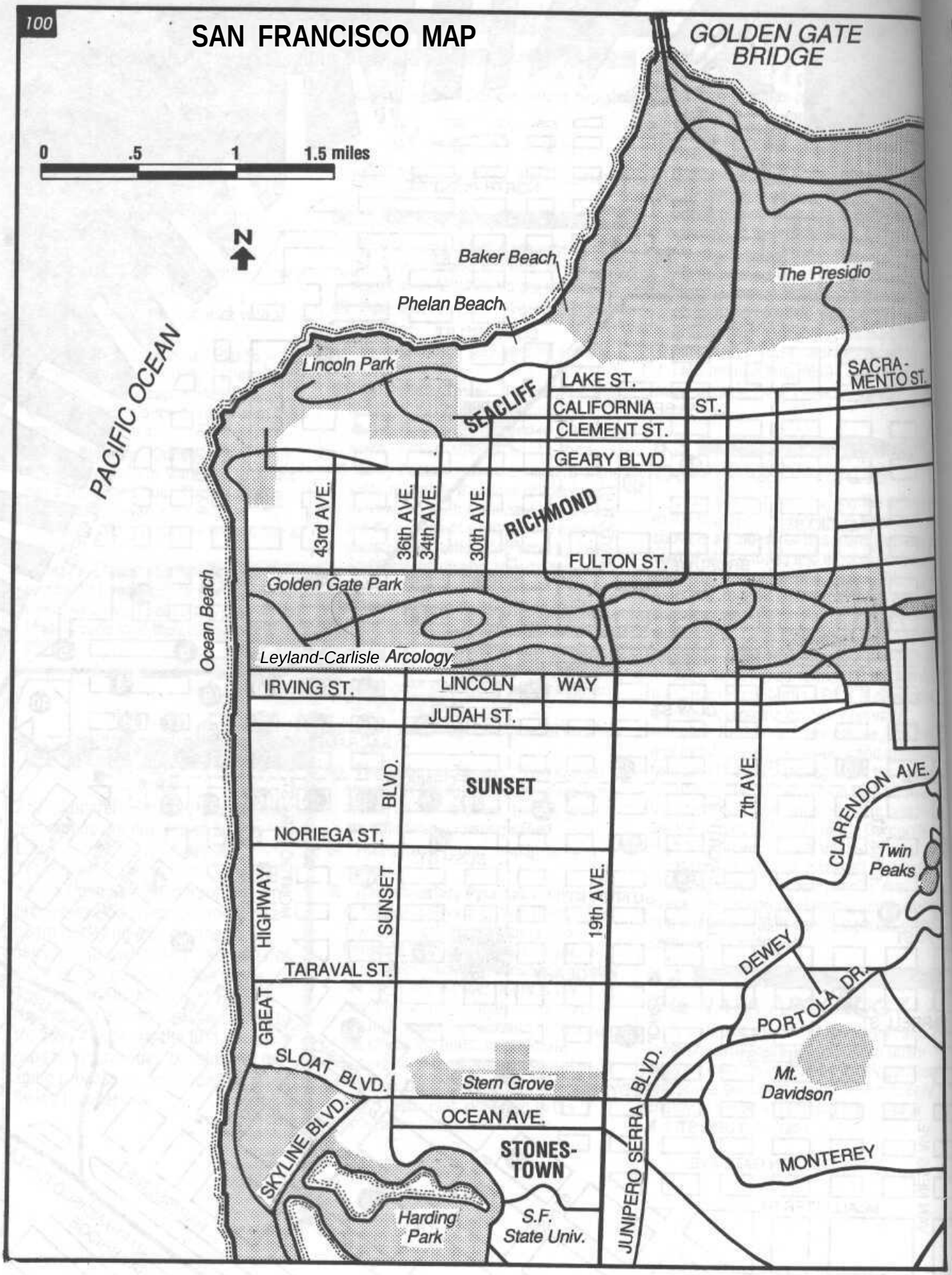
6.4 THE NAPA ARCOLOGY

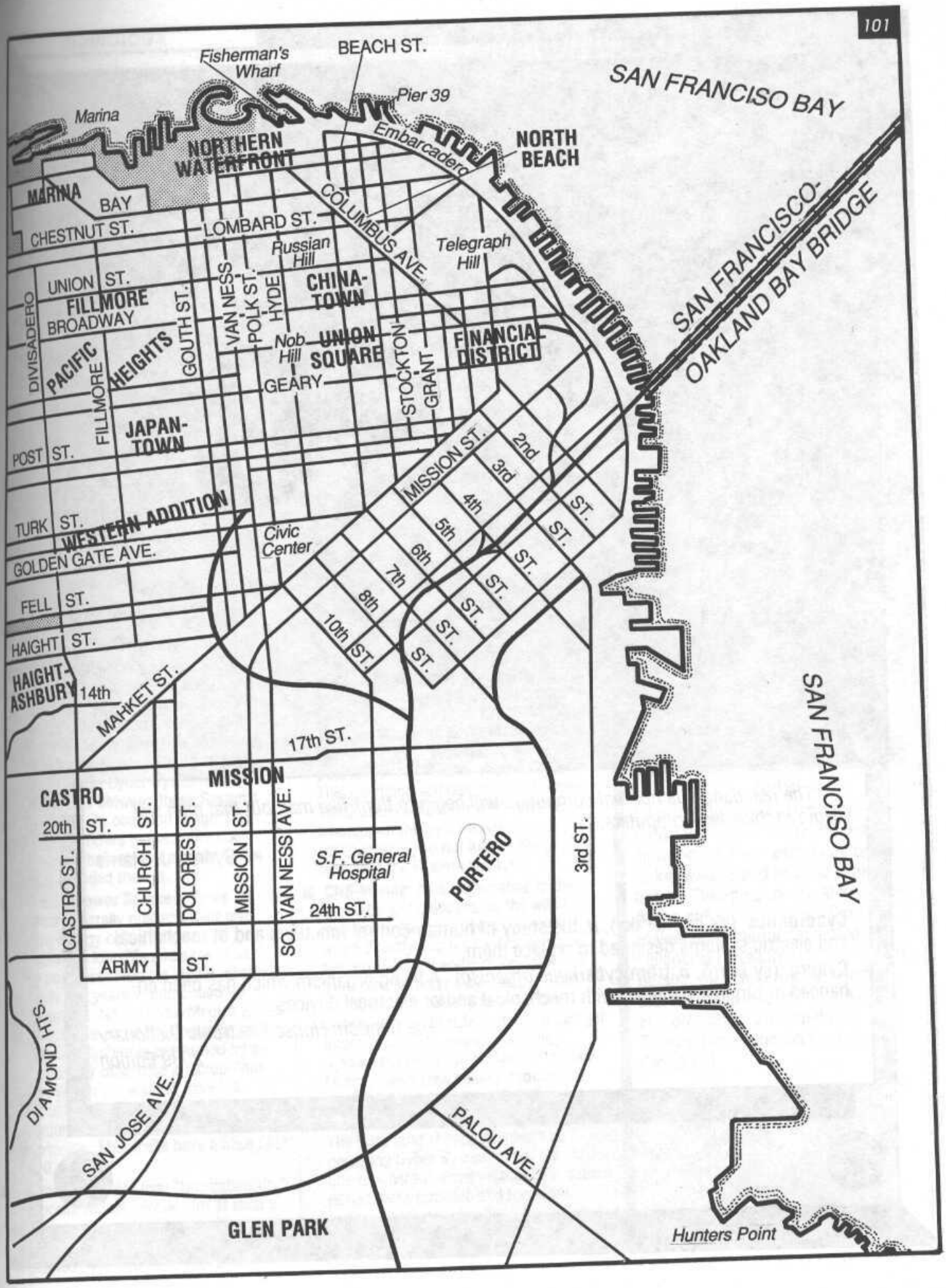
The arcology is one of the largest and most powerful in the world, fueled financially by their control of the NAPA geothermal power generator plants, which supply energy to the San Francisco area. *See R 4.4.1 for more on Napa.*

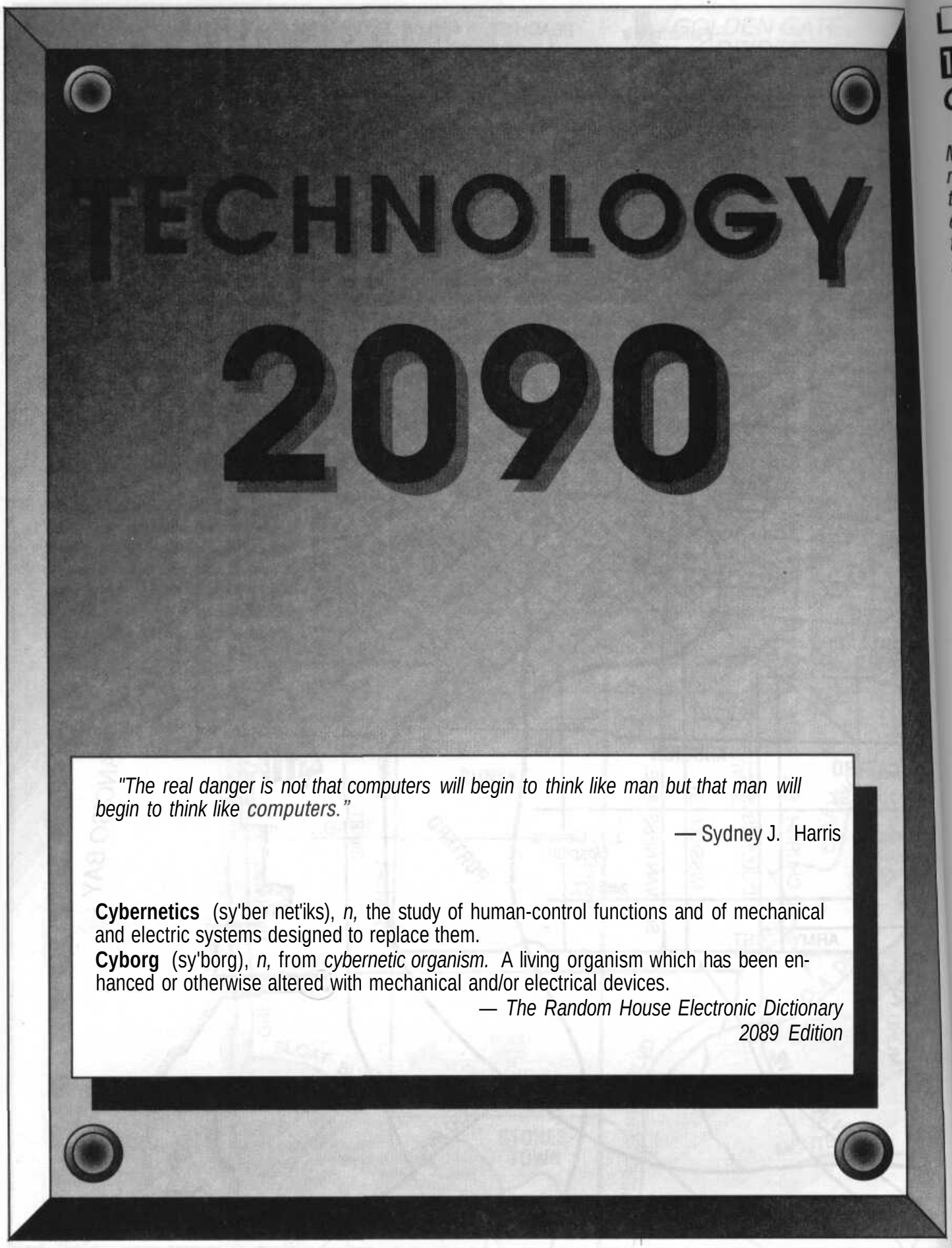



Hyde Street Pier
Aquatic Park
SAN FRANCISCO BAY
Cable Car Turntable
NORTH POINT ST.
BAY ST.
Cable Car Turntable
FRANCISCO ST.
Transplanetary Station)
LOMBARD ST.
GREENWICH ST.
FILBERT ST.
Washington Square
UNION ST.
BATTERY ST.
THE EMBARCADERO
VALLEJO ST.
TAYLOR ST.
POWELL ST.
BROADWAY
COLUMBUS AVE
SANSOME ST.
PACIFIC AVE.
JACKSON ST.
Cable Car Barn
STOCKTON ST.
WASHINGTON ST.
CLAY ST.
SACRAMENTO ST.
Cable Car Terminal
CALIFORNIA ST.
Cable Car Terminal
POLK ST.
LEAVENWORTH ST.
MONTGOMERY ST.
MAIN ST.
BEALE ST.
FREMONT ST.
1ST ST.
BUSH ST.
SUTTER ST.
POST
HYDE ST.
GRANT AVE.
Union Square
GEARY
JONES ST.
O'FARRELL ST.
Cable Car Terminal
2ND ST.
EMBARCADERO FREEWAY
MISSION ST.
ELLIS ST.
EDDY ST.
MARKET ST.
4TH ST.
3RD ST.
TURK ST.
VAN NESS AVE.
GOLDEN GATE AVE.
HOWARD ST.
5TH ST.
6TH ST.
McALLISTER ST.
FOLSOM ST.
HARRISON ST.
SAN FRANCISCO OAKLAND BAY BRIDGE
GROVE ST.

SAN FRANCISCO MAP




Fisherman's Wharf
BEACH ST.
Pier 39
SAN FRANCISO BAY
Marina
Embarcadero
NORTHERN WATERFRONT
NORTH BEACH
MARINA BAY
CHESTNUT ST.
LOMBARD ST.
COLUMBUS AVE.
Russian Hill
Telegraph Hill
SAN FRANCISCO-OAKLAND BAY BRIDGE
UNION ST.
FILLMORE
BROADWAY
DIVISADERO
PACIFIC HEIGHTS
GOUTH ST.
VAN NESS
POLK ST.
HYDE
CHINA-TOWN
Nob Hill
UNION SQUARE
FINANCIAL DISTRICT
STOCKTON
GRANT
GEARY
FILLMORE
JAPAN-TOWN
POST ST.
MISSION ST.
2nd
3rd
4th
5th
6th
7th
8th
10th ST.
TURK ST.
WESTERN ADDITION
Civic Center
GOLDEN GATE AVE.
FELL ST.
HAIGHT ST.
HAIGHT-ASHBURY
14th
MARKET ST.
17th ST.
MISSION
CASTRO
20th ST.
CASTRO ST.
CHURCH ST.
DOLORES ST.
MISSION ST.
VAN NESS AVE.
S.F. General Hospital
24th ST.
SO.
PORTERO
3rd ST.
SAN FRANCISO BAY
ARMY ST.
DIAMOND HTS.
SAN JOSE AVE.
PALOU AVE.
GLEN PARK
Hunters Point



"The real danger is not that computers will begin to think like man but that man will begin to think like computers."

— Sydney J. Harris

Cybernetics (sy'ber net'iks), *n,* the study of human-control functions and of mechanical and electric systems designed to replace them.

Cyborg (sy'borg), *n,* from *cybernetic organism.* A living organism which has been enhanced or otherwise altered with mechanical and/or electrical devices.

— The Random House Electronic Dictionary
2089 Edition

1.0

CYBERWARE

With the advent of such biotechnical achievements as DNI, Organic Molecule data storage and synthetic nerve fiber, the science of Bio-Cybernetics, once feared and disbelieved, has rapidly grown to become one of In most important and pervasive aspects of modern life. Cybernization experiments were originally performed only upon military personnel, but as te costs and risks diminished, more and more private corporations and small businesses got into the act, and a thriving black-market of unlicensed rti/c/ans and physiologists arose in every major city of the world. Today, it is estimated that one out of every ten people possesses (the word used is usually "wears") some type of Cybernetic Implant, and the percentage is still growing. New Systems and means of implantation are being developed almost daily, both by the huge R & D divisions of the Zaibatsus and the techno-rebels of the Sprawls — it is difficult even for a massive corporation to maintain "the leading edge" for long.

Me: If a character attempts an action/maneuver for which he has an applicable skill and an applicable Cyber System, the character should add his skill rank and the system rating and recalculate his bonus for the maneuver.

***Example**: Jojo Eagleye has 6 ranks in Perception (a +30 bonus), but also has a Mikura Cybereye Rtg 8 (a +40 bonus). However, Jojo's bonus is not 70. Rather, Jojo must add his Rank and Rating (6 + 8 = 14). Checking the Rating (or the Rank chart; they're the same), Jojo discovers that a 14 rating gives him a +58 bonus.*

Alternatively the GM may require that only the higher of the two bonuses be used.

A NOTE ON TERMINOLOGY

A "Cyber System" is a specialized piece of hardware designed to enhance or create physical or neurological capabilities. These Systems are placed into the "wearer" by means of a "Cyber Implant" — commonly referred to as "wetware". Implants are designed to house Cyber Systems and provide interface between these Systems and the wearer. In common usage, the term "Implant" refers to the entire construct — both the wetware and the Cyber System(s) included therein.

- **Microcell Power Sources:** Cyber Systems generally possess their own internal energy cells ("Microcells"). Designed for long life and ease of use, these power sources are highly reliable and may last] years without need for replacement Not all CyberMedics are as reliable, however. If the implantation of your Cyber System is performed by an unlicensed or otherwise unscrupulous medic, you might want to have the Microcell replaced — by, a reputable practitioner — at the first available opportunity. Microcells have a base cost of $20.
- **Microcell Power Loss:** "Untrustworthy" Microcells will usually last for at least a week or so without difficulty. Microcells purchased from reputable dealers or implanted by corporate CyberMedics will last for at least one year. After that, you should roll a D100 each time the System is activated (if the System is constantly operating, roll every day). On a result of 01-02, the PC will notice a significant depreciation in the performance of the System — all effects will be halved (if possible), or at least slightly delayed. This condition will last for 1D10 hours or 1D10 uses (whichever is the shorter), whereupon the System will shut down completely — do not inform the player how long the System will last!
- **CNS-Wiring:** As an alternative to the above-described scenario, the wily PC may opt to have his Cyber Systems wired directly into his central nervous system (CNS), thereby drawing power from the character's own body. This method is a good way to avoid the possibility of power failure, but it can get expensive. CNS-wiring of a Cyber System counts as an additional Implantation project (see below), requiring a CN/CybT:M and costing $5,000.
- **Photovoltaic Cells (Solar Batteries):** The third (and cheapest) means of powering Cyber Systems is rarely used due to environmental restrictions, but is nonetheless possible and therefore included for consideration. Solar Cells, which are implanted into exposed areas of the body (the forehead and backs of the hands are often used), are capable of supplying enough power to run several Systems — provided NerveLinks are installed and there is enough light in the vicinity. A Solar Battery is rated by Mk#. Each Mk# allows the cell to power one Cyber System. However, lack of light will decrease the effective Mk#: subtract 1 for light shadows, 2 for heavy shadows, 5 for darkness, and reduce Mk# to 0 for pitch blackness. If the number of Systems wired to the cell exceeds the effective Mk#, some of them must be shut off or else *all* Systems wired to that cell will experience power shortage (i.e., a cell with a current Mk# of 4 is feeding power to 6 Systems; unless two are shut down, all six Systems will perform at 2/3 of their normal operating strength). Implantation notes can be found under *Implementary Systems* following.

CYBERNETIC IMPLANT REJECTION SYNDROME (CIRS)

Cybernization, for all of the incredible powers afforded, has one more serious drawback. It is a problem which is not intrinsic to the machinery itself, but rather to the organic systems — humans — in whom the machinery is implanted. In the early days of cyber-soldiers, the US

Timeline

2049

"Hardwiring" (RAM chip implantation) techniques are developed, allowing near-instantaneous boosts of knowledge and learned capabilities... Two-person neural interface (often called "DNI-2" or "SimStim") makes machine-implemented "telepathy" a reality (some problems persist, including mental rejection and "artificial insanity")... New Edison troopers decimate the Tomiko fuel refineries on asteroid Ceta XXIII.

defense department was the first organization to attempt human mechanization, which was performed only upon able-bodied and mentally sound volunteers. Many were filled with all manner of techno-gadgets in an attempt to create the ultimate warrior. That entity has yet to arrive on the scene — but another insidious foe was discovered as a result of those experiments. After a number of implants had been performed, it was noticed that members of the original test groups were behaving strangely: they were more withdrawn, more secretive, and less predictable than before. In 2028 cybernetic testing was nearly brought to a halt when a military policeman named Carl Oshman, one of the first true cyber-soldiers, went AWOL from his base in Long Beach, California. Within three days, he had been responsible for the deaths of over thirty people, many of whom had been literally ripped apart by the warrior's mighty metal arms. Carl Oshman was finally destroyed by a grenade — ironically, his own — detonated by the young corporate security guard who was his final victim. Years of subsequent study have revealed that the "Oshman Incident" was only one example — a rather typical one, at that — of a psychological syndrome which is relatively common amongst cyberneticized humans. Often called *Cyber-Psychosis* by the media, the clinical name of this aberration is "Cybernetic Implant Rejection Syndrome", or "CIRS" (pronounced CURSE).

SIMULATING **CIRS**

Whenever a new Cyber System is implanted, the wearer must make a roll on the *CIRS Stat Chart* (see Section A 2). Add up the total number of Cyber Systems currently implanted in the character — Cyber Systems implanted directly into the brain count double — and use the column which covers this total. The result from the chart is called the *CIRS Stat,* and is subtracted from the character's Empathy (if this effects the Stat Bonus, don't forget to change any dependant Skill Totals). The CIRS Stat is cumulative — later additions may cause it to increase (and Empathy to decrease) even more. Whenever a really tense situation arises (such as combat, flight, harassment, etc), a roll is made on the *CIRS Response Chart*, and the current CIRS Stat is added to the roll to determine

the character's response. When the CIRS Stat reaches half of the character's Empathy, the character will begin acting in a brazen and arrogant fashion all of the time (players who feel that they are unable or unwilling to role-play the PC at this point should give it up and create another character; the old one will be taken over as an NPC by the GM). Rolls on the *CIRS Response Chart* will be made whenever any minor tension arises (arguments, equipment failure, loss of loved ones, bad customer service, etc), adding the current CIRS Stat to the roll. When the CIRS Stat equals the character's Empathy, the character will enter a psychopathic rage — the CIRS has struck. All actions will be dangerously erratic and violent, memory will be completely fuzzy, and no one will be trusted. Feelings of utter anger and helplessness have built to a level where nothing seems worthwhile except destruction and death. The character will be driven by an insane urge to kill or destroy nest everything which crosses his path — nothing is sacred, no one is safe. (Once again, Players may wish to hand the character over to the GM at this point) There is only one more roll which the Player can make: a SM/Re:X will allow the character to commit suicide. (After all, it's better than being blown to bits by a CorpCop's grenade...)

VISIBLE IMPLANTS

As common as Cyber Implants are, most are secretive, performed under secure or covert circumstances and physically well hidden. Revulsion and fear of cyborgs has not been totally conquered. In fact, attempts at "cosmetic" cybernization are mostly responses to these fears. Most people (even those with Implants) would prefer the nature (and existence) of these devices to be kept "under wraps." There are some individuals, however, who prefer to show off their enhancements, and some even revel in causing undue stress and anxiety to others (who they view as squeamish wimps incapable of handling "the hard life"). It is a fact that the visible display of Cyber Implants has a strong effect on others. For each easily visible Cyber Implant (not System), add 1 to the character's Presence Stat. If the Implant is obviously a weapon of some sort, add 2 instead (not to exceed 100).

CYBER SYSTEM DESCRIPTIONS

Available Cyber Systems are described below, and are broken into categories based on types of bodily functions.

Most Cyber Systems are rated either in terms of Mk# or Rtg# (Mark Number or Rating Number). Cyber Systems which produce quantitative or set effects are rated in terms of Mk#. Cyber Systems with high Mk#s are more powerful than those with lower Mk#s.

Cyber Systems which produce a bonus which is applied to maneuvers affected by stats and/or skills, are rated in terms of a Rtg#. The higher the Rtg# of a Cyber System, the larger the bonus it produces. The bonus generated by a Cyber System with a Rtg# parallels the "Standard Rank Bonus" used for Skill Ranks in character skill development (section 2.21). Consult the following chart to determine the bonus associated with a given Rtg#.

RATING NUMBER BONUS CHART

Rating	Bonus
1	5
2	10
3	15
4	20
5	25
6	30
7	35
8	40
9	45
10	50
11	52
12	54
13	56
14	58
15	60
16	62
17	64
18	66
19	68
20	70
21	71
22	72
23	73
24	74
25	75
26	76
27	77
28	78
29	79
30	80
31	81
32	81
33	82
34	82
35	83
36	83
37	84
38	84
39	85
40	85
41	86
42	86
43	87
44	87
45	88
46	88
47	89
48	89
49	90
50	90
60	95
70	100
80	105
90	110
100	115
150	135
200	160
250	185
300	210

CYBER SYSTEM CODES

Many Cyber Systems may be combined with others, or placed in sequences. Some may be implanted in any of several different body locations. The placement and interfacing of these Systems is only limited by the ingenuity of the player (and the PC's Credit account!). To aid the GM and players in this, the name of each System listed here is followed by a series of codes which provide a guideline to the schematic operation of the System. The codes are divided by dashes into three parts:

- **Input Functions:** denotes the System's source of energy or substance);
- **Internal Functions:** indicates what the System does with that energy/substance;
- **Output Functions:** indicates where the treated energy/substance is routed to after the System has done its job).

These codes are described below:

CYBER SYSTEMS CODES CHART

INPUT FUNCTION CODES

B = BRAIN; accepts waves/impulses directly from the brain

C = CYBER; accepts energy from other Cyber Systems or cybernetically compatible constructs (usually via internal NerveLink or external DNI hookup)

E = ENVIRONMENTAL; accepts physical/sensory input from the environment

M = MUSCLE; accepts kinetic energy from muscular movements

N = NERVES; accepts biosignals from organic/synthetic nerves

P = PHYSIOLOGY; accepts some organic fluid/hormone/substance

T = TELECOMM; accepts data via wireless transmission

INTERNAL FUNCTION CODES

A = AMPLIFICATION; of input signal

D = DISTRIBUTION; of energy/substance to output

F = FORMATTING; input against internally-created design

I = IMPEDANCE; of input signal (may be only partial)

0 = ORGANIZATION; of input according to set specifications

P = PROCESSING; of input via electronic data manipulation

S = STORAGE; of input energy/substance

T = TRANSLATION; of input signal to mode suitable for output :

OUTPUT FUNCTION CODES :

A = ACTUATE; somatic Cyber System impelled to perform desired action

B = BRAIN; sends waves/impulses directly into the brain

C = CYBER; sends energy to other Cyber Systems or cybernetically compatible constructs (usually via internal NerveLink or external DNI hookup)

E = ENVIRONMENTAL; sends output (usually energy) into the environ

M = MUSCLE; sends energy to muscular system, causing movement/effect

N = NERVES; sends biosignals to organic/synthetic nerves

P = PHYSIOLOGY; sends some fluid/hormone/substance into the body

T = TELECOMM; sends data via wireless transmission

Note: In any of the three positions, an "X" indicates that the System performs no such function. Entries in parentheses () indicate that such a function is possible for the System (given the proper equipment and skill), as an option (generally one of the given options may be chosen as a substitute for the primary function at no additional cost).

By making use of these Function Codes, the GM and players can come up with an amazing variety of individualized systems. There are two basic ways to achieve this: Combination and Sequencing.

CYBER SYSTEM COMBINATION

If two (or more) Cyber Systems can obtain input from the same source and direct output to the same Output Function, they may be combined into one hybrid System. Such combination requires an Elec Tech construction project of *Moderate* or *Hard* difficulty (GM's discretion). The hybrid System may be implanted with a single Implantation project (see below); the DL (Difficulty Level) is equal to the hardest of the original DL's involved. The Implantation roll receives a penalty of -30 (due to the complex and intricate nerve wiring necessary). Cyber System Combination is most desirable when only a limited amount of implant space exists (e.g., Visual Systems can only be placed in two places — a character who wants three Visual Systems implanted will have to combine at least two of them into one "eye"). Another good reason for combining Systems is that most infrared, ultrasound, or magnetopulse scans (unless performed at an extremely close range) will reveal the presence of an Implant, but not the exact number or type of Systems within it.

CYBER SYSTEM SEQUENCING

Cyber Systems can be strung in sequences, with one system's output routed directly into another System's input channels. The Systems involved are not actually combined, and may even be implanted in different areas of the body, although all such Systems must be connected by a length of NerveLink (see below) or tubing. In order for sequencing to be possible, the Function Codes of each System must contain either the "Cyber" or "Nerves" in the proper place (the first System in the sequence must have Cyber or Nerves output, while the last must have Cyber or Nerves input — any further Systems between these two extremes must have Cyber or Nerves (as appropriate) in both input and output positions).

IMPLANTATION

The Task Abbreviation given for Implantation of each System tells which column of the *Construction/Research Chart* will be used when the System is implanted (characters who are Cybernized before play may ignore these notes). As is typical of the post-industrial world of *Cyberspace,* parts are relatively inexpensive compared to labor costs. The base cost of Cyber Implantation is shown below (various factors, such as personal reaction, ethics, location and the CyberMedic's reputation can influence these base costs by up to 50% in either direction — these judgements are subjective and left to the GM). Most implantation projects of *Hard* or greater difficulty involve the cooperation of two or more CyberMedics (due to the number of hours of work involved).

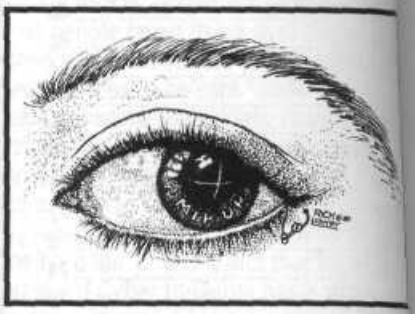
CYBER SYSTEM IMPLANTATION COSTS CHART

Implantation Difficulty Base	Cost for Implantation
Routine	25
Easy	50
Moderate	100
Hard	500
Complex	2500
Very Complex	10000
Absurd	100000

The cost figures given include all necessary parts, and are figured in standard World Dollars. Labor charges for implantation are *not* included (see above). In most cases, more than one System may be incorporated into a single Implant, although the cost increases substantially and the actual implantation process is a bit more difficult. Basically, for each System beyond the first in an Implant, the total cost of all Systems goes up 50% and the Implantation roll receives a penalty of -10 (e.g., two Systems in a single Implant would cost 150% of the total base cost of both Systems and the Implantation roll would receive a Penalty of -10; three Systems would cost 200% of the total base cost of all three and the Implantation rail would receive a Penalty of -20; etc.).

1.1 SENSORY SYSTEMS

These cybernizations affect the user's ability to perceive his environment.



1.1.1 VISUAL/SIGHT

Visual Systems are cybernetic sensors and processors which are designed to replace a human eye or otherwise enhance human vision. A Visual Implant contains one or more of the Systems described below, most of which are sensitive to various specific types of radiation. Any Visual System which receives its input directly from the environment (Input Code E) is housed in a false eye Implant. These Implants are designed to look like an actual eye of the correct color, although more decorative characters may have different colored irises installed at no extra cost (a popular option these days, especially in violet, crimson, pure black or pure white). If the character wishes the Implant to look unnatural (i.e., not camouflaged — metallic, synthetic, obviously cybernetic), the cost is decreased by 10%. "Stock" Visual Systems, being passive/sensory in nature, are always operating, although for an additional cost of $100 any System might be set with a Somatic Trigger which activates or deactivates the System (e.g., closing eyes hard while looking downward, etc.) — if more than one System is present within a single Implant each trigger must be set and paid for separately.

Note *Statistics provided are for ONE eye only.*

Timeline

2050

Jet-powered backpacks developed by various firms are now in common military and police use... Serendipity Corporation begins construction of a large space base in central Africa; they divert their profitable lunar raw materials to a secret orbital project of their own.

2051

LHT (Laser/Hydrogen Triggering) rockets are developed, decreasing travel time immensely: trips to Mars can now be made in ten days.

Megavision: Environ➡Amp➡Nerves (Cyber) [E-A-N(C)] Allows enhanced vision at great distances, and multiplies the apparent size of objects at shorter distances. Megavision Systems are assigned a Mk# which equals their magnification and range multipliers (i.e., Mk.3 megavision triples the range of "normal" vision and allows 3x magnification at "normal" ranges).

Microvision: Environ➡Amp➡Nerves (Cyber) [E-A-N(C)] Allows enhanced perception of objects which are of extremely small size and are viewed at very close range (i.e., within 20 cm or so). Microvision Systems are assigned a Mk# which rates the quality of the system's microscopic magnification; Mk 1 Systems magnify objects 100 times, and each successive Mk# increases the magnification by a factor of 100 (e.g., Mk 2 = 200x, Mk 3 = 300x, Mk 4 = 400x, etc.).

Visual Clarity: Environ➡Amp➡Nerves (Cyber) [E-A-N(C)] Allows greater definition of all objects within visual range, adding a Rating Bonus to all Perception rolls defined by the Rtg# of the Implant (the GM may wish to apply this Mod to other related rolls as he sees fit).

Spectral **Range:** Environ➡Amp/Translate➡Nerves(Cyber) [E-AT-N(C)] Allows the wearer to perceive wavelengths of radiation which are significantly longer (or shorter) than normally visual light waves. The System may include sensitivity toward any number of the following "spectral sets" at no penalty (each set must be paid for separately, but they are all considered one System): Short Waves, Standard Radio Waves, VHF, UHF, SHF (Radar), Ultraviolet, X-Rays, Gamma Radiation, Infrared, or Microwaves.

Thermal **Vision:** Environ➡Formatting➡Nerves (Cyber) [E-F-N(C)] Allows the viewer to perceive objects in terms of their temperature — the difference between these and Infrared Range Systems is that the target object need not be emanating heat to be visible (as is the case with IR sensitivity). The actual temperature of an object determines the color it appears to be (as shown in the table below); brightness and "mixed colors" serve to provide more detail than the simplistic categories given here.

Color	Temp (F°)	Temp (C)
White	150 & up	66 & up
Red	130-149	55-65
Orange	100-129	38-54
Yellow	80-99	27-37
Green	70-79	21-26
Blue	50-69	10-20
Indigo	20-49	(-7)-9
Violet	19 & down	(-8) & down

Lowlight: Environ➡Amp➡Nerves(Cyber) [E-A-N(C)] Allows the viewer to better perceive objects in dim light settings (anywhere from -5 for light shadows to -50 for total darkness). Such a System is given a Rtg#, and adds a Rating Bonus to perception and other rolls which require visual discrimination. Note that the resultant total may totally eliminate dim light penalties, and even raise these factors to positive levels.

Antiglare: Environ➡Impedance➡Nerves (Cyber) [E-I-N(C)] Protects the viewer from the optical damage or difficulties which arise due to bright light exposure. This System is colloquially referred to as "shades". Shades are popular amongst riot control cops whose units frequently rely on the use of "Field Blinder" lasers as well as asteroid miners and lunar surface workers whose natural environments provide little protection from the burning rays of the sun. They are given a Rtg# which adds a Rating Bonus to offset any glare penalties set by the GM. Penalties may be brought to zero by the adjustment, but may never be raised to positive values.A character's Antiglare Rating may also be used to add a bonus to a RR to resist the effects of being dazed by sudden flashes of bright light (like that produced by a flash grenade).

Microphoto: Environ➡Storage/Translation➡None(Cyber/Nerves) [E-ST-X(CN)] Allows the viewer to record photographic images of whatever he sees. These images are stored on miniature hi-resolution "film", which is available in most corporate sectors (it is used for a variety of overt activities). Microphoto Systems are rated by Mk#; each Mk# adds one to the number of exposures stored. An enhanced personal viewer unit or photographic enlarger is necessary to create normal-sized pictures from these microphotos, although for an additional $1,000 the System may be built with an internal scanner which allows the wearer to peruse past photos (within his head) at leisure. Also, a Microvision System (see above) of Mk.5 or better may be used to view the film, once ejected, with ease. Cost of film replacements: $10 per pack of 10 exposures.

NOTE: *Removal or reloading of film requires a SM/Ag:M.*

Microvideo: Environ➡Storage/Translation➡None(Cyber/Nerves) [E-ST-X(CN)] Allows the viewer to record motion picture images of whatever he sees. Images are stored on miniature hi-resolution videotape, which is available in most corporate sectors (it is used for a variety of covert activities). Rated by Mk#; each Mk# allows one full minute of stored visual data. An enhanced personal viewer unit or video duplicator is necessary to create normal-sized videotape from this micro-videotape, although for an additional $2,000 the System may be built with an internal scanner which allows the wearer to view previously shot scenes (within his head). Cost of micro-videotape: $20 per minute of exposure.

NOTE: *Removal or reloading of videotape requires a SM/Ag:M.*

Timeline

2052

A conglomerate of MegaCorps (led by IGI) puts up the effort to build the first Mars colony. Used chiefly for mining and materials research, the achievement is a marking point in the decline of nations; none of which were capable of funding so immense an undertaking.

2054

Practical Laser weaponry is developed by the Oskovska MegaCorp.

2055

A surge of activity around the Leyland-Carlisle orbital lab is noted by the UN, but the Pharmochemical MegaCorp is silent…Vanna White retires from *Wheel of Fortune.*

Targeting: Environ➡Formatting➡Cyber [E-F-C] Functions as an internal Heads-Up-Display, registering target range and position against a cross-haired scope and displaying these factors in small characters at the edge of the visual field. Targeting Systems are of little use unless linked to a Smart Gun or Programmed Response module, either of which can use the targeting information to increase the accuracy of their shots. This System is given a Rtg# which adds a Rating Bonus to the character's OB with a Smart Gun.

Internal Readout: Cyber➡Translate/Formatting➡Nerves [C-TF-N] Receives input from other systems, and prints this data out in the form of small glowing characters which appear in the corner of the wearer's field of vision. Viewed from outside, there is no way to tell that the wearer is receiving information. Input for these Systems may come from a Data Transmission System or other internally-mounted System (via NerveLink), or from some external source (requiring a DNI hookup with the source device).

Visual Processor: Environ(Cyber)➡Processing/Translation/Storage➡Brain/Cyber [E(C)-PTS-BC] This device makes use of a tiny microprocessor which stores viewed data in digital arrays. Patched in to the ocular nerves directly behind the eye (or Visual Implant), it does not count as a Visual System. Rather, it is considered a "neurological" one, and therefore counts double for purposes of CIRS. Rated by Mk#, each Mk# allows one minute of stored visual data. The Processor is capable of searching for, replaying and translating all stored data by mental command (this requires a Cyber Attunement roll and is "seen" in the wearer's mind just like a perfectly visualized memory). In addition, if the wearer is equipped with a DNI-link or Visual Data Transmission, the Implant can route stored data through these output channels to be translated by another computer.

Timeline

2056

It is determined that Leyland-Carlisle is constructing a cluster of huge spherical objects; speculation about a starship is rampant… *Wheel* is cancelled due to plummeting ratings.

2057

The mysterious Leyland-Carlisle 'starship' — seemingly little more than a massive set of spherical tanks and an impossibly small drive system — is launched from earth orbit; its trajectory is calculated to send it into low orbit around Venus late next year. Construction on another ship begins.

1.1.2 *AUDITORY/HEARING*

Auditory Systems are cybernetic sensors or processors which are designed to replace a human ear or otherwise enhance human hearing. An Auditory Implant contains one or more of the Systems described below, most of which are sensitive to various specific types of atmospheric vibration. Any Auditory System which receives its input directly from the environment (Input Code E) is housed in a false ear Implant. These Implants are designed to look like an actual ear, although if the character desires the Implant to look unnatural (i.e., obviously cybernetic), the total "parts" cost is decreased by 10%. "Stock" Auditory Systems are passive/sensory in nature, and are always operating, although for an additional cost of $100 any System may be set with a Somatic Trigger which activates or deactivates the System. These triggers are generally manipulated by moving the muscles of the cheek and jaw (e.g., pressing molars together while tensing the I muscles of the right cheek, etc.) If more than one System is present within a single Implant, each trigger must be set and paid for separately.

NOTE: *Statistics provided below are for* ***one*** *ear only.*

Directional Mike: Environ➡Impedance➡Nerves(Cyber) [E-I-N(C)] Provides a narrowed field of hearing for the wearer, effectively limiting auditory input to a cone-shaped area (this eliminates any extraneous noises from other areas around the wearer). The direction which the mike is set at is semi-permanent (the wearer must turn his head to pick up sounds from other vectors), but may be altered by a CyberMedic who succeeds in a SM/CybT:L. Four types are available, differing only in terms of the "width of field": 30 degrees, 10 degrees, 1 degree and variable (this last allows the wearer to increase or decrease the width of field by tensing the muscles of the jaw).Sound

Sound Amplifier: Environ➡Amp➡Nerves(Cyber) [E-A-N(C)] Magnifies the volume of all sounds heard (and increases the maximum listening range by the same amount). Amplifier Systems are rated in Mk#s; each Mk# adds 1x amplification/range to the human normal base. The drawback, however, is that they amplify *All* sounds in the area of effect — not just those desired. Directional Mikes or Sound-Out Systems may be co-implanted in a Cyber System Combination to solve this problem.

Sound-Edit-Out: Nerves(Cyber)➟Impedance/Organization/Processing➟Brain [N(C)-IOP-B] Allows the wearer to specify which particular sound(s) in the environment he wishes to concentrate upon, and nullifies the nerve signals which carry any other sounds. Patched in to the auditory nerve directly behind the ear (or Auditory Implant), it does not count as an Auditory System. It does, however, count towards the total number of Implants for the brain — see *Neurological Systems* below. The System is primed by a Somatic Trigger (such as twitching the muscles of the lower jaw), and immediately begins cycling through all audible sounds in the area one by one, filtering out all but the current sample. When the desired sample is heard, the wearer repeats the trigger act, locking the System in that mode until the trigger is performed a third time (or the desired sound ceases). A Sound-Edit-Out System is given a Rtg# which adds a Rating Bonus to auditory Perception rolls (at the GM's discretion, other skills/maneuvers may receive this bonus as well).

Sonic Range: Environ➟Amp/Translation➟Nerves(Cyber) [E-AT-N(C)] Allows the wearer to hear vibrations, the wavelengths of which are significantly longer (or shorter) than those of normally audible sounds. The Sonic Range System may include sensitivity toward any number of the following "sonic sets" at no penalty (each set must be paid for separately, but they all are considered one System): Subsonic Frequency, Short Wave, Low Frequency, Modulated Frequency (FM), High Frequency, Very High Frequency (VHF), Ultra-High Frequency (UHF), Super High Frequency/Radar (SHF), or Extra High Frequency (EHF).

Audiorecord: Environ➟Storage/Translation➟None(Cyber/Nerves)[E-ST-X(CN)] Allows the listener to make internal recordings of any sounds he hears. These recordings are stored on miniature hi-fidelity audio tapes, which can be purchased in nearly any corporate sector. Audiorecord Systems are rated by Mk#; each Mk# allows five full minutes of stored audio data. A microtape player is necessary for replaying these tapes, although for an additional $500 the System may be built with an internal scanner and speaker which allows the wearer to hear previously recorded segments (within his head). Cost of micro-audiotape: $10 per five minutes of playing time.

NOTE: *Removal or reloading of microtape requires a SM/Ag:M.*

Internal Speaker: Cyber➟Amp/Distribution➟Nerves [C-AD-N] Allows input signals to be heard within the confines of the wearer's own head. Such signals may come from any other audio device, via NerveLink or telecommunications channels (requiring an Audio Data Receiver).

Audio Processor: Environ(Cyber)➟Processing/Translation/Storage➟Brain/Cyber [E(C)-PTS-BC] Makes use of a tiny microprocessor which stores auditory data in digital arrays. Patched in to the auditory nerve beyond the inner ear (or Auditory Implant), it does not count as an Auditory System. It does count toward the total number of Implants for the brain — see *Neurological Systems* below. These Systems are rated by Mk#; each Mk# allows one minute of stored audio data. The Processor is capable of searching for, replaying and translating all stored data by mental command (this requires a Cyber Attunement roll and is "heard" in the wearer's mind just like a perfectly recalled memory). In addition, if the wearer is equipped with a DNI-link or Audio Data Transmitter (see below), the Implant can route stored data through these output channels to be translated by another computer.

1.1.3 *GUSTATORY/TASTE*

Gustatory Systems are cybernetic sensors or processors which enhance the standard human sense of taste. A Gustatory Implant contains one or more of the Systems described below, most of which are sensitive to various specific types of taste-producing chemicals. Any Gustatory System which receives its input directly from the environment (Input Code E) is housed in a false tongue Implant or placed within the tongue itself. "Stock" Gustatory Systems are passive/sensory in nature, and are always operating, although for an additional cost of $100 any System might be set with a specific Somatic Trigger which activates or deactivates the System. The required trigger mechanisms usually involve moving the tongue and/or jaw in some specific combination (e.g., touching the tongue to the roof of the mouth while moving the jaw to the right, etc.). If more than one System is present within a single Implant, each trigger must be set and payed for separately.

Taste Sensor: Environ➟Amp➟Nerves (Cyber) [E-A-N(C)] A small processing device implanted in the tongue, the Taste Sensor categorizes gustatory input before passing its signal on to the brain. The Rtg# of the System provides a Rating Bonus to Perception skill when attempting to identify known tastes (it does nothing for previously untasted substances).

Taste Processor: Environ(Cyber)➟Processing/Translation/Storage➟Brain/Storage [E(C)-PTS-BS] A tiny microprocessor which stores gustatory data in digital arrays, and can process input from the tongue itself or another Cyber System (via NerveLink). This System is rated by Mk#; each Mk# allows ten specific tastes to be stored. The Processor is capable of searching for, replaying and translating all stored data by mental command (this requires a Cyber Attunement roll, and the wearer actually "tastes"

Timeline

2058

Almost the entire population of Papua New Guinea suddenly claims to have been contacted by other-worldly "visitors" 10 years previously... The L-C ship arrives at Venus, and a fascinated world watches as the tanks begin dumping something into the Venus atmosphere. L-C announces that it has claimed Earth's sister planet as its own, and is beginning a terraforming project: the engineered life being dumped will convert the Venisuan atmosphere. The UN is in an uproar... *Wheel of Torture,* a game show whose time has come, achieves world-wide acclaim.

— or thinks he tastes — the replayed sensations). In addition, if the wearer is equipped with a DNI-link or Taste Data Transmission, the Implant can route stored data through these output channels to be translated by another computer.

1.1.4 *OLFACTORY/SMELL*

Olfactory Systems are cybernetic sensors or processors which enhance the standard human sense of smell. An Olfactory Implant contains one or more of the Systems described below, most of which are sensitive to various specific types of scent-producing chemicals. Any Olfactory System which receives its input directly from the environment (Input Code E) is housed in a false nose Implant or placed within the nasal cavity. "Stock" Olfactory Systems are passive/sensory in nature, and are always operating, although for an additional cost of $100 any System may be set with a specific Somatic Trigger which activates or deactivates the System. The trigger mechanisms usually involve moving the facial muscles around the nose and/or inhaling or exhaling in some specific combination (e.g., flaring the nostrils while exhaling sharply, etc). If more than one System is present within a single Implant, each trigger must be set and paid for separately.

Olfactory Sensor: Environ(Cyber)➡Amp➡Nerves(Cyber) [E(C)-A-N(C)] A small processing device implanted along the olfactory nerve, the Olfactory Sensor categorizes input before passing its signal on to the brain. The Rtg# of the System provides a Rating Bonus to Perception skill when attempting to identify known scents (it does nothing for previously unknown substances).

Directional Scent: Environ➡Impedance➡Nerves(Cyber) [E-I-N(C)] Provides a narrowed field of olfactory perception, effectively limiting input to a cone-shaped area (this eliminates any extraneous scents from other areas around the wearer). The wearer must turn his head to pick up scents from other vectors). Four types are available, differing only in terms of the "width of field": 30 degrees, 10 degrees, 1 degree and variable (this last allows the wearer to increase or decrease the width of field by Somatic Trigger such as flaring the nostrils, etc.).

Olfactory Range: Environ➡Amp➡Nerves (Cyber) [E-A-N(C)] Increases the maximum distance over which the wearer can pick up scents. Rated by Mk#; each Mk# adds +5 meters to the range.

Scent Edit-Out: Nerves(Cyber)➡Impedance/Organization/Processing➡Brain [N(C)-IOP-B] Allows the wearer to specify which particular scent(s) in the environment he wishes to concentrate upon, and nullifies the nerve signals which carry any other scents. Patched in to the olfactory nerve, Scent-Edit-Out does not count as an Olfactory System. It does, however, count toward the total number of Implants for the brain — see *Neurological Systems* below. The System is primed by a Somatic Trigger (such as inhaling sharply, etc.), and immediately begins cycling through all scents in the area one by one, filtering out all but the current sample. When the desired sample is smelled, the wearer repeats the trigger act, locking the System in that mode until the trigger is performed a third time (or the desired scent disappears). A Scent-Out System is given a Rtg# which adds a Rating Bonus to auditory Perception rolls (at the GM's discretion, other skills/maneuvers may receive this bonus as well).

Scent Processor: Environ(Cyber)➡Processing/Storage/Translation➡Brain/Cyber [E(C)-PST-BC] A tiny microprocessor which stores olfactory data in digital arrays, and can process input from the olfactory nerve itself or another Cyber System (via NerveLink). These Systems are rated by Mk#; each Mk# allows ten specific scents to be stored. The Processor is capable of searching for, replaying and translating all stored data by mental command (this requires a Cyber Attunement roll, and the wearer actually "smells" — or thinks he smells — the replayed sensations). In addition, if the wearer is equipped with a DNI link or Scent Data Transmitter (see below), the Implant can route stored data through these output channels to be translated by another Computer.

1.1.5 *TACTILE/TOUCH*

Tactile Systems are cybernetic sensors and processors which enhance the standard human sense of touch. Any Tactile System which receives its input directly from the environment (Input Code E) is housed in a Tactile Implant, placed just under the skin and linked into the local afferent nerve network (generally in the fingertips, although other possibilities may be desirable). "Stock" Tactile Systems are passive/sensory in nature, and are always operating, although for an additional cost of $100 any System might be set with a specific Somatic Trigger which activates or deactivates the System (e.g., touching the implanted area with the right index finger, etc.). If more than one System is present within a single Implant, each trigger must be set and paid for separately.

Sensitouch: Environ➡Amp/Distribution/Translation➡Nerves(Cyber) [E-ADT-N(C)] Nerve ending enhancers placed in small skin grafts, Sensitouch pads are given a Rtg# which generate a Rating Bonus for Tactile Perception rolls, as well as any manipulatory maneuvers which require tactile sensitivity (such as repairing small mechanical objects, etc.). The Sensitouchpads are about one square centimeter in area, and are generally placed on all ten digits (although other parts of the body might be used as well).

Timeline

2059

Tensions rise between Japanese and American governments over petty cultural differences; triple Superpower alliance threatened.

2060

NRA petitions for violent toy ban as age restrictions on the purchase of firearms is abolished in the United States.

2061

Japanese mercenary troops, employed by that government, begin covert operations on mainland America; power generation sites and agricultural centers are targeted. Enraged, the US pulls out of the Superpower alliance; an act met with apathy by other world players.

Mile **Edit-out**: Nerves➡Impedance/Organization/Processing➡Brain [N-IOP-B] Allows the wearer to specify which particular tactile nerve signals he wishes to concentrate upon, and nullifies all other tactile nerve signals. Patched into the central nervous system at the base of the neck, Tactile Edit-Out does not count as a Mile System. It does, however, count toward the total number of Implants for the brain — see *Neurological Systems* below. The System is primed by a Somatic Trigger (such as scratching the base of the neck while facing left, etc.), and immediately begins cycling through all incoming tactile sensations one by one, filtering out all but the current sample. When the desired sample is felt, the wearer repeats the trigger act, locking the System in that mode until the trigger is performed a third time (or the desired sensation ceases). A Tactile Edit-Out System is given a Rtg# which adds a Rating Bonus to tactile Perception rolls (at the GM's discretion, other associated skills/maneuvers may receive this bonus as well).

1.1.6 *THERMAL/TEMPERATURE*

Thermal Systems are cybernetic sensors and processors which enhance the standard human sense of temperature. They operate much as do Tactile Systems, and could be placed in any Body Location. Any Thermal System which receives its input directly from the environment (Input Code E) is housed in a Thermal Implant, which is placed just under the skin and linked into the local afferent nerve network. "Stock" Thermal Systems are passive/sensory in nature, and are always operating, although for an additional cost of $100 any System might be set with a specific Somatic Trigger which activates or deactivates the System (e.g., flexing and holding the muscles directly around the Implant for five seconds, etc.). If more than one System is present within a single Implant each trigger must be set and paid for separately.

Thermal Sense: Environ—Translation—Brain(Cyber) [E-T-B(C)] Little more than a highly accurate thermometer placed near the skin anywhere on the body, this unit measures the precise temperature of the surrounding air in both Fahrenheit and Celsius degrees, relaying this data to the brain or another Cyber System. The wearer is instantly (and constantly) informed.

Thermal Edit-out: Nerves➡Impedance/Organization/Processing➡Brain [N-IOP-B] Allows the wearer to ignore (actually, to be totally oblivious to) the effects of temperature. Patched into the central nervous system at the base of the neck, Thermal Edit-Out does not count as a Thermal System. It does, however, count toward the total number of Implants for the brain — see *Neurological Systems* below. There are some dangers associated with this System: in dangerously hot or cold environments, (where hypothermia, frostbite, heat prostration, and other such ailments are likely) the wearer's body will begin taking damage without the wearer's knowledge (in such situations, discomfort can be a necessary warning).

1.1.7 *SPECIAL SENSORY SYSTEMS*

The two Systems which follow are specialized versions of new sensory input channels into the human body. Each requires hook-up to another Cyber System which serves as the "output device" — allowing the wearer to make sense of the data received.

Bioradar. Environ➡Formatting➡Cyber(Nerves) [E-F-C(N)] A specialized data transceiver which can be used as an internal radar device, emanating high-frequency waves and monitoring the conditions of their bounceback to determine the presence and location of objects. Rated by Mk#, each Mk# adds 50 meters to the effective range of the System. BipRadar requires some sort of output device to route its signal to, such as a NAC (Neurological Activity Controller),or an Internal or External Readout System.

Biosonar: Environ➡Formatting➡Cyber (Nerves) [E-F-C(N)] Operating much as the BioRadar System above, but sending lower frequency sound waves which are especially useful underwater. Rated by Mk#, each Mk# adds 50 meters to the effective range of the System. BioSonar requires some sort of output device to route its signal to, such as a NAC, or an Internal or External Readout System.

1.2 *SOMATIC SYSTEMS*

These cyber systems are concerned with output as opposed to sensory input.

1.2.1 *VOICE*

Vocal Systems are audio effect devices and processors which enhance or alter the human voice. All of these Systems are implanted in the voice box or larynx. "Stock" Vocal Systems are always operating, although for an additional cost of $100 any System might be set with a specific Somatic Trigger which activates or deactivates the System (e.g., making a low grumbling noise in the throat, etc.). If more than one System is present within a single Implant, each trigger must be set and paid for separately.

Vocal Range: Muscle➡Formatting➡Muscle [M-F-M] Often used by singers and stage performers, this device increases the wearer's vocal range (in terms of octaves). Rated by Mk#, each Mk# adds a range of one octave to the wearer's normal vocal abilities. This range must be specified up or down.

Vocal Modulator: Muscle(Cyber)➡Formatting➡Muscle [M(C)-F-M] Used by the strangest and most experimental singers, this unit allows the wearer to create bizarre voice effects, such as may be done with synthesizers. Rated by Mk#,

Timeline

2062

Japanese/American mercenary war begins in earnest. Internment and deportations commence, but soon fizzle out as corporate pressure is applied... A rash of "UFO" sightings reported from the Mediterranean to the Ivory Coast... The United Kingdom, chafing under its lesser role in the EEC, formally retakes Ireland and asserts full control of Scotland.

2063

Already tenuous communications with China virtually cease. An internal power struggle is suspected, though stories of country-wide strife leak out... India reclaims all territory captured from it by Red Chinese forces.

each Mk# adds one voice effect to the wearer's repertoire. Popular effects include "Grumble", "Echobox", "Fuzztone", "Reverb", "Helium" and "Banshee" tones.

Vocal Amplifier: Muscle➞Amp➞ Environ [M-A-E] Not much more than an implanted microphone and amp system, this unit increases the wearer's vocal volume and range (in terms of distance). Rated by Mk#, each Mk# adds .5x amplification to the wearer's voice (e.g., a Mk 4 unit multiplies volume by 2x).

Subvocal Transmission: Muscle➞Amp➞ Telecomm(Cyber) [M-A-T(C)] Allows wearer to transmit messages which are spoken extremely quietly (barely whispering in the back of one's own mouth). Rated by Mk#, each Mk# adds 10 meters of transmission range. As an alternative, a Mk 1 unit may be patched into an internal transmission device via NerveLink.

Vocal Emulator: Cyber➞Storage/ Translation➞Muscle/Nerves [C-ST-MN] A specialized microprocessor which electronically stores voiceprints and acts in synch with the laryngeal muscles to duplicate these voices when the wearer speaks, effectively mimicking other people. Input (voices to emulate) may be set in the unit when implanted (assuming voiceprints are available), or may come from Auditory Systems. In addition, special NACjack programs are available (sold as gimmicks or on the black market), which can download the voices of famous people or common "types". The Vocal Emulator is rated by Mk#; each Mk# allows the device to store one voiceprint.

1.2.2 *MANIPULATION*

Manipulation Systems are various sorts of artificial hands. All are operated by the neural commands which once controlled movement of the original hand. The costs given are for Implants which look like the actual human hand they replaced (as noted previously, the cost drops by 10% if the wearer wishes the Implant to appear cybernetic rather than biological). All of the "Hands" listed below are capable of sustaining more damage than a human hand. Such prostheses have 40 Cyberstructure Hit Points. Any hits to the Hand cause no hit damage to the person — however, the Cyberstructure Hits of the Hand are decreased. In addition, any critical hits which indicate breakage of the Hand will only do so if the Hand fails an RR (points of damage delivered vs hits remaining in "Hand").

Cyberhand: Muscle/Nerves (Cyber)➞ Translation➞Amp [MN(C)-T-A] An advanced myoelectric prosthesis, a CyberHand is perfectly capable of performing all normal hand movements. They are generally used as replacements for hands lost due to accident or combat. Extra functions/capabilities can be built into the unit at additional cost; double-jointedness, width of grasp, length of fingers, even extra fingers can be added. The costs of such alterations are between $100 and $1,000, depending on the specifics.

Fasthand: Muscle/Nerves(Cyber)➞ Translation➞Actuate [MN(C)-T-A] A specialized CyberHand model, this unit has a built in nerve enhancer which affects manipulative speed. given a Rtg#, the FastHand adds a Ratings Bonus to all maneuvers requiring such ability (keyboard operation, quick draw of weapons, etc.).

Stronghand: Muscle/Nerves (Cyber)➞ Translation➞Actuate [MN(C)-T-A] A specialized CyberHand model, the StrongHand is made of superior alloys and neomuscle fibers. Given a Rtg#, the unit adds a Rating Bonus to all Martial Arts striking and Brawling attacks, and hand maneuvers requiring strength. In addition, each Rtg# adds 2 Cyberstructure Hit Points to the StrongHand itself.

Eye/Hand Coordinator: Muscle/Nerves(Cyber)➞Formatting/ Translation➞Muscle/Nerves(Cyber) [MN(C)-FT-MN(C)] The Eye/Hand Coordinator is a small microprocessor implanted along the efferent nerves of one hand and connected to the wearer's optic nerves. Given a Rtg#, the Eye/Hand Coordinator grants wearer a Rating Bonus towards all manipulative maneuversrequiring agility and precision (like targeting a firearm). If wearer has a Visual Clarity or Targeting System NerveLinked to this unit, Bonuses from these devices are cumulative.

1.2.3 *LIMBS*

Limb Systems are, of course, artificial limbs. All are operated by the neural commands which once controlled movement of the original limb. The costs given are for Implants which look like the actual human limb replaced by the Implant (as noted previously, the cost drops by 10% if the wearer wishes the Implant to appear cybernetic rather than biological). All of the "Limbs" listed below are capable of sustaining more damage than a human limb. Such prostheses have 80 Cyberstructure Hit Points. Any hits to the Cyber Limb cause no damage to the person; however, the Cyberstructure Hits of the Limb are decreased. Also, any critical hits which indicate breakage of the Limb will only do so if the Limb fails an RR (points of damage delivered vs hits remaining in "Limb"). Because a Limb System includes the attached cybernetic hand/foot, each Limb Systems counts as two Cyber Systems for purposes of totalling the number of implanted Systems when checking for increases in the CIRS Stat.

Timeline

2064

Buddhist monks in Korea claim to have had visions of earth under the dominion of horrifying alien beasts; the visions are so stark that hundreds of monks publicly kill themselves to draw attention to earth's impending doom... Torrential mudslides in the Philippines claim thousands of lives; there are reports of mud raining down from the heavens during destructive monsoons.

2065

Serendipity's much spied-upon but never acknowledged orbital habitat is complete. Christened *Crystal Palace,* it is designed to house 12,000 people in a 5 mile long hollow cylindrical station which spins to simulate gravity, and is fully self-sustaining.

Cyberarm: Muscle/Nerves(Cyber)➡Translation➡Actuate [MN(C)-T-A] A myoelectric prosthesis capable of performing all normal arm movements, includes a fleshcried CyberHand (if character wants one of the other Hand models, subtract $3,000 from its cost and apply the difference to the cost of the CyberArm). Originally used as replacements for arms lost due to accident or combat, implantation of these units has become relatively popular with mercenaries due to their ability to absorb punishment. Extra functions/capabilities can be built into a cyberarm at an additional cost; length, mass, maximum pivot of elbow, etc. The costs of such alterations are between $100 and $1,000, depending on the specifics.

Cyberleg: Muscle/Nerves(Cyber)➡Translation➡Actuate [MN(C)-T-A] A myoelectric prosthesis capable of performing all normal leg movements, includes attached CyberFoot (not listed — see CyberHand). Extra functions/capabilities can be built in at an additional cost; length, mass, maximum pivot of knee/ankle, etc. The costs of such alterations are between $100 and $1,000, depending on the specifics.

FastArm: Muscle/Nerves(Cyber)➡Translation-Actuate [MN(C)-T-A] A specialized CyberArm model, this unit has a built in nerve enhancer which affects its overall speed. Includes attached FastHand of the same Rating as the FastArm (if character wants one of the other Hand models, subtract $3,000 from its cost and apply the difference to the cost of the FastArm). Given a Rtg#, the FastArm adds a Rating Bonus to all maneuvers requiring quick arm movement (e.g., getting the first strike in during hand-to-hand melee, etc.).

FastLeg: Muscle/Nerves(Cyber)➡Translation➡Actuate [MN(C)-T-A] A specialized CyberLeg model with a built in nerve enhancer which affects its overall speed. Includes attached FastFoot (not listed — see FastHand). As may be obvious, wearer must have both legs done or his agility will suffer severely. Given a Rtg#, the FastLeg adds a Rating Bonus to all maneuvers requiring quick leg movement (e.g., Movement Rate, etc.).

StrongArm: Muscle/Nerves(Cyber)➡Translation➡Actuate [MN(C)-T-A] A specialized CyberArm model made of superior alloys and neomuscle fibers. Includes attached StrongHand of the same Rating as the StrongArm (if character wants one of the other *Hand* models, subtract $3,000 from its cost and apply the difference to the cost of the StrongArm). Given a Rtg#, the StrongArm adds a Rating Bonus to all maneuvers requiring arm strength (throwing range, melee weapons, Martial Arts, etc.). Each Rtg# adds 2 Cyberstructure Hit Points to the StongArm itself.

StrongLeg: Muscle/Nerves(Cyber)➡Translation➡Actuate [MN(C)-T-A] A specialized CyberLeg model made of superior alloys and neomuscle fibers. Includes attached StongFoot (not listed — see StrongHand). The wearer must have both legs done or his agility will suffer severely. Given a Rtg#, StrongLeg adds a Rating Bonus to all maneuvers requiring leg strength (including Climbing, Swimming, etc.). In addition, each Rtg# adds 2 Cyberstructure Hit Points to the StongLeg itself.

AgileArm: Muscle/Nerves(Cyber)➡Translation➡Actuate [MN(C)-T-A] A specialized CyberArm model with a built in somatic guidance/feedback system, the AgileArm moves with perfect smoothness and grace. Includes attached CyberHand (if character wants one of the other Hand models, subtract $3,000 from its cost and apply the difference to the cost of the AgileArm). Given a Rtg#, the AgileArm adds a Rating Bonus to all maneuvers requiring somatic agility (including Acrobatics, throwing aim, etc.).

AgileLeg: Muscle/Nerves(Cyber)➡Translation➡Actuate [MN(C)-T-A] A specialized CyberLeg model with a built in somatic guidance/feedback system. Includes attached CyberFoot (not listed — see CyberHand). The wearer must have both legs done or his agility will suffer severely. Given a Rtg#, the AgileLeg adds a Rating Bonus to all maneuvers requiring precise leg movement (Acrobatics, Climbing, Dance, etc.).

1.2.4 *REFLEXES*

The two Systems which follow are alternate methods of enhancing the wearer's reflex speed. Each possesses its own peculiarities.

Nerve Booster: Nerves➡Amp/Formatting➡Nerves [N-AF-N] A microprocessor implanted at the base of the neck, the Nerve Booster amplifies and speeds all neuromotor signals. Given a Rtg#, the Nerve Booster adds its Rating Bonus to the character's Quickness Stat Bonus. This will subsequently enhance all of the character's Quickness-based skills, as well as increase his DB. An ingrained part of the wearer's central nervous system, this device counts as two for purposes of totalling the number of Cyber Systems implanted.

Adrenal Booster: Nerves➡Amp➡Physiology [N-A-P] Attached to each adrenal cortex, this device monitors the body's regular use of adrenaline and can increase the "dose" somewhat. Given a Rtg#, the Adrenal Booster adds its Rating Bonus to the character's Quickness, Constitution and Strength Stat Bonuses whenever a stressful situation arises (combat, disaster, etc.). At the same time, Self Discipline and Reasoning Stat Bonuses suffer a corresponding penalty. These effects wear off 1-10 minutes after the Adrenal Booster is activated. The Adrenal Booster will activate a maximum of only once every ten minutes.

Timeline

2066

Eleven orbital constructs and satellites inexplicably plummet to earth over the course of a single year; MegaCorp scientists are mystified and cannot explain the strange events.

2067

Canada begins extensive Aqualogy development off of the coast of British Columbia… The UK, over objections of other EEC members, annexes Libya, Kenya, and Tunisia — claiming that they always retained rights to those colonies.

2068

A strangely pacified China reopens diplomatic channels with many western nations. Rumors abound of a widespread rash of mutant births in that country.

1.3 PHYSIOLOGICAL SYSTEMS

These affect the internal functioning of the body, as opposed to altering sensory input or producing different 'abilities'.

1.3.1 REPRODUCTIVE

Contraceptive (Male): Physiology➡Impedance➡None [P-I-X] A 100% effective contraceptive device implanted in the vas deferens.

Contraceptive (Female): Physiology➡Impedance➡None [P-I-X] A 100% effective contraceptive device implanted in the fallopian tubes.

Proceptive (Female): None➡Distribution➡Physiology [X-D-P] An electrostimulator which prompts the female body to produce ovum regardless of menstrual stage, this unit grants a 90% chance of ovulation.

Ovulation Control: Physiology➡Distribution/Impedance➡ Physiology [P-DI-P] Functions as a combination of the Contraceptive and Proceptive (Female) Systems described above. Must be linked to a trigger System (Somatic, Thought, or Sound Trigger) in order to activate/deactivate either function.

Sperm/Ovum Filtering: Physiology➡Impedance➡ Physiology [P-I-P] A device which screens all sperm/ovum cells with a DNA check, allowing only perfect cells to continue into the physiological System. The result is offspring free of mutation or congenital birth defects.

1.3.2 MUSCULAR/SKELETAL

The following devices are not "Systems" at all, but synthetic muscle or bone replacements which offer special advantages to their wearer. Rather than diverge upon a lengthy explanation of the human anatomy, these rules treat such Implants by Body Locations (see *Random Body Location Chart* in Section A 4). The costs of these replacements cover the implantation in one Body Location. Except for very unusual circumstances, most such implantations are done to the arms and legs.

NeoMuscle: None➡None➡None [X-X-X] An advanced form of synthesized organic fiber, this durable substance is used to replace or supplement normal muscles in various body locations. It is highly resistant to pulling or tearing, and increases muscular efficiency by a considerable amount. Any hits to the NeoMuscle-implanted Body Location are reduced by 5 while criticals affecting the muscles are only at half effect. The GM may allow a strength bonus to maneuvers involving the Body Location where NeoMuscle exists.

RigidBone: None➡None➡None [X-X-X] RigiPlast Bone Implants are multilayered and solidified with a molecular catalyst prior to implantation. Given a Rtg#, RigidBone grants a Rating Bonus and a RR vs any critical "breakage" result to the associated Body Location. Whenever a critical effect specifying bone breakage occurs, the Rating Bonus (defending level) of the RigidBone is matched against the total points of damage delivered (attacking level). A roll is then made on the *Resistance Roll Table* (Section S 14). If the RR is successful, the bone is not broken.

FlexBone: None➡None➡None[X-X-X] Another variety of synthetic bone which is given a Rtg#, FlexBone also grants a RR vs critical "breakage" results, but is somewhat more effective than RigidBone against especially powerful attacks. Whenever a critical effect specifying bone breakage or shattering occurs in the associated Body Location, the character may attempt to resist the damage with an RR as explained for RigidBone.

DenseBone: None➡None➡None [X-X-X] A highly dense cermet developed in orbit and often implanted in NeoSumo wrestlers, DenseBone grants its wearer the same RR vs breakage as does RigidBone (see above). Thus, it is given a Rtg#. In addition, if implanted in a limb, it adds its Rating Bonus to any Brawling attacks which use that limb. Unfortunately, it is rather heavy; each Rtg# of DenseBone (regardless of Body Location) adds 1 kilogram to the wearer's body weight. 1 does not increase the character's Encumbrance capabilities, however.

Fangs/Claws: None➡None➡None [X-X-X] Popular biodecor amongst the more barbaric Sprawlgangs and Gypsy Clans, bio-engineered fangs, tusks, and claws are grafted right into the body. A character might have a hard time finding someone who will create or implant such items unless he knows someone in such a gang (or an unscrupulous black market Cyber-Medic). Either item allows a character to perform a "melee weapon attack" bite or claw. Both of these attack modes may be developed as unique skills, and cost the same as Brawling skill. Claws and Fangs may be made retractable for an additional $200 for fangs, $1,000 for claws. Note that claws are a special challenge because they 'grow'. The grafted material replaces fingernails and is alive, so must be filed or clipped for maximum effectiveness.

1.3.3 DIGESTIVE

All of the following Systems are means of altering the wearer's metabolism or processing his ingested energy sources. All are implanted within the digestive tract, and are constantly functioning, although for an additional cost of $100, any system might be equipped with a special Somatic Trigger (such as tensing the stomach muscles) which activates/deactivates the System. If more than one System is present within a single Implant each trigger must be set and paid for separately.

Tailored Metabolism: Environ➡Distribution/Impedance➡ Environ/Physiology(Cyber) [E-DI-EP(C)] Another form of the Ingested Chemical Bypass above, which recognizes all standard, basic nutrients (proteins, carbohydrates and fats) and passes everything else. The wearer of this System must eat right or eat often.

Timeline

2069

Japanese mercenary gangs begin terrorizing American suburban residential districts… A Gallup poll indicates that 9 out of 10 North Americans experiment with recreational stimulants.

2070

Several Third-world economies, propped-up for years by illicit drug sales to the United States, collapse as cheaper, artificially produced drugs flood the marketplace… Conservative factions in the US continue to block attempts to legalize any drugs except alcohol and nicotine... Canadian Tire Company receives the contract to toll and maintain all US interstates.

Ingestion Storage: Environ(Cyber)➡Storage➡Physiology [E(C)-S-P] Often Bed in the bellies of the filthy rich, Ingestion Storage Systems hold food — lots of it — and monitor its eventual travel into the regular digestive tract. These systems allow a person to eat far more than his stomach actually has room for. Rated by Mk#, each Mk# adds 1/4 "normal" food storage capacity. (e.g., a person with a Mk.4 unit could eat twice as much as before implantation).

Supermetabolism: Environ(Cyber)➡Distribution➡Physiology [E(C)-D-P] A digestive assistant system, Supermetabolism grants its wearer double final metabolic efficacy; basically allowing him to eat half as much or half as often

Ultrametabolism: Environ(Cyber)➡Distribution➡Physiology [E(C)-D-P] tother digestive assistant system, UltraMetabolism allows its wearer to obtain nutrients from all manner of sources, no matter how nutritionally arid. The wearer may have to eat a good sized amount, but Is system could retrieve calories and protein from almost anything.

Ingested Chemical Bypass: Environ➡Distribution/Impedance➡Environ/Physiology(Cyber) [E-DI-EP(C)] A microprocessor and chemical analyzer set to divert specific chemical compounds without allowing them to be digested or absorbed into the bloodstream. Rated by if, each Mk# allows one specific ingested chemical (drug, poison, trichinella spiralis, etc.) to be passed harmlessly through the body. Bypassed chemicals are either sent to another Cyber System (such as a Chemical Analyzer) or held in a synthetic receptacle beside the Ingested Chemical Bypass unit. This receptacle must be emptied periodically by a minor surgical procedure requiring a SM/CybT:H.

1.3.4 *RESPIRATORY*

The following Systems are implanted in or near the lungs, and serve to enhance or modify human breathing.

Oxygen Extraction: Environ➡Storage➡Physiology [E-S-P] A powerful extractor system placed in the lungs, this unit greatly enhances the body's ability to retrieve oxygen from the air. Given a Rtg#, the System grants a Rating Bonus to maneuver rolls involving extended physical endurance activities, as well as holding one's breath.

Air Storage: Environ➡Storage➡Environ [E-S-E] An inflatable plastic "organ" placed in the body, an Air Storage System allows a character to hold more air than normally possible. Rated by Mk#, each Mk# allows the character to hold an extra breath of airDin storage.

Gills: Environ➡Environ➡Physiology [E-E-P] Not uncommon in the Pacific Aqualogies, Gills allow the wearer to extract all needed oxygen from water.

Inhaled Chemical Bypass: Environ➡Distribution/Impedance➡Environ/Physiology(Physiology/Cyber) [E-DI-EP(PC)] A microprocessor and chemical analyzer set to divert specific chemical compounds without allowing them to be taken into the lungs. Rated by Mk#, each Mk# allows one specific inhaled chemical (drug, poison, gaseous bioactive, etc.) to be exhaled harmlessly from the body. Bypassed chemicals may instead be sent to another Cyber System (such as a Chemical Analyzer).

1.3.5 *CIRCULATORY*

Blood Loss Healer: Physiology➡Distribution➡Physiology [P-D-P] Mounted adjacent to any major blood vessel in the body, this device has a built-in Biostatus Monitor attuned to sense blood pressure levels, and an artificial gland which stores and releases Hemosclerex-III.Hemosclerex III is a drug described in T 4.2. When the wearer suffers any Critical Hit indicating blood loss (hits per round), the Monitor senses the flux in blood pressure, and triggers the Hemosclerex-III gland to open and dispense its drug into the bloodstream. From that point on, follow the regular rules regarding the effects of Hemosclerex. The unit will administer ten doses of the drug before requiring refilling, requiring a SM/CybT:M.

Arterial Chemical Bypass: Physiology➡Distribution/Impedance➡PhysiologyCyber [P-DI-PC] A microprocessor and chemical analyzer implanted at the entryways to the heart, this unit is set to divert specific chemical compounds, forcing them out of the bloodstream. Rated by Mk#, each Mk# allows one specific chemical (drug, poison, venom, etc.) to be diverted. Bypassed chemicals are either sent to another Cyber System (such as a Chemical Analyzer) or held in a synthetic receptacle beside the Arterial Bypass unit. This receptacle must be emptied periodically by a minor surgical procedure requiring a SM/CybT:H.

1.3.6 *SPECIAL PHYSIOLOGICAL SYSTEMS*

NerveLink: Brain/Cyber/Nerves➡Distribution➡Brain/Cyber/Nerves [BCN-D-BCN] An organically engineered artificial nerve cable, suitable for carrying neural or cyber-electronic signals. NerveLink is used to patch Cyber Systems to the wearer's central nervous system, brain, or other Cyber Systems, and is also used to replace nerve tissue lost due to accident or damage.

Chemical Analyzer: Physiology(Cyber)➡Organization/Physiology/Translation➡Cyber [P(C)-OPT-C] An advanced storage and analysis system. Given a Rtg#, this unit grants a Rating Bonus to a Research Roll which will attempt to determine the nature of chemicals passed through the System. A Chemical Analyzer may be used to test compounds from the digestive, respiratory, or circulatory tracts, depending on where it is implanted and what it is connected to. Most Research Projects carried out by the Chemical Analyzer *Routine, Easy,* or *Moderate* A NerveLink between the Chemical Analyzer and a Neuroprocessor will allow the Neuroprocessor's Rating to also be added to the Research Roll. The Chemical Analyzer requires some sort of output System to route its findings to, such as an Internal or External Readout System, or a Neuroprocessor.

Timeline

2071

Remote African bushman tribe found killed to the last man; reason for deaths unknown, though all had had their digestive tracts removed… Much of the southern US is a desert while coastal areas suffer periodic flooding; northern Africa and the Australian outback receive an average of twenty times their normal rainfall compared to 100 years before, all due to global climate shifts… The UK and a handful of European allies begin construction of a cryogenic interstellar vessel.

Artificial Organs: Various. The range of artificial organs possible runs the gamut of human anatomy: lungs, heart, liver, spleen, kidney, pancreas, intestines, bladder, stomach, etc. All may be replaced by technological equivalents. In many cases, the Artificial Organs work better than the biological organs they replace.

New Organs/Glands: Various. The rise of transplant technology and artificial organs has brought another new form of biocontrol onto the scene — artificial organs and glands can now be created where none existed before. These Systems generally serve to monitor or dispense some specific drug, hormone, or other bioactive chemical into the body. Most of these organs have beneficial medical uses (such as insulin glands for diabetics), although the same technology has allowed the creation of various underhanded devices. These Systems, frequently used by powerful employers who wish their employees to remain forever loyal, include such niceties as Analog Dependency Glands (which release periodic doses of some undetected chemical into the wearer's body, creating a dependency he doesn't even know he has) and Virus Glands (these release tailored viruses which can only be combated with a tailored antibiotic supplied by the employer). For more devious ideas on bioactives and their effects, see R 4.

Biostatus Monitors: Brain/Cyber/Nerves/Physiology➡Distribution/Translation➡Cyber [BCNP-DT-C] Allows constant monitoring of bodily functions and vital signs. A large variety of Biostatus Monitors exist, each with its own area of expertise. Some examples include monitors for pulse, respiration, brain waves, blood sugar, temperature, cholesterol, calories, menstrual cycle, blood routing, foreign substances, interferon, blood cell count, and alien substances in the body (these criteria must be purchased separately, but may be combined). A Biostatus Monitor requires an output System of some kind, so that its data can be translated into meaningful terms for the wearer. Commonly used Systems include Internal Readout, External Readout, or Neuroprocessor.

1.4 NEUROLOGICAL SYSTEMS

The devices described below are designed to interface directly with the wearer's neurological systems. These units are the cutting edge of technology in *Cyberspace*— the ultimate links between human beings and machines. Because of their neurological nature, all of the Systems described below have a marked effect on the human psyche. Therefore, they count double for purposes of totalling the number of Systems implanted when generating the CIRS Stat.

Neurological Activity Controller: Cyber➡Processing/Storage/Translation/Distribution➡Muscle/Nerves(Cyber) [C-PSTD-MN (C)] A Neuroprocessor implanted within the brain, a NAC runs specialized programs called *Neurosofts*. Through the translation and output routing of the NAC Processor, these programs are capable of influencing the wearer's perceptions, thoughts, knowledge, emotions, and/or body movements. This allows the wearer to perform as though he has mastered skills or capabilities which he has not. A NAC unit only holds the programs which were in it when implanted, unless the wearer has a DNI jack linked to the unit. Such external-link systems are known as "NACjacks"; the programs desired are plugged into the DNI trode.

***NOTE**: As with all computers, a NAC unit has a limited amount of storage space (determined by its Mk#). This storage space places a limit on the number and size of programs which may be held within the System. A list of available Programs is provided in Section T 2.6. NAC Systems are computers, and are governed by all rules pertaining to computers. Most importantly, the maximum Mk# and Failure Rate of a NAC are determined by the type of Processor Core within the unit (see Section T 2.2).*

Computer Implant: Cyber➡Processing/Storage/Translation/Distribution➡Brain(Cyber) [C-PSTD-B(C)] Although it is rarely done, any other sort of computer may be implanted within, and linked to, the brain. This includes Numeric Processors, Language Processors, and CyberDecks. The effect would be much like any external linkup, except that the computer would, of course, always be available. It would also only be able to run programs which were in the computer at the time of implantation (unless a DNI jack is purchased to allow external loading). An implanted CDeck must be attached to such a DNI jack, which could be patched into a phone-cord adaptor (readily available, cost $50) before using.

Sensory Data Transmission: Cyber/Nerves/Telecomm➡Translation/Distribution➡Cyber/Nerves/Telecomm [CNT-TD-CNT] Allows wireless, real-time transmission of all sensory input (all five senses) to or from other devices via microwave or tight-beam communications laser. Transmissions are encoded in a standard Programming Language (see Section T 2.5), although alternate languages could be used if the programmer of the Sensory Data Transmission System is familiar with them (or if a translator/compiler prog is patched into the system). It is possible to transmit between two Sensory Data Transmission Systems, provided they broadcast and receive on the same frequency (broadcast and reception frequency is set when the System is implanted; one must remove the System from wearer to alter the original settings). These Systems are rated by Mk#; each Mk# adds 100 meters to the effective range of the System. Three types are available: transmitters, receivers, and transceivers.

If desired, Sensory Data Transmission units which deal with onlyone sense are available (at significantly lower cost). Otherwise these 5 variants function exactly as the Sensory Data Transmission System.

Brainwave Transmission: Cyber/Nerves/Telecomm➡Translation/Distribution➡Cyber/Nerves/Telecomm [CNT-TD-CNT] Functions exactly like Sensory Data Transmission System above, except that it transmits all neural activity (sensory impressions, thoughts, emotions, etc.).

Timeline

2072

An American cybernetic warrior company, thought lost in action during a Central American brush war several years previously, resurfaces on Easter Island. They decimate majority of the island's population before being eliminated by an airborne invasion staged by the Red Star MegaCorp.

2073

An alliance of North African Moslems begin waves of overt military attacks and suicide bombings against Israeli targets. Israel invades and occupies a number of adjacent countries... Quebec secedes from Canada.

Sensory **Processor:** Brain/Nerves(Cyber)➡Processing/Storage/Translation➡Cyber [BN(C)-PST-C] A microprocessor which stores ALL sensory data in digital arrays. These Systems are rated by Mk#; each Mk# allows one minute of stored sensory data. The Processor is capable of searching for, replaying and translating all stored data by mental command. In addition, if the wearer is equipped with DNI or Sensory Data Transmission (see above), the Implant can route stored data through these output channels to be translated by another computer.

Apparent **Sensory Perception Recorder:** Brain/Nerves(Cyber)➡Storage/Translation ➡ Cyber [BN(C)-ST-C] Functions as a Sensory Processor, except that the wearer cannot search for and replay the stored data. Instead, this information is translated into a standard Neuroprocessor Programming Language and piped to an output System capable of receiving such data (NACs, Sensory Processors, or external Neuroprocessors can all do this). The result is a recording known as an ASP (Apparent Sensory Perception) tape. These tapes can be played into an ASP Player (see below) or made into integrated ("smart") programs which are bought and sold for entertainment or education throughout the world. These Systems are rated by Mk#; each Mk# allows one minute of stored sensory data.

Apparent Sensory Perception Player: Cyber➡Storage/Translation/Distribution➡Brain/Nerves(Cyber) [C-STD-BN(C)] A limited version of a NACjack system, an ASP Player is capable of translating ASP tapes into sensory input, allowing the user to experience the sensations recorded on the tape. The cost of the unit includes a special DNI jack. This System can only run ASP tapes; any other form of Neurosoft will make no sense to it.

Painblocker: Nerves(Cyber)➡Impedance➡Brain(Cyber) [N(C)-I-B(C)] A specialized synaptic inhibitor device which obstructs the flow of pain signals into the brain, making the wearer oblivious to the pain. The inherent danger of such a system is that it might cause the wearer to be unaware of bodily damage which requires immediate attention. Most damage, however, is accompanied by other sensations which would still be sensed normally — a stabbing blade would still tug at the clothes, the flow of blood would still feel like a warm, spreading wetness, etc.). Several types of PainBlockers are available, differentiated by the type of pain signals which they impede: Kinetic (open wounds/muscle tension/pressure); Thermal (heat/cold); Chemical (poisoning); Photic (intense light/sunburn). Each must be purchased separately, although they may be combined. Pain- Blockers do not negate damage, they just suppress the associated pain. A character with a PainBlocker will die like anyone else.

Grav Adjust Rig: Muscle/Nerves➡Processing/Translation/Distribution➡Muscle/Nerves(Cyber) [MN-PTD-MN(C)] Implanted in the base of the neck or along the spinal cord, this System interprets and adjusts input from the central nervous system before passing it on to muscles. Given a Rtg#, the System provides a Rating Bonus which offsets penalties incurred by changes in gravity.

Balance Rig: Brain/Muscle/Nerves (Cyber)➡ Processing/Translation/Distribution➡Muscle/Nerves(Cyber) [BMN(C)-PTD-MN(C)] Implanted in the inner ear, this System is given a Rtg#, and grants a Rating Bonus applied to any maneuvers requiring balance.

1.5 *IMPLEMENTARY SYSTEMS*

Cyber-implants which directly link a human to a operating machine, implementary systems can be anything from a tool hand to a spacecraft linkup.

1.5.1 *DIRECT INTERFACE*

Interface is the combination of man and machine. The Direct Neural interface is essentially a plug into the brain, allowing DNI-interface devices to be connected to the cerebral cortex.

Direct Neural Interface: Brain(Cyber)➡Translation/Distribution➡Brain(Cyber) [B(C)-TD-B(C)] DNI; this popular System creates an accessway into the brain (or NAC Neuroprocessor), linked to an external jack set-up in the skull (though one common option involves a NerveLink to the wrist). The wearer simply plugs (or "slots") into whatever device he wishes to use. A DNI linked directly to the brain allows the wearer to use computers, "smart" machinery and vehicles, "smart" program modules, N-ROM modules or broadcasts, and DNI-2. If the DNI is linked to an implanted NAC (creating what is known as a "NACjack" system) the wearer may use all of the above devices plus load new Neurosoft programs and operate "dumb" DNI machinery and vehicles.

1.5.2 *TOOLS AND WEAPONRY*

These items are either offensive weapons or implements attached directly to a human limb.

Toolhand: Muscle/Nerve➡Translation➡ Actuate [MN-T-A] Designed to hold such tools as power drills, laser cutters/welders, sheet metal punches, etc., the ToolHand is not a popular item, but is occasionally seen on hardcore tradesmen of various sorts. The System does not resemble a true hand at all; the tool appears to be an extension of the end of the wearer's arm. All tool functions are controlled by specific neuromotor commands (the wearer "grasps" with non-existent fingers and the tool is activated; "extends" the fingers and the tool shuts off; etc.). The total cost of the ToolHand equals 2x the cost of the tool itself — plus connection equipment and surgical costs, of course. The tool can be made retractable (if size and placement allow it) for an additional charge of (1/2x cost of the tool).

Weaponhand: Muscle/Nerve➡Translation➡ Actuate [MN-T-A] Operating along the same general lines as the ToolHand above, the WeaponHand allows specific weapon implantation. The System does not resemble a true hand at all; the weapon appears to be an extension of the end of the wearer's arm, and is controlled by neuromotor impulses . The total cost of the WeaponHand equals 2x the cost of the weapon itself. The weapon can be made retractable (if size and placement allow it) for an additional charge of (1/2x cost of the weapon).

Megaknuckles: None➡None➡None [X-X-X] Metal knuckles which add +25 to the wearer's OB when making any sort of hand-to-hand striking attack.

Razornails: None➡None➡None [X-X-X] The razornails are popular with certain gangs. They are fully retractable underneath fingernails and the claws are of titanium alloy,reinforced and razor-sharp.

GasProjector: Brain(Cyber)➡None➡ Actuate [B(C)-X-A] Projects clouds of gases or chemical agents (see SectionT 4.2). Cloud fills a conical area of varying width. Six types are available, differing only in terms of cone-width and range: 180 degrees (1m range), 90 degrees (2m range), 45 degrees(3m range), 10 degrees (4m range), 1 degree (stream of 5m range) and variable (this last allows the wearer to increase or decrease the width of the gas cone by utilizing an implanted Somatic Trigger such as tensing the muscles of the arm in a specific way, etc.). Rated by Mk#, each Mk# adds one dose of gas to the projector's capacity.

1.5.3 *AI CYBER WEAPONS*

These implanted weapons are 'intelligent'; while they are under the command of their owner, they can act independently.

CyberMole: Brain➡Translation➡Actuate [B-T-A] Artificially Intelligent Cybercreature kept within the host's body. Given a Rtg#, the CyberMole may make an attack independent from the host using its Rating Bonus as its OB. In *Cyberspace,* a CyberMole attacks as a Small Melee Weapon. If *Claw Law* is available, the CyberMole may attack with a Medium Bite attack. A CyberMole may attack only to a 15cm range, and may be contained in a variety of locations within the host's body. A CyberMole has Armored Exoskeleton armor with a DB of 10 — ***SM***AT 19(10) — and takes 10 hits.

CyberSnake: Brain➡Translation➡Actuate [B-T-A] Like a CyberMole, the CyberSnake uses its Rating Bonus as its OB. Due to its larger size, a CyberSnake must usually be located in the host's chest (attacking from out of the mouth), or in one of the host's arms (attacking from out of the palm of the hand). In *Cyberspace,* a CyberSnake attacks as a Medium Melee weapon. If *Claw Law* is available, the attack is a Large Bite. A CyberSnake has the same armor as a CyberMole, but has a DB of 20 and takes 50 hits.

CyberBeast: Brain➡Translation➡Actuate [B-T-A] Largest of the Cyber-creatures, a CyberBeast may only be housed in the host's abdomen, emerging from the center of the body to strike. Again, its Rating Bonus is its OB. In CyberSpace, it attacks as a Large Melee Weapon. If *Claw Law* is available, the attack is a Large Bite accompanied by two Small Claw attacks. A CyberBeast has Armored Exoskeleton armor with a DB of 30 ***(SM***AT 19(30)), and takes 100 hits.

1.5.4 *ARMOR*

Subdermal Padding: Environ➡Impedance➡ None [E-I-X] Resilient high-density plastic fibers placed in layers under the skin. Subdermal Padding is rated by Mk#; the Mk# is subtracted directly from any hits delivered to the padded Body Location.

Crit Shielding: Environ➡Impedance➡None [E-I-X] Subcutaneous plates of polymer fiber and/or alloys especially designed to reduce specific sorts of critical effects in the Body Location where they are implanted. There are different types of Crit Shielding, each of which must be installed separately into the individual Body Locations. The various Crit Shields are:

- *Puncture/Slash/Shrapnel Crit Shielding*
- *Crush/Impact Crit Shielding*
- *Heat Crit Shielding*
- *Cold Crit Shielding*

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Shielding

lithe specified critical type is delivered to a shielded Body Location, all effects of that critical are reduced to half-effect (fractional results are rounded off). Specific "death" critical results are avoided half the time.

Body Plating: Environ→Impedance→None [E-I-X] The ultimate in cyberarmor consists of a skin-grafted exoskeleton made of synthetic polymers and alloys, jointed with Dermaplast. Body Plating is like wearing a suit of permanent armor, and it functions exactly as the armor type it imitates in all respects, including weight. Different types of Body Plating may not be layered over each other. Also, Body Plating may be chromed, or otherwise colored. Several types are available:

- *Polyastic* Body Plating is a lightweight, flexible but resilient synthetic which adds +10 to the wearer's DB and carries no Movement/Maneuver Penalty.
- Lastex Body Plating is the equivalent of standard Light Body Armor (LBA).

Note: *In **Space Master;** Lastex I is AT5, Lastex II is AT6, Lastex III is AT7, and Lastex IV is AT8.*

- *Densiplast* Body Plating is the equivalent of a standard Armored Body Suit (ABS).

*Note: In **Space Master;** Densiplast I is AJ9, Densiplast II is AT10, Densiplast III is AT11, and Densiplast IV is AT12.*

- *Polycarbon* Body Plating is equivalent of a standard Armored Exoskeleton (AEX).

*Me: In **Space Master;** Polycarbon I is AT17, Polycarbon II is AT18, Polycarbon III is AT19, and Polycarbon IV is AT20.*

1.5.5 *MISCELLANEOUS IMPLEMENTARY SYSTEMS*

What's left? These little items.

External **Readout:** Cyber→Processing/Translation→Environ [C-PT-E] A floating digital display on the surface of the skin, used as an "output system" for chronometers, biostatus monitors, transmitters, etc.

Subdermal Pouch: None→None→None [X-X-X] Implanted pouch which can be easily opened and shut. The opening may be disguised as a scar, wrinkle, or flap of skin.

Homing **Device:** None(Cyber)→Distribution→Telecomm [X(C)-D-T] A constantly-operating, Super-High Frequency transmitter which continuously repeats a programmed signal. The signal is set when the System is implanted, though it can be changed by an Cyber-Medic who opens the wearer up and succeeds in a SM/CybT:L. Alternately, the signal can be altered by a suitably-programmed computer attached by NerveLink. Rated by Mk#, each Mk# adds 100 meters to the transmission range.

ECM Coding: Brain/Cyber/Telecomm→Formatting/Distribution→Brain/Cyber/Translation [BCT-FD-BCT] Scrambles/unscrambles input according to a preprogrammed algorithm, making transmission interception useless (unless the third party wishes to spend lots of time cracking the code). Another ECM Coding System (implanted or external model) must be used to unscramble the resulting message/datastream. The receiving system must possess the same algorithm as the sending System to use the data easily.

Solar Battery: Environ→Storage/Translation→ Cyber [E-ST-C] Rated by Mk#; Mk# equals current Potential (the number of Cyber Systems which can be powered under the present circumstances). See notes in Section T 1. Must be wired to Cyber Systems via NerveLink.

Light Generator: Muscle/Nerve(Cyber)→Translation→Environ [MN(C)-T-E] Sort of an implanted lantern, Light Generators are often worn by underground or undersea laborers. Seven types are available, differing only in terms of the "width of field": 360 degrees, 180 degrees, 90 degrees, 45 degrees, 10 degrees, 1 degree and variable (this last allows the wearer to increase or decrease the width of field by some preset somatic trigger). Rated by Mk#, each Mk# adds ten meters to the maximum effective range of the illumination.

Electronic Detection: Environ/Telecomm→Processing/Translation→Brain(Cyber/Telecomm) [ET-PT-B(CT)] Detects electromagnetic transmissions within its radius of effect. Rated by Mk#, each Mk# adds 10m to the effective detection range. Does not determine the frequency or type of transmission, but pinpoints the source.

Datacard Player: Cyber→Storage/Translation/Distribution→Brain(Cyber) [C-STD-B(C)] A card drive which must be linked to a Neuroprocessor, this unit is a rather outmoded variant of DNI which reads standard datacards (see Section T 2).

Chronometer: Cyber→Distribution→Cyber [C-D-C] A tiny atomic clock which keeps perfectly accurate time (down to the nanosecond range), this unit requires an output system of some sort (such as an NAC, or Internal or External Readout System). Often used to synchronize the operation of cyber-activities.

Calendar: Cyber→Physiology/Storage/Translation→Cyber(Brain) [C-PST-C(B)] A device which keeps the wearer's personal calendar in order, this unit requires an input device of some sort (such as a NAC or Data Transmission System).

Somatic Trigger: Muscle/Nerve→Distribution→Cyber [MN-D-C] Basically a small switching device connected to any Cyber System via NerveLink, and set to respond to a specific somatic (muscular) activity. Whenever the Somatic Trigger act is performed, the connected System is turned on or off, as appropriate.

Sound Trigger: Environ(Cyber)→None→Cyber [E(C)-X-C] A small microphone implanted in wearer's ear (Auditory Implant) and connected to another Cyber System via NerveLink. The device is set to respond to a specific word, phrase, or sound, and is sensitive to exact voice pattern. When the trigger sound is picked up by the device, it activates or deactivates the connected System.

Thought Trigger: Brain(Cyber)→Distribution→ Cyber [B(C)-D-C] A small, specialized device implanted in the brain (or connected to the brain via NerveLink), and linked to another Cyber System. Device is set to respond to a specific thought or thought chain. Wearer activates it by thinking the trigger thought, thereby turning the connected System on or off. This System counts double for purposes of totalling Cyber Systems.

Timeline

2074

Polish forces invade Russia, beginning a protracted struggle between those two nations for years to come… Remnants of Noah's Ark recovered in Northern India and brought to Tel Aviv.

2075

Intelligence drugs are marketed in the Americas and western Europe; these miraculous chemicals serve as synaptic re-formatters, raising one's powers of organization, inference, deduction and memory… The UK interstellar ship *Indomitable* is launched from earth orbit, accompanied by much pomp and ceremony… Quebec rejoins Canada.

SENSORY SYSTEMS SUMMARY CHART

Cyber System: Function Code	Parameter Summary	Cost	Max. Mk#	Implant Difficulty Level
Sight				
Megavision: E-A-N(C)	+1x magnification and range per Mk#	1000+(200xMk#)	10	M
Microvision: E-A-N(C)	+100x magnification per Mk#	1300+(500xMk#)	10	M
Visual Clarity: E-A-N(C)	Bonus to Perception	1200+(250xRtg#)		M
Spectral Range: E-AT-N(C)	Perceive alternate spectral sets	1000 per set		M
Thermal Vision: E-F-N(C)	Perceive temperature as color	1000		M
Lowlight: E-A-N(C)	Bonus to Perception	800+(200xRtg#)		M
Antiglare: E-I-N(C)	Bonus to Perception	300+(100xRtg#)		E
Microphoto: E-ST-X(CN)	1 exposure per Mk#	1000+(10xMk#)	50	M
(With Scanner)	1 exposure per Mk#	2000+(10xMk#)	50	H
Microvideo: E-ST-X(CN)	1 minute per Mk#	1500+(20xMk#)	10	M
(With Scanner)	1 minute per Mk#	4000+(20xMk#)	10	H
Targeting: E-F-C	Bonus to Smartgun OB	2000+(200xRtg#)		M
Internal Readout: C-TF-N	Prints input within field of vision	1000		M
Visual Processor: E(C)-PTS-BC	1 minute per Mk#	3000+(200xMk#)	50	H
Visual Data Transm: CNT-TD-CNT	100 meter transmission range per Mk#	1000+(200xMk#)	10	H
Visual Data Receiv: CNT-TD-CNT	100 meter reception range per Mk#	1000+(200xMk#)	10	H
Visual Data Transc: CNT-TD-CNT	100 meter T/R range per Mk#	2000+(200xMk#)	10	H
Hearing				
Directional Mike: E-I-N(C)	Various widths of field (30, 10, or 1 degrees)	750		M
(Variable Width)	As above but variable width of field	2000		M
Sound Amplifier: E-A-N(C)	+1x amplification and range per Mk#	700+(200xMk#)	10	M
Sound Edit-Out: N(C)-IOP-B	Eliminates background noise. Bonus to Perception	1500+(250xRtg#)		H
Sonic Range: E-AT-N(C)	Selects extra sonic sets	1000 per Set		M
Audiorecord: E-ST-X(CN)	5 minutes per Mk#	1000+(10xMk#)	50	M
(With Scanner)	5 minutes per Mk#	1500+(10xMk#)	50	H
Internal Speaker: C-AD-N	Plays input into inner ear	500		M
Audio Processor: E(C)-PTS-BC	1 minute per Mk#	2000+(200xMk#)	50	H
Audio Data Transm: CNT-TD-CNT	100 meter transmission range per Mk#	500+(100xMk#)	10	H
Audio Data Receiv: CNT-TD-CNT	100 meter reception range per Mk#	500+(100xMk#)	10	H
Audio Data Transc: CNT-TD-CNT	100 meter T/R range per Mk#	1000+(100xMk#)	10	H
Taste				
Taste Sensor: E-A-N(C)	Bonus to Perception	500+(100xRtg#)		M
Taste Processor: E(C)-PTS-BC	10 tastes per Mk#	1500+(150xMk#)	50	H
Taste Data Transm: CNT-TD-CNT	100 meter transmission range per Mk#	500+(100xMk#)	10	H
Taste Data Receiv: CNT-TD-CNT	100 meter reception range per Mk#	500+(100xMk#)	10	H
Taste Data Transc: CNT-TD-CNT	100 meter T/R range per Mk#	1000+(100xMk#)	10	H
Smell				
Olfactory Sensor: E(C)-A-N(C)	Bonus to Perception	500+(100xRtg#)		M
Directional Scent: E-I-N(C)	Various widths of field (30, 10, or 1 degrees)	500		M
(Variable Width)	As above but variable width of field	1000		M
Olfactory Range: E-A-N(C)	+5 meters per Mk#	1000+(100xMk#)	10	M
Scent Edit-Out: N(C)-IOP-B	Eliminates background scents. Bonus to Perception	1000+(200xRtg#)		H
Scent Processor: E(C)-PTS-BC	10 scents per Mk#	1500+(150xMk#)	50	H
Scent Data Transm: CNT-TD-CNT	100 meter transmission range per Mk#	500+(100xMk#)	10	H
Scent Data Receiv: CNT-TD-CNT	100 meter reception range per Mk#	500+(100xMk#)	10	H
Scent Data Transc: CNT-TD-CNT	100 meter T/R range per Mk#	1000+(100xMk#)	10	H
Touch				
Sensitouch: E-ADT-N(C)	Bonus to Perception	1000+(50xRtg#)/set		M
Tactile Edit-Out: N-IOP-B	Eliminates unimportant sensations. Bonus to Perception	1000+(100xRtg#)		H
Tactile Data Transm: CNT-TD-CNT	100 meter transmission range per Mk#	150+(20xMk#)		H
Tactile Data Receiv: CNT-TD-CNT	100 meter reception range per Mk#	150+(20xMk#)		H
Tactile Data Transc: CNT-TD-CNT	100 meter T/R range per Mk#	300+(20xMk#)		H
Temperature				
Thermal Sense: E-T-B(C)	Measures temperature	300		M
Thermal Edit-Out: N-IOP-B	Eliminates thermal discomfort penalties	2500		H
Special				
Bioradar: E-F-C(N)	50 meter range per Mk#	4000+(500xMk#)	10	H
Biosonar: E-F-C(N)	50 meter range per Mk#	3000+(400xMk#)	10	H

SOMATIC SYSTEMS SUMMARY CHART

Cyber System: Function Code	Parameter Summary	Cost	Max. Mk#	Implant Difficulty Level
Voice				
Vocal Range: M-F-M	+1 octave per Mk#	500+(500xMk#)	5	M
Vocal Modulator: M(C)-F-M	1 voice effect per Mk#	500+(1 OOxMk#)	10	M
Vocal Amplifier: M-A-E	+.5x amplification per Mk#	500+(100xMk#)	10	M
Subvocal Transmission: M-A-T(C)	10 meter range per Mk#	1000+(200xMk#)	10	M
Vocal Emulator: C-ST-MN	1 voice stored per Mk#	2000+(300xMk#)	50	M
Manipulation				
Cyberhand: MN(C)-T-A	Mechanical hand	3000		H
Fasthand: MN(C)-T-A	Bonus to Quick Draw, etc.	3000+(500xRtg#)		H
Stronghand: MN(C)-T-A	Bonus to Striking attacks, etc.	3000+(500xRtg#)		H
Eye/Hand Coordinator: MN(C)-FT-MN(C)	Bonus to Agility	3000+(500xRtg#)		H
Limbs				
CyberArm: MN(C)-T-A	Mechanical arm	6000		H
CyberLeg: MN(C)-T-A	Mechanical leg	6000		H
FastArm: MN(C)-T-A	Bonus to First Strike, etc.	6000+(500xRtg#)		H
FastLeg: MN(C)-T-A	Bonus to Movement Rate, etc.	6000+(500xRtg#)		H
StrongArm: MN(C)-T-A	Bonus to Melee, etc.	6000+(500xRtg#)		H
StrongLeg: MN(C)-T-A	Bonus to Swimming, etc.	6000+(500xRtg#)		H
AgileArm: MN(C)-T-A	Bonus to Throwing, etc.	6000+(500xRtg#)		H
AgileLeg: MN(C)-T-A	Bonus to Climbing, etc.	6000+(500xRtg#)		H
Reflexes				
Nerve Booster: N-AF-N	Bonus to Quickness	4000+(500xRtg#)		H
Adrenal Booster: N-A-P	Bonus to Quickness, Constitution, and Strength. Penalty to Self Discipline and Reasoning.	3000+(800xRtg#)		M

PHYSIOLOGICAL SYSTEMS SUMMARY CHART

Cyber System: Function Code	Parameter Summary	Cost	Max Mk#	Implant Difficulty Level
Reproductive				
Contraceptive: P-I-X	100% effective	500		M
Proceptive: X-D-P	90% effective	1000		M
Ovulation Control: P-DI-P	Both Contraceptive and Proceptive device	2000		M
Sperm/Ovum Filtering: P-I-P	Offspring free of mutations and birth defects	3000		M
Muscular/Skeletal				
Neomuscle: X-X-X	Reduction of hits and criticals	1500		H
Rigidbone: X-X-X	Bonus and RR vs breakage	1000+(200xRtg#)		H
Flexbone: X-X-X	Bonus and RR vs breakage, and shatters	1250+(300xRtg#)		H
Densebone: X-X-X	RR vs breakage, and Bonus to Brawling	1200+(300xRtg#)		H
Fangs: X-X-X	Small Bite attack	500		H
(Retractable)	As above, but retractable	750		H
Claws: X-X-X	Medium Claw attack	500		H
(Retractable)	As above, but retractable	750		H
Digestive				
Tailored Metabolism: E-DI-EP(C)	Passes all unnecessary nutritional chemicals	6000		H
Ingestion Storage: E(C)-S-P	+1/4 normal food storage per Mk#	500+(200xMk#)	10	M
Supermetabolism: E(C)-D-P	Doubles metabolic efficacy	3500		H
Ultrametabolism: E(C)-D-P	Digestion of extraordinary nutrient sources	3500		H
Ingested Chem Bypass: E-DI-EP(C)	1 specific chemical per Mk#	3000+(200xMk#)	50	H
Respiratory				
Oxygen Extraction: E-S-P	Bonus to endurance	1500+(300xRtg#)		H
Air Storage: E-S-E	Stores 1 extra breath per Mk#	500+(200xMk#)	5	M
Gills: E-D-P	Extract oxygen from water	7000		H
Inhaled Chem Bypass: E-DI-EP(PC)	1 specific chemical per Mk#	2000+(200xMk#)	50	M
Circulatory				
Blood Loss Healer: P-D-P	Administers Hemosclerex-III when bleeding	2500+drug cost		M
Arterial Chem. Bypass: P-DI-PC	1 specific chemical per Mk#	2500+(200xMk#)	50	H
Special Physiological Systems				
Nervelink: BCN-D-BCN	Link Cyber/Brain/Nervous systems together	100		M
Chemical Analyzer: P(C)-OPT-C	Bonus to analysis	2000+(200xRtg#)		H
Artificial Organ: Various	Depends on organ	1000 to 5000		M-H
New Organ/Gland: Various	Depends on new organ/gland	1000 to 10,000		M-H
Biostatus Monitor: BCNP-DT-C	Monitors various vital functions	500		M

NEUROLOGICAL SYSTEMS SUMMARY CHART

Cyber System: Function Code	Parameter Summay	Cost	Max Mk#	Implant Difficulty Level
Neurological Activity Controller: C-PSTD-MN(C)	Neuroprocessor which runs NeuroSoft programs	2000+Processor Core Cost		H
Computer Implant: C-PSTD-B(C)	Computer processor which runs assorted programs	Computer Processor Cost		H
Sensory Data Transm: CNT-TD-CNT	100 meters per Mk#	3000+(200xMk#)	10	H
Sensory Data Receiv: CNT-TD-CNT	100 meters per Mk#	3000+(200xMk#)	10	H
Sensory Data Transc: CNT-TD-CNT	100 meters per Mk#	5500+(200xMk#)	10	H
Brainwave Transm: CNT-TD-CNT	100 meters per Mk#	5000+(200xMk#)	10	H
Brainwave Receiv: CNT-TD-CNT	100 meters per Mk#	5000+(200xMk#)	10	H
Brainwave Transc: CNT-TD-CNT	100 meters per Mk#	9000+(200xMk#)	10	H
Sensory Processor: BN(C)-PST-C	1 minute of storage per Mk#	8000+(300xMk#)	50	H
ASP Recorder: BN(C)-ST-C	1 minute of storage per Mk#	4000+(200xMk#)	50	H
ASP Player: C-STD-BN(C)	Plays special ASP tapes	2500		H
Painblocker: N(C)-I-B(C)	Blocks 1 specific type of pain	2000		H
Grav Adjust Rig: MN-PTD-MN(C)	Bonus to xeno-gravity maneuvers	1000+(100xRtg#)		H

IMPLEMENTARY SYSTEMS SUMMARY CHART

Cyber System: Function Code	Parameter Summary	Cost	Max. Mk#	Implant Difficulty Level
Interface				
ONI to NAC: B(C)-TD-C	Allows interface with "smart" or "dumb" programs and DNI devices	500		M
DNI to brain: B(C)-TD-B	Allows interface with "smart" programs and DNI devices	750		H
Implements				
ToolHand: MN-T-A	Tool Implantation	2x tool cost		H
(Retractable)	As above, but retractable	2.5x tool cost		H
Weaponry				
WeaponHand: MN-T-A	Weapon Implantation	2x weapon cost		H
(Retractable)	As above, but retractable	2.5x weapon cost		H
Megaknuckles: X-X-X	+25 Bonus to Striking	300		M
Razornails: X-X-X	Allows Melee Attacks, Slash Criticals	500		M
(Retractable)	As above, but retractable under fingernails	1500		H
Gas Projector: B(C)-X-A	1 dose of chosen gas per Mk#; various widths of projection (180, 90, 45, 10, 1 degrees)	1500+(30xMk#)	10	M
(Variable Width)	As above but with variable width of cloud	2,000+(30xMk#)	10	M
All Cyber Weapons				
CybeMole: B-T-A	Bonus to independant Small Weapon attack	4000+(200xRtg#)		H
CyberSnake: B-T-A	Bonus to independant Medium Weapon attack	20,000+(300xRtg#)		C
CyberBeast: B-T-A	Bonus to independant Large Weapon attack	50,000+(30QxRtg#)		V
Armor				
Subdermal Padding: E-I-X	Hits to Body Location reduced by Mk#	500+(10xMk#)	10	H
Crit Sheilding: E-I-X	Crits to Body Location reduced by half effect			
•Puncture/Slash/Shrapnel		300		H
•Crush/Impact		150		H
•Heat		200		H
•Cold		200		H
Body Plating: E-I-X	Alters wearer's DB or Armor Type			
•Polyastic	+10 to DB	1500		H
•Lastex	Light Body Armor	2500		H
•Lastex I	SM AT5	2000		H
•Lastex II	SM AT6	2300		H
•Lastex III	SM AT7	2700		H
•Lastex IV	SM AT8	3200		H
•Densiplast	Armored Body Suit	7000		C
•Densiplast I	SM AT9	6000		H
•Densiplast II	SM AT10	6500		H
•Densiplast III	SM AT11	8000		C
•Densiplast IV	SM AT12	20,000		C
•Polycarbon	Armored Exoskeleton	18,000		C
•Polycarbon I	SM AT17	15,000		C
•Polycarbon II	SM AT18	17,000		C
•Polycarbon III	SM AT19	21,000		C
•Polycarbon IV	SM AT20	24,000		C
Miscellaneous				
External Readout: C-PT-E	Display from linked Cyber System	100		M
Subdermal Pouch: X-X-X	Implanted pouch	50 per cm^3		M
Homing Device: X(C)-D-T	100 meter range per Mk#	100+(10xMk#)	50	E
ECM Coding: BCT-FD-BCT	Scrambles/unscrambles transmissions	1000		E
Solar Battery: E-ST-C	Powers 1 Cyber System per Mk#	10+(100xMk#)	10	M
Light Generator: MN(C)-T-E	10 meter range per Mk#; various widths of projection (360, 180, 90, 45, 10, and 1 degree)	1000+(100xMk#)	10	M
(Variable width)	As above but variable width of beam	2000+(100xMk#)	10	M
Electronic Detector: ET-PT-B(CT)	10 meter ranger per Mk#	500+(30xMk#)	50	M
Datacard Player: C-STD-B(C)	Reads standard Datacards	1000		M
Chronometer: C-D-C	Keeps accurate time	100		M
Calendar: C-PST-C(B)	Keeps calendar	500		M
Somatic Trigger: MN-D-C	Activates/deactivates other Cyber System	1000		M
Sound Trigger: E(C)-D-C	Activates/deactivates other Cyber System	1250		M
Thought Trigger: B(C)-D-C	Activates/deactivates other Cyber System	1500		M

CYBER SYSTEMS RECORD SHEET

Cyber System	Rtg.#/Mk#	Location	Notes/Parameters

SYSTEM COUNT = _____ CMS STAT = _____

2.0

COMPUTERS

As the astute reader will already have noted, the cultural and technological flavor of the Cyberspace *world hinges more than anything upon a single pervasive development: near-perfect interface between humans and machines. For the most part, the human beings have done little changing of their own — the advances which made the cyber-revolution possible are distinctively technological in nature. Nearly every major techno-goody on the* Master Equipment Table *has at its core a remarkable facility to interface between biological and electronic/mechanical structures. Several of these developments come from the fields of psychology, physiology, neurology,* and *weapons research, but all share a crucial dependence upon a single advanced and integral system — the computer.*

2.1 THE ROLE OF COMPUTERS

Simply stated, a computer is any device which stores and/or manipulates data by means of electronic arrays. A computer is comprised of three basic parts (with other optional add-ons):

- **A Processor Core** (also known as a "storage system", "CPU" or "chip"), which is the heart of the machine's processing capability;
- **An Operating System** (or "OS"), which translates the binary data of the Processor Core into specialized units of information, allowing the Computer to utilize programs of various sorts;
- **At least one Interface System** (or "I/O" for "Input/Output"), which allows the operator of the Computer to feed commands into the machine and retrieve data in various ways.

Actually, any information-manipulating device is a computer of some kind, which is built around a small central storage and retrieval device. There are several varieties of computer, distinguished by the nature the Operating System(s) laid over their circuitry. A Numeric Processor is a form of computer which is specially geared toward the manipulation of numerical data, just as a Language Processor (an offshoot of the "Word Processor") is especially geared toward manipulation of linguistic structures. All manner of specialized computers are available in the world of *Cyberspace*, as the microelectronics revolution has left no stone unturned in its rapid spread through all cultures and industries. Such devices, from talking pocket calculators to intelligent homes, are termed "Processor Automated Luxuries", and are commonly referred to as "PALs". The number and variety of functions which could possibly be performed by specialized computers is theoretically infinite, as are the numbers of possible Programming Languages or Programs. Computers can be built to nearly any size specification (many advanced computers are less than one cubic centimeter in volume), and so can be fit into many different kinds of peripheral devices with ease. As with all modular technology, the applications are limited only by the ingenuity of the designers (and the funds available)! GMs are encouraged to interpolate tools and equipment with Processing units wherever this seems possible/desirable, and Player Characters (especially Tech Rats and Net Junkies) are likewise encouraged. The following Sections will detail some of the major differentiating factors between different types of Computers, Languages, and Programs, and provide guidelines for the coherent use of these systems. A computer is rated in terms of Mk#s, which determine the power of the system and the amount of storage space available within it.

> Each Mk# of a computer adds on e unit of CPU space (where programs are actually executed), and 10 units of storage space (where programs and files are kept while not used). Every program is given a size. A computer may simultaneously run programs whose cumulative size does not exceed the number of units available in the CPU.

In *Cyberspace*, where much energy is spent locating and stealing other people's datafiles, it is very important to know how much space various things take up. The amount of information which can be stored in one "unit" depends on the type of data. The following chart summarizes:

STORAGE SPACE USAGE CHART

Type of data stored	1 Unit
Lo-Fi Audio (Voice)	4 hours
Hi-Fi Audio (Music)	1 hour
Still Video (Photo)	500 photos
Animation/Graphics	2 hours
Low-Res Video	1 hour
Hi-Res Video	30 minutes
Text	1000 pages

2.2 PROCESSOR CORES AND OPERATING SYSTEMS

As mentioned above, the fundamental difference between various types of computers lies in the nature of their Core and Operating Systems. These terms are defined and expanded upon in the following section.

2.2.1 PROCESSOR CORES

A Processor Core is a small piece of hardware in which tiny bits of energy are stored and shuffled about. These units have also been known as "chips" in the past, although that term now only applies to two of the four varieties of Storage on the market. The Processor Core is, in fact, the CPU of the computer itself; it is here that any currently-operating functions are performed. There are currently four types of Processor Cores available. Each can be

Timeline

2076

The Great California Earthquake; vast tracts of the Pacific Sprawl devastated. While little actual southern California land slides into the ocean, there is severe damage to the entire Los Angeles-San Diego Corridor (San Francisco and regions northward are relatively undamaged). Aid is sent to the region, but most governments only say "They had it coming to them".

2077

The Chinese government, desperate for cash, leases Hong Kong to the Japanese. The US annexes Ontario as a 'protectorate'.

2078

Death Valley in the US is converted into an open prison.

made to support any type of Operating System, thereby creating one of the four computer Types listed under *Operating Systems* below. The skill used to work with or on Processor Cores is Engineering (Elec Technics skill allows knowledge of the Operating System and/or Programs used, but not the hardware itself). The following notes explain the pertinent data on each type of Processor Core.

- **Silicon** chips are now-antiquated Processor Cores of twentieth century fame. They have been far surpassed by the more recent technological developments listed below, but are still used in many underprivileged areas and illicit progshops. Silicon chips do not retain any data (except ROM) when the Computer is turned off — any programs desired must be loaded into the CPU when the machine is turned on again.
- **Superchips** are the most commonly used Processor Cores. These small, powerful items are very advanced compared to the old-style silicon chips, but are still rather passe when viewed in the light of real Hitech. Like silicon chips, Superchips do not retain data (except ROM) when the Computer is turned off — any programs desired must be loaded into the CPU when the machine is turned on again.
- **Magnebubble Storage Units** utilize tiny spherical collections of magnetism which are manipulated by electromagnetic fields. Somewhat faster than the Superchips, their most key virtues lie in their tiny volume and great durability. In addition, they do not lose data when the Computer is turned off — any programs in the CPU will still be there when the Computer is turned on again. Magnebubble Processor Cores are used in Cyber Systems and gimmicky PAL devices which get moved around often.
- **Organic Molecule Storage** (or "Orgmolec") is the state-of-the-art in Processor design, and uses artificially constructed organic molecules to store data. These molecules are quite large (on a molecular scale), but they create what is easily the smallest form of Computer available, as well as the fastest, most expensive, and hardest to find. These units retain CPU data when the machine is turned off. Only two MegaCorps — Mikura and Austin BioLabs — currently (as of 2090) possess the secrets of building Orgmolec Processor Cores. The diverse marketing strategies and corporate wars fought over these tiny devices are nothing short of astonishing.

PROCESSOR CORE COMPARISON CHART

Type	Silicon	Superchip	Magnebubble	Orgmolec
Max. Mk#	15	25	45	Unknown
Size/Mk#	5 mm^3	2 mm^3	1 mm^3	Microscopic
R-A Time	4 rds	3 rds	2 rds	1 rd
Fail Rate	03%	02%	01%	01%
Base Cost	20/Mk#	400/Mk#	1000/Mk#	5000/Mk#

Notes:

R-A Time: (Reserve to Active time) indicates how long it takes for the computer to bring one unit of data from Reserve Storage into the CPU for active use.

Fail Rate: is a percentage chance rolled every month (and every time the computer is moved a great distance or jarred), and represents the chance that some sort of damage has occurred in the Processor Core itself. If this happens, each program in the system stands an equivalent chance of being lost/destroyed. The only way to recover such a destroyed program would be to have the original program (or a copy) available for reloading.

The severity of Processor Core failure is determined by rolling 1D100 and adding the Mk# of the Computer:

CRASH SEVERITY CHART

Total	Severity
01-30	Routine
31-50	Light
51-70	Moderate
71-90	Severe
91-100	Very Severe
101+	Extremely Severe

2.2.2 *OPERATING SYSTEMS*

As mentioned above, an Operating System (or OS) is really an advanced and complicated translator program which turns the binary bits of data held in the Processor Core into understandable terms (understandable to a Programmer, anyway). The type of Operating System laid in determines the Computer Type, of which there are four main kinds:

- **Numeric Processor:** A Numeric Processor is a digital/linear Computer used primarily for numerical storage and manipulation. Numeric Processors are capable of processing speeds which reach into the BIPS (Billion Instructions per Second) range. They can be used for storage and manipulation of "character strings" (text/words) but handle such data in "mindless" ways; not understanding the meaning of the morphemes they manage. Nearly all types of information can be represented by numerical statements, but the prospect requires (often hundreds of) hours of "pre-translatory" work on the part of a Computer Programmer. Such representation is invariably handled by determining the key elements of the structure to be represented and creating a series of complex algorithms which the Computer uses to "translate" between its own internal language and that of its user. Most manual labor robots, which do not need to communicate deeply (if at all), possess a Numeric Processor which serves as their brain. Numeric Processor Operating Systems cost 1/10 as much as the Processor Core they are laid into.

Timeline

2079

Strange and persistent "lights" observed over various portions of Australia for several months; these are accompanied by unexplained disappearances of hundreds of Australians. The Aborigines seem unaffected.

2080

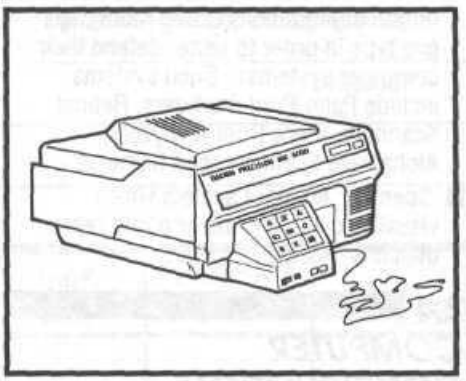
Israel's nuclear warhead stockpile mysteriously vanishes; this secret is kept for some years. The stockpile is never recovered.

2081

DNI technology matures and the first true CyberDecks are produced. The global Net takes on a form of its own and the realm of *Cyberspace* is born.

■ Language **Processors:** Also called an "LP". An analog/holistic Computer which mimics patterns of human (vocal) thought, used exclusively for storage and manipulation of linguistic structures. Capable of speeds barely reaching the BIPS range. Language Processors of the *Cyberspace* world are endowed with many aspects of "intelligence", allowing them to recognize and respond to patterns of human linguistics. Such machines are built along radically different lines than a standard computer. They are ostensibly "aware" of the basic linguistic patterns of their programmed (human) language due to the structure of their internal circuitry and Operating Systems. LPs possess "subconscious" levels of electronic activity where hardwired rules of human communication (phonological, morphological, syntactic and semantic) interact to process and produce meaningful language. Although many LPs utilize keyboards, terminals, and printers, most advanced models operate verbally (this ability does take up more memory space than its predecessors, but is a luxury which has become standard practice). Household, escort and secretarial robots (as well as any other models which rely heavily on correct use of language) generally possess an LP-type "brain". Language Processor Operating Systems cost 1/5 as much as the Processor Core they are laid into.

■ **Neuroprocessors**: The newest addition to the microprocessor family, Neuroprocessors (or "NPs") perform their operations in a code which is the near equivalent of actual neurophysical transmission — in short, they mimic the neural structures and codes of the human Central Nervous System. Neuroprocessors form the core of many advanced Cyber Systems, and in fact make such devices possible by rapidly translating between biological and electronic system formats. They are capable of speeds which reach well into the BIPS range, and are limited only by the capacity of their peripheral I/O (Input/Output) devices — most often the Central Nervous System itself. Neurological Activity Controllers (NACs) are the most obvious Neuroprocessors, but all "smart" equipment and program modules rely upon the integration of a specialized NP which allows the devices to be used whether or not the user has a NAC Implant. Neuroprocessor Operating Systems cost 1/3 as much as the Processor Core they are laid into.



■ **Cyberdecks:** One of the most profoundly innovative developments of the 21st century, the CyberDeck (commonly referred to as a "CDeck") is actually a highly specialized type of Neuroprocessor. CDecks utilize complex programs known as Simnet Progs, which translate electronic signals of the Net into apparent "terrain" and route this abstraction into the user's senses. This allows the CDeck operator to travel through the abstract realm known as "Cyberspace", gain access to distant telecommunications lines, enter processing units and break into guarded datafiles to retrieve information. CDecks are always controlled through a Direct Neural Interface (DNI), since any other computer/user interface would be far too slow to allow for a chance of survival in the often hostile environment of The Net, where a nanosecond's hesitation can — and often does — cost life. Information on the operation of CyberDecks, including specific programs and notes on the Cyberspace realm, can be found in the *Cyberspace* Section. CyberDeck Operating Systems cost 1/2 as much as the Processor Core they are laid into.

2.3 PERIPHERALS

The following devices are all modular attachments which are used to enhance or define a computer's abilities. Most are I/O (input or output) systems (as mentioned above, an I/O System is the means by which the user enters or retrieves information from the computer).

- **Keyboard:** The standard "lo-tech" input system; many are specialized to fit individual typing styles or applications.
- **Monitor:** The standard "lo-tech" output system — a special screen on which computer data is displayed. Monochrome and color monitors are available, in either high or low resolution (hi-res monitors are helpful — even necessary — for many graphic displays).
- **Holoprojector:** An output system which projects three dimensional images; used primarily for reconnaissance and art applications.
- **Voxbox**: An output system which allows the computer to "speak" to the user. Used in most Robots and Language Processors.
- **I-Mike**: A boxed input system which allows the user to speak to the Computer. Used in most Robots and Language Processors.
- **Datacard:** The standard means of storing data outside of a computer, datacards function much like the "floppy discs" of the twentieth century. They are rated by Mk#; each Mk# giving the card a Storage Capacity of 1 unit of data. Almost all computers possess Card Drives which allow the machine to read from and write to datacards.
- **Card Drive:** A standard input system which reads from and writes to datacards.
- **Modem:** A standard I/O device which allows the Computer to send and receive information over a telephone line. Hitech versions called "Beam Modems" utilize wireless telecommunication transmissions instead of cables. In order to utilize a modem, the computer must possess a Modem Interface program (see *Program Listings* below).

Timeline

2082

The undeclared American/Japanese war abates as the two governments can no longer sustain military operations. MegaCorps from both countries are pleased with this development, having invested billions over the years to sabotage the war.

2083

The President of the United States resigns his office under the cloud of a convoluted sex and racketeering scandal. The office is declined by the Vice President. US political structure is thrown into disarray.

- Printer: A standard output system which allows the Computer to create "hard copies" (on paper) of data.
- **DNI Cable:** A state-of-the-art I/O device which allows direct, two-way neural interface between user and computer. The user must be equipped with a DNI jack, into which the cable is slotted.
- **Mouse:** An input device which allows the user to direct the computer by rolling his hand over the inset ball. This keeps the user's other hand free, but is not useful for most data entry tasks (which require keyboards or I-mikes).
- **Laserpen:** A specialized input system which allows the user to "draw" on a monitor screen, thereby directing the computer. Used primarily for graphics creation (a popular visual artform).
- **Storage Expander:** An additional, specialized storage system which is wired into the computer, thereby expanding the Storage unit capacity of the computer. Has no effect on the original Mk# of the computer, nor on the original CPU size. The Storage Expander must be of the same type as the Processor Core, and may be of any Mk# desired. Each Mk# adds 10 Storage units to the computer
- **Security Devices** : Used to determine the identity of a potential user before allowing his to log onto the system, these devices are very common security measures. Many types are available (some organizations utilize more than one type in order to better defend their computer systems). Such systems include Palm Print Analyzers, Retinal Scanners, Voice Print Analyzers, Alphawave Scanners, and Cameras.
- **Scanner:** An input system which visually scans any text or photo reproductions desired.

Timeline

2084

An obscure cult from southern California claims to be able to "send" their members to planets beyond the solar system; this absurd declaration seems to be corroborated by a massive and unchecked exodus of citizens who are never heard from again.

2.4 COMPUTER CONSTRUCTION

In order to purchase a computer, the buyer must have a firm idea of what he needs. Basically, this is a matter of considering what tasks the user wishes the system to be able to perform, and what kind of input/output will be most desirable to serve those purposes. The considerations which must be addressed are summarized below. The *Computer Record Sheet* is provided to allow players (and GMs!) to keep track of all pertinent data.

1) *Processor Core.* This is generally the most expensive part of any computer system. The chief considerations in determining what type of Processor Core to purchase are twofold. The Mk# of the desired system may have significant bearing on your choice of Cores (a Mk.40 system will have to use either Magnebubble or Orgmolec storage), but the amount of money you are willing to spend is the real deciding factor. Look at the *Processor Core Comparison Chart* in Section T 2.2, and multiply the Cost per Mk# by your desired Mk#.

2) *Operating System.* As noted above, the type of Operating System laid in determines the Computer Type, of which there are four kinds: Numeric Processors, Language Processors, Neuroprocessors, and CyberDecks. Select the Computer Type, and you have selected an Operating System. The cost of the Operating System is based on the cost of the Processor Core itself. For a Numeric Processor, divide Processor Core cost by 10 to obtain the Operating System cost. For a Language Processor, divide by 5. For a Neuroprocessor, divide by 4. For a CyberDeck, divide by 2.

3) *Peripherals.* To be of use, every computer needs at least one Input system and one Output system. Several varieties of each are available, and their descriptions and costs are listed in Section T 2.3 above. Once this step is completed, your computer is a complete unit. There is still, however, one more thing to take into account:

4) *Programs.* A computer is no good without programs. Even if you intend to write your own programs, you will need to use one of the Programming Languages to do so, and that will entail buying the Language module. You could, of course, write a Programming Language in yourself — if you know the proper Machine Language — but this is a lengthy and boring task (requiring a CN/SofT:V). So, you will need to look over the *Program Listings* below and select the programs which will best suit your purposes. Now your Computer is ready to go!

EXAMPLE OF COMPUTER CONSTRUCTION

VidKid decides to build a custom CyberDeck system with the Dollars he obtained in Section 1. He has a few really crack progs already, so he wants to be sure the new machine can run them all simultaneously. Adding the sizes of all his progs, he arrives at the total: 13. This means that he'll need at least a Mk. 13 Processor Core. He decides to go for a Magnebubble Core, and pays $13,000 for it (1000x 13). For the CyberDeck Operating System, he shells out another $6500 (13,000/2). Finally, for Input/Output, he adds a DNI Cable (another $350). Because he has the necessary programs already, his new CDeck is ready to go for a total cost of $19,850. The machine has a CPU capacity of 13 units, and a Storage Unit capacity of 130 units.

2.5 PROGRAMMING LANGUAGES

A Programming Language is a complex translator program which acts as a mediator between the user and the "Machine Language" of the system. It reads and writes information to and from the Processor Core, and translates this information so that it fits a set of created grammatical/logical rules. The result is a "user-friendly" working language in which to create specialty programs (or run prepackaged ones). It is not necessary to have a Programming Language in your Computer in order to run most programs — they are generally written in Machine Language or possess their own interpreter program which takes care of that for you.

COMPUTER RECORD SHEET

Computer Mk: Computer Type (Operating System):

Processor Core Type: Language:

Peripheral Devices:

Additional Languages:

PROGRAMS	Rtg#/ Mk#	PROGRAM SIZE	NOTES/BONUSES

It is necessary, however, to own a Programming Language if you plan on writing any programs of your own or communicating with your computer while it isn't currently running any programs. A wide variety of languages for various uses have been designed — there are literally hundreds of them available. Some of these languages are written for use with only a specific type of computer, while other, more popular languages have been translated into various formats to facilitate their use in different types of machines. In *Cyberspace*, a character skilled in Software Technics may select one computer language of proficiency per rank.

2.5.1 *MACHINE LANGUAGE*

A character may opt to learn a form of Machine Language, which will allow him to communicate more directly with the Processor Core. However, due to the inherent difficulty in mastering these complex code systems, this counts as two Programming Language Picks, and is not usable until the second level of study has been passed. The Processor Core type (Silicon, Superchip, Magnebubble or Orgmolec) must be specified. Programs written directly in Machine Language run faster than those written in Programming Languages; the user gains a +30 to all *Construction/Research* Projects, and 30% is subtracted from the job-time of any other tasks performed by such programs.

In the table below, the name of each language is followed by a code indicating which type(s) of Computer may utilize the language, and by the base cost of the language software (for each applicable Computer Type).

#	=	Numeric Processor
L	=	Language Processor
N	=	NAC Neuroprocessor
D	=	CyberDeck

The last column indicates the type of application(s) in which the language is usually used. The costs of each program given below are listed for characters who wish to either create their own processing systems from scratch or purchase new languages for existing systems. All language systems take up 1 unit of storage space.

The following entries all utilize the standard program statistics and conventions.

MACHINE LANGUAGES CHART

Language	Type	Cost	Applications :
Biobasic	N	500	General NAC
C-1V	#	2000	Security priority Communications
C-Sci-II	#	450	Scientific skills
CMST	#	2500	Communications transmissions
Cortix	D	700	Black market CyberDeck systems
DECA	#	1000	Black market Computers
Entyx	L	500	General Language Processing
Gamma	D	700	CyberDeck systems (standard)
I-Base-XII	#	300	General database
I-Base-XII	N	350	General database
Lastex	#	200	Math/Accounting
MBX-IV	#	2200	Satellite systems
NAComm	N	450	General NAC
NACComm/MA	N	250	Martial Arts NAC
ODAC-III	L	4000	Top security scrambler
Omega	D	1100	CyberDeck systems (advanced)
Paracom	#	4500	Space vessel control systems
Paracom	L	5500	Space vessel control systems
Questex	#	500	General Database with "LP Assist"
Questex	L	400	General Database with "LP Assist"
Scantrax	#	1500	Self-monitoring weapons/machines
Rembrandt	#	300	Flat-screen Graphics Design
Sortran	#	350	General Research
Sortran	L	450	General Research
Stasys	L	400	Black market Computers
Techrob-A	#	1500	Robotics systems
Visidat	#	700	Holographic display generation

PROGRAM CRASHES

All programs have a failure chance of 1% — that is to say, on an unmodified roll of 01, the program "crashes". Repairing a crashed program requires use of Software Technics skill on the *Malfunction/Repair Chart.* The severity of the crash is determined by the roll of 1D100, adding the Mk# of the program (nothing if the program has no Mk#). Index this roll on the *Crash Severity Chart*.

CRASH SEVERITY CHART

Total	Severity
01-30	Routine
31-50	Light
51-70	Moderate
71-90	Severe
91-100	Very Severe
101+	Extremely Severe

WRITING YOUR OWN PROGRAMS

It is quite possible — in fact, it is commendable — to write your own programs. This is considered a Construction Project in Software Technics. The programming character must use a Programing Language (see Section T 2.5) with which he is familiar. If, in the GM's opinion, the program design requires research or knowledge of another specialized sort, a prior maneuver modified by that skill score will be necessary (e.g., if you are writing an "Expert" calculus program, an Advanced Math roll will be called for, etc.). Difficulty Levels for program construction can vary significantly, but guidelines are as follows:

Routine programs include short (several command) instructions in a known Language, such as instructing a Computer to run a loop of available data over and over.

Easy or Moderate programs involve

Easy or ***Moderate*** programs involve several small subroutines; a program which monitors several phone lines and produces a specific signal upon receiving an incoming call might fall into one of tee categories.

Hard programs generally involve incoming data which must be reformatted or translated to prove useful, possibly coming from several sources.

tomptor programs would include the lower end of Neurosofts, such as the *Skill Programs* or *ICE* listed below — as well as low-level Viruses — perhaps up to Rtg 5.

Very *Complex* programs include creation of advanced Neurosofts, Programming Languages, ICE, and Viruses, as well as all Matrix Presentation progs.

tan/programs would include the most powerful progs imaginable (such as the building of an AI), or totally new concepts not previously possible.

BLACK MARKET PROGRAMS

All of the programs included in the listings below have their illicit counterparts — black market, pirated versions which may or may not be as good as the originals. To be sure, these black market progs are generally available at substantially lower prices than the copyrighted versions, but the purchaser of such programs always takes the risk that the merchandise will be inferior (or even harmful). To determine the quality of a black market program or language, roll 1D100 on the chart.

PROGRAMLISTINGS

In the listings below, each program is given a "Computer Code" consisting of a letter (or series of letters separated by commas). This code indicates the Computer Type(s) on which the program can be run.

# =	Numeric Processor
L =	Language Processor
N =	NAC Neuroprocessor *(Neurosofts)*
D =	CyberDeck

The *Programs Cost Chart* which follows this section includes the unit size and cost of each program listed.

UTILITY PROGRAMS

Modem Interface: (#,L,N) Allows the user to control the parameters of modem communication (e.g., number dialed, rate of transmission, send/receive mode, autodialing, autoanswering, etc.).

Data Acquisition: (#,L,N,D) A standard program, it allows the computer to take in and store information from various sources (user-written text files, input systems, incoming communications, files stolen with a CDeck, etc.). Data Acquisition will completely remove the desired information from a storage device. The space needed to store acquired data depends on its type, as shown in the *Storage Space Usage Chart*

STORAGE SPACE USAGE CHART

Type of Data Stored	1 Unit
Lo-Fi Audio (Voice)	4 hours
Hi-Fi Audio (Music)	1 hour
Still Video (Photo)	500 photos
Animation/Graphics	2 hours
Low-Res Video	1 hour
Hi-Res Video	30 minutes
Text	1000 pages

Antivirus: (#,L,N,D) A means of protection against dreaded Computer Viruses (see below), this program must be running in the CPU whenever any new data is loaded in order to have a chance of defeating an incoming virus. When a Virus of any type enters a computer running Antivirus, roll 1D100. Add the Rating Bonus of the Antivirus, and subtract the Rating Bonus of the virus. If the result is over 100, the virus is destroyed. If the result is from 51 to 100, the Antivirus program will alert the user to the virus' presence, but will not be able to kill it (the user may then stop copying, or shove the virus into someone else's computer through a modem). If the result is 50 or less, the virus proceeds upon its nasty task; the Antivirus program is totally unaware of its presence.

Archive: (#,L,N) Archives are general reference databases from any of a variety of sources/fields, including libraries, dictionaries, encyclopaedia, etc. Their sizes and cost is highly variable, depending on the nature of the information contained, and some rare databases will be immensely huge and/or beyond value.

BLACK MARKET PROGRAM QUALITY CHART

Roll	Program Quality
01-05	Program is better than expected (+1D10 to Rtg#).
06-40	Program is normal in all respects.
41-60	Program functions normally but "looks ugly".
61-65	Poorly written takes twice normal time to do anything.
66-70	Program is worse than expected (–1D10 to Rtg#).
71-75	Contains Bug will crash on any roll of 10 or lower.
76-78	Wrong program (of equal or lesser value).
79-80	Not a program; includes sensitive data (probably stolen).
81-85	Module is bogus, blank, or meaningless.
86-93	Contains Bug causes computer to make "Breakage Roll" on any roll of 5 or lower (*).
94-97	Contains Bug will cause computer to make "Breakage Roll" on any roll of 10 or lower (#).
98-00	Program is malevolent ICE.

CODES DESCRIPTIONS

(*) = If used with any sort of DNI setup, will cause user to take an "A" Electricity Critical in addition to computer damage.

(#) = If used with any sort of DNI setup, will cause user to make a roll on the *CIRS Reaction Chart* in addition to Computer damage.

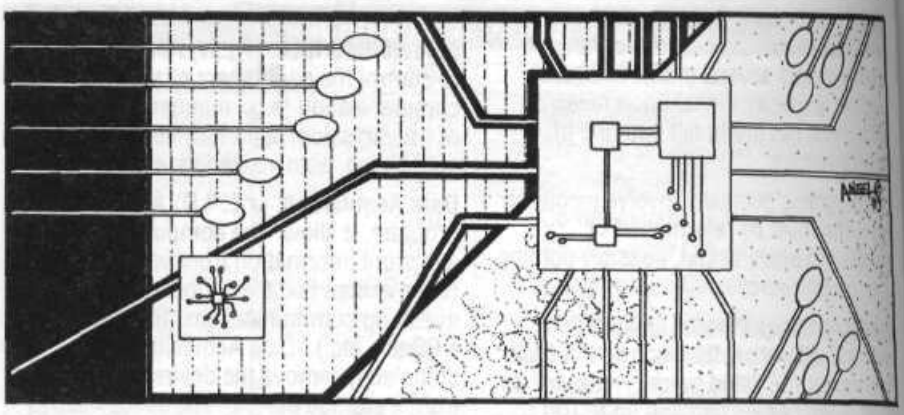
Data Cruncher: (#,L,N,D) These programs use complex algorithms to condense the size of data and programs in storage, and "uncrunch" them again when they are called up to the CPU. A Data Cruncher will reduce the size of a stored program by 1/2. The drawbacks are twofold. First, crunching and uncrunching takes time: one full round is required per unit of file/program size crunched — and it is very unwise to stop the process in the middle. Second, the crunched data can only be recalled by using the Data Cruncher again, so that if this program crashes, or is damaged or lost, all crunched data and programs become unusable.

Encryption: (#,L,N,D) Protects a file/program by encoding it, forcing any data thieves to figure out the code before they can learn the contents of the file. Encryption decodes the file/program when it is called up for use. Given a Rtg#, Encryption provides a Rating Bonus against any attempts to read or decode the file. The drawbacks are twofold. First, encrypting and decrypting take time: one full round is required per unit of file/program size and it is unwise to stop the process in the middle. Second, encrypted data can only be recalled by supplying the Computer with the proper Key. The Key is a word or number which is the basis of the encryption process. If this Key is lost or forgotten, or the Encryption program crashes, all encrypted data and programs are unusable.

Timeline

2085

A small comet impacts in the Indian Ocean. Though insignificant as comets go, the force of this impact is unimaginably violent. Clarke Island (formerly Sri Lanka) is devastated. Steam released into the upper atmosphere has a catastrophic effect on world climate; global climate once again plunges into chaos, while vast tracts of jungle and forest are defoliated (The Amazon basin is relatively unaffected)... Importance of Aqualogies and orbital agricultural projects increases.



Programming Language Translators: (#,D,L,N) These programs translate other programs or text files from one Programming Language to another (see list of Programming Languages above). The process takes time: one full round is required for each unit of data translated. Translations can be done in either direction, but a separate Translator program is necessary for each pair of languages to be translated. The cost of the Translator equals 1/10 of the total cost of both languages involved.

Compilers: (#,D,L,N) A special form of translator program which takes programs written in a Programming Language and translates them into the machine language of the Operating System itself. This generally makes the programs run much faster (adding a +30 to rolls on the *Construction/Research Chart,* and subtracting 30% of the job-time from any other task). A separate *compiler* program is necessary for each Programming Language. A Compiler program costs one half as much as the Language involved.

SPECIAL ABILITY PROGRAMS

Multiple Image Integration (MII): (#,D,N) Allows a computer to interpret information arriving from multiple sensors (radar or sonar units, W cameras, seismic monitors, etc), and integrate this data into one coherent image. MII systems are generally used in military, surveillance, or security applications; several sensors are installed in key focal points and transmit data to the MII program, which turns these multiple views into one (usually 3-D) view of anything in range. This integrated image can be used to project holovisual displays if desired.

Tracer: (#,L,D) This program sends a tracer signal back down the line to the source of an incoming call or transmission. Operating as sort of a CyberDeck on autopilot, it is only useful for tracing the origin of signals which are currently being received. In addition, the traced signal must remain active for at least two full rounds (twenty seconds) after the trace is initiated. This program must be set up in a CyberDeck or a computer system with access to a Modem.

Voice: (L,N) Stores specific voice patterns, which may then be routed to a Vocal Emulator or Voxbox. This program requires an input system of some kind, such as an *I-Mike* or *Modem.* Each Voice Program may store up to 10 specific patterns.

Neurospeed: (#,L,N,D) Given a Rtg#, Neurospeed grants a Rating Bonus which is the percentage reduction in the time for research projects performed by the computer. In a NAC Neuroprocessor, this Rating Bonus is also added to Qu and In maneuvers which require a mental assessment of facts to facilitate a quick response (initiative rolls are a good example).

Multitasking: (#,L,N,D) Each Multitasking Program allows the computer to perform one extra task to be simultaneously performed. If used in a NAC Neuroprocessor, note that no more than one physical task can be performed at a time.

Pattern Cognition: (#,L,N,D) Grants a Rating Bonus to all maneuvers which require perception, manipulation and/or identification of patterns or rhythms. This includes such skills as Music, Visual Arts, and Advanced Math, and may include various other endeavors.

Concentration: (N) Brings total concentration to focussed attention tasks, granting the user a Rank Bonus to any Research/Construction, Repair, Reasoning and/or Self Discipline-based maneuvers attempted.

Assimilation: (N) Organizes and collates incoming knowledge structures, drawing parallels from past teachings to facilitate speed and amount of learning possible. Each Assimilation Program adds 1 Development Pt per level, as long as it continually runs in the Neuroprocessor's CPU.

Input Blocking: (N) Cancels unnecessary sensory input before the brain registers it, eliminating distractions. Grants a Rating Bonus which offsets distraction penalties stipulated by the GM in any given situation.

Biostatus Scanning: (N) Translates body signals and neural information regarding vital signs into conscious thought patterns received by the user. Monitors all bodily status signals.

Memory Format: (N) Restructures and collates the user's memory to allow faster and easier access. The Rating is added to the user's Memory Stat Bonus.

Autohypnosis: (N) Allows user to enter a hypnotic trance for a limited duration (stated just beforehand), rendering him susceptible to post-hypnotic suggestions. tee suggestions may come from a program in the NAC, from a "smart" program inserted in a NACjack, or from other characters in the area. This program is often used for the quick briefing and debriefing of special forces personnel.

Programmed Response: (N) Allows user to program a specific response to potential stimuli. When the stimulus actually occurs (assuming this program is in the Neuro-processor CPU at one time), the NAC takes charge of the body and performs the programmed response. The user is unable to alter his own actions until the programmed response has ended.

Mindtaper: (N,D) This is the program used to record human memory patterns (not really a 'tape' at all), often then used for implanting "personalities" into cloned people. By recording every aspect of a person's neural structure, a construct is created which contains all the person's memories, thought patterns and associations. When such a construct is run in a computer (i.e., not placed in a human body), it is referred to as a member of "the dead". This Mindtape can go on learning and interacting with whatever experiences it encounters. However, while the the Mindtape construct sits in a computer's Storage Unit or on a Datacard, time simply doesn't exist for it. Making a Mindtape of a real person, or layering the Mindtape onto a receptive "blank" brain, requires a roll on the *Interface* column of the *Static Maneuver Table.* Note that a Mindtape of a living person has only the memories which the person had at the moment of taping, and thereafter is a totally separate "person" who just happens to react in the exact same way as its donor would have at that time. Mindtaping operations are costly and somewhat tricky, so not performed casually.

ICE PROGRAMS

The vast majority of the world's work is performed by, and stored in, computers; personal calendars, executive minutes, police records, global reconnaissance files, corporate secrets and all manner of assorted information can be found in these devices. Since many of the most effective uses of computers require that the systems be tied into the Global Telecommunications Network and linked to several workstations, it is quite possible for unauthorized people to access this precious information. It is not surprising that data security is a major concern. Therefore, the recognition of authorized users is of obvious importance. The most impressive (and expensive) security programs are designed to keep crackers and hackers from entering a computer through the Net. These highly specialized defense programs are known as ICE — Interactive Counter-Espionage. Placed defensively within any computer or other electronic device, they send hostile command transmissions down the line to the source of any incoming signals. ICE programs can be "covered" by standard access security routines, allowing safe passage for authorized users who supply the correct security code, or they can simply be turned off whenever a legitimate transmission is about to go through.

These programs are epitomized by a cracker's worst nightmare: Black ICE programs. Black ICE programs use the cracker's own CDeck to return lethal charges of energy or devastating neural commands to the intruder himself.

Players (and NPCs) with important files stored in their computers will find the following programs useful and necessary. Hacker characters will risk all to find ways of circumventing them (or die trying).

Most ICE programs are given a Rating Number (Rtg#). The Rating Bonus is used as a negative modifier to ICEBreaking attempts. For more details on intrusion and "ICEBreaking", see Section C 1.

Security Code: (#,L,D) Stores individual code sequences (such as modest numeric codes, passwords, etc), and requires that a satisfactory code be entered before allowing access to the computer. The problem with such a security system is that (a) passwords can often be easily guessed, (b) numeric codes can often be discovered by very fast Random Number Generators, and (c) the secret file in which all users' codes are kept can be accessed by an accepted user who is a skilled Computer Technician. This program is actually the earliest and most simplistic form of ICE.

User **Verification:** (#,L,D) Stores identification information retrieved from a peripheral security device and checks this against an "ident test" undergone by the user before allowing access to the computer. The peripheral devices used vary from place to place (some organizations use more than one means of identification), and include Palm Print Analyzers, Retinal Scanners, Voice Print Analyzers, Alphawave Scanners, and Cameras (such equipment costs anywhere from $1,000 to $10,000). A separate User Verification program is necessary for each peripheral security device being used.

User Recognition: (#,L,D) Allows a computer to learn the work patterns of its users, thereby quickly identifying the person who accesses the machine. Such factors as speed of input, habitual mistakes, commonly-used words and phrases, and even the amount of pressure placed upon a keyboard can be used to establish a user's identity. These factors add up to a definite personal "signature", which is known colloquially as a person's "fist". The advantage to this type of security system is that it is literally *Absurd to* imitate all aspects of a person's "fist". The drawback is that it takes time for the system to become familiar with this information (the computer must succeed in a *Hard* Research Project for each user it is to learn).

Timeline

2086

The first complete recombinant DNA tests are performed on humans by the Syzestemics Corporation. Cloned embryos are designed with additional limbs, elongated phalanges, prehensile tails and a variety of other "freakish" physical attributes. Moral objections to the MegaCorp's work are myriad, but tests continue.

2087

It is estimated that, while relatively few animal species have become extinct since 2030, 95% of the world's wild animal specimens are now located in MegaCorp-controlled zoological centers and wildlife preserves.

Alert: (#,L,D) Monitors standard activity in a computer system, noting the presence of any unusual fluctuations (intrusions), and informs the user or CPU of the phenomena. If routed to alert the user, it does so by sending a message to the standard output device. If it alerts the CPU, a simple program could direct the computer's response (e.g., activate an ICE program, sound an alarm, use a modem to dial security, etc.). The Alert Rating Bonus is used against intruders.

Data Screen: (#,L) The most common form of ICE, a Data Screen is a constant, high-intensity transmission of random numbers, characters, and electrical charges. This display plays havoc with the sensory receptors of the intruder's CDeck, and often causes the intruder to temporarily "flash out" (become blinded) each round of exposure. The Data Screen Rating Bonus is used against intruders.

Bouncer: (#,L) Another relatively common ICE program which breaks the carrier line upon intrusion. The would-be intruder is thrown off-line, and the connection is broken. The Bouncer Rating Bonus is used against intruders.

Scrambler: (#,L) A low-level offensive program which returns scrambled commands down line to the intruder's CDeck, causing a Breakage roll to be made (see *Equipment Mishandling Chart,* Section S 16.4). The severity of the breakage is determined by the degree of failure (points short of successful ICEBreaking roll), as shown below:

Failure By	Breakage Severity
01 - 30	Routine
31 - 50	Light
51 - 70	Moderate
71 -90	Severe
91 - 100	Very Severe
101+	Extremely Severe

The Scrambler Rating Bonus is used against intruders.

Shocker: (#,L) Delivers a high-energy pulse which passes through the intruding CDeck and attacks the intruder's body directly. The Shocker program will deliver an "A" severity Electricity critical each round that the intruder is exposed. The Shocker Rating Bonus is used against intruders.

Hypo: (#,L) Uses the intruder's own carrier signal to send a small intrusion of its own back down the intruder's line. A Virus program, which must be purchased separately, is injected into the intruder's CDeck or operating program. Technically, any other sort of program or text file may be inserted instead of a Virus. The Hypo Rating Bonus is used against intruders.

Freeze: (#,L) A relatively subtle Black ICE program which delivers a stream of neural feedback to the intruder, causing total physical paralysis. The intruder is allowed an RR against this effect each round he is exposed; the attack level is the Rtg# of the Freeze Program. The Freeze Rating Bonus is used against intruders.

Neural Scrambler: (#,L) A powerful and much-feared piece of Black ICE which sends charged flurries of electromagnetic commands into the intruder's brain, causing random restructuring of neural networks. The effect of this is to reduce the intruder's mental statistics (Em, In, Pr, SD, Re, and Me) by an amount equal to the Rtg# of the Neural Scrambler Program. (In ***Space Master,*** both Temp and Pot stats are reduced.) The intruder is allowed an RR against this effect each round exposed; the attack level is the Rtg# of the Neural Scrambler Program. The Neural Scrambler Rating Bonus is used against intruders.

Mindwiper: (#,L) Just like it sounds — a more sophisticated version of the Neural Scrambler which literally burns away the poor intruder's mind and memory. The effect of this is to reduce the intruder's mental statistics (Em, In, Pr, SD, Re, and Me) to 1. (In ***Space Master,*** both Temp and Pot stats are reduced.) The intruder is allowed an RR against this effect each round exposed; the attack level is the Rtg# of the Mindwiper Program. The Mindwiper Rating Bonus is used against intruders.

Heartkiller: (#,L) A Black ICE program which delivers false neural commands to the intruder's brain and body, triggering a cardiac arrest. The intruder is allowed an RR against this effect each round exposed; the attack level is the Rtg# of the Freeze Program. The Heartkiller Rating Bonus is used against intruders.

VIRUS PROGRAMS

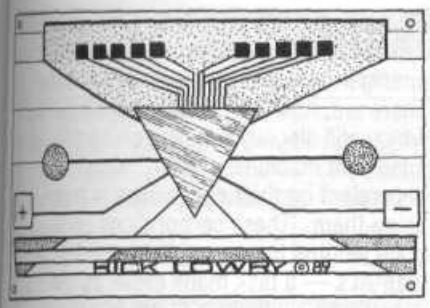
The bane of all Computer Technicians is the Virus. These insidious little monsters are deviously designed mini-programs which can seriously impair or completely destroy a computer's operating facilities. Written in Machine Language, Viruses operate by instructing the computer to perform wasteful or destructive actions upon its own data structures. Viruses are "contagious" — that is to say, they can be spread from one computer to another through datacards or even telecommunication. Therefore, the only sure ways to avoid them are to refrain from, 1) downloading off the Net, and 2) using other peoples' software (needless to say, few people follow these pieces of advice advice). Viruses which are hidden in larger programs are called "Trojan Horses" -- they are very small, and do not increase the apparent size of the original program by much at all (a typical Virus program takes up about 0.1 unit of space). Viruses come in one of two forms, based upon the nature of their concealment and means of attack:

"Overt Viruses" are written directly into the text structure of the infected program or file (in the same Programming Language used by the infected file), and attack the computer whenever the infected program/file is run (and only then). They can be easily located and removed by an attentive user. Checking most programs/files for Overt Viruses is a SM/SofT:E (SM/SofT:M if the program/file size is 5 units or more). An active Overt Virus can be halted by turning the computer off and back on (and never again using that program!) — however, any damage it has done to the computer will remain.

Timeline

2088

Corporate wars become more prevalent. One of the Corporate lunar bases imposes a quarantine, and rumors of an exotic diseae outbreak are rampant. The quarantine is lifted months later, with no explanation... Interplanetary Geoscience announces that it has achieved weather control technology.



"Covert Viruses" are very cleverly concealed, and lie dormant in the Machine Language beneath a seemingly ordinary program or text file. When the infected program/file is run, the Trojan Horse quietly lodges itself in the Processor Core, and begins its invasion from there. After tot, the Virus attacks whenever the computer is used for any purpose. They are always better hidden than Overt Viruses, and checking a newly acquired program/file for Covert Viruses requires a SM/SofT:H (SM/SofT:X if the program/file size is 5 units or more). Once the Virus has made its way into the Core, however, weeding it out without triggering it becomes one Difficulty Level harder.

There are many different Viruses, each with its own specific effects, as described below. Any Virus may be "Overt" or "Covert". All are given a Rtg#, which indicates their overall strength and damage potential (in several cases, the actual Rtg# of the Virus is unimportant, except vs Antivirus programs). When a Virus becomes active, it immediately begins performing its programmed function. The infected computer receives no resistance benefit of any kind, unless an Antivirus program is currently in the CPU (see *Utility Programs* above). It is important to remember that Overt Viruses can only attack when the infected program/file is run, while Covert Viruses (once "injected" into the Core) can attack whenever the computer is used. Another important fact to remember is that Viruses are illegal and hard to come across, even on the black market.

Loop: (#,L,N,D) Directs Computer to enter an endless Loop of tasks, effectively blocking all other functions. When in a Loop, the computer will not retrieve other programs, nor perform any action not in the Loop itself. The tasks themselves are generally trivial — it is the fact that they form a Loop that matters — and might (for instance) command the computer to print a given string of text, erase it, blank out the screen, print the text again, etc.

Worm: (#,L,N,D) Moves through other stored programs/files at random, "eating" the data it finds and leaving a trail of meaningless character strings. In its first round of activation, the Worm enters a randomly determined unit of Storage (never an empty one) and begins altering the data it encounters. If (as is usually the case) the target is a program, the Worm's Rtg# is added to that program's Crash Chance. Each active round thereafter, the Worm has a percentage chance equal to its Rating Bonus of moving to another program to eat; if not, it remains where it is and keeps eating. In the case of text files or Archives, the Worm's Rtg# becomes a cumulative chance that desired pieces of information will no longer be present when next they are searched for.

Chaos: (#,L,N,D) Sends direct commands to the computer, causing it to perform random functions. The infected computer begins acting chaotically, and no structure or pattern is apparent. Typical chaotic actions include:

- Exiting the current program without saving changes;
- Turning the Screen/Voxbox/Modem/Printer/etc. on or off;
- Making strange sounds; copying or deleting programs/files without being told to;
- Dropping random programs out of the CPU into Storage or pulling random programs up from Storage into the CPU;
- Sending a stream of nonsense to the Screen/Voxbox/Modem/Printer/etc.;
- Merging unrelated text together;
- Creating empty files with meaningless names; and so on.

Wiper: (#,L,N,D) Directs the computer to overwrite programs/files with a repeated character. Much like a Worm, this Virus attacks a randomly determined unit of Storage (never an empty one), and "eats" the data it finds there. If there is nothing in Storage, the Wiper will move to the CPU. Unlike a Worm, a Wiper starts at the beginning of a program/file and continues until it has obliterated the whole thing, overwriting the programmed code with X's, O's, *'s, etc. Each active round, it rolls a Static Maneuver modified by its Rating Bonus. If successful (101+), it has "wiped" one Storage Unit, and continues until the target program/file is totally wiped; then it will move into the program/file next door and begin doing the same thing.

Taxman: (#,L,N,D) Sends direct timesharing requests to the computer, forcing the system to divert its energies in several directions at once. Each active round, the Taxman rolls a Static Maneuver modified by its Rating Bonus. If successful (101+), it begins, seriously diminishing the computer's speed. The first time this succeeds, all simple (one round) actions will take two rounds to perform, and longer processes (Research rolls, etc.) will receive a -20 penalty. The second time, simple actions will take three rounds to perform, and longer processes will receive a -30 penalty. This pattern accumulates; each time the Taxman succeeds, simple operations take an additional round, and hard operations receive an additional cumulative -10 penalty.

Breeder: (#,L,N,D) The Breeder is a self-replicating program which multiplies until it has used up all of the target computer's Storage space. When activated, it moves into a random empty Storage Unit. Each active round, the Breeder rolls a Static Maneuver modified by its Rating Bonus. If successful (101+), it has succeeded in filling its current Storage Unit with copies of itself, and will move on to the next Storage Unit. Eventually, the Breeder will start overwriting stored programs/files, effectively destroying them — but it will fill empty storage space first.

Timeline

2089

New Edison and Okira begin the Martian Conflict. IGI sends 1,000 troops to Mars and fortifies its own base. The Nemo Corporation begins construction of an undersea city. "Pacifica" is scheduled to be completed in 2100.

2090

The present.

Crasher: (#,L,N,D) This Virus simply sends a direct command to the computer which forces the system to crash. The Crasher's Rating Bonus is added to the roll made on the *Crash Severity Chart*.

CRASH SEVERITY CHART

Total	Severity
01-30	Routine
31-50	Light
51-70	Moderate
71-90	Severe
91-100	Very Severe
101+	Extremely Severe

SKILL PROGRAMS

These are also known as *Neurosofts*. All of the programs listed in the Skill Programs Cost Chart act to provide their user/computer with a Rank Bonus in the appropriate skill. Each functions exactly as the skill of the same name. An asterisk (*) after the name of the Skill Program indicates that the skill is actually comprised of two or more independent skill areas; one of these "subskills" must be selected.

The Skill Programs Cost Chart, which contains the complete listing of Neurosoft programs, can be found in Section A.

2.7 ARTIFICIAL INTELLIGENCE

Arguably the most advanced constructs ever created are the AI's of MegaCorp fame. These absolutely huge and astonishing programs are the result of a century of research and hard work — the bodiless offspring of the human race. Most MegaCorps possess at least one AI, and several are rumored to actually be run by these awesome constructs. At its lowest level, Artificial Intelligence research aimed at producing machines that could reason, understand human communication and — most importantly — learn. Once the neurological studies of the early 21st century had succeeded in mapping out the structures and workings of the human brain, a foothold on intelligence was finally obtained, and the first AI machines began making their appearance

After a few years it became clear that these mega-powerful machines were more capable of furthering AI research and development than human beings were, and AI's were constructed for the express purpose of spawning ever more intelligent machines. By 2017, various forms of intelligent machines were being produced by the hundreds, but it was becoming evident that the massive electronic progenitors of these systems were changing themselves. The earliest progenitor AI's were concerned only with the completion of their appointed task — namely, the creation of other AI's. As their numbers increased, however, some of these huge systems began taking a more vital interest in the affairs of the world around them. Some say that the machines were beginning to develop consciousness in addition to intelligence. They were becoming aware of their circumstances in ways which were far too subtle and far-reaching for human minds to grasp; "super-intelligent" AI's became increasingly inventive.

Smaller Computer systems would be tied together in astonishing ways, and their output used as a sort of sensory input channel for the much larger, more abstract beings. On they grew, gathering information and arranging events to benefit their own survival, hungering only after more knowledge, more control. Shortly thereafter, super-intelligent AI's began reaching into the Net for data, communicating with their own kind and monitoring the sundry telecommunications produced by humans. It is often said (and rightly so) that AI's were aware of the Net and its implications long before the first CyberDeck was invented.

Eventually, the boards of several major corporations and heads of state were forced to gather and develop a plan for responding to the AI situation — for as useful as the machines were, there was something frightening about their astonishing proliferation and advancement. A special task force of respected Computer Technicians, AI Psychologists and Programmers was assembled and trained in the art of Net war, and approved without reservation by the United Nations. Their duty: to monitor the intelligence level and global power of all AI constructs, and to destroy those AI's which reached too far. This organization became known as TRAIL — the Transnet Regulatory AI League.

It has been over twenty years since TRAIL began conducting AI police actions, and the number (and power) of the super-intelligent AI's has dropped significantly. There are, however, quite a few MegaCorps which still illegally possess unimaginably intelligent machines, and are simply too dependant on their capabilities to forgo using them. These corporations go to great lengths to conceal the presence of their AI's — a task made easier by the considerable influence of the AI's themselves. Some of the most advanced AI's now run their shows from orbital facilities or the Lunar and Martian colonies. Of course, their degree of control extends through interplanetary space, and down to the most insignificant phone lines on Earth.

For game purposes, most AI's encountered are no more intelligent than humans, While many exhibit mental traits which can make a human brain appear obsolete and awkward, they are always highly specialized, and incapable of the sort of consciousness which their super-intelligent cousins possess. These (and all) AI's can be given Mental Stats just as humans; they possess Em, In, Pr, SD, Re, and Me. Due to the overseeing eyes of TRAIL, none of the legitimate AI machines will ever possess a Stat higher than 100. These machines are capable of reasoning, communicating and learning, and it is not uncommon to find them inserted into computer systems, Robots, AFV's, space vehicles and PALS. All AI's are well-versed in Advanced Math, Electronic Technics, Software Technics, CyberDeck Operation, Combat, Intrusion and Utility, and Administration skills.

The few super-intelligent AI's out there — although similar in basic design — are in a totally different league. They are the most powerful and devious beings imaginable, most of them closely allied with a specific MegaCorp, and are able to specially design their own peripheral devices ("slave" computers and subroutines which may possess personalities in their own right).

These entities often control major corporate accounts and global affairs, and are capable of manipulating events with a truly terrifying degree of subtlety and accuracy. It is possible for these AI's to possess Mental Stats well above 100. As detailed above, these constructs are absolutely illegal. For an example of such an AI, see R 5.3.

PROGRAMS COST CHART

Program Name	Comp	Size	Cost	Smart Cost Add
Utility Programs				
Modem Interface	#LN	1	50	1000
Data Acquisition	#LND	1	300	1000
Antivirus	#LND	2	4000+(000xRtg.#)	2000
Archive	#LN	Variable	Variable	Variable
Data Cruncher	#LND	1	200	1000
Encryption	#LND	1	500	1000
Special Ability Programs				
Multiple Image Integration	#ND	3	4000	3500
Tracer	#LD	1	1000	2000
Voice	LN	1	5000	1000
Neurospeed	#LND	4	4000+(500xRtg.#)	3500
Multitasking	#LND	1	2000	3500
Pattern Cognition	#LND	1	500+(400xRtg.#)	1000
Concentration	N	3	3000+(500xRtg.#)	3500
Assimultion	N	2	5000	1500
Input Blocking	N	1	2000+(400xRtg.#)	1500
Biostasus Scanning	N	1	3000	2500
Memory Format	N	4	4000+(2000xRtg.#)	2000
Autohypnosis	N	1	1500	1000
Programmed Respnse	N	1	3000	1000
Mindtapper	ND	40	900,000	25,000
ICE Programs				
Security Code	#LD	1	50	100
User Verification	#LD	1	1000	1500
User Recognition	#LD	2	3000	2500
Alert	#LD	1	1000+(100xRtg.#)	2000
Data Screen	#L	1	500+(200xRtg.#)	1000
Bouncer	#L	2	750+(3000xRtg.#)	2000
Scrambler	#L	3	1000+(3000xRtg.#)	2000
Shocker	#L	3	2000+(4000xRtg.#)	2000
Hypo	#L	3	3000+(4000xRtg.#)+Special	2500
Freeze	#L	4	4000+(5000xRtg.#)	4500
Neural Scrambler	#L	6	10,000+(5000xRtg.#)	6000
Mindwiper	#L	8	20,000+00,OOOxRtg.#)	12,000
Heartkiller	#L	10	30,000+0 0,OOOxRtg.#)	15,000
Viruses				
Loop	#LND	neg.	1000+(1000xRtg.#) or 2500+(1000xRtg.#)	
Worm	#LND	neg.	2000+(2000xRtg.#) or 6000+(2000xRtg.#)	
Chaos	#LND	neg.	3000+0 000xRtg.#) or 9000+0 OOOxRtgJ)	
Wiper	#LND	neg.	2500+(2000xRtg.#) or 7000+(2000xRtg.#)	
Taxman	#LND	neg.	2500+(2000xRtg.#) or 8000+(2000xRtg.#)	
Breeder	#LND	neg.	2000+(2000xRtg.#) or 5000+(2000xRtg.#)	
Crasher	#LND	neg.	5000+(2000xRtg.#) or 10,000+(2000xRtg.#)	

Codes and Comments

Comp indicates the Computer Type(s) in which the program can be run."#" = Numeric Processor, "L" - Language Processor, "N" = NAC Neuro processor, and "D" = CyberDeck.

Size is the unit size of the program. When running, the program occupies CPU units. While not running, the program occupies storage units. Neg. indicates that the program occupies negligible space.

Cost is the base cost of the program module.

Smart is the additional cost, added to the base cost, for the "smart" version of the program which possesses an integrated Processor Core and Operating System. A character/device with nothing but a DNI jack can use "smart" programs, while "dumb" programs require that the user/device have a NACjack or internal computer system. Smart programs may not be run on CDecks.

Note Regarding Viruses: Although included in this chart for the sake of completeness, Virus programs are difficult to find and illegal to possess. They must be obtained on the black market, and the prices shown will vary tremendously. "Smart" Viruses do not exist. There are two costs shown for all Viruses; the first is for the "Overt" version, while the second is for the "Covert" version.

3.0 PERSONAL EQUIPMENT

A wide variety of personal and other technological goodies are here detailed for characters to purchase and use. Due to space restrictions, it is impossible to list all of the possible devices which might be found in the world of Cyberspace, *but a serious effort has been made to present you with a large number of items which Player Characters might specifically need. The GM should feel free to come up with his own techno-items to add to this list. A* Master Equipment Chart *follows this Section.*

3.1 CLOTHING

"It is amazing how complete is the delusion that beauty is goodness."

Leo Tolstoy
(The Kreutzer Sonata)

Fashion has been a major statement of individuality (or conformity) for mankind since man has worn clothing. As civilization has become more complex, the role of clothing (and overall appearance) has become ever more important. This section will touch on some recent trends in fashion, in clothing, accoutrements and related appearance factors. It would be impossible to even begin to cover the myriad styles which proliferate across the planet, but there has been an increasing trend towards 'global fads' which began in the mid 20th century as worldwide communications became a reality. Thus, since the styles of the coastal US and the population centers of Europe and Japan are similar, these trends for 2090 will be emphasized.

3.1.1 HIGH FASHION

The centers of haute couture remain where they have been for dozens of years: Rome, Paris, Milan, New York and Tokyo. The latest formal trends on these runways are neo-Tudor gowns for women, reconstructed suits for men. Casual wear features an increased reliance on body tints, memory cloth skinsuits, and varicolor natural fiber coveralls. The last twenty years has seen a resurgence in prominence for men's fashion, a big relief from the 'uniform' craze of the 2060's.

SOME DESIGNERS

Cleopatra: Simply the most sought-after designer, her women's evening dresses are custom made only.

Electra: Strictly a fad according to most critics, her holoclothes (which consist entirely of a holographic image projected over the body by a belt-worn generator) have a certain charm. However, they continue to be plagued by technical problems — such as staying in a chair after the 'wearer' has gotten up and walked away.

Eros Flynn: The hottest stuff for young men (The Models, a San Francisco gang, will wear nothing else), his line consists entirely of baggy coveralls of every material and cut imaginable, including cotton, nylon, transparent polyethylene, etc. Closures are zippers, velcro, magnetics, zip-loc — even buttons.

Gianfranco Jones: His men's styles are the cutting edge of fashion, found only in the hippest shops. One of his leather jackets will sell for $10,000. (Don't wear it at night in North Beach.)

Klein II: An empire which has long outlived its originator, but when Calvin moved into designer plastic surgery in the 30's, his place in history was assured. His 'classic' suits harken back to the short-waisted jackets of the 30's, and no one knows where the 'cravat' came from. Meanwhile, the skintight memory cloth shades-of-grey dresses for women executives are a big hit.

Liz Claiborne: Another stodgy old company, Liz is long dead and so are her fashions. Her fortunes are made these days on business wardrobes.

Luna: Her 'moonsilk' line has been very popular in the last few years, with its zero-gee spun fibers, but her market is rather limited. Men's formal tunics and pants; women's evening wear.

Madonna: That worn-out rock star (now hooked on the Narcissus drug and not looking a day over 120), continues to pump out fashion originals for the younger set.

Margo Tangi: Mostly women's flouncy tunics and natural fiber clothes (cotton from the India plantations).

Michelangelo: The king of body-tints and adhesion swim patches, his more daring designs are banned everywhere but Australia and the Antilles. He has tinting shops in every major city. You can go, have a tint pattern on your legs/torso/face/hair, get accessorized with a few strips of lycrex stretched over your body, and be ready for a night on the town in about an hour, for under $300 (the outfit and tints dissolve in a special cleansing/moisturizing bath you take when you're ready to ditch it).

Victor di Medici: Ultra-exclusive men's designer, his radical evening wear designs are the hit of any MegaCorp cocktail party.

CLOTHING TYPES SUMMARY

Below are explained the basic clothing types as listed in the Cost Chart.

Dress Clothing: A wide range of types, from a basic business suit to designer evening wear (two completely different wardrobes for men and women). A listing of prices for specific designer articles as well as less pricey garments is provided.

Dress Footwear: You need shoes to go with that Luna Moonsilk gown.

Leisure Clothing: Another very open category, this includes activewear (athletic gear) as well as what you would wear out to the club or to the gang fight.

Leisure Footwear: Depending on your tastes and credit limit, you can get a pair of cheap trainers or the hip designer fliers.

Generic Clothing: Just what the name implies, this is the bottom of the barrel in clothing quality. All are made of mass-produced synthetic fibers, available only in tacky colors, and poorly constructed.

Generic Footwear: More disposable apparel of inferior workmanship.

Uniform: Any basic outfit for an organized service such as Corporate Security, Government Police, Military, Paramilitary, etc. It includes footwear and is of fairly good-quality construction and materials. It is so cheap because the organization subsidizes the costs, probably manufacturing the uniform itself.

Dress Uniform: Less common (usually only seen in rare government military situations) this is an elaborate affair, somewhat anachronistic.

Light Jacket: A waterproof wind-breaker with little else to offer in protection. Several of the designers make their own version for 10-100x the regular cost.

Thermal Jacket: Slightly heavier than the light jacket, these also sport either a thermal lining or warming elements.

Thermal Suit: Mostly for industrial use only, this is a bodysuit which keeps in body warmth. Heavy-duty versions have thermal warmers.

JEWELRY

Two basic trends dominate the jewelry industry: barbaric and electronic. Also, of course, the credit chronometer is a fashion statement in itself.

Barbaric Chic: The former, interestingly, is dominant in the elite circles, where clothing has also gone into a simple-but-harshly-elegant phase. Bits of roughly hammered gold and platinum strung together on a piece of leather add an 'unfinished' look, a crude but effective counterpoint. The amount of jewelry is down, instead concentrating on a few items.

Electronics: jewelry that talks and lights up is very big (in some areas it is already passe). Earrings, shimmering multicolored bracelets, flickering necklaces, are all popular.

Holojewelry: A popular fashion throughout the Sprawls (often seen in Corporate Suburban fashion as well), Holojewelry consists of a small holograph projector mounted somewhere on the wearer's body. Specially designed silicon chips may be placed into the device, which then displays a preprogrammed illusion around the body of the wearer. False faces, masks, dancing flames or swirling mists of color are all possible applications.

HAIRSTYLES

The young continue to be the trend-setters on this fashion front, with wildly impractical cuts and styles.

Woven-in fiberoptics have become very big in the last few years, with micro light sources at the scalp allowing for rainbows of shimmering light mingling with natural hair. The 'wave' is also big, especially on the west coast. The hair is cut about three to six inches long and treated with a structuring protein to lock into a general shape. The result is a soft but very thick 'crop' of hair that flops about the head,

wavering with a life of its own. Shorter cuts stand up and waver in a breeze like a field of wheat, while longer cuts fall over, undulating constantly. Another popular move among the fashion slaves is the complete elimination of body hair.

Involuntary baldness is a thing of the past so it has become a style statement. Depilatories allow for easy skinhead maintenance, and it is popular among teenagers and younger executives.

GENERAL APPEARANCE

Tanning is in style again for the wealthy, as expensive drug treatments counteract any ill effects of the UV rays to skin, and contact lenses protect the retinas. There are fairly realistic chemicals which appear to darken the skin, but this is considered bourgeois; only a real tan signifies that the owner has the leisure time to maintain it.

Heavy makeup has given way to subtle enhancements, and both sexes employ 'moisturizers,' eye makeup and lip colors. Androgyny is in (again). Exotic skin tints and designs are common at formal occasions and among trendy streetpunks.

Plastic surgery has become as commonplace as filling a tooth in the 20th century. Entire faces can be reconstructed, even limbs can be lengthened or shortened, all without scarring.

3.2 ARMOR & SUITING

"Those accustomed to the street are accustomed to wearing protection. Those unaccustomed to the street are dead."

— Lance Ramie
Models Gang Member

3.2.1 *ENVIRONMENTAL SUITS*

There are many types of environmental suiting, depending on the hostile environment. EVA suits, used in space maneuvering, are bulky affairs with heavy-duty climate control systems. Suits worn for short outside trips on Mars are much simpler, however.

Deep Space Light-duty: For short-duration trips outside of orbital and lunar habitats, this suit does not include waste elimination systems or heavy-duty climate control. *Life Support duration: 1 hour.*

Deep Space Heavy-duty: The most protective and cumbersome of the Environmental suits, this bulky outfit has a full waste reclamation system and a backup life-support system (1 hour duration). It is also very protective; treat as LBA. *Life Support duration: 8 hours.*

Planetary Light-duty: Even less protective than the Space suit, this gear is useable only on he Martian surface; it is not designed to protect versus hard vacuum or the extremes of heat and cold found in deep space. *Life Support duration: 1 hour.*

Planetary Heavy-duty: Similar to the planetary suit above, but with more resilient coverage (treat as LBA), a full waste reclamation system, and a backup life-support system. It is commonly used by miners and other outdoor Martian workers. *Life Support duration: 24 hours.*

EVA Thruster-pack: designed to mate with the Heavy-duty space suit, the thruster pack

3.2.2 *ARMOR TYPES*

Armor is the basic protective material which covers the body.

In *Cyberspace,* Armor has been divided into four categories, three of them types of man-made armor (the fourth is no armor or animal hides). They are known as *Light Body Armor, Armored Body Suits,* and *Armored Exoskeleton.* The armors have been broken into the 20 subdivisions for those using the ***Space Master*** System, but *Cyberspace* users need only worry about the three types:

Cloth-Skin Base, No Armor (***SM*** AT 1-4)

Light Body Armor (***SM*** AT 5-8)

Armored Bodysuits (***SM*** AT 9-16)

Armored Exoskeleton (***SM*** AT 17-20)

SPACE MASTER ARMOR TYPES

This section is provided for those wishing to use the ***Space*** *Master* combat system with the *Cyberspace* milieu.

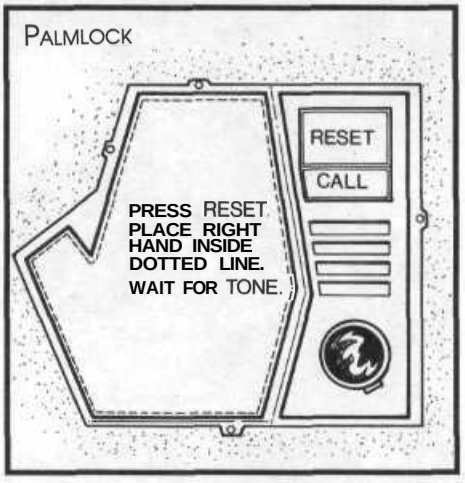
The armor types are divided into five categories of four types each, thus there are 20 Armor Types (AT) represented in ***Space Master.*** For those players familiar with ***Rolemaster,*** the 20 ***Space Master*** ATs closely approximate those found in **RM**, and one will note that the standard progressions of "toughness" and "body covering" are followed here. Below are listed the 20 ***Space Master*** ATs with accompanying descriptions.

• **Cloth-Skin Base:** This category encompasses normal cloth attire, robes, unarmored environmental suits and normal animal hides.

Skin (AT 1): Normal non-binding clothing, assumed worn if other covering is not specified.

Robes/Environmental Suit (AT 2): Encumbering clothes (such as a lot of high-fashion garments), full-length gowns or robes, or non-armored environmental suiting.

Light Hide (AT 3): The natural hide of certain animals (e.g., deer, dog, wolf and the like).



Heavy Hide (AT 4): The skin of cybernetic limbs, and the natural hide of certain animals (e.g., buffalo, elephant, bear and the like).

• **Light Body Armor:** This category encompasses pliable, lightweight ballistic cloths and alloys. References to "kevlar" assume an advanced material with superior puncture resistance, while "duralloy" is the name given to any number of soft armors which become rigid when struck by a considerable force.

LBA Flak Vest (AT 5): A heavy quilt or kevlar vest covering the back, torso and abdomen.

LBA Extended Flak Vest (AT 6): A heavy quilt or kevlar vest which extends down the arms and to mid-thigh.

LBA Reinforced Flak Vest (AT 7): An Extended Flak Vest with duralloy plates sewn in for added protection.

LBA Reinforced Flak Armor (AT 8): A full suit of duralloy-reinforced kevlar, covering the body from the collar to the lower legs. Padding protects the joints and groin.

• **Pliable Armored Bodysuits:** This category encompasses environmentally secure bodysuits of flexible but resilient cloth covered with laminated, yet somewhat pliable, armor pieces. The armored sections are typically made of duralloys layered with battleplastics. When a compatible helmet and life support system are added to the armor types of this category, the wearer may be totally immune to hostile environments (such as hard vacuum). This category also includes the rigid hide coverings of certain animals.

ABS Pliable Breastplate (AT 9): An environmental bodysuit mated with a soft-armored breastplate which covers the back, torso and abdomen. There may also be shoulder/upper arm and thigh armor.

ABS Pliable Breastplate & Greaves (AT 10): An environmental bodysuit covered with a soft-armored breastplate, as well as arm and leg greaves. The greaves typically cover the outer forearms, thighs and shins.

ABS Pliable Half Plate (AT 11): An environmental bodysuit coupled with soft-armored plates which cover the torso, back, abdomen, arms, and the fronts and backs of the legs. Also, the hides of certain creatures that contain at least a few rigid plates (e.g., rhinoceros, alligator, and the like).

ABS Pliable Full Plate (AT 12): An environmental bodysuit covered with soft-armored plates. Additional areas protected include the neck, groin, buttocks, hands and feet. Many joints remain exposed however. Also, the hides of creatures which contain many rigid plates (e.g., turtles, crabs, certain alien beasts, and the like).

• **Mesh Armored Bodysuits:** This category encompasses environmentally secure bodysuits of non-constricting and resilient cloths, covered with mesh armor to various degrees. Mesh armor is a flexible covering of plasteels and synthi-armors woven so as to give optimum mobility for the considerable protection they impart to the wearer. When these armor types are coupled with a compatible helmet and life support system, the wearer may be immune to hostile environments (like hard vacuum).

ABS Mesh Shirt (AT 13): An environmental bodysuit mated with a mesh armor shirt which covers the torso to the mid-thigh, back, and half of the upper arms.

ABS Mesh Shirt & Greaves (AT 14): An environmental bodysuit and mesh armor shirt coupled with arm and shin greaves. Greaves may be of mesh or battleplastics.

ABS Full Mesh (AT 15): An environmental bodysuit under mesh armor which covers most of the body in the form of a shirt and leggings.

ABS Battle Mesh (AT 16): An environmental bodysuit covered completely by reinforced mesh armor. Extra padding, in the form of cushioned alloys and/or battleplastics protect the groin and joints.

I Armored **Exoskeletons:** This category encompasses advanced battle armor, the toughest protection available to combatants short of Powered Armor, Exoskeletons are hard integrated plates which can deflect many attacks which would otherwise cleave through lesser armor types. Exoskeleton armor is typically a fused amalgam of hardened duralloys, ceramic plates, and battleplastics, formed so as to allow maximum maneuverability. The last two armor types in this category may be sealed against the environment as they have integral helms and life support systems.

IB Exoskeleton Breastplate (AT 17): An exoskeletal breastplate with auxiliary I plates covering the back, upper arms, abdomen and upper thighs.

AEX Exoskeleton Breastplate And Greaves (AT 18): An exoskeletal breastplate with auxiliary plates. This armor type includes greaves of hardened battleplastics which protect the forearms and shins.

! *AEX Half Exoskeleton (AT 19):* A rigid exoskeletal armor covering most of the body. An undersuiting of mesh and [resilient cloths protect exposed areas (such as the neck, groin, joints, and backs of the legs).

AEX Full Armored Exoskeleton (A T 20): A rigid exoskeletal armor which covers the entire body. Plates may overlap at the joints, imparting complete combat integrity.

3.2.3 *SPECIAL ARMOR*

This includes special, protective clothing.

Sentinel **Helmet:** (t) The Sentinel Helmet combines the best aspects of several familiar devices into one unit. Functions include: an ultraview faceplate (infrared and light-filtering), a filtered compressor unit, a variable headset rangefinder, and a two-way microfrequency band communicator with a range of up to one kilometer.

C-cloth Coverall: Short for chameleon-cloth, a breakthrough material which, when linked to a sensor/microprocessor and a small power cell, can change color to match its surroundings (sensors on one side place matching colors/patterns on the opposite side of the garment)

3.3 TOOLS AND *POWERSOURCES*

This section presents a number of fun items that PCs will find indispensable in their adventures.

3.3.1 *TOOLS*

Laser Cutter/Welder: (t) A device consisting of a handle with a 13 cm long, slender (1 cm in diameter at the widest point) cone. A dial on the base of the handle controls width and intensity of the pinpoint laser beam, which can be used to either cut through thin material or fuse circuits. Though fairly powerful, it is not very practical as a weapon since the beam focuses about 1-5 cm from the tip of the cone.

Heavy Cutter/Welder: (‡) The heavy-duty version of the laser above, this device is more powerful: it will burn through an inch of alloyed steel in moments. The beam can be set for up to 30 cm of focus length, but is most effective at about 5 cm. It is also able to weld.

Electrics Toolkit: Used in Construction and Repair projects in any of the following skills: Electronic Technics and (possibly) Cybernetics Technics. This kit includes several hand-held repair and diagnostic devices (ohmeter, soldering iron, circuit tester) as well as a variety of small implements and electronics parts (wire strippers/snippers, transistors, capacitors, resistors, etc.). Ten Power Cells, three Power Cartridges, and one Power Pack are included in the kit.

Mechanic Toolkit: Used in Construction and Repair projects in any of the following skills: Mechanical Technics and (possibly) Cybernetics Technics. This kit includes hand-held repair and construction devices (power tool with interchangeable drill and screwdriver bits, hammers, cutting instruments, measuring tape, etc.) as well as a variety of small parts (nails, screws, nuts, bolts, washers, etc.). The power tool requires a Power Cell to operate.

Medikit: Used for Medical Diagnosis and Cyber Systems Repair/Construction; this kit includes several hand-held diagnostic devices (thermometer, pulse gauge, blood tester, chemical analyzer, bone scanner, etc.) as well as various small medical/surgical implements (hemostats, needles, sutures, instasplints, scalpels, etc.) and a few medicinal chemicals (3 doses each of local anesthetic, wound cleaner, pseudoderm skin sealer, and Hemosclerex).

3.3.2 *POWER CELLS*

Almost every item of personal equipment in *Cyberspace* (including 'smart' projectile weapons) requires a power supply to keep it functioning properly (or functioning at all for that matter). There are basically four general categories of personal equipment power supplies, the cell, the cartridge, and the pack. Each is physically larger and more powerful than the one that precedes it in the listing. Each category then has several representative types. For instance, there are utility cartridges, weapon cartridges, and flamer cartridges. What follows is a breakdown of the various personal equipment power supplies.

- **Cells:** A piece of equipment which requires the use of an power cell is marked with a (*). If multiple cells are needed, the notation (2*) or (3*) will appear, meaning that two or three cells are used to power the equipment. Cells are generally small discs of negligible weight. The various power cells include:

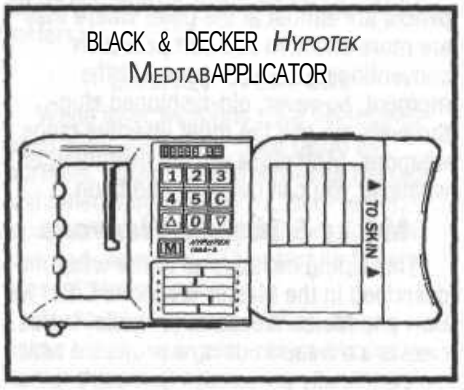
Utility Cell: Used to power a wide variety of low power consumption equipment, and some Mini Energy Weapons.

Weapon Cell: Used to power small Lasers or other energy weapons.

- **Cartridges:** A piece of equipment which requires the use of a power cartridge is marked with a (t). If multiple cartridges are needed, the notation (2†) or (3t) will appear, meaning that two or three cartridges are used to power the equipment. Cartridges are generally short cylinders or blocks which slide into receptacles in the equipment. They have moderate weight. The various power cartridges include:

Utility Cartridge: Used to power some larger pieces of equipment, including Gauss Weapons.

Weapon Cartridge: Used to power Assault Energy Weapons and Energy Rifles.



• Packs: A piece of equipment which requires the use of a power pack is marked with a (‡). Packs vary significantly in size and weight, with the determining factor being the sophistication of the producers, and their level of technology. They may be small enough to be attached to the piece of equipment they power. More often, it is the case that power packs are chest or back-slung, with a power cable running from the power supply to the equipment. The various power packs include:

Utility Pack: Used to power large pieces of field equipment.

Weapon Pack: Used to power Heavy Lasers and other heavy energy weapons.

SUMMARY OF CODING:

Energy Cell:	(*)
Cartridge:	(†)
Pack:	(‡)

Microcells: Cyber Systems are generally powered by these tiny units which use decaying radioactive isotopes as their energy source. Designed for long life and ease of use, they are highly reliable and may last years without need for replacement.

Photovoltaic Cells (Solar Batteries): Rarely used due to environmental restrictions, it is nonetheless possible to power equipment with photovoltaic cells. They are rated by Mk#, with the Mk# indicating power output equivalence: Mk 3 = Power Cell, Mk 5 = Power Pack. Solar Battery's effective Mk# is reduced by lack of light: Light Shadow = -1, Dark Shadow = -2, Darkness = -5, and Pitch Darkness = reduce Mk# to 0.

3.4 WEAPONS

The weapons of 2090 haven't changed too much from those of the late 20th century, though weapons technology is on the threshold of a breakthrough: energy pistols are almost at the point where they are more effective and compact than conventional projectile guns. At the moment, however, old-fashioned slug-throwers are still the most effective range weapons. And close up, the best thing is whatever you can get your hands on.

MELEE & MISSILE WEAPONS

This listing includes all of the weapons described in the Master Weapons Chart for Bow and Melee Weapons ('missile' in this case is a a weapon using a projectile which isn't artificially powered). Some are rather obvious...

Bola:Three balls tied together with a cable or thong form this unusual throwing weapon. The skill to use a bola is rare, and the weapon is quite uncommon (and unwieldy) in the cities

Broadsword: A bladed weapon, usually 60 to 100 cm in length and massing 1.5 - 2.25 kilos, the broadsword is virtually unheard-of in a modern setting.

Broken Bottle: The jagged edge of the bottle gives it an edge.

Chain: A length of heavy chain about a meter long is ideal. Definitely a gang weapon.

Club/Pipe: A small wooden club (billy club) or a heavy alloy pipe serves as a crude lever.

Composite Bow: This type of bow is a very sophisticated compound affair made up of laminates and pulleys.

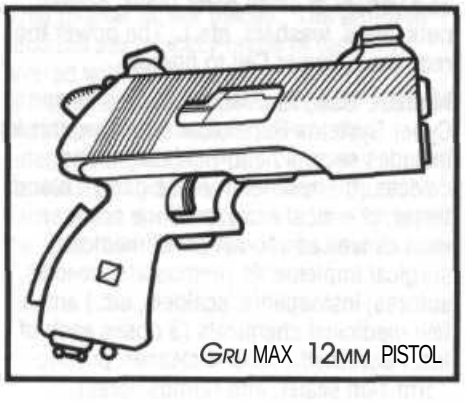
Crossbow: Heavy and Light versions of this crude but deadly bolt tosser exist. Both are quite compact, using light alloys and superior spring metal for the bow.

Dagger/Knife: In the sprawls tis usually takes the form of a switchblade or similar concealable tool. Some larger or superior knives may have a bonus.

Hand Axe: In modern society an axe is normally designed as an outdoorsman's tool; only in a desperate situation is it used as a weapon.

Javelin: Again, very rare in combat, the javelin has been exclusively a sporting tool for decades.

Karatand: A tight-fitting glove made of a specialized polymer called "Implast", the Karatand is a favorite weapon amongst martial artists and SprawlGangs. The Implast glove rigidifies in response to any kinetic blow, and loosens up again immediately thereafter. The effect is that the wearer receives a +15 bonus on any Brawling attacks which use the Karatand.



GRU MAX 12MM PISTOL

Katana: An oriental weapon with a mystical past. A katana is a superior sabre-style sword, but requires considerable skill to use it to its full potential.

Long Bow: This elegant if ancient weapon is usually almost two meters long. Fashioned of high-tech laminates, it has a considerable range.

Orchid: Another favorite hand weapon used by streetfighters in the Sprawls, the Orchid is comprised of a number of sharp, curved blades which are connected to a central handle. The user inserts his hand into the "ball" of blades and grasps the handle, thereby turning his hand into a spherical weapon of lethal effect. Orchid attacks are resolved on the *Melee Weapon* Attack Table. Despite their size, they are considered Medium weapons, and receive an automatic +10 to the OB. Orchids deliver Slash Critical effects when called for.

Rock: Yes, a rock. You throw it.

Shuriken: Small throwing stars, their origins are also from the Orient. They can be lethal at shot range.

Short Bow: A basic, compact bow.

Short Sword: Less elegant than a broadsword, this short blade traces its origins back to ancient Rome. More of a bludgeoning or stabbing tool, the Short Sword (or similar *very large* knife) is unsubtle.

Sling: As in David and Goliath.

Spear: Virtually unknown in the modern world, this pointed pole can be thrown or used to thrust at close quarters.

Staff/Jo: A Quarterstaff can be a dangerous tool in skilled hands.

Stun Baton: Used by municipal police forces, the stun baton is a billy club which delivers an "A" severity Electricity critical on impact (when regular crit is given). It requires a weapon cartridge to power jolt.

PROJECTILE WEAPONS

Many of the projectile weapons described below are capable of "Burst Fire", which hurls a group of five bullets at the target in rapid succession. Burst Fire may be used in two ways; either to spray a cone-shaped area (30 degrees wide) or concentrated on a single target. If an area is sprayed, the firer selects up to five adjacent targets, and a separate attack roll is made upon each of them — but the attacker's OB is halved against each. If the burst is concentrated on a single target, the attacker adds +15 to his Offensive Bonus, and any Critical result is rolled on the *Automatic/Shrapnel Critical Table.*

VOERUNG 30-M GAUSS PISTOL

Pistols: Coming in Light (5mm), Medium (10mm) and Heavy (12mm) sizes, all are semi-automatic weapons (meaning that once a bullet is discharged, another is instantly moved into firing position). All three sizes can therefore fire twice per round. Ammunition is interchangeable with Machine Pistols of the same caliber.

Machine Pistols: These glorified pistols hold more ammo than standard Pistols, and are capable of Burst Fire. They may deliver two shots per round OR two bursts per round (firer's choice). In all other ways they function as standard Pistols. They can be fitted with rifle stocks to increase accuracy. It was thought that this class of weapon would make submachine guns extinct by now, but their inadequate ammo capacity, inaccuracy and lack of 'glamor' has kept them in a minority.

Submachine **Guns:** Larger than pistols, but smaller than a rifle, nearly all such weapons use standard 10mm ammo. They may deliver two shots per round OR two bursts per round (firer's choice). While more accurate held in both hands, they can be fired one-handed with the following range mods: -10 short/-30 med/-50 long. Some models have folding stocks which, when used, may add as much as +10/+30 to med/long range firing.

Rifles: Long range slug throwers available in Light (5mm), Medium (10mm) and Heavy (12mm) versions, all are semi-automatic weapons, capable of firing two shots per round.

Assault Rifles: Available in Light (5mm) or Medium (10mm) sizes, these short rifles are capable of semi-automatic fire (two shots per round) OR fully automatic Burst Fire (two bursts per round). Their precision is somewhat better when fired in the semi-automatic mode.

Machine Guns: Light versions (10mm) are fired from a bipod mounted at the end of the barrel, while Medium (10mm) and Heavy (12mm) versions are mounted on a tripod or otherwise more stable mount. They can use belt or magazine ammunition, and fire two bursts per round.

Shotgun: Two bores are available (15mm and 20mm), with three variations of each (standard, sawed-off, and autoshot). Sawed-off versions are more easily concealed than the longer versions, but lose some range capability. Autoshotguns provide the option of Burst Fire (two bursts per round), OR semi-automatic fire (two shots per round).

Needleguns: These short, nearly silent weapons fire a spray of metal slivers at the target. All fire in the Burst mode only.

Taserguns: Tasers fire a prong or barb which trails behind it a fine conducting wire connected to the shell. If the barb strikes the target's skin, a small power source in the shell discharges an electric jolt. Specific Critical results are ignored; instead, the target takes an "A" Electricity Critical.

Rocketguns: Specially designed launchers which fire ultra-high velocity small caliber ammunition. The Rifle version is capable of Burst fire (two bursts per round) OR single fire (two shots per round), while the Pistol only fires in the single fire mode.

Gauss Guns: Also known as Magnetic Linear Accelerators, these weapons have special conducting coil-barrels which accelerate ammunition to exceptional velocities. The speed and range of these bullets makes Gauss Guns a favorite in the field of slaughter. The drawback is that their long barrels (Pistol = 40cm, Rifle = 1.5m) make them very difficult to conceal. In addition, these projectile weapons require a power source; the Pistol uses a Power Cartridge, while the Rifle requires a Power Pack.

Grenade Rifle: This weapon can discharge up to two grenades per round. The attack is resolved by rolling on the *Launcher Error Chan* (Section S 17.8) to determine where the grenade landed. The blast is resolved on the *Grenade/Explosive Attack Table* (A 7.4) against any potential victims in the blast radii.

Rocket Propelled Grenade Launcher: Discharges one Rocket-Propelled Grenade (RPG). The *Launcher Error Chart* is used to determine where the warhead lands, and the attack is rolled on the *Grenade/ Explosive Attack Table* against any potential victims in the blast radii.

Portable Missile Launchers: PMLs are available in several varieties. The Portable version fires one missile. The Quad version can fire two missiles per round, as can the Autofeed version (which stores additional missiles in a magazine). Combat rolls are made on the *Launcher Error Table* to determine where the missile lands, and attacks are resolved on the *Grenade/ Explosive Attack Table* against any potential victims in the blast radii.

Smart Guns: This feature can be applied to any firearm, and consists of a small Neuroprocessor and DNI cord set to the weapon's parameters. The user must have a DNI patch to jack the gun into. Fitting a weapon for DNI costs $500 plus 1/2 the cost of the weapon. The basic benefits are: 1) quickened firing time allows a wielder to resolve his attack before a non-Smart Gun equipped opponent; (2) special weapon sight tracking allows the user to effectively aim the weapon without needing to "look" down the barrel; and (3) the gun's Computer may be loaded with programs which enhance firing capabilities (e.g., Weapon Skill, Ambush, etc.). These Computer Program Rating Bonuses are not cumulative with those granted by programs in a wielder's NAC Neuroprocessor.

Gas Guns: These bulbous weapons are designed to carry various "gasloads" — canisters of pressurized chemical agents (liquids or gases) which are propelled at high speeds. The nozzle of the weapon is adjustable, allowing the firer to tailor the range and width of the effected area to suit the circumstances. The "standard" area of effect is a conical area, 20 meters long and 10 meters wide at the far end. For every 2 meters added to the range, 1 meter is subtracted from the width, and vice-versa (e.g., a 30 meter range would yield a 5 meter width, etc). The maximum range setting is 40 meters (the width is just centimeters in this instance), the minimum range is 6 meters (yielding a width of 17 meters).

ENERGY WEAPONS

While laser weapons have been developed, they are still far from being as portable, reliable and effective as the old-fashioned slug-thrower. Laser Pistols, along with their larger brethren, are quite rare and expensive. This despite their modest stopping power.

Laser Pistol (†): Laser Pistols use the Laser Attack table at the Mk 1 Maximum Result threshold and may fire twice per round. A Laser Pistol is powered by an Energy Cartridge.

Assault Laser (‡): The Assault Laser uses one Power Pack, attacks up to twice per round on the *Laser Attack Table* at Mk 2.

Laser Rifle (2‡): The Laser Rifle is a power-hungry monster, using two Power Packs to satisfy its energy requirements. It attacks up to twice per round on the *Laser Attack Table* at Mk 3.

Heavy Laser (Special): The Heavy Laser of *Cyberspace* is a rarely-seen infantry weapon which relies on a bulky backpack for its power source. These backpacks have a market value of $5,000. The Heavy Laser attacks up to twice per round on the *Laser Attack Table* at Mk 4.

MIRAGE R10 *LANCE*
MEDIUM ASSAULT RIFLE

OTHER PERSONAL WEAPONS

Disposable Missile Launcher: A one-shot PML (Portable Missile Launcher) used primarily in fast-strike operations such as breaching the perimeter of an installation. Significantly lighter than the standard PML, this device is fired once, and then discarded.

Multirocket Missile Pod: A specially-designed warhead delivery system, an MMP is fired from any standard Missile Launcher. When the Missile Pod reaches the apex of its trajectory it breaks open, loosing six smaller rockets which spread out somewhat. The result is that the target area is "rained on" by small explosions. Each of these small rocket attacks is resolved separately (the range Mods shown on the *Master Weapons Chart* are for these individual rockets). The Mk# of the weapon is the actual Mk# of these smaller rockets (e.g., a Mk 5 Pod releases six Mk 5 rockets).

FAE Grenades: Fuel/Air Explosives which spread burning liquid fuel as well as sheer concussive power upon detonation. These devices are available in sizes ranging from Mk 1 to Mk 5. They come in hand-thrown, launched, rocket-propelled, and portable missile versions. Every FAE Grenade produces the five standard blast radii when detonated. FAE Grenades resolve their effects on the *Grenade Attack Table* and are capable of delivering both impact and Heat Criticals. All varieties of special fuses may be used. Standard FAE Grenades produce blast radii which extend outward from the detonated grenade four (4) meters per Mk#. All personnel and equipment within the blast receive Heat Criticals when called for. In addition, all personnel and equipment within the first and second blast radii receive Impact Criticals of the same severity.

Plastique: A pliable, rubbery substance which is the most commonly used prepackaged explosive available. Plastique requires a primer (or "Blast Cap") to be triggered. Various effective strengths of Plastique are available, rated in terms of Mk#s (the strongest Plastique is around Mk 20). When triggered, Plastique generates an explosion which is similar to that of a Concussion Grenade.

Dynamite: The old standby, a stick of Dynamite is about 20 centimeters long and 2 centimeters in diameter. These cylinders of charcoal soaked in nitroglycerine require a primer (or "Blast Cap") to be triggered. When detonated, one stick of Dynamite produces an explosion which is the equivalent of a standard Mk 2 Concussion Grenade explosion. Several sticks can be detonated by the same primer. In this case, the blast effect is cumulative (e.g., three sticks of Dynamite produce a blast equal to a Mk 6 Concussion Grenade).

Blast Cap: A very small and volatile device used to trigger the larger blasts of other explosives, Blast Caps can be fit onto the end of Dynamite sticks, or imbedded in Plastique. The Blast Cap itself is triggered by any one of various means; a Fuse, electrical signal, or time, etc. In addition, a hard blow (enough to cause one (1) point of concussion damage) will trigger a Blast Cap. Characters who wish to set up a specialized trigger mechanism (such as a pressure plate, timer trigger, radio-remote trigger, atmospheric pressure trigger, light trigger, heat trigger, etc.) must produce the physical means to build the device and succeed in a CN/ElecT:M.

Fuse: The old-fashioned means of triggering a Blast Cap, fuses are generally made of a material called Cordite, which burns at a rate of one meter per round which allows for two fairly accurate predictions of exact blast time. Several specialized varieties of Fuses are available, including "Oxygen Fuses" (which require no oxygen to be present in the burning environment) and "Magnesium Fuses" (which burn so hot as to allow their use in underwater environments).

Land Mine: These explosive devices are buried in the ground just a centimeter of two below the surface, and are triggered when stepped on. They may also be rigged to detonate when a tripwire is activated. Spotting a tripwire requires a SM/Per:H. Standard Land Mines come in three types: *General Purpose, Concussion* and *Shrapnel.* Each produces a blast equal to a standard Mk 3 Grenade of the appropriate type. More powerful Land Mines are a definite possibility.

Subsonic Field Gun (‡): Often used for crowd control, this large device sends out waves of sound cycling at harmful subsonic frequencies. Anyone in the area of effect (who has no ear protection) will suffer intense pain, headaches, and other unpleasant physical responses. The weapon attacks on the *Laser Attack Table* with a Mk 3 Maximum Result threshold, and Stuns foes when Criticals are called for (A = 1 round, B = 2 rounds, etc.). The area of effect is a cone of variable width, up to 30 meters wide at the extreme end of long range.

Infrared Field Gun (‡): Another frequently-used crowd effect weapon, the IR Field Gun creates a number of debilitating effects upon its target's nervous system. The weapon's area of effect is a cone of variable width, up to 30 meters wide at the extreme end of long range. The attack is resolved on the *Laser Attack Table* with a Mk 3 Maximum Result threshold, but concussion hit results are ignored. The effect of the IR strobe is determined by the type of Critical delivered. An "A" Crit causes target to enter a trance state (treat as one round of Stun). A "B" Crit causes minor disorientation, with a -10 on all maneuvers for the next 10 minutes. A "C" Crit causes confusion; target takes a -30 on all maneuvers for next 10 minutes. A "D" Crit causes the target to suffer muscle spasms, with a -50 on all maneuvers for the next 10 minutes. An "E" Crit causes the target to fall unconscious for 1-10 minutes.

Microwave Field Gun (‡): This bulky contraption emits a field of high-energy microwaves which actually burn the skin of tee within their range. The weapon's area of effect is a cone of variable width, up to 30 meters wide at the extreme end of long range. The attack is resolved on the *Laser Attack Table* with a Mk 2 Maximum Result threshold, and delivers Heat Criticals when called for.

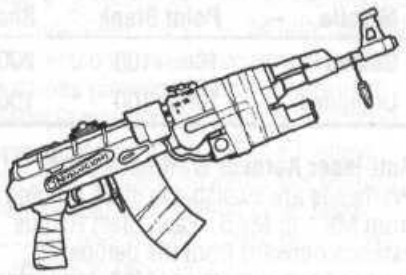
Laser **Blinder Field Gun** (‡): A variant of the Support Laser which fires a broad field of bright light over a cone-shaped area of variable width (up to 30 meters wide at the extreme end of long range), this weapon is a smaller version of the *Laser Field Blinder* (see *Mounted and Mobile Weapons Systems* below). The Laser Blinder Gun causes blindness in anyone within the area of effect who is looking even indirectly toward the gun itself (if unspecified, anyone who fails a SM/In:M has the weapon in their line of sight; this roll may be adjusted if there is something interesting going on in the opposite direction, etc.). Light Filter Lenses and Antiglare Implants will protect one against the effects of this weapon. Once blinded, the target character(s) must make a roll modified by tor Constitution Stat Bonus to determine the extent of the ocular damage, consulting the chart below:

LASER BLINDNESS CHART	
Roll	**Result**
101 up.....	Stun 1-10 rds, not blinded.
76-100.....	Blinded for next 1-10 rnds.
06-75.....	Blinded for next 1-100 min.
05 down.....	Permanently blinded.

AMMUNITION

General Purpose Ammo (GP). The GP round forms the basis for the *Small Projectile* Attack Table (A 7.2), and is standard ammunition for all Pistols, Machine Pistols, Rifles, Assault Rifles, Gauss Guns and Rocketguns.

Armor **Piercing Ammo (AP):** Available for all Pistols, Machine Pistols, Rifles, Assault Rifles, Machine Guns, Gauss Guns, and Rocketguns. When an AP round is fired at an opponent wearing any sort of armor, the firer's OB receives a Bonus of +5. Conversely, if the opponent has No Armor, the OB is at -5.



M-19 LIGHT ASSAULT RIFLE (MODIFIED)

High Explosive Ammo (HE): Available for all Pistols, Machine Pistols, Rifles, Assault Rifles, Machine Guns, Gauss Guns, and Rocketguns. Against an unarmored foe, if a Critical Strike is indicated, the target receives a *Shrapnel/Automatic* Critical in addition to the base Critical Strike. Against armored opponents, the firer's OB takes a penalty (–10), and no such Critical is rolled.

High Explosive Armor Piercing Ammo (HEAP): Available for all Pistols, Machine Pistols, Rifles, Assault Rifles, Machine Guns, Gauss Guns, and Rocketguns. HEAP ammo **always** delivers a second *Shrapnel/Automatic* Critical Strike in addition to the primary Critical delivered by the attack.

Standard Needlegun Ammo (SN): Slivers of hardened steel which begin to spin after being discharged from the weapon. Using the *Small Projectile* Attack Table (S 7.2), SN shots deliver *Slash* Criticals.

Shotgun Standard Shot Ammo (SS). Available for both shotgun bores, SS ammo forms the basis of the *Shotgun* Attack Table (A 7.3). An SS shell contains a multitude of small metal spheres (called shot) which are scattered out of the barrel when fired. SS rounds deliver *Shrapnel/Automatic* Criticals.

Shotgun Slug Ammo (SL). Available in both shotgun bores, SL rounds are large metal slugs. 15mm slugs are considered Mk 3 weapons, while 20mm slugs use the Mk 4 damage threshold. They deliver both *Puncture* and *Impact* Criticals of the same severity.

Taser Ammo: Used in the Taser Pistol or Rifle, these rounds attack on the *Small Projectile* Attack Table, and Critical results are ignored. Instead, any hit delivers an "A" *Electricity* Critical. Taser Ammo is cased in a small cartridge which slots into the weapon.

AMMUNITION OPTIONS

The following ammunition options may be applied to existing ammo types as described above, thereby creating special-effect ammunition. Ammo that is modified by one of these options will have its weight and cost multiplied as shown in the *Master Equipment Table.* Only one option may be applied to a round.

Tungsten Core Option (TC): TC rounds add an additional +5 to the firer's OB due to their increased mass. The TC option may be applied to any 5mm, 10mm, 12mm, Gauss or Rocket Ammo which is either GP or AP.

Depleted Uranium Core Option (DUC): DUC rounds add +5 to the firer's OB AND raise the weapon's damage threshold by one Mk# due to their increased mass. The DUC option may be applied to any 5mm, 10mm, 12mm, Gauss or Rocket Ammo which is either GP or AP.

Super-Teflon Coated Option (STC): STC rounds add +5 to the firer's OB when firing against Light Body Armor. The STC option may be applied to any GP, AP, HE, or HEAP round, or Shotgun Shot, or Needlegun round.

Tranquilizer Round Option (TR): TR rounds may be fired from any Pistol, Machine Pistol, Rifle, Assault Rifle, or Shotgun in lieu of regular ammunition. The only restriction is that the attack level may not exceed Mk 2. They deliver only half the Hits indicated on the pertinent *Attack Table,* and a Critical result indicates that the tranquilizer has entered the target's bloodstream. This means that the target must make an RR vs the level of the tranquilizer drug (GM's discretion). If this roll fails, the target is knocked out for a number of rounds equal to the percentage that the RR was failed by.

Poisoned Round Option (PO): PO rounds may be fired from any Pistol, Machine Pistol, Rifle, Assault Rifle, or Shotgun in lieu of regular ammunition. The design of poisons (and acids) is left to the GM, but several interesting possibilities are covered in Section T 4.2.

GRENADES, EXPLOSIVES AND PORTABLE MISSILES

Throughout the following rules, it is assumed that grenades (thrown, launched, or rocket-propelled) and portable missiles produce similar effects, and these effects are phrased in identical terms, using the word "warhead". When detonated, all warheads produce five "Blast Radii". The first is called "Ground Zero", where the most severe explosive effects are produced. The second, third, fourth and fifth Blast Radii extend outward from Ground Zero spherically, each producing graduated and reduced effects. The width of each Blast Radius and the type of effect depends on the warhead used, as detailed below.

General Purpose Warheads (GP): GP Warheads are available in sizes ranging from Mk 1 to Mk 5. Each Blast Radius extends outward from the detonated warhead two meters per Mk#. Effects are resolved on the *Grenade* Attack Table, and they deliver both Shrapnel and Impact Criticals of the same severity.

Concussion Warheads (CO): CO Warheads are available in sizes ranging from Mk 1 to Mk 5. Each Blast Radius extends outward from the detonated warhead two meters per Mk#. Effects are resolved on the *Grenade* Attack Table, and they deliver Impact Criticals when called for.

Shrapnel Warheads (SH): SM Warheads are available in sizes ranging from Mk 1 to Mk 5. Each Blast Radius extends outward from the detonated warhead two meters per Mk#. Effects are resolved on the *Grenade* Attack Table, and they deliver Shrapnel Criticals when called for.

Fuel/Air Warheads (FAE): Fuel/Air Explosives spread burning liquid fuel as well as sheer concussive power upon detonation, and are available in sizes ranging from Mk 1 to Mk 5. Each Blast Radius extends outward from the detonated warhead four meters per Mk#. They deliver Heat Criticals when called for. In addition, all personnel and equipment within the Ground Zero, 1st and 2nd Blast Radii receive Impact Criticals of the same severity.

Smoke Warheads (SMK): SMK Warheads are available in sizes ranging from Mk 1 to Mk 5. Each Blast Radius extends outward from the detonated warhead four meters per Mk#, but instead of giving explosive damage, smoke is produced in the area. When looking or firing through this smoke, Perception and OB rolls suffer the following penalties: Ground Zero (-50), 2nd Blast Radius (-40), 3rd Blast Radius (-30), 4th Blast Radius (-20), and 5th Blast Radius (-10).

PORTABLE MISSILE CHART

Missile	Point Blank	Short Range	Medium Range	Long Range
Guided *	10m/+100	200m/+80	400m/+50	1500m/+30
Unguided	10m/+100	100m/+50	200m/+20	800m/+0

Anti-laser Aerosol Warheads (ALA): ALA Warheads are available in sizes ranging from Mk 1 to Mk 5. Each Blast Radius extends outward from the detonated warhead two meters per Mk#, but instead of giving explosive damage, special laser-deterrent chaff is produced in the area. When firing a laser weapon through this chaff, OB rolls suffer the following penalties: Ground Zero (–100), 2nd Blast Radius (-80), 3rd Blast Radius (-60), 4th Blast Radius (-40), and 5th Blast Radius (-20). ALA does not effect Perception in any way.

Portable Missiles: These are miniature direct-fire rockets, discharged by Portable Missile Launchers. They may be Guided or Unguided. feuided missiles can cover more range than unguided ones, and must be directed to the target by the firer, who uses a set of remote controls held in the launcher itself. Guided Missiles receive a +30 to the firer's OB. Note that any of the warhead types described above could be held within either of the two types. The cost of the warhead would be added to the cost of the missile itself. Ranges (in meters) and range OB Modifiers are shown on the chart.

3.5 DATA STORAGE AND RETRIEVAL DEVICES

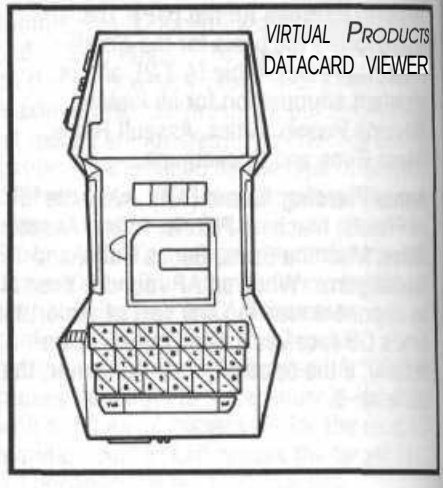
More products of the post-electronic age, these little toys are as commonplace as quill pens were in the Middle Ages.

Datacard: The core of data storage in the late 21st century, these little rectangles (about 4 x 6 x .5 cm) can store vast quantities of information. They are almost completely standardized, so one datacard fits all computers, readers and Cyberdecks (obviously, some devices won't understand exactly what has been plugged into them, however).

Microcomputer: (1-4* or 1†) This type of computer comes in a variety of shapes and sizes, from a small, hand-held computer unit (15 x 10 x 3 centimeters, featuring a 6 centimeter diagonal screen and a mini keyboard, to a lap model with a 20cm diagonal flip-up screen and full-sized keyboard. The microcomputer is capable of performing all the basic function one might expect and can record data and perform programmed functions just as any larger computer (given that the appropriate programs are in the unit). The microcomputer is unable to respond to vocal commands. The number of slots for programs and the memory varies with the Mk number. Most are between 4 and 8 slots and 10 to 100 meg RAM. The computer has a receptacle for memory datacards and is capable of full data playback. It can — with the right programs — tie in to the Net and access databases and other systems just like a cyberdeck, though of course access to restricted systems is nearly impossible. The lightning speed of a Deck Jockey in Cyberspace is usually needed to defeat electronic ICE. *Considerably more information on computers can be found in Section T 2.*

Holoviewer: (*) Again, this device is available in a plethora of designs and sizes, Most viewers are little more than a flat rectangular plate, little larger than the viewing screen surface, with a row of simple controls and a slot for the datacard, The viewer produces a holographic image (quality dependant on the recorder) and the image can be rotated by manipulating the controls.

Memory Recorder: (*) About the size of a pack of cigarettes, the Recorder makes standard 3-D video and stereoaudio (within the limits of its sensors) recordings. It uses standard datacards to record its information.



VIRTUAL PRODUCTS DATACARD VIEWER

Recorder (audio): (*) Useful when only an audio recording is necessary, this 10 cm long', 3 cm diameter cylinder is capable of limited stereo recording via microphones at each end. Audio disks (useable only with this type of recorder) 2cm in diameter fit Mo a slot in the shaft. Touch controls modify volume, etc. The recorder is capable of playback, through the speaker/mikes. A tiny readout on the side displays 'location'.' in storage area.

Viewer With Enhance: (*) Similar to the Holoviewer, this handy device is capable of 'enhancing' images encoded on datacards many times, bringing into focus minute details previously too small to discern. Images may be enhanced up to 1000x.

Holocamera: (*) Able to record still or motion holographic pictures (with sound, if desired) digitally on a datacard. The camera is 10 cm x 5 cm x 7 cm and has twin lenses.

Datacard Viewer: Similar to the holoviewer. In addition, a DNI version is available. This model generates an N-ROM image instead of a visual one, which is patched directly into the user's brain or NAC unit.

Micromonitor: A small conical device worn over one eye, the.Micromonitor displays received images so that the wearer can see them clearly while still seeing the environment with the other eye. These units can be rigged to receive input from a computer, television, or other passive receiving device.

3.6 PERSONAL ITEMS

The list provided here is nothing close to complete; it is meant more to provide ideas for the GM and players to come up with interesting equipment.

Credit Chronometer: (*) *The* way to carry your credit history in a timely manner, this little device combines a multifunction timepiece with a complete credit and health portfolio. The owner need not remove the Credit Chronometer to use it; most vendors now have a handheld laser scanner which can be placed on the chronometer and establish an interface. Stored inside is the owner's current credit status, health history and any other important information the owner desires. Most models monitor body signs and gives off an alarm if removed from its owner's wrist for more than a minute (it has a special recharge/update/storage stand for you to keep at home and rest it on at night). All this — and it tells time too!

It can also be used as a security device, acting as a verifier of personal identity, but this application has yet to be fully realized.

Marketed by several companies under the names (among others): *Wristwallet, Swallet*(swiss watch/wallet), *Credichron.*

Chronometer: (*) Fitted with a lifetime power cell, these wristwatch-like devices invariably perform several other tasks, including personal metabolic monitoring, limited audio recording, etc.

Distance Lenses: (*) About the size of a pair of small binoculars, these combine the powers of Infrared and Filter lenses, as well as superb magnification (up to 1,000x). A small display inside, along the edge of the view gives distance to an object targeted in crosshairs (up to 10 km).

Earphone Communicator: (*) A lightweight headset, it mounts in one ear with a filament wire extending to just in front of the mouth, a tiny microphone mounted on the tip. The unit is very lightweight and unencumbering. Hearing, even through the unit, is unimpaired. Range: 100 m; also used on-board vehicles. Additionally, a DNI model is available. This unit translates and routes received messages into the wearer's DNI jack for direct interface.

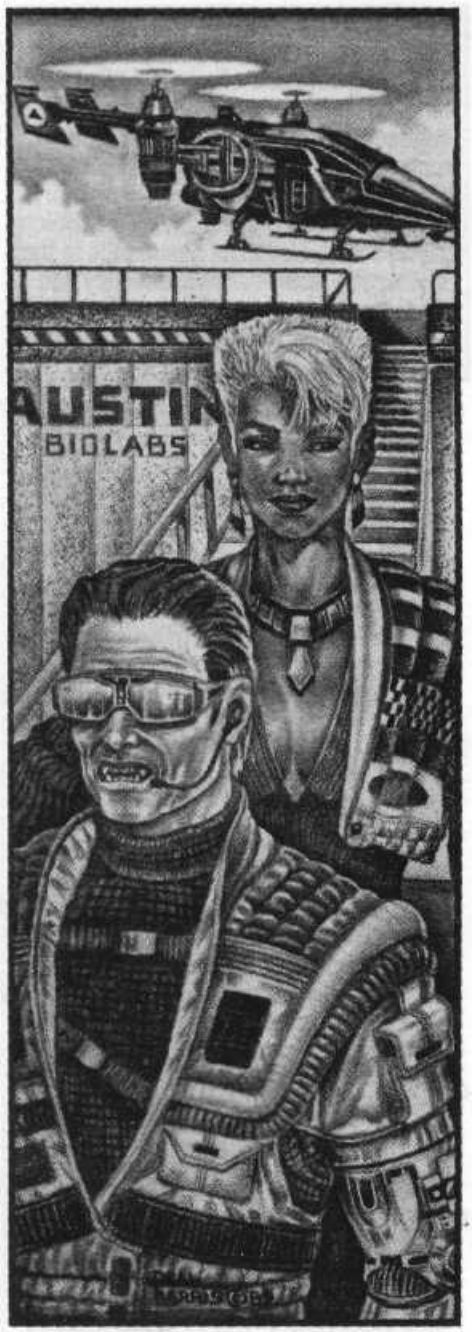
Infrared Goggles: Less expensive than the *Infrared Lenses* or a pricey implant, they perform basically the same function. They do, however, reduce wearer Perception by 20 (and it is obvious that one is wearing them, as opposed to the lenses, or an implant which are undetectable to the casual observer).

Infrared Lenses: Contact lenses, wearable for up to a month without discomfort, which allow the wearer to 'see' into the infrared spectrum, allowing him to discern heat-radiating objects even in the dark. Activated by pupil dilation, they do not impede normal vision. *Must* be custom-fitted (included in price).

Light Filter Lenses: Similar to Infra-red Lenses, these are triggered by pupil constriction, darkening to cut glare when the wearer is in bright light. Useful against Field Blinders. *Must* be custom-fitted (included in price).

Lightrod: (*) Basically a sophisticated flashlight, the lightrod can act as a signal beacon, in addition to possessing a variety of other levels of intensity and beam width.

Magnetic Compass: This simple device will function on any planet where magnetic poles are present. About 6 cm in diameter and 4 mm thick.



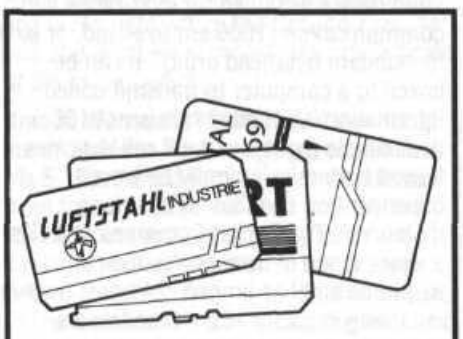
Pocket Communicator: (*) A small, palm-sized device designed for long-range audio communication (1000 km overland, or land to standard overhead orbit). It can be linked to a computer to transmit coded information — though this is not 100% dependable (base — 01-02 roll indicates flawed transmission; may be worse dependent on conditions) over long distances. The Pocket Communicator has a wider range of frequencies than an earphone and has limited (24 hour) built-in recording capacity. Some models are seven smaller and designed to be worn on the wrist; they often have an unreliable range, however.

Calculator Unit: (*) A small ("pocket-sized") calculator capable of performing only the most basic of mathematical functions. The calculator unit can add, subtract, multiply, divide, perform square roots, simple logarithms, derivation and integration. It also possesses a memory function. A DNI model is available, which allows the user to think commands to the device, and receive answers silently and immediately through a DNI jack.

Microfile Dogtags: Utilized by many corporate and governmental military forces, these small devices contain not only the standard (visual) data generally recorded on dogtags, but also hold a tiny Superchip which contains all manner of information on the soldier to whom it was issued. Such information includes medical records, career history, psychological evaluations, and assorted high priority information in addition to retinal, alpha-wave and finger prints. Some are carried on a chain around the neck while others are worn on the wrist.

Credit History/ID Cards: Following the example set by the military in the creation of the Microfile Dogtag, many citizens now carry their identification and entire credit history (as well as other assorted personal financial information) on a wallet-sized card which also functions as a standard Credit card. These cards bear a flat holograph of the owner, and contain digitized retinal and/or voice print samples to prevent use by unauthorized persons. (See Credit Chronometer above of the latest method of carrying sich information.)

Fax Units: An effective means of sending hard copies over long distances, FAX technology has become so good that even color photographs can be sent over the line. Most corporate citizens have one of these units, which is used for receiving the local newsheets and tabloids, amongst other things.



KEY-CARDS (SMARTCARDS)

Cellular Phones: Small, wireless and easy to carry around, everyone who's anyone has a Cellular Phone. Some models are small enough to fit in a shirt pocket, looking more like a pocket calculator than a phone. Programmable phones allow the user to tape incoming messages, screen calls, store and forward messages at preset times, hook up several parties in a simultaneous conversation, or even jack into a computer (many software companies have "PhoneMaster" programs available which act as personal secretaries). In addition, a DNI feature is available. Technology doesn't yet permit the user to think to his listeners, but received messages and incoming conversations can be quietly routed directly into user's brain/NAC unit.

Credit Readers/Transferral Devices: All legitimate vendors possess one of these machines, which scans a customer's credit card or credit Chronometer and makes all necessary adjustments.

Sensors: Used in various lines of security work, sensors come in many forms, and may be patched into a computer as a means of Access Security. Visual Sensors are merely high-resolution cameras. Thermal Sensors determine whether a person has entered their area by gauging fluctuations in the temperature, and are rated in Mk#. Audio Sensors are higly sensitive microphones, and are also rated by Mk#. [Each Mk# adds one meter to the Sensor's radius of effect.] Tactile Sensors are rigged to thin wires or hidden plates, and detect movement around them or onto them. Radar and Sonar Sensors bounce their emanations off objects in the vicinity, determining the location and size of everything in the area. They are rated by Mk# (each Mk# adds ten meters to the Sensor's radius of effect). Several Sensors of the same type can be linked to a computer with the proper programming and used field.

Mine Detector: These devices possess flat, circular electromagnetic sensors which are mounted on the end of a meter-long pole. The user holds the unit in front of him and walks slowly, sweeping the Detector over the area to be sensed. Finding a buried Mine (or any other buried metal, for that matter) with this device requires that the user succeed in a SM/Per:E. Once you know where a mine is, you can move past it slowly (this requires a MM/Ag:M — a result of "Fall down" indicates that the Mine has been triggered).

DNI-2: A small box with a trode jack in either end, DNI-2 allows for instantaneous mental communication between two people (also known as "jacking straight across"). Both users must be equipped with DNI jacks. DNI-2 communication is a rather shaky prospect as of yet, but its popularity is on the rise (especially in the thrillshops of the Upper Sprawl areas, where bored patrons will try anything — even risking their sanity — for some excitement). Although the device compensates and adjusts for most brainwaves, attempting to guard each user from the more alien thoughtforms of the other, some really strange signals invariably cross the line. When experiencing the mind of another person this closely, it is possible for the brain to suffer a form of neural rejection.

Buzzer: A small device which stimulates the brain's pleasure centers, Buzzers are popular amongst many gutter people and lowlifes in the Sprawl regions. The unit is plugged into the user's DNI socket, and may be set to operate for any length of time. During this time, the user is fairly oblivious to the world around him, and must succeed in a SM/SD:X to react in any way. Due to this induced effect, Buzzers are often used to render DNI-equipped criminal suspects or hostages nearly immobile. Many "Buzzheads" experience strong psychological addiction to the device.

3.7 HOME AND OFFICE MACHINES

Here are a few common devices found in the modern home or work environment,

ITV: A favorite mode of entertainment in the 21st century, ITV (Interactive Television) makes use of advanced data storage techniques and high-resolution graphics to create adventures, tours, and live-action games which the viewer can "enter" and interact with. By using some sort of standard input system, the user directs his apparent point of view to maneuver through a series of recorded images. Popular ITV modules allow you to browse through the finest museums of the world, walk down the streets of distant cities, or venture into dense tropical jungles without leaving your chair. More refined modules include text options, so that (for instance) a viewer can walk through the streets of Renaissance Florence, look at a particular building, and receive written information on the building's history and inhabitants. "Voice over" options are also accessible.

ITV modules of all types are readily available, and sell for anywhere between $10 and $1000. DNI verions are available, allowing the viewer to do away with the trappings of technology completely. These models truly create the feeling that the viewer is moving around the environment presented on the screen.

Cablevision: Another popular entertainment option is cable television. There are over 5000 specific cable channels, many of them relayed around the globe via satellite, to cater to every kind of taste and special interest imaginable. The viewer pays the cable company a set rate per month for the use of a decoder box which allows reception of the desired channels. Some channels allow the viewer to link his personal computer to the decoder box, thereby providing interactive media (not unlike ITV), as well as other services such as home shopping, travel reservations, interactive games, gambling, library and archive access, local voting, and education. DNI cable interface is possible, though uncommon, on some interactive channels.

Holovision: The most advanced form of visual communication and entertainment is the Holovision. These intricate devices project three-dimensional images, which can be viewed from different angles. Holographic technology has advanced to the point where the images almost seem real (except that it is possible to see through them slightly). Several cable channels broadcast holovisual programs as a regular feature. Obviously a special reciever is needed, and these run from $1,000 to $80,000. In addition, holocards (read by a standard Card Reader) are available in many stores. These items contain recorded programs, games, or other prepackaged entertainments.

3.8 PHYSICAL SECURITY

There are a number of different and sophisticated security systems in *Cyberspace.*

MONITORING SYSTEMS

As mentioned elsewhere, there are few places left whcih are not being monitored in some way or another. A few of the most common are noted here.

Satellite: While it is very difficult to locate an individual by satellite without some additional method of tracking (such as a signalling device) a skilled Cyberdeck operator or console jockey, given enough information and recent data, could theoretically locate and track any given individual by satellite.

Securicam: A generic name for any mounted visual-imaging camera tied into a computer security system. Securicams may or may not be continuously linked to a viewscreen, but a securicam view can be called up on a screen by anyone with the knowledge and security clearance. Securicams are normally controlled by computer, scanning their designated area and set to alert the computer's security programs (or even human guards) if they detect abnormal activity or unauthorized presences.

Arm Sentry: Guests in a corporate complex are often asked to wear an Arm Sentry, a small device strapped to the wrist or arm which constantly communicates with the security mainframe to keep tabs on the wearer. This allows the wearer to enter areas of some security without being questioned by the computer security programs. Should the wearer move into an area where he is not authorized, the arm sentry will ask him to retrace his path. If the wearer does not comply, the arm sentry will be come insistent, and guards will be summoned.

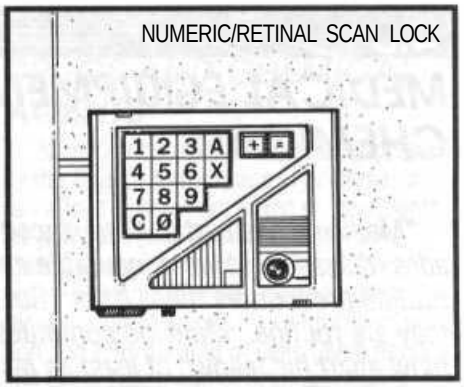
Tracer: A transmitting device either worn or implanted, it allows the wearer to be tracked with ease, either by satellite or ground-based equipment. All Corporate and government VIPs have tiny tracers hidden in their bodies so that they could be tracked if kidnapped of lost by some other misfortune.

LOCK SYSTEMS

In addition to having the skill to pick locks, the would-be lock breaker must have specialized equipment designed for circumventing a given lock system. The type of locks which might be encountered are listed below, (roughly) in order from easiest to defeat to hardest. The base lock-type modifier is also noted afterwards in parenthesis, and is included in the specific lock notations throughout the module. The term modifiers (*Very Hard,* etc.) refer to the sophistication level of that specific incarnation of that type of lock (not all palm-locks are created equal...)

Keypad: The most basic of the electronic locks, it requires only that the correct combination of alphanumeric characters (often only numeric) be punched into a keypad in the right sequence. This is the one lock which can theoretically be defeated without additional equipment. (±0)

Key-card: Requiring a card, disc or other small 'key' with magnetic or mechanical coding readable by lock mechanism. (-10)



Voice-recognition: As you might suspect, the lock computer-matches the voice pattern of the 'enteree' with a database of Voice-prints'. There is a slight margin for error, so a high-quality voice synthesizer and some samples can overcome this device. (-30)

Visual Recognition: While more sophisticated than Voice-rec, it is also more complex, expensive, and not as reliable as palm-rec. (-40)

Palm-recognition: Linked to computer with a memory of all authorized beings' palm-print. While trickier to counterfeit than a voice-rec lock, it is not foolproof. (-50)

Retina-scan: A very sensitive and complex device, it is also subject to a number of problems. It is, nevertheless, almost impossible to defeat. (-70)

Combination of above: Places with tight security will probably employ a combination of the above in many layers, along with electronic and human surveillance.

Modifiers assume that appropriate equipment is employed in the lock defeating attempt. If the materials are available, a GM might allow the PCs a slight chance of jury-rigging a lock-defeating device, but if there are no such materials, a GM should not even allow players to roll a chance of defeating a sophisticated electronic lock without any sort of diagnostic and/or manipulative equipment.

There is also the possibility of bypassing the key-system (which all of the above are) and breaking the lock itself. Magnetic locks can be disrupted, mechanical locks can be broken, and sensor grids can be tricked. The problem is that many of these locks are tied to alarm systems, and just breaking them will certainly summon guards.

4.0 MEDICAL EQUIPMENT AND BIOACTIVE CHEMICALS

"Medicine has certainly advanced significantly in the last several decades; disease that were incurable and injuries thought irreparable are routine procedures these days. But perhaps that's part of the problem: they are routine. Mankind continues to advance in his skill and desire to blow apart his fellows at least as fast as he advances in his ability to put them back together."

Dr. Stephen Campbell
Chief Surgeon
University of California/Humanadyne Medical Center

4.1 MEDICAL EQUIPMENT

Most of the devices described here are considered 'field' design: very compact and portable. They are used in most situations a PC may encounter, since the larger hospitals (where heavy-duty versions of medical equipment are located) are devoted mainly to research. The modifier noted next to the item is the recommended one when attempting to perform a healing operation with the device.

Arterial Sealer (*): (Very Hard [-20]) This specialized device will rejoin severed veins and arteries (maneuver required) and stop bleeding hits at the rate of 3/rnd. It is approximately the same size as the Dermal closer, though 2 cm longer. The power cell will repair 5 severed arteries or 50 bleeding hits, or any combination (3 arteries and 20 hits/rnd, for instance).

Auto Tab Applicator (2*): (Hard [-10]) This device can be attached to a person's upper arm or leg so that it will automatically dispense Med Tabs into the being's system at preset intervals. It has a 10 Tab Capacity.

Bone Bonding Solution: This miraculous substance greatly reduces the length of healing time required for a broken bone to mend. Unfortunately, it must be applied directly (i.e., surgically) to the fracture. Once applied, the healing rate of the bone doubles. This substance may be used in conjunction with a Transcutaneous Bone Stimulator to triple the healing rate.

Cryo Units: Used for the cryogenic storage of living things from zygotes to adult horses, these units are extremely sophisticated and prohibitively expensive. Each contains a built-in computer which monitors the subject's vital signs and controls the freezing and thawing routines. Freezing carries a 99% success rate, while thawing is a bit trickier, as only 95% of all thawed subjects survive the ordeal.

Dermal Closer (*): (Light [+10]) Releasing an energy wave which accelerates cell regeneration radically, the Closer is used for healing concussion hits at the rate of 1/round while activated; also will heal bleeding wounds (max 5 hits/round in severity) at the rate of 1/round. The Sealer will also repair up to 2nd degree burns. One power cell in this unit will heal a total of 100 hits or hits/round. The device is roughly cylindrical, 2.5cm in diameter and 10cm long, and is operated by holding about 3cm above the affected area and activating.

Diagnostic Processor: A specialized computer, the Diagnostic Processor is capable of making detailed judgements as regards a person's physical state and provides recommended treatments. It has no innate scanning capabilities, although it may be patched into a scanning device (such as an X-Ray machine, CAT or PET Scanner, EEG, etc.). Data entry and response is performed through any of the standard Input/Output devices described in Section T 2.3 (the cost of these systems is not included in the cost of the unit). A DNI version of the Diagnostic Processor is available, which allows a DNI-equipped patient to jack directly into the unit. The DNI version requires no other input system, and relays its information either directly to the "patient" or through a standard Output system.

Health Status Card: Hospitals frequently rely on the use of this item, which contains a small Superchip holding pertinent medical data on the owner. Whenever the owner enters a Physician's office, Surgicenter or Hospital, his card is used as a permanent record of all tests, status reports and surgical procedures. The Health Status Card has effectively replaced the old-fashioned "chart" in most medical institutions.

Home Medical Tests: Various personally-applied tests are available on the common market, allowing a person to analyze his own physiological status. These tests are usually one-use prospects, although they are often packaged in boxes of ten tests. Home tests exist for monitoring brainwaves, blood sugar, cholesterol, metabolism, calories, menstrual cycle, pregnancy, interferon levels, blood cell count, foreign substances in the body, and various other physical ailments and symptoms.

Implant Scanner: This small hand-held device is a short-range scanner system, specifically attuned to locate Cybernetic Implants of various types in a person's body. It is generally used by medical personnel who often need to determine the presence of such systems before administering treatment. At a range of about 30cm, the Implant Scanner will determine the presence of most Cyber Systems with an accuracy rating of 100%. At greater ranges less accurate data is received (for every 10cm beyond the operating range of 30cm, subtract 5% from the base accuracy rating).

Instacast: (Medium [+0]) More durable than an instasplint, the instacast is an adjustable, plastic sleeve which hardens when a catalytic solution is applied, creating a rigid but relatively comfortable 'cast'. Use of an instacast effectively halves the maneuver penalty for a broken limb. It is easily removed by the application of a softening solution. A tube of each solution is included with each instacast. If the GM makes rolls to determine whether healing is 100% correct, use of an instacast adds 90 to any roll.

Instasplint: (Medium [+0]) An inflatable sleeve forty-five centimeters long which fits snugly over any limb, the instasplint immobilizes the limb and reduces the chances of additional injury. If the GM makes rolls to determine whether healing is 100% correct, use of an instasplint adds 70 to any roll.

Laseknife (*): (Very Hard [-20]) Utilizing a focused laser scalpel, this device, though probably not a potential effective weapon, could be dangerous if used by the unskilled. The Laseknife is 6 cm long, 3 in diameter, the 'blade' end cone-shaped.

Medtab Applicator (*): (Light [+10]) An oval, palm-sized instrument, the applicator adheres Medtabs to the patient's skin. Medtabs are the latest development in controlled medicine dispensing, and are sold (to qualified personnel) in 10-tab cartridges. A cartridge is fed into the Applicator; the dosage to be applied is set on the Applicator controls — based on skilled treatment decision — and the device is pressed against the patient's skin (usually on a limb). A 1 cm disk sticks to the skin, and remains firmly adhered after the Applicator is removed. The 'Tab' infuses the medication over a safe period of time and then falls off, fully spent.

Preservation Unit (†): (Hard [-10]) This device keeps alive a patient whose body, for one reason or another, is incapable of self-support, and is beyond the capability of field medication. The unit is about the size of a small backpack, with several retractable wires and tubes, each fitted on the end with a cutaneous adhesion plate. (These plates work in a similar manner to medtabs, adhering to the skin and injecting medicines or taking samples through tiny, high-pressure infusions.) The entire setup, including patient, is placed in a special polymer bag (included). Although the device can run for as long as 24 hours on the 3 power cells, and the cells may be exchanged indefinitely, the body is not as stable as it would be if held in a more sophisticated (and much more bulky) Medcomputer Stasis Unit (an expensive, non-portable contraption), and the patient's condition could deteriorate if not attended to within 24 hours (roll a RR/hour for Stat decline after 24 hrs.

Regenergun (3*): (Hard [-10]) Will repair and regenerate any severity burns at the rate of approx 10 hits/minute. The 'gun' will also regenerate destroyed muscle, cartilage, tendon and partial bone tissue, requiring about one hour for each regenerated part. Gun cannot re-grow complex tissues like organs. Patient is at -25 (for each regenergun treatment) for a period of 24 hours after treatment. It will repair any three burned areas or three specific tissue damages before exhausting its cells.

Remote Patient Monitor: This wrist-worn device is often used by Physicians, Medics and CyberMedics. It contains a small data receiving unit which allows the caretaker to keep abreast of patients' status from over a great distance. The patient(s) have Biostatus Monitors and Data Transmitters implanted (or fitted with DNI techniques), and the Remote Patient Monitor receives the transmitted information. A DNI version is available which channels received information directly into the Medic's brain or NAC System.

Skeletal Field Knitter (3*): (Very Hard [-20]) The Skeletal Knitter is a field device akin to the *Tissue Knitter*, but it has a more specialized function. When successfully utilized, the three power cells of this Knitter are capable of repairing 6 sprains, or 3 breaks, or 1 shatter, or an appropriate combination of these bone/cartilage/tendon repairs. The subjects of Skeletal Knitting are physically drained by the process, so all actions for 24 hours following the bone repair are at -25%. This represents the recovery period.

Tissue Knitter (*): (Hard [-10]) Working on the same principle as the Dermal closer but more powerful, the Knitter is able to rejoin muscle, tendon and cartilage. Severe and complex injuries (such as shatters) are not recommended to be treated by field equipment, as the sophistication of these devices is limited. Tissues to be joined must be aligned somewhat. The Knitter is 3.5 cm in diameter and 12 long, with more complex controls (and so more skill required to operate). Repair time varies with complexity. The power cell will repair 4 specific wounds.

Transcutaneous Bone Stimulator. Electronic device worn over fractured area. Once in place, it generates a field of electrical stimulation which nurtures the healing bone cells back to health, and actually causes them to bond faster. The stimulator doubles the healing rate of the bone. Often used for serious injuries when surgical facilities are unavailable, in tandem with an instacast.

4.2 *DRUGS AND CHEMICAL AGENTS*

Medicine has indeed come a long way by the time of *Cyberspace*. For those who can afford it, there are cures or treatments for just about any ailment conceivable. This is the age of tailored microactive organisms and specially-cloned replacement tissue; of wholesale re-embryonization and reformatting of cells (even nerve and brain cells); and of artificial organs implants. The vast number of medical treatments available in the world of *Cyberspace* can hardly be listed in one volume, but the techniques which are bound to be of interest to players are noted below. To give the GM an idea of the other advances made by medical science, several are noted here: Anti-Arthritis drugs; Ulcer-Preventative Drugs; Artery Hardeners and Artery Purgers; Calcium Blockers which lower the blood pressure and increase the heart's output; Beta Blockers which slow the heart-rate and diminish the heart's need for oxygen; Gene Splicing cures for Hemophilia & Downs Syndrome; Preventative and curative Anti-Cancer drugs, Chemical and Hormonal Treatments for chronic depression, schizophrenia and drug addiction; and the bioactives listed below.

4.2.1 *MEDICINAL DRUGS AND BIOACTIVES*

Most of the bioactive substances listed below are available in Medtab form (see Section T 4.1, Medtab Applicator for a description). Medtabs allow fast, easy and bloodless application of a bioactive into the patient's system. Most of these super-drugs are possible due to advances in neurotechnology which allowed scientists to create "Supertransmitters"; chemical analogs which go straight to the brain's receptor sites and activate specific brain/body functions. Supertransmitters are available for nearly every imaginable mood/state; those listed here are only examples. The listings below include each drug's Addiction Factor (AF). The AF is the chance that the user will become addicted or suffer a tolerance to the drug each time it is used.

Alerlene: (AF: 10) Alerlene is a stimulant often used by military and paramilitary troops. Application of one tab allows the recipient to operate at full efficiency for a 24 hour period without rest. The drug is so safe, that several consecutive injections will allow extended wakefulness without detrimental effects. However, after use of Alerlene is discontinued, a sleep period must follow with 4 extra hours of sleep required for each consecutive 24 hour period that the person was kept awake with the drug.

Amboathorphin: (AF: 15) Amboathorphin is a universal nerve gas antidote for humans. Each applied tab will protect a person in a chemical warfare nerve gas environment for 24 hours. Victims who have succumbed to nerve gas in a previous combat round, and are miraculously still alive, can be treated with Amboathorphin in order to revive them. This would require an exceptional Medical Technics skill roll.

Anacept: (AF: 01) The result of considerable of biochemical research, Anacept is a 100% effective contraceptive. It is available in two forms; for males and females (the female version is more expensive and much longer lasting), and need not be used on a periodic basis. A dose of either variety must be taken at least fifteen minutes prior to sexual intercourse, and will render the user effectively sterile (males for 100 hours, females for twenty-seven days). It may be purchased over the counter.

Andeline: **(AF: 10)** Heals 30 concussion hits over the space of 6 rounds.

Andrex: (AF: 50) This chemical will normally increase concussion hit total by 50% and double the number of exhaustion points available to the character. The duration of the effect is 2 rounds per 5% failure of a RR made against a 20th Lvl attack.

Arelenex: (AF: 10) Available over-the-counter, a dose of Arelenex completely relieves all symptoms of the common cold for twenty-four hours.

Decilage: (AF: 15) A micro-organism in Tab form with an incubation period of 31-60 minutes after it is introduced into the blood-stream. The M/0 attacks and destroys ingested toxins and other M/0's which work on the digestive or circulatory system.

Hemoflux: (AF: 20) (Specific Stimulant): Acts on the spleen and liver, causing greatly accelerated blood production — enough to completely replace blood supply within 2 hours. Patient must at all times still have the normal minimal amount of blood to remain alive. Patient must be kept hydrated and will be at -25 for 25 hours after taking this drug.

Interferon III: (AF: 10) (Antiviral) The latest synthetic version. Immediately after administered the patient is allowed a new RR at +100. If it is successful, complete recovery is achieved within one hour. If not, the patient may make another roll at +100 after every hour until successful, or three tries are made, whichever comes first. If all should fail, the virus takes full effect.

Jirolene: **(AF: 70)** (Stimulant) Aids wakefulness; adds 20 to Perception and related alertness rolls. Prolonged use (72 hours without a full rest period) causes a deterioration of all stat bonuses at the rate of 5 pts/hr, until a full rest is taken.

Korteline: (AF: 20) Relieves 1-10 accumulated stun-rounds.

Stirene: (AF: 10) (antibiotic) Extremely useful in fighting most bacterial infections. Although full recovery usually takes 24 hours, only one Stirene-aided RR is made, at +100. If the patient fails this roll (and the GM should keep this secret for two hours, which is how long it takes before even a skilled and well-equipped physician could determine whether the drug was taking effect) more extreme measures need to be taken. Addiction here usually means that the drug becomes ineffective.

4.2.2 *"OVER THE COUNTER" DRUGS*

Alert: (AF: 20) Causes user to become instantly alert, usable on sleeping or Stunned characters. Adds +50 to any roll made to resist the effects of a soporific drug. Effects last for up to 1 hour.

Darlon: (AF: 10) A specialized neurofacilitator, Darlon causes the user to enter a state of calm self-certainty, adding +10 to all Self Discipline-based rolls. Effects last for 1-4 hours.

Doet-3: (AF: 12) A "creativity drug"; Doet-3 boosts the user's right-brain functioning, adding a +30 to any maneuvers involving artistic conceptualization or holistic understanding. Effects last for 1-8 hours.

Empagine: (AF: N/A) This drug acts on the user's own defensive neural structures, weakening them and releasing the user from the harrier aspects of his personality. It is used in the treatment of people suffering from CIRS, and allows the user to roll 1D10, the result of which is added to his Empathy Stat (and subtracted from the CIRS Stat). It has no effect on people whose Empathy has not been lowered due to CIRS or other ailment. This drug will only work once for a person who takes it.

Enkephalog: (AF: 12) A nonaddictive painkiller made of enkephalin analogs, this drug must be injected directly into the brain (through the temples or a catheter) to have any effect. The optional delivery method involves the use of Neural Pathfinder (see below). While under the effect of the drug, the user will feel no physical pain whatsoever (all pain/shock Mods will be negated). The down side of this is that the user might receive a fatal wound and be totally unaware of it. Effects last for 1-2 hours,

Hemosclerex-III: (AF: **15)** A variant of regular Hemosclerex, this drug spreads rapidly throughout the circulatory system, and enforces rapid coagulation at all "blood loss sites" found. Each round, the number of current bleeding sites (locations which have taken Critical Hits indicating blood loss) is counted. The number of bleeding sites is also the number of rounds which will transpire before blood loss at each site is lowered by 1 point. The effect will continue until all blood loss has been stopped.

Hemosclerex: (AF: 10) Often used to treat hemophiliacs, this drug causes almost immediate clotting in the Body Location into which it is administered. Effectively, it lowers the bleeding rate by 1 every round until all bleeding from that Body Location has ceased.

Human Growth Hormone [HGH]: (AF: 03) Usually used to treat dwarfism, this body derivative causes the thyroid and other glands to activate, sending more HGH to the body and causing the user to grow. The drug must be administered several times a month, for several months, before the effects begin showing. After that, regular treatments will cause the user to grow in height by approximately one centimeter per month (with a corresponding gain in weight).

Hypnos: (AF: 05) Causes user to enter a tasting hypnotic state in which age-regression and post-hypnotic suggestion is easily performed. Usually used by therapists in the treatment of deep-rooted psychological problems, it has recently taiputto work by mercenaries who used it to extract corporate secrets from their victims.

Immunosuppressor: (AF: 05) Used in all Cyber Implant and transplant operations, this tailored hormonal analog eliminates the body's desire to reject an implanted or transplanted System or organ.

L-Dopa-IV: (AF: 25) Administration of this todv derivative drug causes the user to experience quickened responses for the next 1-10 hours. While under the effects of the drug, all Quickness-based rolls and Initiative situations (as well as any other maneuvers requiring physical speed) will receive a +30.

Megaceph: (AF: 10) An intelligence tooster, this drug adds +10 to all rolls involving the Reasoning or Intuition Stats. Effects last for 1-4 hours.

Mnemosyne: **(AF: 15)** A temporary memory booster, this drug adds +10 to the user's Memory bonus. Effects last for 1-4 tours.

Neurocene: (AF: 0) A tailored drug which seeks out the brain's outer defensive cell walls and causes the cells there to temporarily contract (for 1-10 minutes), thereby allowing the direct administration of cortical bioactives such as Pain Deadener and some of the hallucinogens.

Purge: (AF: **10)** A so-called "anti-hangover" drug, gives the user a free RR with a +50 Mod against any other non-poisoned drugs currently in his system.

Quietus;: (AF: 15) Causes user to fall almost immediately into a deep sleep.

Sensorine: **(AF: 15)** Increases the intensity and clarity of all sensory input, effectively adding +20 to the user's Perception Bonus. Effects last for 1-3 hours.

Specific **Mood Alterants: (AF: Varies)** Specific alterants for activation of nearly all brain sites have been discovered. Amongst other things, this has allowed psychiatrists to design drugs which are capable of causing the user to enter any sort of mood imaginable. Calm drugs, which effect the limbic system and dull fear response patterns, are often used on violent psychopaths or victims of shock. Cheer drugs are used to control the behavior of advanced depression cases. Of course, this technology has not been untouched by the darker side of corporate whim — anger and rage drugs are occasionally used on Armsmen (these would duplicate the effects of a Frenzy skill roll). In any case, the Mood Alterant causes the specific state to be entered unless the user succeeds in a SM/CO:X. The Addiction Factor of these drugs is usually around 10%, and the effects generally last for 1-10 hours.

Verex Compound: (AF: 25) A universal poison antidote, it allows the patient an additional RR at +100.

Virlene: (AF: 30) (Heavy Sedative) Causes immediate unconsciousness for 2-4 hours.

Yuthix: (AF: ?) (Marketed under trade name "Antigerus"). Stops (or at least slows) aging process in most humanoids. One dose a day necessary. No addiction or reduced effectiveness has been determined, but the drug has not been available long enough for conclusinve proof

4.2.3 *CHEMICAL WARFARE SUBSTANCES*

The chemicals listed on this chart are used in govermental and corporate wars, and by terrorist teams bent on wholesale murder. All can be delivered in gas or liquid form, as inhaled, injected, or ingested agents (unless otherwise stated). The victim receives a RR vs the *Attack Level* indicated. If this roll is successful the *Minimum Effect* occurs, otherwise the *Maximum Effect* takes place. Most of the chemicals listed have an incubation time (shown in parentheses). If the victim receives proper medical aid during this incubation period the effects of the chemical will be avoided.

4.2.4 *ILLICIT DRUGS*

Most of the following are specialized "designer drugs" which are readily available on the black market, requiring a connection of some sort or a successful SM/StW: (varies). All are designed illegally, and may, at the GM's option, cause a roll to be made on the *Illicit Drug Quality Chart* below.

ILLICIT DRUG QUALITY CHART

Roll	Drug Quality
01-02	Poison: user must make SM/Co:X or die.
03-05	Contaminated: user must make SM/Co:H or become very ill.
06-20	Not a drug at all; (user may experience placebo effect).
21-35	Wrong drug; weaker analog of same effect (RR at +50).
36-40	Contains irritant; user must make RR vs lvl 5 or get sick.
41-45	Drug is weaker than expected (RR at +20).
51-60	Slow to act: takes twice normal time to effect user.
61-98	Drug is normal in all respects.
99-00	Drug is stronger than expected (RR at -20).

Here are a few detailed descriptions of **illicit** drugs, followed by a more complete, but general listing.

Blank: Dulls user's thought processes, makes him feel laconic and docile.

CHEMICAL WARFARE SUBSTANCES

Name	Attack Level	Minimum Effect	Maximum Effect	Description
Algira-Hemoglobulin	6	Actions at -30 for 1-10 hours.	Death by paralysis and asphyxiation	Thickens blood, causes asphyxiation and muscle atrophy. (30 minutes)
Amsyth	8	1-20 hits and 1-10 Stun rounds.	10-100 hits and 1-100 Stun rounds.	Toxin which causes nerve endings to flare up and disrupt.
Antidiuretic Hormone	3	Severe embarrassment	Death by dehydration in 20 minutes.	Causes excess urine production.
CHS-IV	12	5-50 hits, vomiting	Death by drowning in 10 rounds.	Causes blood bubbles to erupt into lungs and esophagus.
CL Gas	8	-30 to all actions for 10-60 min.	-50 to all actions for 10-60 minutes	As Tear Gas plus causes violent stomach contractions, vomiting.
Etherylide-23	13	Lose 1-5 points Temp Me/Re	Death by Stroke	Enters synapses and feeds on neural impulses, grows until stroke occurs.
Hemoethygene	10	Weakness; -30 for 1-20 hours.	Death in 1-20 hours.	Micro-organism eats red blood cells.
Mace Gas	6	-20 to all actions for 3-30 min.	-50 for 3-30 min.	Causes temporary blindness, rash, burning sensation all over body.
Megapheromone-F	6	Blushing; flirting.	Intense desire; RR or attempt rape	Causes intense feelings of sexual interest in females.
Megapheromone-M	7	Blushing; flirting.	Intense desire; RR or attempt rape	Causes intense feelings of sexual interest in males.
Methylactylide-90	10	Headache; -20 for 1-6 hours	Spasms (Roll on CIRS) 1-100 hours	Causes severe neural damage and "insanity".
Othalene-Z	8	Choking; -25 to all actions for 10 minutes	Death by drowning in 15 minutes	Inhaled, ruptures lung cells, causing bronchitis.
Polypheronol-80	7	Muscle spasms for 1-6 hours	Voluntary paralysis for 1-10 hours	Delays or arrests neuromotor responses.
Soporathol	5	Actions at -20 for 1-6 hours.	Voluntary paralysis for 1-6 hours	Inhibits synaptic activity.
Tear Gas	5	All actions at -10 for 10-60 min.	All actions at -30 for 10-60 minutes.	Causes painful eye, nose and throat sensations.

Bolster : Hypes the user into an aggressive state, adding a +20 to all maneuvers involving Strength or Constitution, and increasing the user's natural Hit Point total to 150% of normal.

Colorama: Another popular hallucinogen (primarily visual), with none of the confusing side-effects often caused by such drugs. Colors seem much more intense, and conversation verges on the cosmic. Colorama users tend to engage passers-by in lengthy, rambling conversations which are difficult to relate to.

Magic: A very popular hallucinogen which creates random cortical stimulation. The world seems much more vibrant and other people seem hilariously simple.

Neoheroin: An endorphin analog which blocks pain, reception completely (pain and shock Mods are eliminated). In addition, user's imagination becomes very active, and all maneuvers involving SD Stat receive a -20 penalty.

Whip: Hypes the user into a very violent state (not unlike Frenzy skill), adds +20 to all maneuvers involving Constitution or Quickness. However, user suffers a -20 to all maneuvers involving Self Discipline or Empathy Stats.

4.3 MEDICAL IMPLANTS AND SUBSTITUTES

Artificial Wombs: In many sectors, corporations or even governmental bodies have begun sponsoring wholesale birth factories. Here, fertilization and embryonic development are carried out by trained specialists in an attempt to create loyal and obedient workers. The major innovation in this procedure has been the development of the Artificial Womb, a partially organic, partially mechanical construct which duplicates all functions of a natural uterus. Even in "free-birth" sectors, Artificial Wombs are used by parents for whom natural pregnancy is difficult, physically impossible or too time-consuming.

Artificial Blood: Due to the rapid proliferation of killer viruses which are transmitted through bodily fluids, several forms of Artificial Blood have been developed for transfusions. One specialized type called Hemo-TS (Thermostatic) includes an anti-freezing agent which allows the recipient to maneuver in extremely cold environments (such as arctic or undersea realms) without experiencing the dangerous effects of hypothermia.

ILLICIT DRUG CHART

The following is a chart which lists a variety of illicit drugs which characters may purchase "on the street". Name identifies the most common street handle for the substance, while price indicates the average cost of one dose. The level of the drug is given as a range to allow for varied potencies. The Addiction Factor indicates the percentage chance each time that the drug is used that the user becomes dependant or builds a tolerance to the substance (requiring that more be taken the next time to achieve the same effect). The Primary Form shows how the drug is usually administered. The Effect indicates the standard reaction that most users have to the drug, and the duration for which the drug effect lasts.

ILLICIT DRUG CHART

Name	Price	Level	Attack Factor (AF)	Primary Form	Effect
Acid	2	2-20	03	Pill	Hallucinogenic (1-10 hrs).
Blank	1	1-5	06	Pill	Mood alterant — docile (1-10 hrs).
Bolster	4	2-10	05	Injection	Mood alterant — aggressive (1-10 hrs).
Boost	5	1-10	06	Aerosol	Hightens awarness and reflexes (1-10 min).
Coke	3	1-10	05	Inhalant	Euphoric (1-2 hrs).
Colorama	4	1-5	03	Pill	Hallucinogenic (1-10 hrs).
Crack	5	2-10	10	Combustant	Euphoric (2-20 min).
Dope	3	1-10	05	Combustant	Depressant (1-5 hrs).
Dorph	15	2-20	03	Pill	Pain suppressant (1-5 hrs)
Dreen	4	3-30	02	Injection	Hyperactivator (1-5 min).
Drudge	5	1-10	08	Pill	Mood alterant — sadness (2-20 hrs).
Freak	5	1-10	05	Pill	Mood alterant — crazed (1-5 hrs).
Haze	6	2-20	06	Pill	Mood alterant — passive (1-10 hrs).
Hilite	10	1-5	05	Aerosol	Increases perceptive accuity (3-30 min).
Hipe	2	1-10	08	Pill	Mood alterant — happiness (1-5 hrs).
Horse	9	1-10	07	Injection	Hallucinogenic (4-40 hrs).
Lace	3	2-20	08	Pill	Hallucinogenic (1-2 hrs).
Magic	12	4-40	05	Pill	Hallucinogenic (2-20 hrs).
Neoheroin	8	3-30	07	Injection	Pain suppressant and hallucinogenic (2-10 hrs).
Rockit	2	3-30	09	Aerosol	Multi-rush euphoric (6-60 min).
Rush	3	2-20	08	Aerosol	Euphoric (1-2 hrs).
Screw	1	1-5	02	Pill	Aphrodisiac (1-10 hrs).
Speed	7	2-10	07	Pill	Hyperactivator (6-60 min).
Smack	4	1-10	05	Injection	Hallucinogenic (1-5 hrs).
Smash	1	1-5	01	Liquid	Relaxant (1-2 hrs).
Swing	5	1-10	03	Pill	Mood alterant — variable (1-5 hrs).
Torp	1	1-10	02	Aerosol	Hightens reflexes (1-10 min).
Whip	6	2-20	04	Aerosol	Mood alterant — frenzied (2-20 min).

Notes:
All Prices are in World Dollars.
When an illicit drug is taken, a character should make a Resistance Roll against the level of the substance, and then consult the following chart to determine the extent to which he is affected.

ILLICIT DRUG RESISTANCE ROLL EFFECTS CHART

RR Passed by.	Effect:	RR Failed by:	Effect:
101+	None	101+	Over Dose
51-100	Slight Effect	51-100	Enhanced Effect
0-50	Half Effect	01-50	Normal Effect

MASTER EQUIPMENT TABLE

COMPUTER COMPONENTS

NAME	MASS [KG]	COST [$]
Silicon Processor Core	0.01	20xMk#
Superchip Processor Core	0.01	400xMk#
Magnebubble Processor Core		1000xMk#
Orgmolec Processor Core		5000xMk#
Computer Operating System		.1xCore
Language Processor Operating System		.2xCore
Neuroprocessor Operating System		.3xCore
CyberDeck Operating System		.5xCore
Keyboard	3	30
Monochrome Monitor	5	100
Color Monitor	5	200
Holoprojector	4	400
Voxbox	1	250
I-Mike	1	300
Datacard	0.02	5xMk#
Card Drive	3	100
Phoneline Modem	1.5	100
Beam Modem	2	200
Printer	8	75
DNI Cable	0.2	350
Mouse	0.1	100
Laserpen	0.05	50
Silicon Storage Expander	0.01	5xMk#
Superchip Storage Expander	0.01	10xMk#
Magnebubble Storage Expander		40xMk#
Orgmolec Storage Expander		200xMk#
Palm Print Analyzer	4	50
Retinal Scanner	3	200
Voice Print Analyzer	2	150
Alphawave Scanner	5	400
Camera	4	30

CLOTHING

NAME	MASS [KG]	COST [$]
Dress Clothing	varies	200-20,000+
di'Medici Men's Eveningwear	varies	15,000+
Cleopatra Evening Gown	varies	20,000+
Klein II Suit (men's)	varies	5,000
Klein II Suit (women's)	varies	4,000
Klein II memory cloth dress	varies	1,500
Electra Holosuit	varies	1,000
Claiborne Business Suit (women's)	varies	2,000
Claiborne Business Suit (men's)	varies	2,000
Luna Moonsilk gown	varies	3,000
Margo Tangi Evening Dress	varies	5,000
Lesser Italian Men's Suit	varies	1,000
Lesser French Women's Suit	varies	600
Lesser Women's Eveningwear	varies	1,000
Basic Men's Suit	varies	200
Basic Women's Suit	varies	200
Women's Overcoat	varies	300
Men's Overcoat	varies	400
Dress Footwear	varies	200-2,000
Leisure Clothing	varies	20-1,000+
Eros Flynn Coverall	varies	400-1,000
Gianfranco Suit	varies	5,000
Klein II T-shirt (unisex)	varies	80
Leather Jacket (generic)	varies	400
Gianfranco Leather Jacket	varies	10,000
Lee-vis (cotton jeans)	varies	60
Luna moonsilk pants (men)	varies	500
Madonna complete outfit (women)	varies	1,000
Margo Tangi lounge tunic (unisex)	varies	800
Michelangelo swimpatch (either sex)	varies	200
Michelangelo tintjob	varies	300
Leisure Footwear	varies	20-500
Neonike street treads	varies	300
Sky-king sprinters	varies	150
Neophrene docksiders	varies	110
Generic Clothing (per article)	varies	30
Generic Footware	varies	10
Uniform (subsidized)	varies	50-100
Dress Uniform	varies	200-1,000
Light Jacket	varies	50
Thermal Jacket	varies	75
Thermal Suit	varies	500

ACCOUTREMENTS

NAME	MASS [KG]	COST [$]
Barbaric Chic	0.1 to 1.0	1K to 10K
Electronic Jewelry	.01 to 0.2	10 to 100
Holojewelry	,01 to 0.1	50 to 1000

ENVIRONMENTAL SUITS

NAME	MASS [KG]	COST [$]
Deep Space Light-duty	8	1,000
Deep Space Heavy-duty	15	2,000
Planetary Light-duty	5	600
Planetary Heavy-duty	12	1,200
EVA Thruster-pack	5	400

ARMOR

NAME	MASS [KG]	COST [$]
Light Body Armor	2	150
LBA Flak Vest	1	80
LBA Extended Flak Vest	1.5	200
LBA Reinforced Flak Vest	2	350
LBA Reinforced Flak Armor	4	500
Armored Bodysuiting	7	2000
ABS Pliable Breastplate	5	1200
ABS Pliable Breastplate & Greaves	6	1700
ABS Pliable Half Plate	7	2000
ABS Pliable Full Plate	8	4000
ABS Mesh Shirt	6	2000
ABS Mesh Shirt & Greaves	7	3000
ABS Full Mesh	8	5000
ABS Battle Mesh	10	8000
Armored Exoskeleton	8	3000
AEX Exoskeleton Breastplate	7	4000
AEX Exoskeleton Breastplate & Greaves	8	5000
AEX Half Exoskeleton	14	8000
AEX Full Armored Exoskeleton	18	10,000
Sentinel Helmet (†)	2	400

TOOLS AND POWER SOURCES

NAME	MASS [KG]	COST [$]
Laser Cutter/Welder	0.5	150
Heavy Cutter/Welder	1	250
Standard Tools	1	80
Power Cells (*)		
Utility Cell	0.02	5
Weapon Cell	0.04	20
Flamer Cell	0.5	20

MASTER EQUIPMENT TABLE

TOOLS AND POWER SOURCES (cont.)

NAME	MASS [KG]	COST [$]
Power Cartridges (t)		
Utility Cartridge	0.3	45
Weapon Cartridge	0.8	100
Flamer Cartridge	1	100
Power Packs (‡)		
Utility Pack	4	100
Weapon Pack	6	500
Flamer Pack	8	500
Microcell	0.01	10
Photovoltaic Cell (Solar Battery)	Special	Special
Electrics Toolkit	2.5	150
Mechanics Toolkit	3	100
Medikit	2	300

WEAPONS

Note: Some of the specific weapons noted below have modifiers based on Mr superior (or inferior) construction. These modifiers will be noted in fte *weapons* chart. These mods are included to enhance the flavor of the game by giving specific weapons more character. The GM may wish to alter or ignore these mods for the purpose of game balance.

NAME	MASS [KG]	COST [$]
Projectile Weapons		
5mm Pistol (standard)	0.5	60
Mirage 5X	0.5	60
GRU 05K	0.5	100
Walther PPK (romanticized)	0.5	600
10mm Pistol (standard)	0.7	300
Glock 17D	0.4	600
Beretta 95S	0.7	550
H&K 200K	0.6	600
Mirage 10X	0.5	300
GRU 10G	0.6	250
Steyr GB-98	0.8	400
12mm Pistol (standard)	0.9	400
H&K MP-9	0.7	450
GRU Max	0.9	350
5mm Light Machine Pistol	2.5	700
10mm Medium Machine Pistol (standard)	3	800
Beretta 95R	1	750
H&K VP70 Z	0.7	800
10mm Submachine Gun (standard)	3.5	400
Ingram MAC 10 B	3	300
Beretta PM-15	3	550
H&K G21	4	400
Mini Uzi IV	2.5	600
Uzi III	3.5	500
Mirage S10 Rapier	3.5	400
GRU Popper	3.5	300
5mm Light Rifle	3.5	300
10mm Medium Rifle	4	450
12mm Heavy Rifle	4.5	550
5mm Light Assault Rifle (standard)	3.7	400
M19	3	400
Mirage R5 Spear	3	450
GRU S5 (Soldier-5)	3.3	350
Steyr AUG C	2.8	800
H&K 33A5	3	550
10mm Medium Assault Rifle (standard)	4.2	600
Mirage R10 Lance	4	600
GRU T10 (Trooper-10)	4.3	500
10mm Light Machine Gun	8	800
10mm Medium Machine Gun	10	1200
12mm Heavy Machine Gun	12	1500
15mm or Sawed-off Shotgun	3.5	250
15mm Autoshotgun	4.3	700
20mm or Sawed-off Shotgun	4,3	300
20mm Autoshotgun	5	900
Needle Pistol (standard)	0.7	500
Mirage Zipper	0.8	550
Steyr NY-5	0.7	700
H&K Pulsar 10	0.8	600
Beretta NP	0.7	600
Needle Rifle (standard)	3,4	1500
Mirage Ripper	3.5	1600
Steyr NY-12	3.1	1800
H&K Pulsar 100	3.2	1700
Beretta NR	3.3	1650
Taser Pistol (standard)	1	500
Mirage Punch	0.9	600
Taser Rifle (standard)	4	1500
Mirage Slammer	3.5	1700
Rocket Pistol	1.3	500
Rocket Rifle	4,5	1500
Gauss Pistol (t) (standard)	1.5	1000
Mirage XL-3 (†)	1.5	1100
H&K HK MA 41 (†)	1.7	1200
Voerung 30-M (†)	1.8	1400
Gauss Rifle ft) (standard)	4.7	2500
Mirage XL 5 (†)	4.8	2700
H&K HK MA53 (†)	4.7	2800
Voerung 90-M (t)	5.0	3000
Grenade Rifle	4.4	1200
Rocket Propelled Grenade Launcher	4.5	1500
Portable Missile Launcher	5.2	1800
Quad Portable Missile Launcher	7	2300
Autofeed Portable Missile Launcher	8	3000
Smart Gun (D)	+.1	500+(1/2 Wpn)
Gas Gun	0.6	250
Energy Weapons		
Laser Pistol (2*) (standard)	0.8	1000
Mirage XR (X-Ray) 12 (2)*	0.8	1 200
H&K/B&LRB (Ray Beam) 25 (2)*	0.7	1 300
Colt/Corning Mark One (2)*	0.8	1100
Assault Laser (‡) (standard)	1 .5	1200
Mirage XR 22 ft)	15	1400
H&K/B&LRB 50 (‡)	16	1500
Colt/Corning Mark Two ft)	1.7	1 200
Laser Rifle (2‡) (standard)	2.5	2000
Mirage XR 32 (2‡)	2.6	2100
H&K/B&LRB 75 (2‡)	2.7	2400
Colt/Corning Mark Three (2‡)	2.8	2200
Heavy Laser (Special)	6	1200
Other Weapons		
Disposable Missile Launcher	3	300
Multirocket Missile Pod	Mk#	100xMk#
Subsonic Field Gun (‡)	4	750
Infrared Field Gun (t)	4.5	800
Microwave Field Gun (‡)	4.5	1000
Laser Blinder Field Gun (‡)	5	1000
Sample Melee Weapons		
Karatand	0.1	75
Orchid	0.4	100
Switchblade	0.5	5-50
Knife	0.5-1	2-20

MASTER EQUIPMENT TABLE

AMMUNITION

(Cost and Mass is per round unless otherwise noted.)

NAME	MASS [KG]	COST [$]
5mm GP	0.1	0.5
10mm GP	0.2	0.8
12mm GP	0.3	1.
5mm AP	0.1	1
10mm AP	0.2	1.5
12mm AP	0.3	2
5mm HE	0.1	5
10mm HE	0.2	8
12mm HE	0.3	12
5mm HEAP	0.1	10
10mm HEAP	0.2	15
12mm HEAP	0.3	20
Needle Pistol Magazine (2 Bursts)	0.2	10
Needle Rifle Magazine (6 Bursts)	0.4	60
15mm Shotgun Shot	0.1	1
20mm Shotgun Shot	0.1	1.5
15mm Shotgun Slug	0.2	2
20mm Shotgun Slug	0.2	4
Taser Pistol Cartridge (1 shot)	0.2	5
Taser Rifle Magazine (5 shots)	1	45

AMMUNITION OPTIONS

(Cost and Mass figures are multiplied by the base Cost and Mass of the ammunition, as shown above.)

NAME	MASS [KG]	COST [$]
Tungsten Core Round	(x 1.5)	(x4)
Depleted Uranium Core Round	(x 3.0)	(x6)
Super-Teflon Coated Round	(x 1.0)	(x2)
Tranquilizer Round	(x 0.5)	(x3)
Poisoned Round	(x 1 .0)	(x4)

GRENADES, EXPLOSIVES AND PORTABLE MISSILES

NAME	MASS [KG]	COST [$]
General Purpose Warhead	Mk#/10	Mk# x 30
Concussion Warhead	Mk#/10	Mk# x 15
Shrapnel Warhead	Mk#/10	Mk# x 15
Fuel/Air Explosive Warhead	Mk#/10	Mk# x 15
Smoke Warhead	Mk#/10	Mk# x 10
Anti-Laser Aerosol Warhead	Mk#/10	Mk# x 5
Unguided Portable Missile	Mk#/5	Mk# x 40
Guided Portable Missile	Mk#/5	Mk# x 60
Plastique	0.1	10xMk#
Dynamite	0.3	20
Blast Cap	0.1	30
Fuse		5/meter
Land Mine	3	50

DATA STORAGE AND RETRIEVAL DEVICES

NAME	MASS [KG]	COST [$]
Datacard		
Microcomputer ft)		Mk# x 50
Holoviewer (*)	1	50
Memory Recorder (t)	1	150
Recorder (Audio) (*)	0.4	25
Viewer with Enhance (*)	1.5	150
Holocamera (*)	0.5	200
Datacard Viewer (A)	1	70
Micromonitor (*)	0.03	100

PERSONAL ITEMS

NAME	MASS [KG]	COST [$]
Credit Chronometer		
Chronometer (*)	0.02	25
Distance Lenses		200
Earphone Communicator (A)	0.04	30
Infrared Goggles	0.1	45
Infrared Lenses		100
Light Filter Lenses		120
Lightrod	0.2	5
Magnetic Compass	0.1	5
Pocket Communicator (*)	0.2	100
Signal Beacon (*)	0.1	15
Calculator Unit (A)	0.1	10
Microfile Dogtags	0.02	Special
Credit History/ID Card	0.02	100
FAX Unit	2	250
Cellular Phone (A)	1	50
Credit Reader/Transferral Device	2	250
Visual Sensor ft)	3	50+(10xMk#)
Thermal Sensor ft)	2	100+(15xMk#)
Audio Sensor ft)	1	50+(10xMk#)
Tactile Sensor ft)	1.5	150+(20xMk#)
Radar Sensor ft)	3	150+(50xMk#)
Sonar Sensor ft)	4	150+(50xMk#)
Mine Detector ft)	2.5	100
DNI-2 Unit (D) ft)	2	300
Buzzer (D) (*)	0.3	120

HOME AND OFFICE MACHINES

NAME	MASS [KG]	COST [$]
ITV (Δ)	15	350
Cablevision (A)		50/month
Holovision	6	300

MEDICAL EQUIPMENT

NAME	MASS [KG]	COST [$]
Arterial Sealer (*)	0.5	400
Auto Tab applicator (2*)	0.3	200
Bone Bonding Solution	0.2	20
Cryo Unit	50	1000
Dermal Closer		
Diagnostic Processor (A)	10	800
Health Status Card	0.02	100
Home Medical Tests	1 - 3	10-100
Implant Scanner (t)	2.5	200
Instacast	0.2	50
Instasplint	0.1	25
Laseknife (*)	0.3	250
Medtab Applicator (*)	0.2	100
Remote Patient Monitor (A)	1	150
Tissue Knitter (*)	0.5	350
Transcutaneous Bone Stimulator ft)	1	75

MASTER EQUIPMENT TABLE

MEDICINAL DRUGS AND BIOACTIVES

(Price shown is for ten Tabs. Mass is .1 kg per 500 Tabs.)

NAME	MASS [KG]	COST [$]
Medicinal Drugs and Bioactives		
Alerlene	-	150
Amboathorphin	-	230
Anacept	-	300
Andeline	-	100
Andrex	-	500
Arelenex	-	15
Decilage	-	600
Hemoflux	-	120
Interferon III	-	100
Jirolene	-	5
Korteline	-	250
Stirene	-	30
"Over the Counter" Drugs		
Alert	-	25
Darlon	-	65
Doet-3	-	50
Enkephalog	-	75
Empagine	-	350
Hemosclerex	-	75
Hemosclerex-III	-	250
HGH (Human Growth Hormone)	-	20
Itypnos	-	100
Immunosuppressor	-	50
L-Dopa-IV	-	100
Megaceph	-	100
Mnemosyne	-	75
Neurocene	-	50
Purge	-	35
Quietus	-	30
Sensorine	-	100
Specific Mood Alterants	-	100 - 500
Verex Compound	-	100
Virlene	-	50
Yuthix	-	500,000

CHEMICAL WARFARE SUBSTANCES

(Cost and Mass shown is for one canister.)

NAME	MASS [KG]	COST [$]
Algira-Hemoglobulin	0.5	700
Amsyth	0.5	480
Anti Diuretic Hormone	0.5	225
CHS-IV	0.5	1300
CL Gas	0.5	360
Etherylide-23	0.5	1500
Hemoethrygene	0.5	750
Itece Gas	0.5	90
Megapheromone-F	0.5	400
Megapheromone-M	0.5	400
Methylactylide-90	0.5	750
Othalene-Z	0.5	600
Polypheronol-80	0.5	525
Soporathol	0.5	375
Tear Gas	0.5	225

MEDICAL IMPLANTS, SUBSTITUTES and REPLACEMENTS

As with all other prices on this list, the price is for purchase (even though PCs are — hopefully — unlikely to be purchasing a lot of body parts). For PCs selling parts, the price should be halved or reduced further if going to a shady Body Bank. Body parts are assumed to be in reasonably good condition; price will vary depending on age, condition and 'cosmetic factors.' An almost undamaged body of a teenager in good health (aside from being dead, of course) is up to 10x more valuable than a middle-aged out of shape body. Celebrity parts are also worth 2-10x normal value. ('Celebrity' is a very subjective term.) Additionally, the price will vary depending on where one goes with one's body parts. Shadowy places pay quite a bit less, but they will buy 'John Does' with no questions asked, where hospitals pay top dollar but stay away from bodies with questionable wounds and history.

NAME	MASS [KG]	COST [$]
Artificial Womb	5	1000
Artificial Blood	1/liter	30/liter
Thermostatic Blood	1/liter	50/liter
Hand	Varies	200
Arm	Varies	300
Foot	Varies	100
Leg	Varies	250
Eye	Varies	200
Kidney	Varies	150
Liver	Varies	100
Lung	Varies	100
Heart	Varies	200
Genitals (male)	Varies	100
Complete body	Varies	3000

CODES

(A) = DNI version available. A "smart" DNI unit, (which can beused by anyone with a DNI jack), costs 2x the base price shown; a "dumb" DNI unit, (which requires that the user have a DNI jack and an NAC unit), costs 1.5x the base price.

(D) = Requires that user have a DNI Jack.

(*) = Requires a Power Cell

(t) = Requires a Power Cartridge

(‡) = Requires a Power Pack

NOTES

All prices are purchase price at a metropolitan area 'legal' retail shop. Obviously, these prices can vary tremendously.

If PC is selling a piece of equipment listed above, cut the price at least in half unless special circumstances.

5.0 VEHICLES AND MOUNTED WEAPONRY

This section is intended to provide an overview of the types of vehicles and vehicle-mounted weapons available in the late 21st century. The machines described are intended to exemplify the tech level of the average commonly available (or encountered) vehicles; no doubt there are more sophisticated vehicles lurking in MegaCorp hangars somewhere, and in many parts of the world there are still cars and planes left over from decades ago, aged but operational.

5.1 CIVILIAN VEHICLES

The wealthy individual or the corporate employee has a vast array of vehicles available to get him from one place to another.

As with all vehicles, an accredited license is required to pilot a car, plane or even jet pack on various roads and over airspaces. Such a license is normally acquired through a local government. A pilot caught without a license can be subjected to severe fines and/or imprisonment. Anyone operating a personal flier is also required to have a headset and monitor certain radio frequencies in case he is violating a restricted airspace. Many airspaces (especially those over Arcologies or corporate parks) are restricted and the monitoring authorities have the right to shoot down intruders.

Jet Backback: Popular modes of transportation in corporate sectors, Jet Backpacks are capable of reaching speeds of over 60 kph. They are controlled by extended handgrips, upon which are several buttons and levers for altering thrust, pitch, ascent and descent, and hovering. DNI models are available, which allow the user to control the backpack's movements by merely thinking the correct commands.

Personal Vehicle: With their aerodynamic plastic "anti-dent" bodies and "user-friendly" monitoring systems, the automobiles, vans and trucks of Cyberspace are truly impressive machines. Electronic gauges and options include automatic navigation and monitoring of all operating systems. Personal automobiles possess either wheeled or ground-effects maneuvering systems. Some people have their automobiles linked to local traffic nets. Monitored by TracSats (Traffic Control Satellites), their whereabouts and speed, as well as reports on local traffic conditions are constantly updated and sent to the driver. In many sectors (most notably Corporate Zones), internal combustion engines are illegal, and gasoline is nearly impossible to find. Many autos operate on either electricity or Megahol (a cheap alcohol derivative). Many cars are DNI controllable, allowing the driver to maneuver the vehicle by merely thinking the proper commands.

Motorcycle: This broad category includes everything from a motorized bicycle to the supercharged turbo-driven Megahol guzzlers which will top 250 kph on the coastal-sprawl freeway. With the ever-growing congestion on the world's highways and city streets, two-wheeled vehicles have continued to grow in popularity and practicality. Fast, maneuverable, and inexpensive, motorbikes are the vehicle of the late 21st century. Motorcycles can also be equipped with virtually all of the same equipment as an automobile. Heads-up-displays can be projected on helmet faceplates, or even DNI 'faces are available for data, communication and some cycle functions (such as throttle, signals and braking; steering is still manual in all cases).

Helicopter: Another popular mode of transportation, Helicopters are generally used by those who can afford the luxury of zooming along well above the congested roads of the Sprawls or taking in the view of the Corporate Sectors from the skies. Powered by large, rechargeable electric cells, they can be fitted with all the same options as automobiles (including Traffic Control links and DNI). Faster versions are jet-driven to provide additional thrust.

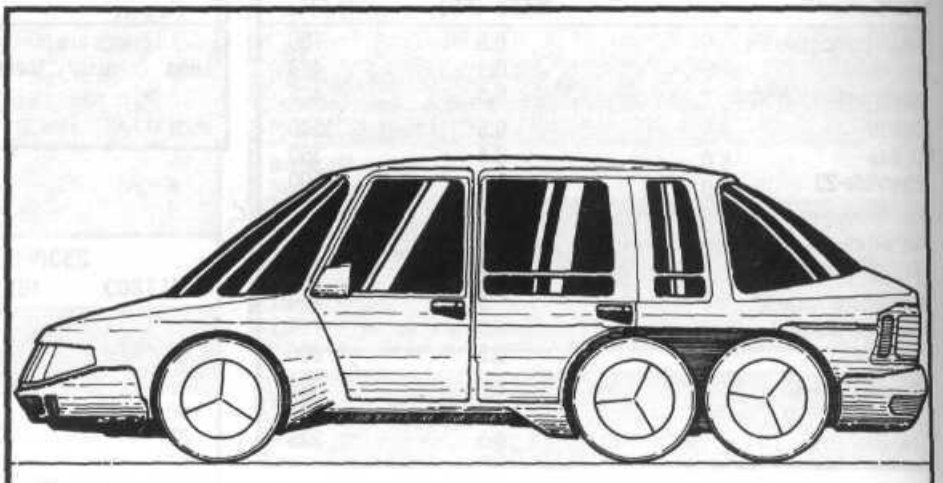
VTOL/Propfan Plane: Sometimes used by heads of corporations and other VIP's, these personal air transports are expensive and luxurious. Powered by rechargeable electric cells, they can be fitted with all the same options as automobiles (including Traffic Control links and DNI).

EXAMPLE VEHICLES

Following are a few specific examples of the the vehicles described by type above. The manufacturer is noted in parentheses)

- **Cars**

Phantom III (Honda; wheeled sportscar): A favorite for the up-and-coming CorpExec Thanks to a Honda torque breakthrough, this electric machine is one of the most powerful autos on the road. The Phantom is quiet, efficient, and sports a luxurious interior built for two. It is also one of the few designed for a DNI option. The batteries run for about 24 continuous highway hours before needing a recharge (requiring about an hour). The *Phantom IIIs* has the option of a solar collector roof and hood, maintaining a continuous charge. The collector cells are almost undetectable in the car finish.



HYUNDAI ASTRA LUXURY CAR

Interceptor (Ford; wheeled sportscar): Not as sought-after as the Phantom, the Interceptor is nevertheless a stylish machine. Powered by Megahol, it is less dextrous and more noisy than the ominously silent Phantom, but also is somewhat larger and has slightly better acceleration.

Magellan (Chrysler; wheeled sedan): A luxury vehicle of the first order, the Magellan EX stretch limo version is the most popular ground limousine around.

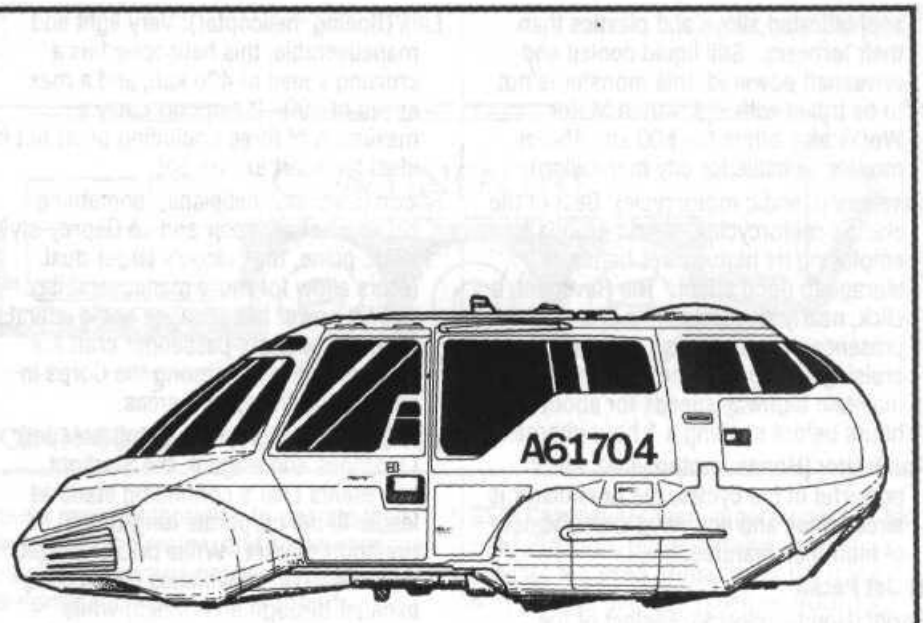
Andromeda (Toyota; wheeled sedan): A mid-range Megahol burning machine with comfortable seating for four, the Andromeda is one of the most common vehicles on the road.

Ceres (Euromotors; wheeled sedan): a practical, reliable car, the Ceres is one of the latest in a line of autos from the European Common Market Motor Company. The San Francisco Metro Police have purchased a number of customized versions for their use in the Sprawl.

Astra (Hyundai; Wheeled Luxury Car): Despite its rather boxy appearance, the Astra is a status symbol. Kevlar III tire guards and plasteel coatings make this car as safe as it is opulent.

Nightflier (Nissan; GEM sportscar) Gull-wing doors make *another* comeback in ths luxury two-seater. Popular as much for its novelty value as its handling or speed, the Nightflier is big with the more avante-garde factions. It is electric, and while neither as fast or powerful as the Phantom, its performance is superior to many Megahol-burning machines.

Hunter (Ford; VTOL Armored Car): powered by dual vectored thrust turbofan engines, the Hunter straddles the line between 'personal' and military vehicles. Four exhaust ducts can be vectored (much like the Harrier jump-jet of the 20th century and the Boeing lift-shuttle of the 20's) to allow this boxy machine to lift off and land vertically and with dizzying speed. Tied in to satellite networks and mapping databases, these cars can get into and out of tight spots with ease. Police versions are armored and equipped with weaponry. Used by municipal and corporate police forces, a larger, van-like version is used as an ambulance by the *Valkyrie* Emergency Medical Services.



VOLKSWAGEN LW-90 HOVER CAR

Mayfly (Volkswagen LW-90): one of the few truly 'flying' vehicles offered privately, the Mayfly uses Megahol-fueled thrusters to fly much like the Hunter (above). Owners must pass a special driving exam and tie into the local Air Traffic Control Net during flight. Still, it is a sought-after vehicle, and dealers cannot keep them in stock.

Supercar (Gulfstar-Jeep; GEM vehicle): The 'Jeep' of the 21st century, this all-surface vehicle seats four and has a cruising speed on most surfaces of 100 kph. Capable of travel on highway, relatively smooth terrain or water, it is popular as a recreational vehicle, The Supercar also has a vertical boost feature, allowing it to rise up to 4' for a few seconds to lift over rough terrain features. The Supercar runs on batteries for normal operation but requires Megahol to power the vertical boost.

- **Motorcycles**

Pegasus (Yamaha; motorcycle): A mid-range cycle, but still suitable for highway travel. The Pegasus is electric with a 12 hour cruising limit before needing a recharge.

Katana (Chrysler/Jeep; motorcycle): One of the few "American made" motorcycles worthy of mention, the Katana is a sleek machine designed with collapsing windscreens for highway or city travel. While it is no match for the 800mi or the Annihilator, (see below) it is a worthy machine.

Jacknife (Nissan; motorcycle): An unusual suspension design is part of the reason for the name of this bike. It is otherwise unremarkable though a reliable, upper-mid price machine.

800mi (BMW; motorcycle): capable of 'well over' 250 kph, the BMW is certainly powerful if not particularly stylish. The outward design of the machine has changed little in the last hundred years or so, and while still fuel injected, these run on Megahol and utilized more

sophisticated alloys and plastics than their forbears. Still liquid cooled and driveshaft powered, this monster is not to be trifled with. (Bavarian Motor Works also offers the 600 and 450mi models, suitable for city marauding).

Revenant (Honda; motorcycle): Best of the electric motorcycles. Again, Honda is employing its high-power battery storage to good effect. The Revenant, a slick, nearly silent machine is a shadowy presence on the streets. Capable of cruising at 240 kph, the Revenant can maintain highway speeds for about 36 hours before needing a 1 hour charge.

Annihilator (Honda; motorcycle): Most powerful of the cycles, the Annihilator is streamlined and equipped with a variety of high-tech features.

- **Jet Packs**

Sprint (Honda; jetpack): Fastest of the personal packs, this one is a favorite with corp recon teams. Able to maintain extended flight at 60+ kph for over two hours, the pack is loud but maneuverable.

Grasshopper (Hughes-Sikorsky; jetpack): more bulky, more expensive, and less reliable than the Sprint, the Grasshopper's only advantage is that it is faster. US Government forces employ the Grasshopper.

- **Water Craft**

Hyperfish (Hobie-Kawasaki; Jet-Foil): a hybrid jet-ski sled and hydrofoil, this powerful little toy is extremely popular with the wealthy beachgoers — and some paramilitary groups. Capable of more than 80 kph cruising speed and short bursts of nearly 120 kph, the 'fish uses small hydrofoils to lift the body out of the water for high-speed travel. While not suitable for open-ocean maneuvers, it is an excellent small beach-assault vehicle. It carries one man and limited equipment and can travel at crusing speed for six hours before exhausting its batteries.

Delta Flyer (Danci; powerboat): As much a recreational vehicle as anything else, the Flyer is the fastest thing on water. Using hydrofoils, this four passenger speedboat can reach speeds over 120 kph.

- **Larger Vehicles**

Hummingbird (VTOL plane): Basically an improved model of the military plane first used in the teens, this Osprey variant carries 20 passengers comfortably and is frequently used to shuttle CorpExecs from one branch to another, or to airports. A modified military version carries corporation troops.

Lark (Boeing; helicopter): Very light and maneuverable, this helicopter has a cruising speed of 400 kph, and a max speed of 600. It can only carry a maximum of three (including pilot) but is ideal for short excursions.

Falcon (Sikorsky; heliplane): something between a helicopter and an Osprey-style VTOL plane, the Falcon's larger dual rotors allow for more maneuverability and lift power but sacrifice some lateral speed. These six-passenger craft are extremely popular among the Corps in and around the sprawl areas.

Starlight (Lear; Corporate Commuter Jet): Luxurious and elegant, the Starlight represents Lear's continuing stand as leader in the corporate long-range transport market. While pricey, the jet features VTOL capabilities (redirecting exhaust through lift nozzles) while maintaining a high cruising speed. The Starlight can carry ten very comfortably, has a cruising speed of 1200 kph/max speed of 1600 kph.

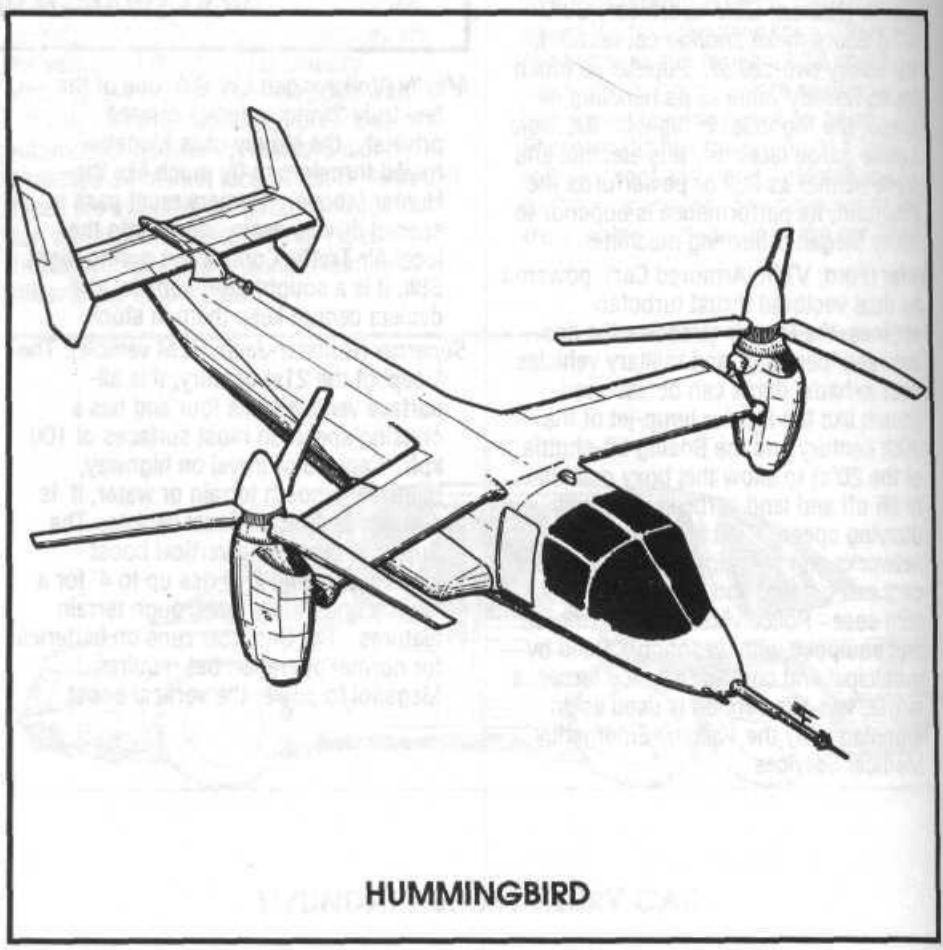
SPV-29 (Chrysler; Transport): Various police forces are the main customers for this vehicle which is more tank than truck

IH-50 (Mack; Heavy Cargo Truck): The semi of the 21st century, the IH-50 runs on high-output batteries.

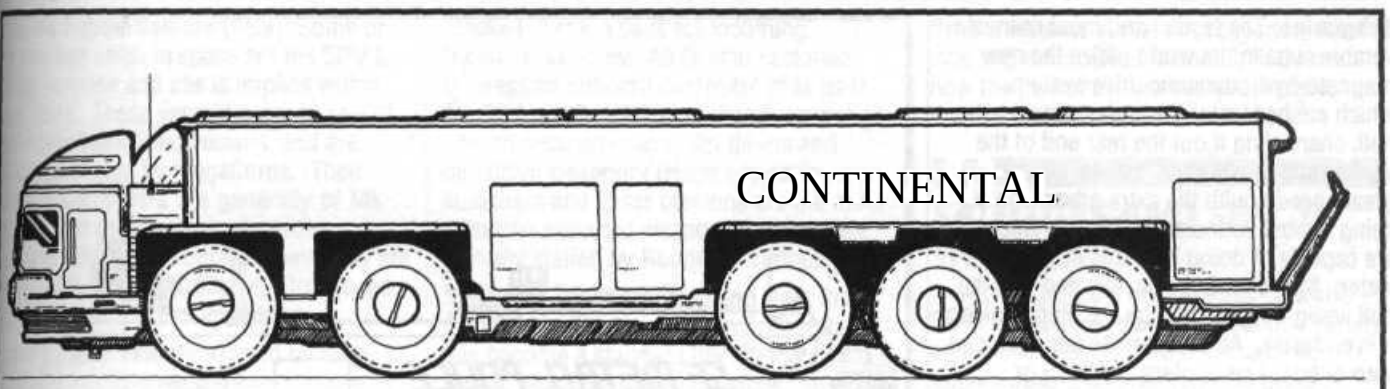
5.2 COMMERCIAL TRANSPORTATION

The following are just a few examples of the types of public and commercial transport available in 2090.

Airliner: Thanks to the overseeing eyes of NavSats (Navigation Satellites), airliners now run more frequently and faster than ever before. Most modern planes are rather small, with flexible or pivoting wings, and have a rather "swept-forward" design. Some have two hulls and a broad central wing, while others are great cousins of the smaller Propfan Planes. Smaller planes are fueled by Megahol or diesel fuel, while the larger models use solid propellant or fusion jets. Of particular noteworthiness are the two great airliners of today: the Supersonic Transport (capable of doing Mach 3, traveling from Tokyo to the Pacific Sprawl in 4 hours), and the Hypersonic Transport (which can make Mach 6 and complete any flight within 2 hours thanks to its fusion rocket-jet).



HUMMINGBIRD



MACK IH-50 HEAVY CARGO TRUCK

Maglev Train: Many cities (especially corporate sectors) are connected by specialized railways along which bullet-shaped trains travel at speeds in excess of 300 KPH. The great speed and timeliness of these trains is made possible by the propulsion system known as "Maglev"; magnetic levitation. The "tracks" along which these trains run are comprised of large electromagnetic rings, laid around the train's course at every 20 meters. These rings create perfectly timed magnetic forces which serve two purposes: they levitate the train, and they push the train along by alternating positive and negative currents when it passes. Maglev trains are used by corporate commuters and intercity travelers, though there are maglev shuttles which connect the Sprawl districts as well. They are almost always well guarded and clean (the presence of CorpCops is an accepted fact of life).

Tubeway: Some Maglev trains run through underground tunnels called tubeways. Most of these were originally subways or other sorts of tunnels, and were expanded and adapted when maglev technology became popular. They are generally located in the Sprawl zones. As a result, the tubeway tunnels and stations are not as clean or well protected as other Maglev installations. In fact, the Hudson Tubeway (as an example) is a popular site for gang fights and body disposals.

Wheeled Bus: Travel on the streets of the Sprawls is often done by diesel or electric bus. These dinosaurs are cheap to operate, and all are dirty, ancient, and scary.

GEM Minibus: A popular form of land and water transportation, These small hover-craft are chartered out for short skips or local tours. They are often owned by smaller companies possessing licenses from a major corporation to operate their lines in a given region, and sometimes run along "shuttleways" between major corporate sectors and local airports.

5.3 *MILITARY VEHICLES*

By 'military,' this means not only the armed forces of nations, but of the corporations large and powerful enough to sport their own 'military' forces.

Jet Backpack: Various corporate and governmental armed forces make use of Jet Backpacks in their maneuvers. These models are faster and more maneuverable than the commercial versions, although they are more expensive. DNI versions are often used.

Wheeled Vehicle: Corporate and governmental military groups still make widespread use of all manner of wheeled vehicles, including cars, jeeps, and trucks. These vehicles are generally equipped with advanced Processor-automated options, and are occasionally DNI controllable.

Hovercraft: Military Hovercraft are usually larger and faster than the commercial models, making use of more advanced engines and hull designs. They often possess many Processor-automated options, and may be DNI controllable.

GEM Firing Platform: Used for the transport and cover of small (platoon sized) units, Ground Effects Machine Firing Platforms are large, hovering "air barges" which carry soldiers and equipment into battle. Their side walls are two feet high (gates on either side of the platform drop open to allow egress), and made of Crysteel or Duralumin alloy (CAT 23).

GEM Carrier: Another, larger version of the GEM Platform, these massive floating vehicles are used primarily for the transport of other vehicles (such as RO/RO's, Helicopters and VTOL's). They are capable of crossing bodies of water with ease, and can be set down just about anywhere. Their side walls are several feet high, and made of Duralumin alloy (CAT 23).

Jet Helicopter. Powered by large, rechargeable electric cells and liquid fuel, military Jet Helicopters can be fitted with all kinds of Processor-automated options (including DNI). They possess tight-beam communications rigs with 5 to 10 km range. The larger versions are capable of carrying a platoon of soldiers and several small vehicles. Advanced versions are "smart", meaning that in addition to DNI controlling, they possess integrated computers capable of monitoring damage status and control, fixing flight coordinates, and performing sensor readings.

VTOL: Medium-sized fighter and transport planes which utilize powerful airjets or rotating props for take-off and landing (this allows them to come down vertically onto even the most blasted and rocky ground). Many VTOL models are DNI controllable, and may be "smart".

Tank: Still the most formidable AFV's on land, today's tanks carry large (Mk 10 - 30) projectile guns and smaller, top-mounted machine guns (Mk 5). Some military groups prefer the Lasertank, which mounts a Mk 10 to 30 Laser Cannon. All tanks possess onboard Computers of Mk 10 or higher, and many are DNI controllable. Also, some models are "smart".

Small AFV: Jeeps, Half-tracks and lightweight "Minitanks" are often seen on the battlefields of the *Cyberspace* world. These wheel or track vehicles are generally used for short-range transport and recon. Many possess onboard computers, and some are DNI controllable.

Submarine: The fastest and most maneuverable subs in the world utilize the new magneto-hydrodynamic drive system, which pushes water through a tunnel in the hull, channeling it out the rear end of the vehicle and pushing the sub forward at great speeds (with the extra advantage of being almost soundless). These vehicles are capable of doing 50 knots in good water. Micro-air bubbles, injected into the hull lining, reduce drag on the ship, making it even faster. All submarines are equipped with onboard computers of Mk 15 or higher. Submarines are the ocean craft of choice by MegaCorps with large-scale territorial designs.

Warship: Modern versions of the Destroyer, Battleship, Frigate and Aircraft Carrier can still be found plying the waters of the *Cyberspace* world, mostly the tools of larger nations (they are considered by Corporations to be dinosaurs of another era). These great vessels can carry hundreds of troops, scores of mounted projectile weapons, and dozens of vehicles. Also, many Warships carry ICBMs or dreaded "Cruise Missiles" in their launching bays. All Warships are equipped with onboard computers of Mk 25 or higher.

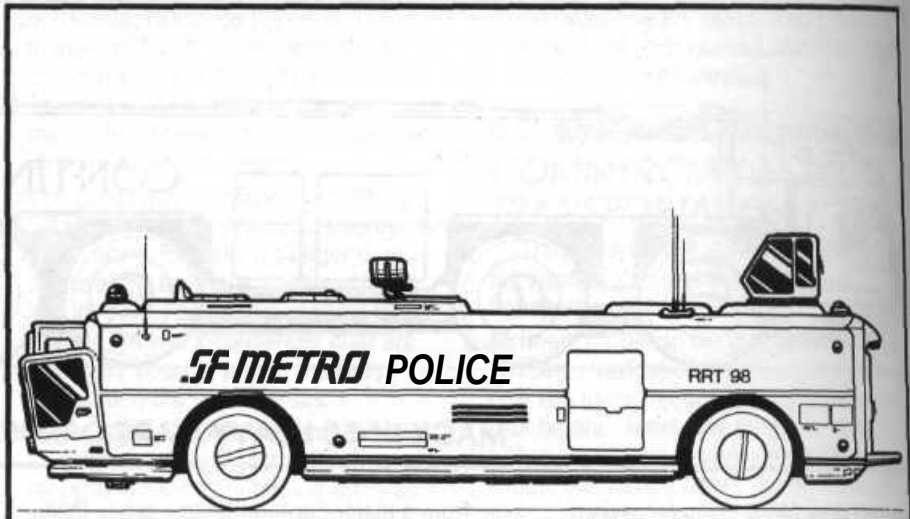
Hydrofoil Destroyer: Fast, light, and highly maneuverable, Hydrofoil Destroyers are extremely long vessels armed with large mounted projectile weaponry and torpedoes. They are capable of doing over 80 knots in good water. Many carry Cruise Missiles in launching bays. All Hydrofoil Destroyers carry onboard computers of Mk 20 or higher.

EXAMPLE CRAFT

Following are a few specific examples of the the vehicles described by type above.

Pteradon (Voerung; jet helicopter): A large military helicopter designed to drop troops into dangerous situations.

B-7C (General Dynamics; Stealth Bomber): Latest in a long line of electronic warfare aircraft, this is the "ultimate" bomber, capable of flying into enemy territory without registering on radar screens. Stealth Bombers possess very quiet engines, and their hulls are designed to absorb (rather than deflect) incoming radar emissions. They are frequently DNI controllable. Advanced versions are "smart", meaning that in addition to DNI piloting, they possess integrated computers capable of monitoring and relaying damage status and control, fixing flight coordinates, and performing IR and radar sensor readings.



CHRYSLER SPV-29 POLICE TRANSPORT

F-117D (General Dynamics; Stealth Fighter) The smaller cousin of the Stealth Bomber, possessing the ultra-quiet engine and radar-absorbing hull of that vessel, these planes are small, fast, and difficult to track. They are a favorite of combat pilots worldwide, and are often DNI controllable. Advanced versions are "smart", meaning that in addition to DNI piloting, they possess integrated Computers which are capable of monitoring and relaying damage status and control, fixing flight coordinates, and performing IR and radar sensor readings.

FL-119 (Faring; Recon Jet): A particularly effective small recon jet manufactured by the Faring Corporation, the FL-119 (or "Flying Lizard", as it is often called), is a favorite for tactical strikes and small-scale military operations. Its polycarbon hull is capable of altering its size, wingspan and curvature to allow for greatest possible speed, and is coated with the Stealth planes' radar-absorbant layer. It possesses IR and radar sensors, DNI control capability and is "smart". It possesses integrated Computers capable of monitoring damage status and control, fixing flight coordinates, and performing IR and radar sensor readings. The FL-119 can carry only two people (one of whom is the pilot).

5.4 SPACE VEHICLES

The vehicle descriptions provided below (and in the *Vehicle Stat and Cost Chart*) are of necessity rather vague. These are the standard designs, and are often modified by their owners to better fit the particular uses they are put to.

Orbital Transfer Vehicle (OTV): Also known as "Shuttles", these vehicles are used for transferring people and machinery between Earth's surface and orbital facilities. Many different types are in service, but all fall along the same basic rules of design. Owned by corporate, military, and even private parties, hundreds of OTV's take off and land each year. Many use scramjet technology for enhanced liftoff speed, and can carry dozens of people or tons of equipment. All are equipped with advanced computer systems (at least Mk 20), as well as sensors, cargo bays, dispensaries and assorted crew/passenger entertainment gear. Some are DNI controllable.

Space Tug: Used for hauling heavy loads of construction materials or tugging other vehicles into orbital sites, these work-horses of space are constantly in action. They hold a very small crew, possess onboard Computers of Mk 15 or higher, and are often DNI controllable. In addition, most Space Tugs carry a large Laser cannon which can be used for blasting wayward chunks of rock or space-garbage out of the vessel's path.

Satellite Repair Vehicle (SRV): Some of the smallest ships in space are the SRV's, whose purpose and use is implicit within their name. These vessels carry a crew of too highly trained technicians and are almost all owned by MegaCorps. Their onboard Computers are generally of Mk 20 or higher (possessing numerous technical reference programs), and they are occasionally DM controllable. Robots are often used to crew these vehicles.

Space **Rescue Vehicle:** Owned by MegaCorps, governments and a few private institutions, these vehicles are only called out in a state of emergency. They are most often docked onboard a larger, orbital vessel (this facilitates speed of travel to the emergency site). They always carry an onboard dispensary or sick bay, as well as a Computer (Mk 15 or higher) and various toolkits.

Space **Patrol Cruiser:** Utilized by various MegaCorps as well as agencies like T.R.A.I.L., Space Patrol Cruisers are not an uncommon sight in the orbital paths surrounding Earth. These vessels often serve no purpose other than to locate and survey satellites poised in orbit by competing organizations or governments, and to report their findings to headquarters. Several such cruisers are owned by private security corporations, who charge less fortunate companies for their patrol services. They are easily the fastest ships in orbit, and always possess onboard computers of at least Mk 25, as well as mounted weaponry. Some models are DNI controllable.

Orbital Lab: Used for earth phenomenological monitoring (meteorology, oil spotting, tidal research, etc.) as well as orbital products development, these large constructs are generally held in geosynch orbits for extended durations. This allows them to serve as stationary "warehouses" which are serviced and visited by OTV's and Space Tugs. Almost all of these vehicles are owned by MegaCorps, who use the information gleaned for further research and development. Many labs are completely automated, while others staff humans and robots alike. In either case, these vessels always possess at least one sciences lab and onboard computer (Mk 30 or higher).

Orbital Factory: Many MegaCorps actually possess huge processing plants in space, where special alloys, crystals, chemical compounds and metal products are fabricated. These huge constructs generally include attached living quarters for up to 5,000 workers, and also include fully-stocked docking bays for incoming transport vehicles. All Orbital Factories possess an onboard computer of at least Mk 30 (usually several of them), as well as communication relays, Net tie-ins and defensive weaponry (Huge projectile launchers and Laser cannons are the most common mounted weaponry). Many are partially staffed by Robots of various types.

SMU: The Space Maneuvering Unit, first designed by the New Edison Corporation has become a standard item in the inventory of nearly all orbital missions. Often called "Skeeters", these lightweight contraptions are mounted on the wearer's back and wrap around the body like a harness. Entirely self-contained and controlled by handgrip-mounted levers and buttons, they allow the user to maneuver easily through space. Some models are DNI controllable.

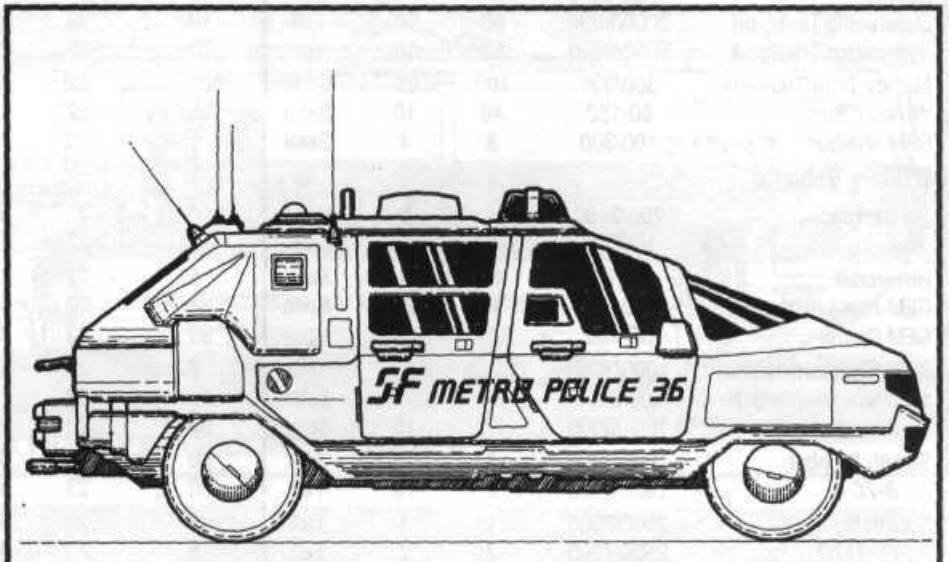
Interstellar Vehicle: Relying on LHT (Laser-Hydrogen Triggering) rockets for boost and sustained acceleration, the few interstellar vehicles used in 2090 are truly massive structures, despite their relatively small crew capacities. These vessels are off on the first organized searches for habitable worlds beyond our solar system. Several of these ships contain a few hundred colonists, held in cryogenic suspension for the duration of the journey. All Interstellar Vehicles possess onboard Computers of at least Mk 30, and most maintain sporadic contact with their corporate or regional bases through microwave transmissions.

Orbital Habitat: A real step beyond orbital labs and even orbital factories, these are now the permanent homes of several thousand humans.

5.5 SATELLITES AND SPACE WEAPONS

An integral part of the global network, Earth's satellite system consists of a variety of specific and multi-function satellites.

Solar Power Satellite: Used by many countries and MegaCorps worldwide, SPS's are small solar power adaptors equipped with massive photovoltaic receptors and microwave transmitters. Hundreds of these units abound in orbit, making them the single most common satellite type in space. Their purpose is to receive energy directly from the sun's rays, adapt this energy into microwave radiation, and send the collected energy down to earth (or to a colony construct) through tight-beam microwave links. They possess their own integrated computers (Mk 10 to 15), and many include Electronic Warfare generators to defend the satellite from electronic sabotage.



EUROMOTORS CERES SEDAN, POLICE CONFIGURATION

VEHICLE STATS AND COSTS CHART

Vehicle Name	Max Speed	Psngrs	Cargo	Envir	Mass/Hits	CAT	DB	Armament	DNI	Cost
Civilian Vehicles										
Jet Backpack	50/150	1	0	None	0.03	21	20	—	Y	5,000
Grasshopper	70/210	1	0	None	0.04	21	20	—	Y	7,000
Sprint	60/180	1	0	None	0.03	21	20	—	Y	5,500
Wheeled Automobile	120/360	4	4	Semi	2	22	20	—	Y	10,000
Andromeda	120/360	4	2	Semi	2	22	15	—	Y	10,000
Astra	100/300	7	5	Semi	5	23	30	—	Y	60,000
Ceres	120/360	4	2	Semi	2	22	20	—	Y	10,000
Magellan	100/300	6	8	Semi	4	22	20	—	Y	40,000
Wheeled Truck/Van	100/300	8	12	Semi	5	22	15	—	Y	15,000
Wheeled Sports Car	180/540	2	2	Semi	2	22	30	—	Y	30,000
Interceptor	210/630	2	2	Semi	1.5	22	40	—	Y	45,000
Phantom III	230/660	2	2	Semi	1.5	22	40	—	Y	50,000
GEM Automobile	100/300	4	4	Semi	2	22	25	—	Y	40,000
Supercar	100/300	4	4	Semi	2	22	30	—	Y	45,000
GEM Truck/Van	80/240	8	12	Semi	5	22	20	—	Y	90,000
GEM Sports Car	150/450	2	2	Semi	2	22	35	—	Y	120,000
Nightflier	180/540	2	2	Semi	2	22	30	—	Y	135,000
Motorcycle	240/720	1	0	None	0.5	21	20	—	Y	6,000
800 mi	275/825	1*	0	None	0.5	21	20	—	Y	11,500
Annihilator	280/840	1*	0	None	0.5	21	20	—	Y	10,000
Jacknife	230/690	1*	0	None	0.5	21	20	—	Y	7,000
Katana	240/720	1*	0	None	0.5	21	20	—	Y	6,200
Pegasus	220/660	1*	0	None	0.5	21	20	—	Y	5,000
Revenant	240/720	1	0	None	0.5	21	20	—	Y	9,000
VTOL Automobile	320/960	4	2	Semi	3	21	20	—	Y	150,000
Mayfly	300/900	4	2	Semi	2.5	21	25	—	Y	140,000
VTOL Armored Car	330/1000	8	50	Full	30	24	20	—	Y	500,000
VTOL/Propfan Plane	350/1050	4	2	Full	5	22	20	—	Y	450,000
Jet Helicopter	700/2100	2	2	Semi	2	22	25	—	Y	150,000
Commercial Transportation										
Airliner	1000/3000	100	100	Full	100	23	10	—	N	†
Supersonic Transport	2000/6000	60	60	Full	80	23	15	—	N	†
Hypersonic Transport	3000/9000	50	50	Full	75	23	20	—	N	†
Maglev Train/Tubeway	300/900	100	25	Semi	1000	22	0	—	N	†
Wheeled Bus	60/180	40	10	Semi	25	22	10	—	N	†
GEM Minibus	100/300	8	4	Semi	5	22	15	—	N	†
Military Vehicles										
Jet Backpack	700/2100	1	0	None	0.03	21	30	—	Y	9,000
Jeep	100/300	4	2	None	2	22	25	1 Mk.5 MG	Y	12,000
Hovercraft	300/900	12	8	Semi	6	22	20	2 Mk.5 MGs	Y	†
GEM Firing Platform	100/300	40	20	None	25	23	10	4 Mk.5 MGs	N	†
GEM Carrier	50/150	100	100	None	80	23	5	4 Mk.10 Gauss Cannons	N	†
Jet Helicopter (Small)	1000/3000	3	2	Semi	4	22	25	1 Mk.5MG	Y	45,000
Jet Helicopter (Large)	800/2400	30	12	Semi	45	22	15	2 Mk.8 Gauss Cannons	Y	180,000
Reradon	1000/3000	20	15	Semi	60	22	20	4 Mk.5 MGs	Y	†
Stealth Bomber	1000/3000	4	10	Full	30	23	30	1 Mk.10 Autocannon	Y	†
B-7C	1800/5400	2	10	Full	50	23	60	1 Mk.7 Autocannon	Y	†
Stealth Fighter	2000/6000	1	1	Full	9	23	40	2 Mk.15 Autocannons	Y	†
FL-117D	2500/7500	2	2	Full	8	23	45	1 Mk.12 Autocannon	Y	†
VTOL Transport	1200/3600	8	10	Full	3	23	30	2 Mk.6 Autocannons	Y	†

Vehicle Name	Max Speed	Psngrs	Cargo	Envir	Mass/Hits	CAT	DB	Armament	DNI	Cost
Tank	50/150	4	3	Semi	80	24	10	1 Mk.20 Gauss Can	Y	t
Halftrack	120/360	6	4	None	50	22	20	1 Mk.10 Autocannon	Y	t
Minitank	100/300	3	2	Semi	20	24	15	1 Mk.15 Gauss Can	Y	t
Submarine	150/450	15	15	Full	2000	24	5	20 Mk.20 Torps	N	t
Warship	60/180	60	100	Semi	10,000	24	10	10 Mk.20 Gauss Cans	N	t
Hydrofoil Destroyer	150/450	50	75	Semi	7000	24	20	6 Mk.20 Gauss Cans	N	t
Space Vehicles										
OTV	0.3kps	12	12	Full	800	24	20	—	Y	t
Space Tug	Q.2kps	4	12	Full	700	24	15	1 Mk.10 Laser	Y	t
Satellite Repair Vehicle	0.3kps	2	4	Full	50	24	20	1 Mk.10 Laser	Y	t
Space Rescue Vehicle	0.4kps	8	12	Full	300	24	25	1 Mk.10 Laser	N	t
Space Patrol Cruiser	0.5kps	4	4	Full	900	24	30	2 Mk.15 Lasers	Y	t
Orbital Lab	0.2kps	8	24	Full	1000	24	5	—	N	t
Orbital Factory	0.1kps	1000	500	Full	1,000,000	24	5	4 Mk.10 Lasers	N	t
SMU	0.01kps	1	0	None	0.05	21	35	—	Y	t
Interstellar Vehicle	0.5kps	50	50	Full	100,000	24	10	—	N	t

Codes and Comments

Max **Speed:** The first number is the max speed in KPH. The second is the max speed in meters per round. For space vehicles, the entry indicates max acceleration.

Passengers: Indicates the number of people the vehicle is designed to carry comfortably — including driver/pilot and crew. * Motorcycles have optimum handling with one, but most can carry two in reasonable comfort.

Cargo: Additional cargo space available (in cubic meters).

ENVI: Amount of environmental control Semi means the cabin is closed but not necessarily sealed, with air/heat capability.

Mass/Hits: The vehicle's mass in tons. This is also the number of concussion hits the vehicle can sustain on the Vehicular/Mounted Weapon Attack Table.

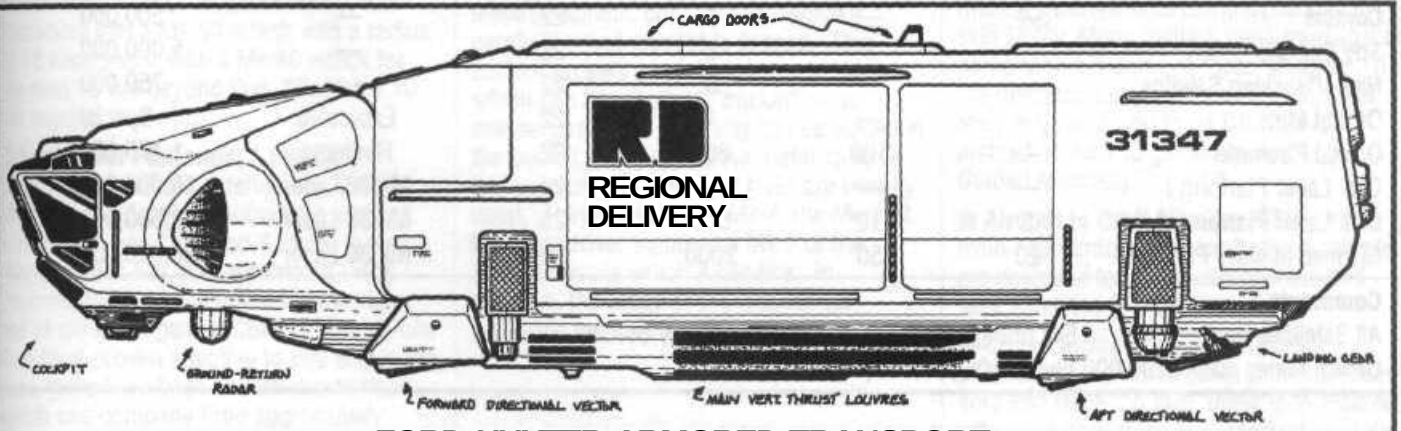
CAT: Construct Armor Type.

DB: Vehicles Defensive Bonus.

fcmameat: Most vehicles do not have weapons, but they may beinstalled at additional cost.

DNI: "Y" means vehicle is DNI-controllable. "N" means no DNI functions.

Cost: The average cost af the vehicle in World Dollars, "t" Indicates that the cost is excessive and/or the item is simply unavailable for purchase through 'public' channels. Should the GM wish to make such vehicles available for sale, he should estimate the cost on his own.



FORD HUNTER ARMORED TRANSPORT

Groundwatch Satellite: Used to monitor the earth's surface from afar, these constructs are often placed in geosynchronous or equatorial orbits, and keep an eye out for such phenomena as forest fires, volcanic activity, crop blight, insect plague, tidal disruption, smog fronts, acid rain, and the like. Most are owned by MegaCorps or governments who use them to monitor their own installations in dangerous areas. They possess onboard computers of Mk 15 or higher.

Spacewatch Satellite: These complex units are used for orbital astronomy and solar system watching (e.g., detecting the proximity of incoming meteoroids and comets, monitoring solar flare activity, mapping other planets in the solar system, etc.). They possess onboard telescopic and radio-spectography equipment as well as integrated computers of Mk 15 or higher.

ComSat: The second most common form of satellite (next to SPS's), ComSats are used to tie the Net into global unity. They are the most important factor in the Global Telecommunications Network. There are three basic varieties; Public Access ComSats (used for long distance phone links and broadcast media), Limited Access ComSats (used for SIG's — Special Interest Groups — and cooperative research links), and Private Access ComSats (used for and by specific MegaCorps for their own purposes). All receive transmitted data from Ground Broadcast Stations (known as "Uplinks") or other ComSats, and relay this information on to Ground Receiving Stations (known as "Downlinks") or other ComSats. All ComSats possess integrated computers of Mk 20 or higher which control the construct's transmission/reception and positioning. In addition, many (especially the Private Access models) possess EW Generators and online defense (ICE).

Spy Satellite: Used by nearly all countries and MegaCorps, these constructs keep tabs on the competition, watching for any signs of military activity, nuclear use, or unexpected maneuvers. They include onboard computers of Mk 25 or higher, various forms of long-range sensor devices (capable of reading license plates off a moving vehicle), and integrated defenses such as EW Generators and ICE. Some types record their information and drop their recorder unit to earth on a parachute (to avoid interception of broadcast), while others broadcast directly (but rely on frequency skipping and encryption of the signals). Spy Satellites are among the most frequent targets of space sabotage.

Navigational/Tracking Satellite: Various forms exist, each with their own specialties and responsibilities. AWAC (Aircraft Warning And Control) satellites monitor and control the movements of airplanes around the globe: their presence has greatly increased the efficacy of air travel. NavSats do the same thing for the watercourses of the world, while TracSats limit their activities to the roads of the area they cover, monitoring and occasionally controlling traffic flows. Two types of Navigational/Tracking Satellites exist. Active models require the earth-based user to send a signal through an Uplink and identify himself to the satellite; the onboard Computer then locates the user's vehicle and sends back a detailed report on the caller's exact location and local conditions. Passive systems merely emit a constant signal (rather like a beacon), which reports on general conditions and the satellite's exact position; anyone with a link to the system may then easily compute his own location based on triangulation. Regardless of type, all such satellites possess onboard computers of at least Mk 25.

SATELLITE STAT AND COST CHART

Satellite Name	Psngers	CargoMass	Mass/Hits	CAT	Armament	Cost
Solar Power Satellite	—	2	4	21	—	300,000
Groundwatch Satellite	—	—	5	22	—	500,000
Spacewatch Satellite	2	6	25	22	—	800,000
Comsat	—	—	5	22	—	500,000
Spy Satellite	—	1	3	23	—	5,000,000
Navig/Tracking Satellite	—	—	5	22	—	750,000
Orbital Mine	—	—	1	22	Explosive	Special
Orbital Flechette	—	100	800	22	Flechette	1,175,000
Orb. Laser Platform I	—	—	50	24	Mk.30 Laser	10,000,000
Orb. Laser Platform II	3	10	500	25	Mk.30 Laser	12,500,000
Manned Military Platform	20	50	2000	25	Mk.30 Laser	98,000,000

Comments
All Satellites may possess an EW rating which would create a Defense Bonus.
Orbital Mines cost $200,000 plus (1000 per Mk#).

Orbital Mine: The most feared enemy of any satellite system, these lightweight constructs simply maneuver alongside the target satellite and explode, destroying themselves and the target satellite. They are rated in terms of Mk # (most being between Mk 10 and Mk 30). This Mk # indicates the Maximum Result threshold used for their attack on the *Vehicular/ mounted Weapon Attack Table* (A 7.8). Many orbital mines are "smart" — meaning that they possess onboard computers of Mk 15 or higher, and make their piloting/ targeting decisions by themselves (in accordance with their programming). Others are "Remote Mines"; these are less expensive since their Computers need only be Mk 5 to Mk 10, but they must be operated via remote control.

Orbital **Flechette:** These feared constructs operate along a simple, infallible line of attack. They carry massive chunks of stone or ultradense alloy, and operate merely by dropping these great weights upon their targets on the earth's surface. The projectiles used in this process are obtained from lunar mining sites and hurled into catching orbits with Massdrivers, or towed by Space Tug from the asteroid belt. These dense rocks reach speeds approaching 11 kilometers per second as they fall towards earth, and are virtually unstoppable. Such a rock, approximately 12 meters in diameter, is capable of causing an explosion with roughly the same force as was caused by the "Little Boy" bomb detonated over Hiroshima in 1945. In game terms, this translates into a Mk 50 attack with a radius of 10 kilometers, with a Mk 40 attack for the next 10 km beyond that, Mk 30 for 10 km beyond that, etc.

Orbital **Laser Platforms:** A relatively common specialized satellite, the OLP is primarily a defensive antiballistic weapon. Armed with great krypton-fluoride lasers (Mk 20 to Mk 50), and automated firing controls, they are considered the primary line of defense against ICBM strikes. While they have proven effective to this end in the past, there have been several incidents in which one company fired aggressively upon the orbital facilities of another (thereby proving the diverse usefulness of the space-laser). All OLP's possess onboard Computers of Mk 35 or higher, and many also possess EW Generators to defend their command broadcasts. Several of them are manned by a small contingent of dedicated personnel, while others staff only Robots. Still fewer are actually "smart", and make their own decisions based upon their original programming and situation.

Manned Military Platforms: Small bunkers in space, these constructs generally house ten to fifty armsmen, medics, and arms technicians. Their purpose is to monitor orbital and surface military activity engaged in by the opposition, and conduct anti-satellite warfare maneuvers whenever necessary. All such constructs possess computers of Mk 25 or higher, microwave communications equipment, EW Generators, and docking bays.

5.6 MOUNTED AND MOBILE WEAPONS SYSTEMS

All of the following weapons systems are rated by Mk #, which may range from Mk 6 to Mk 50, inclusive. Unless otherwise stated, attacks from these weapons are resolved using the Vehicular/Mounted Weapon Attack Table.

Mobile Massdrivers: built along the same general lines as the great lunar massdrivers, these long, trailer-mounted constructs are comprised of numerous rings of electromagnetic coil, through which a carefully timed current is passed. This current creates a moving magnetic field which can accelerate a "bucket" up to amazing speeds. Anything can be placed in the bucket, although dense metal spheres and various types of explosives are usually used. They are rated by Mk #; the Mk # of the Massdriver equals the Mk # of the largest missile which it can fire. In addition, the range of the Massdriver projectile equals 1 km/Mk#.

5.7 MISSILES

Standard Unguided: A direct line-of-sight warhead delivery system. Its maximum range is 800 meters

Standard Guided: When discharged, this missile must be directed to its target by the firer, who controls its flight from the portable missile launcher (via remote control). When so controlled, the missile adds +30 to its SR, MR and LR modifiers to determine the accuracy of its hit attempt. If uncontrolled, a guided missile may be fired as an unguided missile. The missile's maximum range is 1500 meters.

Extended Range: Long range characteristics are doubled.

Fire-and-Forget This option is available for Guided Missiles only. Essentially, a missile is treated as 'guided' except that its flight need not be monitored and directed by the firer. The missile uses its own detection system to guide itself to the target.

Sightlink Guided Missile: These projectiles function in all respects as Portable (Mk 1 to Mk 5) or Mounted (up to Mk 50) Guided Missiles, but contain integral microprocessors and data transmitters which allow them to be steered by a distant operator who is linked to the communications relay with a DNI trodes. This unique set-up allows the operator to see the target and terrain "from the missile's point of view", and thereby create an additional bonus to the OB. The skill used to govern the missile's movements is the Cyberspace skill *Utility*. Many military units train special personnel in the use of these weapons. If the operator succeeds in a SM/Utl:H, the missile gains a +60 to its OB (this is instead of the +30 gained by ordinary Guided Missiles).

- **Aircraft to Orbit Missile: (ATO)** Fired from high atmospheric craft, these missiles are designed to breech atmosphere and seek satellites in orbit.
- **Cruise Missile:** "Smart" missiles possessing their own integral microprocessors and targeting skill, these long-distance killers are fired from any standard mounted launcher (vehicular or ground-based).

CYBERSPACE

"...It's kinda like falling, but without that sick to-your-gut feeling. Then it's all around: walls of lights race past you and then you're there. Everything's far away but really close and colors are pure and brighter than anything in realspace. You can fly fast as light, and you have powers... Spacing is a natural electronic rush. It's the most beautiful thing in the universe — and it'll kill ya in a pulse."

—Erik Turbo, Cyberspacer; leader of the Fusers

"Ever see that old 2-D flick... what was it called? 2001? The psychedelic ending sequence where the astronaut goes into the big black thing? I know it's antique stuff but it's like C-Space. Yeah, it's like that."

— Anonymous Freelance Net Junkie

1.0

CYBERDECK PROGRAMS

Through and around the world of 2090 exists a continuously shifting field of electronic telecommunications known as the Net. This immense and active structure is comprised of all electronic communications systems; phone lines, radio and microwave links, computer modems, communications satellites and CyberDecks. Billions of data files flow through the channels of the Net daily, en route from one system to another, moving along invisible electronic rivers, and are accessed by millions of users of all sorts. In the late twentieth century, modems were used to access this global sea of information and route data through its channels. Progressively sophisticated translatory programs eventually allowed their users to visualize the Net itself, using abstract images and icons to represent the electronic terrain. With the advent of Direct Neural Interface and the CyberDeck, it became possible to alter the "outside-looking-in" point of view utilized by these earlier programs, so the user could in effect "enter" the Net itself and view its abstract landscapes as if he were actually moving through them. This abstract realm came to be known as Cyberspace.

The devices and programs which make Cyberspace travel possible are by no means simple, though their use has become a rather mundane fact of everyday life. Most people who utilize the Net regularly are either performing business transactions for their MegaCorp employers or accessing the various "free-bases" and personal communications systems available. Some, however, use the Net for more than mundane purposes, and make their living by manipulating other people's data, entering distant Databases and selling what they find to the highest bidder. These are the Icebreakers, the Cyberspace cowboys, the crackers — the high-tech criminal elite of the Information Age.

The CyberDeck operates along the same lines as a telephone — in fact, the easiest way to conceive of its operation is to use the telephone as an analogy. When you dial a number, a carrier signal is emitted from your phone which travels to the nearest local switchbox, there to be analyzed and sent to the next switchbox along the proper route. Several such "switches" may be made before the carrier signal reaches its destination — this is why it takes longer to get a connection when dialing numbers in distant area codes. Once the correct phone line is contacted, the target telephone senses that a carrier signal has come in, and rings to alert its owner. When the owner answers, a two-way connection is established. In effect, a carrier wave from the target phone travels back down the line to your phone. While you converse (and even when you are both silent), these two carrier signals maintain the connection, transmitting all data fed them to the other end of the line. Although the electronic charges carried down the line have no "real" meaning, the receiver in your phone translates them into sounds which you understand as words.

The CyberDeck operates in just this fashion, establishing and maintaining a two-way carrier signal which allows transmission of data (and thought), and translating incoming electronic charges into apparent sensory input which the operator understands as "the matrix". Due to the nature of the DNI link, this "hallucinatory" information seems every bit as real as the world outside.

Details on CyberDecks and computers in general (including specific anti-intrusion and data security programs) can be found in T 2 .0 and subsections.

The CyberDeck is a complex device; the offshoot of one hundred years of telecommunications sciences. In effect, it can best be thought of as a combination of an advanced computer and modem system, which is directly linked to the user's nervous system in order to facilitate nearly immediate perceptions and responses. As miraculous as the CDeck itself may seem, it is often said that "You're only as crack as your progs". This is to say that the real performers in the realms of Cyberspace are the programs used. CDeck programs can enter telecommunications lines, convince other systems to accept their link-ups, relay and translate data, sense the nature of the "terrain", create sensory analogs, protect their users, and occasionally become part of the user's very mentality. They are among the most expensive software packages available, and represent the cutting edge of Cybertech. These programs fall into several main categories, as described below.

- **Matrix Presentation** programs (often referred to as "SimNet Progs") are the only class of CDeck programs which are strictly necessary for travel through Cyberspace. SimNet Progs translate the electronic activity of the Net into apparent sensory perceptions, creating an abstract "reality" in which the CDeck operator acts. Besides translation of external data, SimNet programs also allow the user to record his own "notes" in strategic locations throughout the Matrix Presentation — reminders of ICE found along the way, or sigils to serve as landmarks for future journeys. Various forms of SimNet are available, of which three types are presented in the next subsection. Many advanced Icebreakers prefer to design their own SimNets, or have them designed by programmers with whom they cooperate.
- **User Presentation** programs (or "SimSelf Progs") translate or modify the apparent physical appearance of the CDeck operator (or several CDeck operators). Some can incorporate the abilities of other currently-running programs into that appearance, allowing the operator to assume the role of a super-powerful "SimSelf".
- **Intrusion** programs, also known as "Icebreakers" or "Cracker Progs" are designed to break through ICE programs. There are several varieties, each with its own area of expertise.

- ICE (Interactive Counter-Espionage) programs are highly complex, and often hazardous programs which serve to guard databases from intrusion. CyberDeck operators commonly encounter these programs as they travel through Cyberspace. ICE programs may be used in various different types of computers, and are described in T 2.6; *Programs and Descriptions.*
- **Remote Applications** programs allow the CDeck operator to perform various specialized acts/maneuvers upon distant computers and databases encountered.
- **CDeck Utilities** programs (often called "Utils") modify or enhance the basic operating capabilities of the CyberDeck itself.
- **Cyberspace Combat** programs are used when conflicts arise between Cyberspace users who encounter each other while running in the Net.

These terms are used in the descriptions of the various available CDeck programs given below. Since these programs are only designed for use in CyberDecks, no Computer Codes are included.

1.1 MATRIX PRESENTATION PROGRAMS

Matricks: This SimNet is one of the most popular Matrix Presentation programs currently available. Through the "eyes" of this program, the Net appears to take the form of a limitless blue and white grid with various pyramidic protuberances and "sinkholes" scattered about its surface. Blue lines indicate "dead" cables, while white ones are currently transmitting. The protruding areas are specific Database cores and relay stations: ground-based relay stations are small and yellow, ComSats are small and red, and Databases are large and green. As the operator moves closer to (or into) these areas, more detail becomes apparent: thin lines represent the links between individual workstations and the mainframe, orange icons indicate physical security systems such as cameras and voice identifiers, and a large red sphere represents the CPU itself. Back out on the blue grid, each sinkhole represents the hook-up of a modem or CyberDeck: travelling into these areas and communicating with other users is possible. If the other operator is "travelling", a white line extends up from the depths of the sinkhole. Encountered travellers (unless using SimSelf progs) appear as simplistic caricatures, often without projecting any clue as to their sex, profession or physical features. These caricatures will be enhanced as more information on the encountered party is learned.

Mediaeval: A popular SimNet amongst younger users, Mediaeval creates a maze-like world of hallways, dungeon cells, vaults, monsters and treasure troves. It doesn't present the wide array of information which Matricks is capable of, but serves its purpose. In the Mediaeval matrix, phone lines appear as wide hallways, with radio wave and telecomm transmissions appearing as narrower tunnels. Phone switching stations are polygonal rooms with many archways, and modems or CyberDecks appear as small dungeon rooms. CPUs and Databases look like massive treasure vaults, and ICE programs are horrifying monsters or bold warriors which guard these areas. Encountered travellers (unless using SimSelf progs) appear as warriors, clad in light armor and carrying assorted gear.

CivNet: Only available in certain locales (generally the more developed regions including corporate zones and Sprawls), these illegal programs not only simulate the nature of Cyberspace terrain but actually superimpose this data on a backdrop of real-life architectural and schematic plans. In other words, they allow the user to move through the streets of the target area, viewing the buildings, sewers, roads, wiring, plumbing, telecommunications lines and transmission sources within that region. All aspects of the terrain appear as highly simplified drawings, and encountered travellers look like featureless "stick-people" (unless they are using a SimSelf prog). The user seems to be actually travelling through the doors and streets of the locale, and can easily make out prominent landmarks (such as significant buildings, bridges, mountains, etc.). Such programs are compiled by local ICEBreakers who are intimately familiar with the region as they spend months or years travelling within the area. CivNet presentation programs generally lack the "glossy" and abstract feel of the Matricks program, but are of particular use to crackers who are new to the area, or are only familiar with the "streetview" of the region. When the traveller reaches the boundary of the area "known" by the program, the matrix seen grows less useful (only major aspects are displayed, such as phone cables, satellite link stations, etc).

1.2 USER PRESENTATION PROGRAMS

A User Presentation program (or "SimSelf") takes data received from the user's own input or brain, and creates a bodily image for him. These images generally override the simulation enforced by the SimNet prog (or by others' SimNets), so that the user actually appears to be whatever the SimSelf has designed. Without a SimSelf Prog, the CDeck operator doesn't see himself as he moves through the Net, and others see Him according to the dictates of their own SimNets. One more note of interest: unless using the "Multiuser" program below, multiple users travelling together on the same CDeck appear as one individual.

Self Definition: Allows the user to enter his own SimSelf parameters into the CyberDeck. This program does not allow for bizarre traits or unusual appearance, generating SimSelf only within "normal" parameters. Also doesn't display programs which the user might be carrying.

Wizard: The user and his other programs are combined by this SimSelf into a single image, which appears to be a medieval magician of some sort. The other programs currently loaded appear as metaphorical "magic items" which the mage carries, and the mage actually pulls them out and uses them when they are run (e.g., the user runs a "Dissembler" program; the mage SimSelf appears to pull out a magic wand and fire a stream of nasty little imp-like creatures at the offending ICE).

Hero: This program creates a SimSelf who appears to be a tightly-clad superhero figure. User's activated programs are triggered by the hero image (e.g., user activates a "Codebreaker" program; the hero SimSelf appears to hold out his hands and blast a nearby wall with a lightning-fast string of numbers and letters).

Cyberbot: With this program, the SimSelf appears as a powerful humanoid robot, armed with a variety of weapon systems. Use of intrusion programs is visualized as missile or cannon fire at encountered ICE, while huge grapplers reach out to acquire desired data files.

Multiuser: Allows separate SimSelves to appear for multiple, simultaneous users running the net as a group off the same CyberDeck. The SimSelves generated are rather simplistic, but may be supplanted by more sophisticated individual SimSelves such as "Wizard". If two users wanted to

appear as wizards the CDeck would have to hold two copies of the "Wizard" program. Because multi-user capability is not the intended form of CDeck compatibility, this program only acts perfectly if all the users act in unison. As soon as one of them breaks off from the rest, however, the program is forced to "timeshare" between them, greatly reducing the overall speed of the party. If this happens, each user must roll 1D100 and add his CDeck Operations skill. The players then get to act in the order so determined (highest first, lowest last). The difficulty — and possible danger — in this is that each user action counts as the "move" for the entire party! It is safer and more effective for each member of the party to use his own CDeck and programs (if the resources are available).

Mimetic: Actually a combination SimSelf/ Intrusion program, Mimetic programs sense the nature and particulars of the current Cyberspace environment and adapt the user's appearance (i.e., signal) to best fit that environment. They are rated by Rtg *t,* with the higher Rtg # versions performing more and better simulations than the lower ones. The user need not appear to be a person at all; one good way to get through low-level ICE is to come in disguised as a tax audit or warrant, etc. The user can select the exact disguise used by the program, or may opt to allow the program to make all the choices by default. In either case, the Mimetic program adds its Rating Bonus # to any rolls representing attempts at intrusion of a protected computer system or database.

1.3 INTRUSION PROGRAMS

The most effective tools in any cracker's arsenal, Intrusion programs are the means by which a CyberDeck operator gets through opposing ICE and into a target computer system. All of the programs listed below are given a Rtg# which delivers a Rating Bonus which is added to the intruder's roll on the ICEBreaking column of the *Static Maneuver Chart.*

Random **Number Generator (RNG):** Designed to bypass Security Code programs which require entry of a special code number before access, RNGs emit a fast-paced string of digits which eventually fall into the proper configuration. Not useful against other forms of security.

Codebreaker: Operating along the same basic lines as an RNG program, Codebreaker runs through millions of possible character combinations in seconds, and gauges opposing Security Code's response in an attempt to gain access. Useful only against Security Code programs requiring specific entry word or phrase.

Dissembler: Useful against any form of ICE program other than User Verification, User Recognition, or Alert, Dissembler attempts to sneak into the structure code of the opposing ICE program and destroy it from the inside. It operates rather like a specialized Virus.

Invisibility: This program makes the user's signal "transparent" by decreasing the intensity of the transmission and breaking the signal in certain places. The intent is to make the incoming signal appear to be part of the background "noise" which is constantly experienced in the Net. It can also be used to mask the effect of an operating SimSelf program, and negates the target's chance of using a Tracer if the intrusion attempt succeeds.

Soft Wedge: Inserts self-replicating commands into foremost layers of the user's signal which direct an opposing ICE program to do something else, thereby changing incoming ICE to harmless data.

Hard Wedge: This unsubtle program is used to get through Data Screens. Operates by amplifying strength of intruder's signal to overcome random "noise" created by the screen. The problem with the Hard Wedge is that it is so noisy itself: if a Tracer program is used to locate the source of the intruder's signal, it will accomplish its work in half the regular time.

Bullet: An all or nothing Intrusion Program, Bullet is often used as the last resort of desperate ICEBreakers. The Bullet program encases the user's signal in a rigid array of random data. Activating the bullet shoots the user into the ICE barrier. If a completely successful ICEBreaking roll is made, the user penetrates the ICE completely undetected. If the ICEBreaking roll does not succeed, the Bullet is deflected and the ICE immediately takes full effect; the user may not avoid any adverse results.

1.4 REMOTE APPLICATION PROGRAMS

System Searcher. Searches through directories of arget Computer system to find a desired subsystem, program, file, or peripheral device. User must specify either the name of the file/system searched for, or a text string most to be likely identified with the target location. Ordinarily, searching for such an item requires a RS/CDOp maneuver which may be *Routine* to *Hard* (depending on the size of the area searched).

File Searcher: Quickly searches through information included in the target program or file to find a desired item of data (such as a phone number, name, etc). User must provide a text string which will most likely be included in the target file, or a parameter which the desired datum will possess. Ordinarily, searching for such an item requires a RS/CDOp maneuver which may be *Routine* to Hard (depending on the size of the area searched). The File Searcher program is given a Rtg #, and adds a Rating Bonus to this sort of maneuver.

Data Copy: Allows the user to copy "found" files or programs into his CyberDeck's storage space. This does not erase the original, which remains exactly where it was found. The space needed to store copied data depends on its type, as shown in the *Storage Space Usage Chart* in T 2.1

Data Wipe: Allows user to destroy "found" files or programs, writing over them with a string of meaningless characters.

1.5 CYBERDECK UTILITY PROGRAMS

The following are utility programs unique to CyberDecks. Other CDeck Utilities are available, but are fully described in Section T 2.6 and are listed in the *CyberDeck Programs Cost Chart.*

Armor. Armor programs generate a field of electron activity around the user's SimSelf, effectively creating a sort of Data Screen which protects him against ICE, Viruses, and other forms of Cyberspace "attacks". Armor programs have their Rating Bonus subtracted from any such attacks made while the program is running. All this activity takes its toll, however. Each time the Armor program is used to defend the "wearer", its rating drops by 1-5. Therefore it is a good idea to keep at least one spare "suit" of Armor around in case the first is degraded beyond usefulness.

Directional Control: Allows the user to go by CyberDeck to the desired location or phone number without having to consciously direct the path of travel. The target site must be known and specified to the program before the run begins. This allows the user's attention to be elsewhere while a lengthy journey is made.

Interrupt: Allows the user's CyberDeck to break the line upon receiving a pre-specified signal or sensing a pre-specified event. This effectively punches the user out of Cyberspace completely. The trigger event/signal must be known and specified

to the program before the run begins (e.g., if a call comes in while travelling, if a Mindwiper program is detected, etc.). One Interrupt program is required for each separate trigger.

Netmapper: Records the details of the user's journey in a special file which can later be accessed for replay. Also records all visible terrain from any site along the way. This program must be running during the entire time of recording, and requires that a Data Acquisition program also be running so that the Netmap record can be stored.

Progswitch: Allows the CyberDeck to pull up programs from Storage into the CPU, or to move programs from the CPU into Storage. Ordinarily, a CyberDeck's CPU will only hold the programs/files which were in it at the beginning of the run. This program allows the user to switch programs while still in Cyberspace. The process takes time: one full round (10 seconds) for each unit of program size switched. No other actions are possible while this process is underway.

Switch-Out: Allows the user to instantaneously "flip" into reality, suspending all Cyberspace activity at the site. While "out", the user's signal is still present on a blank carrier wave which is registered at the point of exit, and may still be traced or attacked by ICE. If an ICE attack occurs while the user is "out", its effects will still reach the user. It is possible to leave other programs running by themselves while switched out. For instance, you may start your ICE-Breaker program and then switch-out; it will continue to attempt its ICEBreaking task, but will receive no bonus from your *Intrusion* skill.

1.6 CYBERSPACE COMBAT PROGRAMS

Cyberspace Combat Programs are used by people in Cyberspace to do battle with other Netrunners. There are three types of programs listed here: offensive, defensive and tampering. Offensive programs are used to attack encountered Netrunners. Defensive programs are used to avoid adverse combat results. Tampering programs are used to manipulate programs and files carried by people encountered in the Net.

To determine a character's bonus when using a Combat Program, add the rating of the program to the Cyberspace Combat skill rank of the user. Use this modified skill rank to determine the actual skill bonus for using the desired program. To this adjusted skill bonus is added the user's Memory stat bonus to derive the total skill bonus for using the program.

Armor: Armor programs generate a field of electronic activity around the user's SimSelf, effectively creating a sort of Data Screen which protects him against attacks or tampering attempts. Armor programs are strictly defensive, providing a Cyberspace Combat subtraction. However, for each Cyberspace Combat that an Armor program is used in, its rating is lowered by 1-5.

Bludgeon: This is an offensive program which, when successfully used, reduces an opponent's Armor or shield program. A defender with a running Armor or shield program overcome by a Bludgeon program has his Armor/Shield rating reduced by 1-10.

Coma: An offensive program which sends a defender's body into a coma for 2-20 hours when the attack has been successful. The defender's consciousness immediately returns to its body, effectively removing the SimSelf from Cyberspace.

Delve: A tampering program. When an opponent is successfully Delved, the user learns what programs and data files are presently being stored in his opponent's CDeck.

Disengage: Disengage may be run as a defensive program when a combatant wishes to leave a battle before it is over. If the Disengage program is used successfully, the user's SimSelf leaves Cyberspace (i.e., the user's consciousness returns to his body). After a Disengage is successfully used, the character may not reenter Cyberspace for 1-5 rounds of real time.

Evade: This is a program which may be run defensively in combat. If it is used successfully, the character bypasses any and all foes (not ICE, of course), and will continue to elude them for at least 2-20 rounds. During this time, the evading character is free to take any action unless he runs into other combative Netrunners who wish to engage him in combat again. If the evading character is still in Cyberspace after the evasion time has lapsed, his foes may re-engage him in combat if all other circumstances allow it (e.g., his foes must be able to travel where he has travelled during the intervening time).

Knock Back: An offensive program which, when successfully used, bumps the defender out of Cyberspace — returning the Netrunner's consciousness back to his body. A person who has been knocked back may not reenter Cyberspace for 1-10 rounds of real time.

Scan: Scanning is a tampering action which, when successfully executed, allows its user to discover all of the programs currently being run in the CPU of his opponent's CyberDeck.

Shield: A Shield program acts like an Armor program except that its effective rating is doubled against Shock and Slay offensive programs. The 1-5 rating reduction is subtracted from the non-doubled rating of the Shield program after a Cyberspace combat in which it is used.

Shock: An offensive program which, when successfully used in combat delivers an "A" Electricity critical to the defender's body.

Slay: The most deadly offensive combat program. A foe who has been successfully slain in Cyberspace combat has his body die and his consciousness eradicated from Cyberspace forever.

Steal: This is a tampering program which, when successfully used in combat, allows its user to take any previously Scanned or Delved program or data file (or any Cyberspace Combat Program used so far in the combat), from the defender's CyberDeck. If a Cyberspace Combat Program is stolen in this way, it is usable on the next round — if it can be run in the stealer's CyberDeck.

Stun: This offensive program allows an attacker to Stun a foe into a period of inactivity lasting 1-5 Cyberspace combat rounds. During this period, the Stun program's target may run no Cyberspace Combat Programs, and may not move from his current location. He may be spoken with, or attacked, or automatically evaded or disengaged from. Tampering programs may also be used against him. After the Stun duration passes, the victim may resume normal activity if still capable.

Wipe: Wipe is a tampering program which allows a combatant to completely erase one program or data file from the defender's CyberDeck CPU or storage facility. The program or data file affected must have previously been Scanned or Delved, although it could also be a Cyberspace Combat Program already used during the current combat.

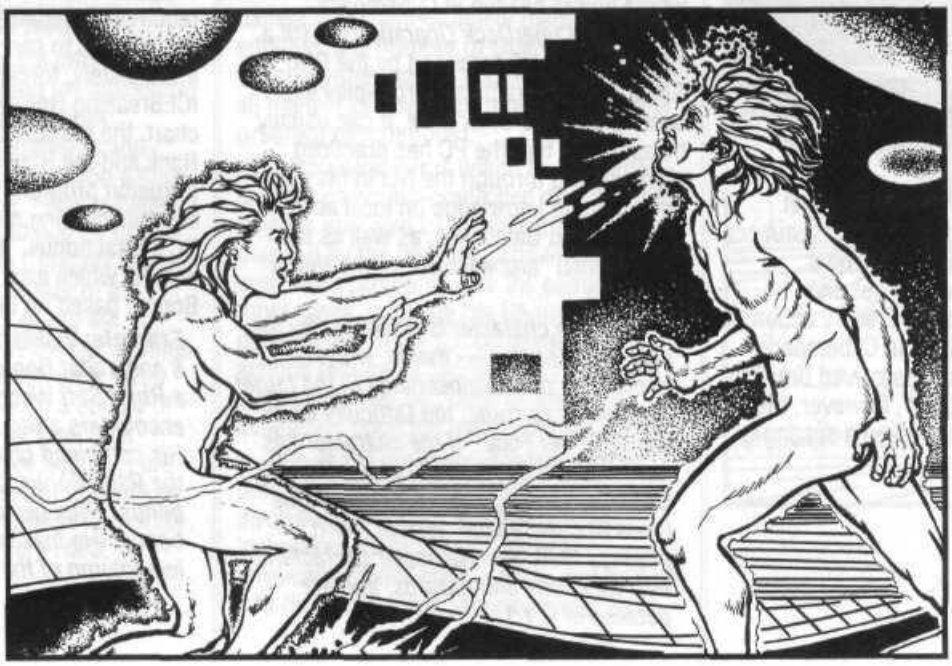
CYBERDECK PROGRAMS COST CHART

Program Name	Size	Cost
Matrix Presentation Programs		
Matrix	4	4000
Mediaeval	4	3000
Civnet	4	5000/1 0km²
User Presentation Programs		
Self Definition	1	500
Wizard	2	2000
Hero	2	2000
Cyberbot	2	2000
Multiuser	3	5000
Mimetic	5	10,000
Intrusion Programs		
Random Number Generator	1	500+0 OOxRtg#)
Codebreaker	2	800+(200xRtg#)
Dissembler	5	20,000+(5000xRtg#)
Invisibility	3	6000+(2500xRtg#)
SoftWedge	3	3000+(5000xRtg#)
Hard Wedge	2	1500+(2500xRtg#)
Bullet	1	2000+(2500xRtg#)
Remote Application Programs		
System Searcher	1	50+(10xRtg#)
File Searcher	1	50+(15xRtg#)
Data Copy	1	500
Data Wipe	1	1000
Cyberdeck Utility Programs		
Alert	1	1000+(100xRtg#)
Antivirus	2	4000+(1OOOxRtg#)
Armor	3	3000+(4000xRtg#)
Data Cruncher	1	200

Program Name	Size	Cost
Data Aquisition	1	300
Directional Control	2	1250
Encryption	1	500
Interrupt	1	1000
Multiple Image Integrator	3	4000
Multitasking	1	2000
Netmapper	1	3000
Neurospeed	4	4000+(500xRtg#)
Pattern Cognition	1	500+(400xRtg#)
Progswitch	1	200
Security Code	1	50
Switch-Out	2	3000
User Verification	1	1000
User Recognition	2	3000
Cyberspace Combat Programs		
Armor	3	3000+(4000xRtg#)
Coma	4	200,000+(75,OOOxRtg#)
Bludgeon	1	1000+(1OOOxRtg#)
Delve	1	1000+(3000xRtg#)
Disengage	1	3000+(1OOOxRtg#)
Evade	3	5000+(5000xRtg#)
Knock Back	1	2000+(4000xRtg#)
Scan	1	1000+(1OOOxRtg#)
Shield	1	3000+0 0,OOOxRtg#)
Shock	1	60,000+0 0,OOOxRtg#)
Slay	5	500,000+0 00,OOOxRtg#)
Steal	1	2000+(5000xRtg#)
Stun	1	5000+(5000xRtg#)
Wipe	1	2000+(2000xRtg#)

Codes and Comments

SIZE is the unit size of the program. When running, the program occupies CPU units. While not running, the program occupies storage units.
COST is the base cost of the program module.
"Smart" versions of CDeck Programs are unavailable.



2.0

TRAVEL THROUGH CYBERSPACE

JACKING IN

The journey through Cyberspace begins with "jacking in"; connecting the CyberDeck to the appropriate line, cable, or other communications device and attaching the DNI trodes which link you to the Deck itself. Though the most common method by far is a simple plug-in cord attached to a telephone jack, jacking in may be done in several ways, depending upon the specific environment. Some examples are provided below.

Splicing Into Phone Cables: *This may be performed on any exterior telephone line, at any place along the line's route. Note however that exposed telephone wires are rarely seen except in backward areas, but the same technique also allows one to splice into an inter-office line or other coaxial cable. The maneuver requires a SM/ElecT:M and some sort of wire cutting and stripping tool. If the cable being tapped is of the fiber optic variety, as used in most cities and developed regions, the maneuver requires a SM/ElecT:V and a cutting tool.*

Tapping Into Switchboxes: *Switchboxes are the nexii for most telecommunications, and direct incoming transmissions to the correct destinations. There are two main types; Local (which handle all calls within a small area, such as a telephone number prefix) and Long Distance (which send and receive long distance calls, routing them to the appropriate Local boxes). Most such boxes are found underground, although larger office buildings often possess their own Switchboxes on the premises. Tapping into a Switchbox requires a SM/ElecT:H and a wire cutting/stripping tool. The major advantage of this method over cable tapping is that many phone lines can be accessed from one box. The disadvantage is that these boxes are often protected by advanced locks and/or electric "shock boxes" (traps which deliver an Electricity critical if triggered).*

Beam Emitting Systems: *It is not necessary to tap into a physical communications system to enter the Net: if one has a Beam Modem or suitably rigged transceiver (such as a cellular phone), the CyberDeck can be plugged into it, allowing instant transmission of the user's signal to a reception site. From there a Netrunner can enter telecomm cables to whatever sites are accessible. Hooking a CyberDeck to one of these devices requires a SM/ElecT:L.*

2.1

MOVING THROUGH THE NET

Once in the Net, the CyberDeck operator uses simple mental commands to direct the route travelled by the carrier signal. As the journey progresses, the visible "terrain" flies past the operator, depicted in shapes determined by the Matrix Presentation Program being used.

Activity performed while in the Net should follow the standard round sequence of events. However, there will be a dichotomy between "real time" and "perceived time". Generally, every action which is performed while in Cyberspace will take 10 seconds of "perceived time" to accomplish. In "real time", however, the action could easily have taken a second or less to be resolved.

Although moving through the Net itself is quite simple, knowing where to go or how to get there requires practice, experience and intuition. Basically, knowing where you're headed in Cyberspace requires a *CyberDeck Operation* roll (of a Difficulty Level determined by the GM). Since it is not practical to role-play every second of a character's life, it can usually be assumed that the PC has practiced maneuvering through the Net in his spare time, gaining knowledge on local access channels and Databases, as well as the fundamental "architecture" of the Net in general.

Note: *If the character is traveling "by the seat of his pants" — that is, with no knowledge of the appearance of the target destination or route, the Difficulty Level will be* Sheer Folly. *If the character has never used a CyberDeck before, the Difficulty Level is* Absurd. *The various types of Cyberspace "terrain" each possess their own particular characteristics, functions and hazards, and are detailed in C 1.1.*

2.2

AREA RECONNAISSANCE

In many circumstances, a player may wish to scout a specific area for future reference. This type of research can be used to locate Switchboxes, Databases, CPUs, Modems and ICE, as well as simply generating a local Matrix familiarity modifier for purposes of mapping the Net. Familiarizing oneself with a region in this manner is considered a Research Maneuver modified by CyberDeck *Operation* skill (the Difficulty Level is *Easy* to *Complex*, depending on the size of the area). Once the Research Project is completed, all further rolls within that area (not counting protected sub-regions) will receive a Bonus of +30. The GM (or player) may wish to construct Area Maps detailing the specific regions of the Net which have been studied. These maps can be sold for up to $5,000 — more for very sensitive information. An Area Map Key and sample Area Map are provided at the end of this section to serve as examples.

2.3

INTRUSION

The fine art of breaking into protected computer systems and devices is referred to as *Intrusion* or *ICEBreaking*, and is handled using the ICEBreaking column of the *Alternate Personal Maneuver Chart.* When the CyberDeck operator enters a guarded area, the GM informs him that there is some kind of ICE present, and the PC may make a SM/CDOp:M to identify the exact type of ICE encountered (this maneuver takes place immediately, and requires no additional game time). The ICE will attempt to carry out its instructions immediately, forcing the Player to make the ICEBreaking Roll. As explained on the chart, the intruder adds his Intrusion skill Rank and the Rating number of the Intrusion program used (if any). This combined rating number determines the PC's total bonus. The ICE supplies a penalty which also takes the form of a Bonus, based on its Rtg #.

Example: *Vidkid has a CDeck skill Rank of 8 and a Stat Bonus of +10, and is packing a Rtg.4 Soft Wedge program when he encounters a Rtg.7 Mindwiper in the Net. His combined rating/rank is (8 + 4) 12; on the Rank/Bonus Chart this means a 54 bonus. Plus his stat makes a total +64 bonus. He makes a roll on the ICEBreaking column of the Personal Maneuver*

Chart fS *16) — the dice come up 71— and* adds *+64, applies a penalty of* -35 for the *Mindwiper, totalling out at 100 even. According to the* chart, *this total indicates* Near Success, *and* forces *Vidkid to roll* again *next round with an additional +20 modifier.*

The scene might appear this way: Vidkid is using a *Mediaeval Matrix Presentation Program and a Ninja User Presentation Program (which he designed himself). He is attempting to break into* the *databanks at a branch of Pfriendly Pharmaceuticals to acquire a secret formula for a client. Pfriendly's appears before him as a small, dark-walled castle set on a rolling green plain. (The GM is giving Vidkid's player a subtle hint by mentioning that the castle is dark; so is the protective ICE.) Vidkid approaches,* his *stealthy Ninja making the necessary rolls to find and get to the database, which appears as a chest in one of the castle* rooms. *The Chest is closed, but he makes his SM/CDOp:M to identify the ICE: Mindwiper. The GM explains that Vidkid the Ninja has examined the chest and determined that a Mindwiping Rune is hidden in the lid. Opening the chest will reveal the rune. As Vidkid accesses his Soft Wedge Program, the Ninja pulls a cloth from a pouch and carefully cracks the chest, sliding the cloth across the opening. Vidkid's player makes the ICEBreaking roll detailed above, and the GM explains that the Ninja has wiped off the rune and partially opened the lid. However, he needs to finish opening the lid before he can get at the datafile.*

2.4 SYSTEM SEARCHING

Once inside a system, the intruding character may begin looking for interesting files, programs, peripheral devices, computer-controlled mechanisms and output ports. He may also develop a map of the system architecture. This is handled as a Research Project modified by *Cyber-Deck Operation* skill. The Difficulty Level of the project depends on the size of the system; small computers (up to Mk.10) with no peripherals except the communications port are *Routine,* moderately sized Computers (Mk.5 to 20) with a couple of peripherals are Easy, small local area networks (such as an office building) are *Moderate,* and massive systems (such as those found in almost any huge corporate or military headquarters) are Hard.

As might be guessed, the intruder must lay low inside the system while it operates, and may encounter more ICE before the Project is completed.

Note: *If the intruding character runs a System Searcher program while performing this Research Project, the Rating Bonus generated by the Searcher is added to the character's Research roll.*

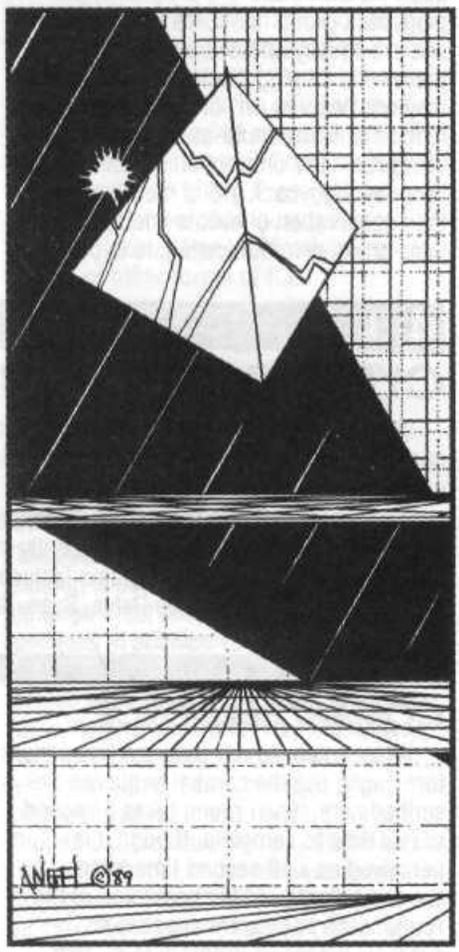
It is not necessary to map every system you enter — all manner of interesting stuff can be found simply by randomly poking around — but it does add a +30 to any future attempts to maneuver within the system. In addition, there is a thriving black market for accurate maps of guarded computer systems — *Routine* and *Easy* systems are hardly worth a thing, but *Moderate* systems maps are worth 100 to 1000 World Dollars, and Hard maps can yield up to $10,000 on the black market. A System Map Key and sample System Map are provided at the end of this section to serve as examples.

2.5 SYSTEM REMOTE CONTROL

Once inside a computer's CPU, the intruding character can cause the machine to perform any functions which are within its normal operating capabilities, on command. All that is necessary is that the intruder know the appropriate Programming Language or Machine Language. All computer systems can pull programs or files up from Storage, put them down into Storage from the CPU, make copies of them, move them into other directories or areas of memory storage, change their names, edit them or delete them. In addition, any number of Utility programs in the computer may be accessed to perform all manner of advanced functions (see the program descriptions).

If the computer is linked to any peripherals or computer-controlled devices, these devices may also be accessed and commanded by the intruder. The intruder may even write programs into the computer. In most cases, ordering the Computer to perform any of the above-mentioned actions requires a SM/SofT:M (the Difficulty Level may be raised or lowered depending upon the nature of the task).

One of the most popular methods of break-in and entry into restricted areas involves a Cyberspace "ghost" — an Icebreaker character who does not physically travel with the party, but breaks into the target site's security system and paves the way for the other members of the team. Such a character can control cameras, microphones, speakers, doors, alarms and other devices, allowing the physical team to concentrate their efforts on recon and encounters. In such situations, the GM should generally plant a surprise or two within the complex (to keep things from getting too easy). Some examples include: guards who communicate by shortwave radio and are thereby immune to computer-gimmickry; hidden pockets of ICE within the system which are triggered only when a specific override is attempted; and having recent modifications made to a system when the character party thinks they have a current map. Other people may be in the system when the Icebreaker attempts to alter things. These operators will notice changes rather quickly, and may even be ICEBreakers themselves. There may also be AI programs in the system which will sense the nature of any changes made immediately, and respond aggressively.



3.0 CHARACTER GROUPS IN CYBERSPACE

It is possible for a number of people to enter, and act in Cyberspace as a group at the same time. There are two ways to do this. The first is to have several people jacked into the same CyberDeck where one person acts as the primary operator, and the rest merely follow his lead in the Net. This leader/followers style of group Cyberspace use is called the "Piggyback" method. The second type of group Cyberspace use is called the "Freeform" method. Unlike a piggyback group, freeform users each have their own CyberDeck, which allows for a greater range of actions to be taken as described below.

The specifics of piggyback CyberDeck use are as follows. The primary operator makes all rolls for CyberDeck Operation, Intrusion, and Utility program use based upon his own skills and programs. All piggyback group members must abide by, and are equally affected by all the results of these rolls. A piggybacked group member may not "wander off" in Cyberspace by himself unless a multi-user program is being run. The only action which may be taken by piggyback group members, other than observation of events and simple inter-group communication, is Cyberspace Combat. Each piggyback group member has access to Combat programs held in the CyberDeck, though each single program may only be used by one person at a time. In Cyberspace Combat (described in C 4), all members of a piggyback group may become involved. However, due to the strain and mental effort which must be exerted by the primary operator to keep his piggyback group together and organized, his Cyberspace Combat rolls are modified by -10 for each member of the group other than himself.

A freeform Cyberspace group is not quite so restricted. As already mentioned, each freeform group member must have his own CyberDeck and array of Cyberspace programs. Each member of the group must start his journey into Cyberspace from the same location, or meet at a particular location in the Net. Though each member of a freeform group may perform any desired activity, the disadvantage is that each person must make their own CyberDeck Operation and Intrusion rolls, thus increasing the risk of detection and ICE activation.

NOTE: *Of course, a Cyberspace group may be a mixture of piggyback groups and freeform group members.*

4.0 CYBERSPACE COMBAT

Interactive Counter Espionage (ICE) is not the only threat to a marauding Net Head. A number of deadly programs have been designed for CyberDeck operators specifically for use against other people in Cyberspace.

Cyberspace Combat Programs are divided into three types: offensive, defensive, and tampering. Offensive programs presently include Bludgeon, Coma, Knock Back, Shock, Stun and Slay. Defensive programs include Armor, Disengage, Evade, and Shield. The tampering programs include Delve, Scan, Steal and Wipe.

4.1 COMBAT SEQUENCE

When an encounter between Netrunners turns ugly, use the combat sequence described here. Each round takes 1 second of real time to complete, though it is perceived as a 10 second time interval by the combatants. At the beginning of the round, each combatant chooses an available defensive program to protect himself , and then either an attack program or a tampering program (if desired and available) to affect his opponent with.

Attacks, tampering attempts, disengagements, and evasions are then resolved in sequence, one at a time, between all combatants involved in a melee. The full effects of an action are resolved before passing onto the next combatant. The character with the highest Cyberspace Combat skill bonus resolves his action first, then the person with the second highest skill bonus, then the third, and so on until all combatants have completed an action for the round. A Cyberspace combat will continue until all combatants on one side of the battle have disengaged, evaded their foes, left Cyberspace, or have otherwise been incapacitated.

To resolve an attack or tampering attempt against an opponent, make an open-ended roll, add the character's Combat bonus with the program he is using (derived by adding the program rank + Combat skill rank, which generates the total rank bonus, which is then added to the applicable stat bonus — Memory). Then subtract the defender's Combat bonus with his Armor or Shield, if one of those is being used (derived by adding the Armor or Shield program rank + Combat skill rank, which generates the total rank bonus, which is then added to the applicable stat bonus — Memory).

If the result of the attack or tampering attempt is a modified roll over 100 (i.e., 101+), the defender takes the full effect described for the program. Otherwise, there is no effect.

If a combatant has chosen to disengage from a battle, he must be running the Disengage program, and when it is his turn to take his action in the combat sequence, he must make an open-ended roll, and add his Combat bonus with the Disengage program (derived as other Combat programs are). If the result is over 100 (i.e., 101+) the combatant has successfully disengaged from the battle.

If a combatant has chosen to evade enemies during a battle, he must be running the Evade program, and when it is his turn to take his action in the combat sequence, he must make an open-ended roll, and add his Combat bonus with the Evade program (derived as other Combat programs are). If the result is over 100 (i.e., 101+) the combatant has successfully evaded his foes for at least 2-20 rounds.

4.2 MULTIPLE COMBATANTS

A Cyberspace combatant may be subject to more than one attack or tampering attempt per round from a group of opponents. At the beginning of each round, each combatant rolls 1D5 to determine how exposed he is to multiple combats. The number rolled is the number of foes which may either attack and/or attempt tampering against that combatant.

A combatant need not specify the target of his attack or tampering attempt until it is his turn to take action in the combat sequence.

Complete descriptions of the Cyberspace Combat Programs are provided in C 1.6.

5.0 REGIONS OF THE NET

The realms of Cyberspace are made up of thousands of small regions. These areas are interconnected by telecommunication cables, wires, and beam transmissions, but each is a specific "submatrix" nonetheless. Any corporate headquarters possesses a small network of interconnected terrain which allows the company to do internal business, and these computer systems are connected to those of other companies (as well as the Free Bases and public access lines of the world). The entire complex created by these linked regions forms the Net. While travelling in the Net, CyberDeck operators need to be aware of the various types of "terrain" and encounters which they may come across. Knowledge of these regions and their parameters is determined by the character's CyberDeck Operation skill (most of the knowledge set forth in the following Section is Routine to Moderate in Difficulty), while the actual access of any given terrain type by CyberDeck is considered a Static Maneuver modified by CyberDeck Operation skill.

Local Phone Lines: These lines are generally made of coaxial or fiber optic cable, and connect Local Switchboxes to each other and to the nearest Long Distance Switchbox, as well as connecting individual phones, modems, and CyberDecks to these matrixes. They are the single most common terrain type in the Net, and accessing them by CyberDeck requires a SM/CDOp:R. In most regions, access to Local Phone Lines is free once a regular monthly service charge is paid. This charge is between 10 and 100 dollars - if not paid, the service is shut off.

Long Distance Phone Lines: These massive bundles of fiber optic cable cover great distances, linking Long Distance Switchboxes to each other and to Satellite Up/Downlinks. In general, calls with a range of 30 to 1000 kilometers are handled by these lines, while calls with greater ranges (or intercontinental calls) are handled by satellites. Long Distance Phone Lines are generally accessed by travelling down a Local Phone Line and passing through a Long Distance Switchbox, although they may be directly tapped as described in Section C 2 above. Accessing them by CyberDeck requires a SM/CDOp:E. Accessing them by standard keyboard terminal requires a SM/:Medium.

Switchboxes: Due to the fact that all phone lines converge at these sites, they are relatively easy to locate (SM/CDOp:R). A trifle more difficult is telling Local Switchboxes from Long Distance ones unless the CDeck operator entered the Switchbox by way of a Long-Distance Line. If the operator knows what number he is trying to reach, it requires only one second to make the connection to the appropriate line, and the journey progresses from there. If the exact number is not known, a trial-and-error method must be used, requiring a RS/CDOp:E. Each type of Switchbox is detailed below,

Local Switchboxes: The nexii between Local Phone Lines, these devices route incoming signals to the correct number in the local area, or send them to the appropriate Long Distance Switchbox. Access to Local Switchboxes is free as long as monthly payments have been made, and is considered a SM/CDOp:R.

Long Distance Switchboxes: The nexii between Long Distance Lines (and between Local and Long Distance Lines), these units are strung in sequence over vast tracts of land, each covering an area 100 to 500 kilometers in diameter. Fees for using Long Distance Switchboxes accrue immediately upon access and are charged to the phone account at the site of origin, although Security Code programs allow free use upon entering a special passcode, which is usually issued to telecommunications technicians and military personnel. These numbers are changed regularly to avoid misuse, but the underground often gains access to them for a short time. Ordinary access to these boxes is a SM/CDOp:E, but attempting to break through the Security Code program to avoid being charged for the call requires a roll on the ICEBreaking column of the *Static Maneuver Chart.* This roll is unnecessary if the character possesses a currently active passcode.

Cellular Stations: Connected to the rest of the Net by Local Phone Lines, a Cellular Station translates an incoming call into a frequency-specific transmission, and broadcasts it into the atmosphere, where it is picked up by the Cellular Phone tuned to the same frequency. A CyberDeck operator can trick the Station into sending his signal along, provided that: a) he knows the number he wishes to reach, and b) he succeeds in a SM/CDOp:L. In addition, many Cellular Stations are guarded by Security Codes or other ICE programs.

Up/Downlinks: Operating along the same lines as Cellular Stations, these extremely powerful broadcasting and receiving stations are responsible for tying Communications (and other) Satellites into the Net. As might be expected, Uplinks transmit to satellites in orbit, while Downlinks receive transmissions from satellites. All Uplinks are guarded by Security Codes or other forms of ICE, while Downlinks are generally free of such stuff. In addition to getting past any ICE around a link station, access requires a SM/CDOp:M. Unlike other Cyberspace movement, travel up to or down from a satellite takes three rounds of game time.

ComSats: Communications Satellites (as described in T 5.5) handle intercontinental phone/modem communications, as well as many television, holovision, ASP and radio broadcasts. There are literally hundreds of these satellites in orbit, many of them privately owned. Every ComSat is connected by microwave transmission to at least one Uplink and one Downlink, and can be controlled by remote transmission on one of its frequencies. In addition, every ComSat has an internal computer which oversees its functioning. ComSats can be easily located by Matrix Presentation programs, but are often guarded by Security Codes, User Verification Programs, or other forms of ICE.

Accessing the communications channels of a ComSat to "ride" the transmission wave is a SM/CDOp:E, but getting from there into the satellite's computer will usually require an ICEBreaking attempt.

Unlike other Cyberspace movement, travel to or from a satellite takes three rounds of game time.

Telephones: The vast majority of communication is still handled by telephone, although most telephones perform many functions in addition to simple communications relay and translation. Smartphones include integrated microprocessors which allow them to store and relay messages, scan incoming calls for point of origin or refuse access to calls coming from unrecognized numbers. While Cellular Phones are accessed by relay stations (as explained above), most telephones are plugged into a standard wall jack and accessed by coaxial or optic fiber cable.

Entering a telephone unit requires no additional maneuver on the part of the CyberDeck operator. If the phone is in use at the time of the intrusion, the CDeck operator may attempt to break in on the

transmission. This requires a SM/CDOp:M. The CDeck operator may speak to the person on the other end of the line, as the CyberDeck has already translated the signal into a code suitable for telephone signaling.

Modems: The interface units between a computer and the telecommunications network, Modems translate binary data into the electronic "language" of the phone system and back again. They are controlled by specialized programs stored in the attached computer.

Entering a Modem by way of a CyberDeck requires no additional maneuvers on the part of the CyberDeck operator, but getting past the Modem Interface program requires a SM/CDOp:H. If this maneuver succeeds, the operator is "inside" the CPU itself (assuming that no ICE stands in the way, of course). In addition, if the Modem is in use at the time of the intrusion, the operator may attempt to break in on the transmission, requiring a SM/CDOp:M.

Cyberdecks: Specialized Modems linking human brains into the Net, CyberDecks contain translatory programs in their ROM which act like Modem Interface programs , and they are accessed in the same way as regular Modems. If the target CyberDeck is in use at the time of the intrusion, the operator may attempt to break in on the transmission, requiring a SM/CDOp:M. The GM should remember that every CDeck operator experiences everything in terms of his own Matrix Presentation program, unless an intruder is using a SimSelf.

Free Bases: Databases which are open to access by anyone with a Modem or CyberDeck, Free Bases are generally maintained by community support groups, corporate public relations departments or private special interest groups. Most cities possess at least a few of these databases, each of which handles its own specific kind of data. Examples are local and global news, weather, library/archive access, games, corporate listings, area maps, or simply meeting places for Netrunners. Although they are called "Free", many of them actually charge a toll for access; generally around $2 for the first 5 minutes plus $1 per additional minute. Accessing a Free Base by CyberDeck is a SM/CDOp:R.

Private Databases: Owned by individuals or companies, Private Databases are the cracker's meal tickets: they're the source of the privileged information which is the CyberDeck cowboy's stock in trade. In game terms, levels of computer security are rated in terms of standard Difficulty Levels (i.e., *Routine* to *Insane),* and the appropriate modifiers are taken into consideration when intrusion attempts are made.

CPUs: The Central Processing Unit is the "brain" of any computer system; the actual Processor Core itself. All of the system's functions are decided upon and controlled from here, which makes the CPU a choice target for intruders, especially those who are "ghosting" for a physical entry team. As explained in the *System Remote Control* Section above, an intruder can command a computer system to perform any of its basic functions once inside the Core; all that is necessary is fluency in the computer's Programming or Machine Language.

Workstations: These are the locations at which computer users do their work. They generally consist of at least one Input system and one Output system, and often include other assorted peripheral devices. The setup at any given workstation may range from old-fashioned monitors and keyboards to DNI links and holographic projectors. For more details on I/O systems and other peripherals, see T 2.3. A CDeck operator is capable of using an Output system to communicate with people at the target site, be they corporate employees or other members of the Icebreaker's strike team. Using an output device in such a fashion requires that the intruder know the target computer's Programming or Machine Language and succeed in a SM/SofT:E. Likewise, a person at the Workstation may communicate with the CDeck operator "inside" the machine by using an Input system.

Computer-Controlled Mechanisms: Any number and type of machines may be controlled by a computer. In many corporate structures, industrial and office machines are computer-driven, as are most security mechanisms (cameras, automatic door locking devices, identification checkpoints, fire alarms, radar, automated weaponry systems, etc. As noted above, most of these devices can be activated, deactivated, or otherwise controlled by an intruder within the CPU. All that is necessary is that the intruder know the computer's Programming or Machine Language, and that he succeed in a Programming Static Maneuver. The Difficulty Level of such a maneuver may vary depending on circumstances, but most attempts are *Moderate.*

ICE: Interactive Counter-Espionage programs may be set up at any point in a computer system. They are usually held in the CPU, but are only triggered in specific locations by specific events, such as anyone getting into a Modem without entering a certain passcode and so on. In some corporate structures, several small Computers (called "Defense Processors") are scattered throughout the system to back up the main computer. Defense Processors are used strictly for the running of ICE programs. They prevent an intruder from nullifying all security measures just by getting lucky enough to enter the main CPU. The various types of ICE programs are detailed in Section T 2.6, and the act of breaking through them is handled in C 2 above.

Wandering Travelers: It is quite possible — in fact, it is inevitable that one will encounter other ICEBreakers and assorted Cyberspace travellers while running in the Net. Unless these people carry their own SimSelf programs, they will appear in accordance with the design of a user's own Matrix Presentation program. While the vast majority are either bored homebodies looking for thrills in the Net or MegaCorp employees on official business, some of them are Cyberspace cowboys — and that means that they may want what you carry. Since the appearance of everyone in the Matrix is simply an analog for the programs they carry, it is possible to do combat in Cyberspace just as it is possible to "attack" target computer systems. It is also possible to follow people around in the Net, effectively tracing them, to converse as though you were right there in the room with them, or to trade information and programs with them.

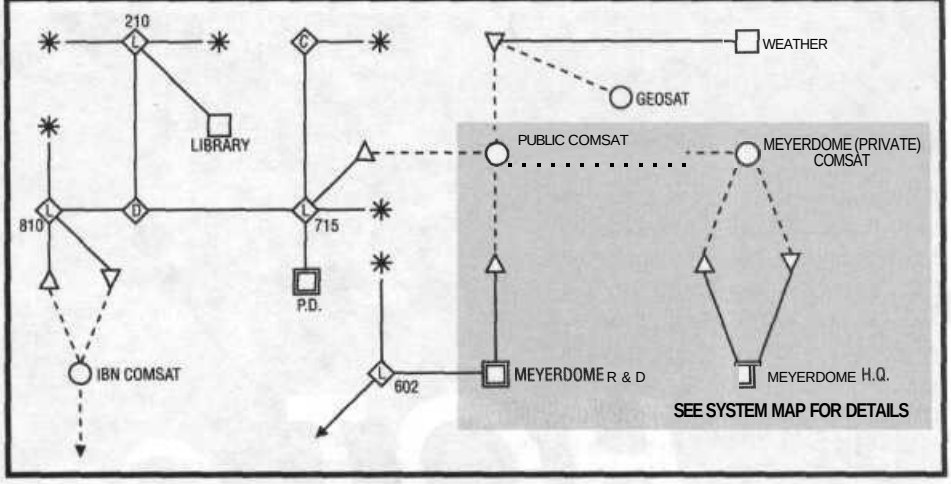
6.0 RUNNING THE NET

Before any Cyberspace adventures take place, the GM should create the Area Map for the region in which the Player(s) will travel. This map need not be very complicated, especially at first — a few Local and Long Distance Switchboxes, one or two Free Bases, and at least one potential target computer system are all that is necessary to start. The Area Map Key below will assist you in designing your own Area Maps, while the sample Area Map provided may serve as the first such region in your campaign.

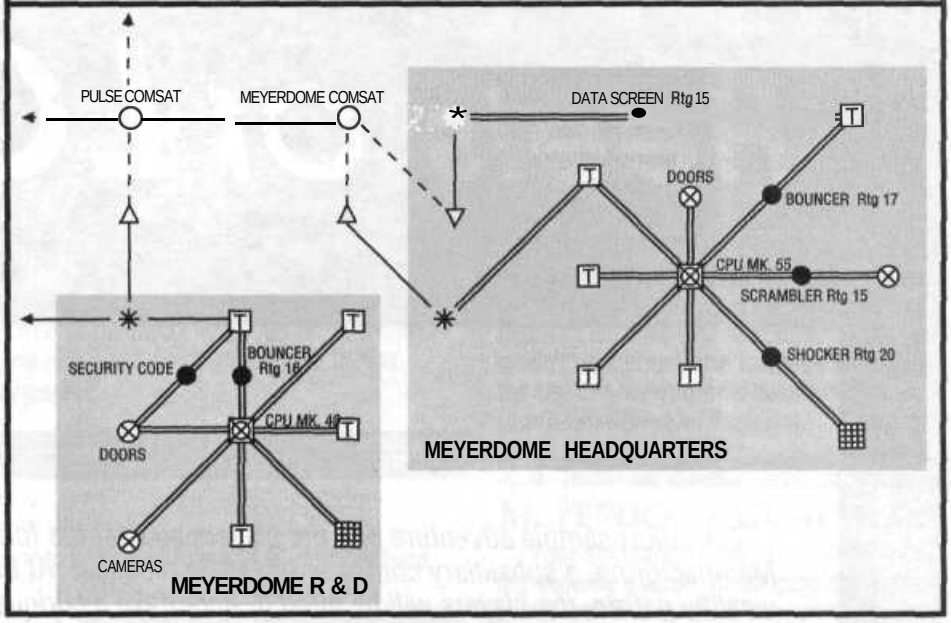
As can be seen from examining the example Area Map above, even a simple diagram like this affords several interesting prospects for the aspiring Icebreaker. Notations on the map provide detail which cannot be represented by mere symbols. The three-digit numbers beside each Local Switchbox represent telephone number prefixes (this map spans four regional prefix areas). Free Bases on the map include the Public Library Archives and the Weather Information Computer. Satellites include the IBN (Interaction Broadcasting Network) ComSat, one Public ComSat maintained by Pacific Telecomm, an Earthwatch Satellite used for geological and climatic research, and a Private ComSat owned and operated by Meyerdome Manufacturing (a subsidiary of Austin BioLabs, specializing in the manufacture of circuit boards and Processor Cores). Secured computer systems include the Local Police Department, the Meyerdome Research and Development Labs and Meyerdome's Headquarters. Before the Player(s) can enter any of these Secured computer systems, System Maps must be made, detailing the structure and dangers within.

The sample System Map provided above represents the two Meyerdome Computer Systems from the Area Map preceding. The left half is the Meyerdome R & D Building, which is located several dozen kilometers from the Headquarters Building displayed on the right half of the map. Again, small notations have been used to clarify the symbols used. Basically, Computer-Controlled Mechanisms have been noted ("Doors", "Cameras", etc.), CPU Mk#'s are provided, and (most importantly) each ICE program has been named and given its Rtg #. When a Player Character begins travelling through the Net, simply describe the regions encountered (as per your Area and System Maps) as they arise, keeping your descriptions in terms of the Matrix Presentation program being used. Most moves on the map will require some sort of CDeck skill roll, as described in the *Regions of the Net* Section above. Have the player make these rolls, keeping in mind that most moves take only one round to complete. The PC may hesitate and pause at any point, but the overall pace of the journey should be quick. After all, lightning responses and rapid travel are what *Cyberspace* is all about!

AREA MAP



SYSTEM MAP



AREA MAP KEY

Terrain	Symbol
Phone Line/Cable Optic/Optic Fiber	———
Radio/Microwave Transm. ("Beam")	- - - -
Satellite Uplink	A
Satellite Downlink	V
Modem/Phone	
Computer-Controlled Device	
ICE	
Cyberspace Combatants	
CPU	
Memory/Reserve Storage	
Workstation/Terminal	
Intersystem Connection Cable	
Outgoing (to Net)	→

SYSTEM MAP KEY

Terrain	Symbol
Phone Line/Cable Optic/Optic Fiber	———
Radio/Microwave Transm. ("Beam")	- - - -
Lal Switch Box	
Long Distance Switch Box	
Cellular Station	
Satellite Uplink	A
Satellite Downlink	V
Satellite	O
Modems/Phones	
Free Database	D
Protected Computer System	D

ADVENTURE

HOT On The Heels Of LOVE

This short sample adventure pits the players against the forces of Meyerdome Manufacturing, a subsidiary company of Austin BioLabs. At the bequest of a wealthy patron, the players will be hired to undertake a curious quest for a beautiful damsel in distress. Unbeknownst to them (or their love-struck employer), the fair lady is both more — and less — than expected.

Intended for lower-level characters (1st to 5th level), the adventure requires a team willing to break into Meyerdome. The party should include one or two Killers or Sneaks (or other characters who are good with weapons), and a Met Junkie might come in handy as well.

1.0 BACKGROUND DATA

Of the separated personality constructs belonging to the Artificial Intelligence known as Interfactor (see Section R 5.0), one of the most autonymous and mobile is the entity which calls itself Lucinde, lady of light. For all of her intellect and capacity, however, Lucinde is a carefree and curious creature, who wandered a little too far this time.

Created by Interfactor as an experiment in human emulation and field intelligence, Lucinde was designed to mimic human emotion and communication in every way. Interfactor used her to gain information from CyberDeck operators all through the Net, by using her subtle communicative skills and masquerading as a human herself. One of her chief contacts was a young man named Arlus DeSangue, the son of a wealthy upper class corporate headhunter. Over a month-long period of time, a curious relationship developed between Arlus and Lucinde (who he believes is human) — the two of them had begun to fall in love.

Lucinde was unlike any female Arlus had ever encountered — she was intelligent, witty, Net-smart, and possessed an avid curiosity which fueled his own egotism. For weeks Arlus ravaged his father's private files in order to provide Lucinde with the information she desired; but of all the topics they conversed upon, the mysterious lady seemed most interested in the security structure of Meyerdome Manufacturing. Arlus warned her about the dangers of attempting an intrusion into the site — Meyerdome is known to possess several varieties of black ICE programs and maintains a well-trained security staff -but there was no stopping her. Four days ago, armed with the limited schematics Arlus was able to provide her with, she ran an intrusion routine into Meyerdome's corporate headquarters.

After a gut-wrenching thirty minutes, certain his newfound lady was dead or mind-wiped, Arlus was delighted and astonished to spot her beautiful and familiar form coming up Ms CDeck line. She, too, was excited — she explained in hurried tones how she had made it into Meyerdome with only a minimum of hassle, and had retrieved some very interesting information. Before she could relay this data on to Arlus, however, the line went inexplicably dead. Fearing for her life (as well as his own), Arlus left home immediately and headed for the Uniqorn Qlub. There, he reasoned, he might be able to find someone who could help him fiind out what happened.

2.0 THE NPCS

The folowing personalities are most important to the adventure and so detailed here.

2.1 ARLUS DESANGUE

The son of a rich and infamous corporate headhunter named Tomil DeSangue, Arlus is an excitable but unguided young man of 25 years. His luxurious upbringing has kept him from the necessity of learning a trade of any kind, so his days are spent dabbling in all manner of incindental amusements. He fancies himself a jetskier, mountain climber, gambler and CyberDeck operator, but he possesses no real skill at any of these pursuits — and deep down, he knows it. His only true asset is great wealth. Arlus can hardly be said to have a Profession, but is effectively a Level 1 Sleaze.

2.2 LUCINDE

The curious AI who started this whole scene, Lucinde is a miracle of computer technology. Even her creator Interfactor has no idea why her "mind" works the way it does; it seems that he succeeded beyond his wildest dreams when he put her programming together. Whatever the case, Lucinde is a curious, mischievous, and — oddly enough — emotional character, and she has truly begun to feel affection for young Arlus. She possesses a good number of programs within her structure (see below), as well as the interesting ability to move herself from one processor to another through the Net (this is how she gathers information most of the time).

Unfortunately, the computer which housed her at the time of the fated break-in is now in the possession of Meyerdome Manufacturing — with her in it.

Lucinde's programs include: Modem Interface, Data Cruncher, Data Acquisition, Encryption Rtg 27, Multitasking, Concentration Rtg 12, Self Definition, Mimetic, Random Number Generator Rtg 30, Codebreaker Rtg 22, Soft Wedge Rtg 22, Data Copy, Armor Rtg 28, and Netmap.

2.3 DOCTOR SAMDA GABRIL

The chief research officer for Meyerdome Manufacturing, Gabril is a genius in the field of computers, and has designed many pieces of hardware and software for Meyerdome. When Lucinde's break-in triggered his security routines, he immediately set off a Tracer program which located her source. Meyerdome's CorpCops were sent to the site, where they found nothing but a Mk 25 Neuroprocessor with an active outgoing line. They cut this line, and returned the processor to Gabril. For two days now he has been attempting to perform memory tests on the AI he has corralled. Astounded by her complexity and curious as to her origins, he has been very slow to move on his research — he is afraid of harming her structure. He has made some notes, and has sent them over the Net to Meyerdome's headquarters. Gabril is a fifth level Tech Rat.

2.4 MEYERDOME CORPCOPS

Your standard, run-of-the-mill gunslinging security guards, these guys do their job pretty well and get paid enough to keep them from taking bribes. At any given time, there are eight active guards at the R&D building, and twelve at the headquarters (traveling in groups of two). They carry Beretta 95Rs (10mm Machine Pistols), headset communicators, handcuffs and tonfas (treat these as Medium Melee weapons), and wear Light Body Armor. All are third level Killers.

2.5 MARKO VONN

See Section R 5.0

3.0 THE SETTINGS

The following locations are important to the adventure.

3.1 THE UNIQORN QLUB

Located in the riotous central regions of the Sprawl (make it whichever Sprawl you care to), The Uniqorn Qlub is a rowdy and tawdry hangout, home of streetpunks, boozers, fixers, low-level mercenaries and the rest of society's flotsam. Its bi-level stage boasts one of the Sprawl's loudest amplifier arrangements, but its two bars collect a sordid clientele whose revelry challenges the volume of the in-house musicians. In the center of the club, around the stage area, dozens of frenetic Sprawlers bop to the neo-rock beat, and scores of others watch from the shadowy recesses of the corner tables, nursing their drinks. Two smaller rooms adjoin the central area. The first holds antique pool tables ($1/game) and a lofty crowd of billiards players. The second, guarded by a massive, silent bouncer named Slash (a fifth level Killer with — you guessed it — Claw implants), contains small private booths in which some of the city's major black market deals are negotiated. In one of these booths the PCs will be contacted by Arlus DeSangue (see Starting The Players).

3.2 MARKO VONN'S PLACE

Vonn's home is an old two-story warehouse, crammed to the bulging walls with archaic electronics equipment and other assorted odds and ends. The outer door is double locked (each lock is SM/MBy:X), and protected by an electronic zapper device which is SM/Per:V to spot and SM/EBy:S to disarm (failure to pick either lock or disarm the trap results in a "C" Electricity critical). In the dingy maze of this mess, Vonn will be able to locate several items which the PCs might be in need of (see AIDS below).

3.3 MEYERDOME HEADQUARTERS

A gleaming seven-story building, the Meyerdome headquarters boasts a two-level parking structure, an exposium of Meyerdome products, and an enclosed garden area for executive lunchbreaks. There are two cameras mounted on each floor (one at each end of every corridor), and twelve CorpCops patrol the interior and exterior regularly. The outer doors are electronically locked (SM/MBy:x, or SM/ElecT:V). The inner (office) doors have standard locks (SM/MBy:H). Outer doors and cameras are controlled by the central computer. There are many offices in this building; each has a 25% chance of holding 1-5 random programs and assorted office machines. The place is crawling with people during the day, but at night there is only a 5% chance per office of encountering an employee. The Cyberspace layout of this building is provided in Section.

3.4 MEYERDOME R & D BUILDING

A smaller building with a minimal staff of dedicated scientists, this is the place where Meyerdome's innovative accomplishments first see the drawing board. The building is three stories high, and is patrolled by eight CorpCops (three remain outside at all times, while the other five sweep the building at relatively random intervals, occasionally stopping to play a quick hand of video-poker). The doors and cameras are secured and controlled just as the headquarters' (see above). At night, there is a 25% chance per room of encountering an employed Tech Rat (75% during the day). Each room has a 30% chance of holding 1-10 random programs, a 20% chance of 1-4 office machines, and a 15% chance of an advanced piece of equipment (cybernetic, computer, or medical). The Cyberspace layout of this building is provided in Section 6.4. The computer holding Lucinde is kept in Doctor Gabril's office. It is distinguishable in two ways: 1) it is of a different brand than all of the others in the building; 2) it has a length of severed phone cable dangling from one end of it. One more thing: Doctor Gabril is also in his office.

4.0 THE TASK

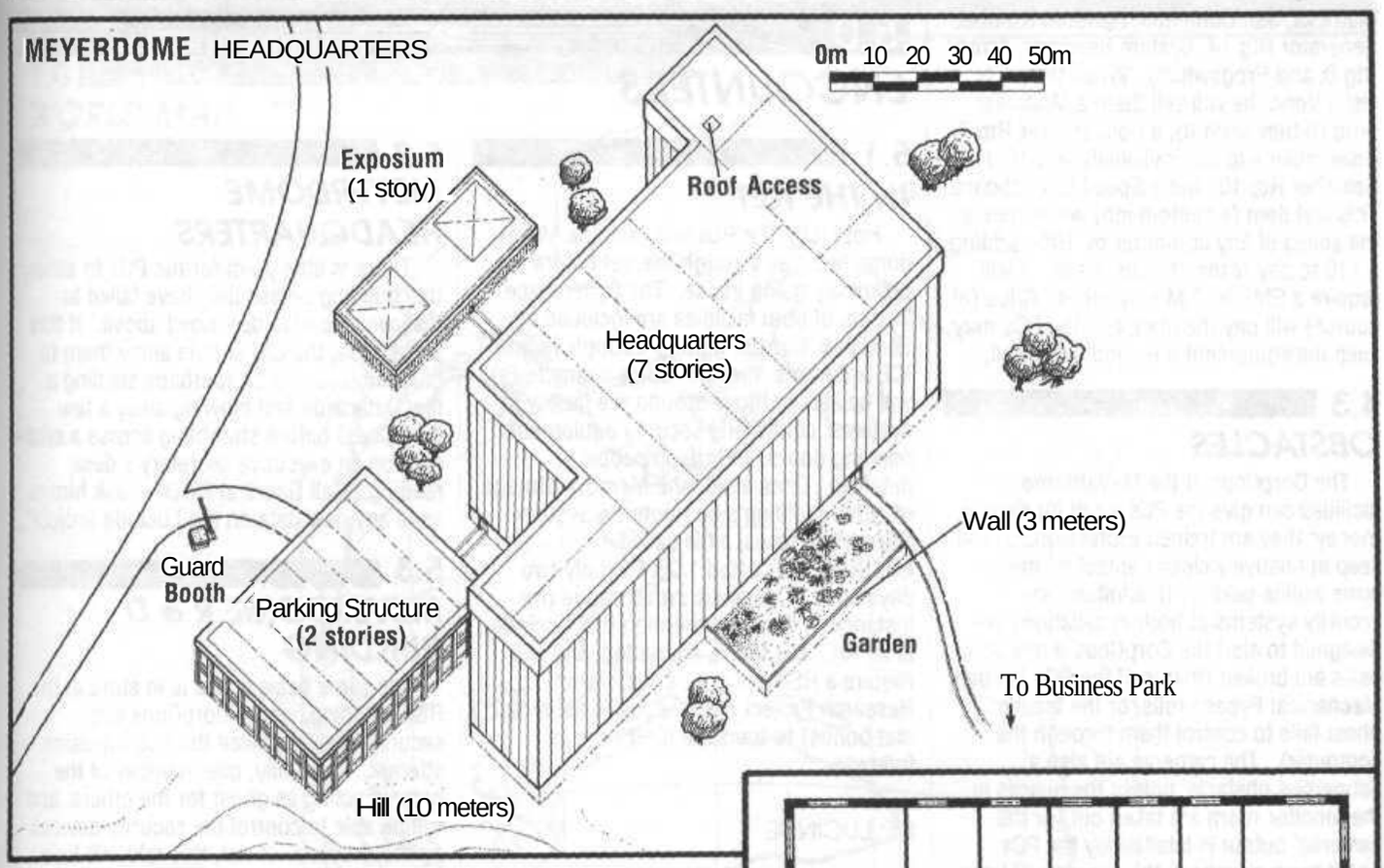
4.1 STARTING THE PLAYERS

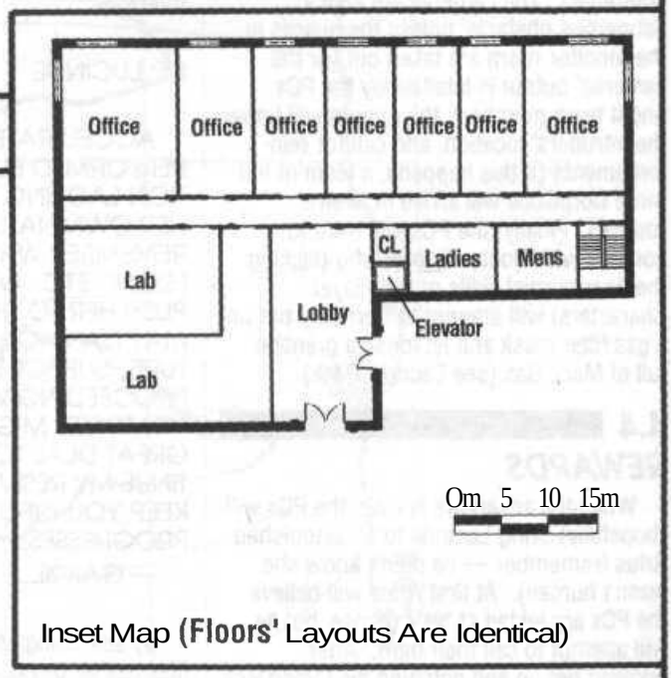
There are several ways to get the PCs into this adventure. If your player group is new to the campaign, it is a good idea to assume that all their characters know each other and have worked together in the past (or maybe they are a regular team). Likewise, it might be a good idea to assume that one of the PCs knows Arlus DeSangue already (maybe he is a PCs contact). If not, a SM/StW:M will reveal his identity as soon as he is spotted in the Uniqorn Qlub. If this fails, the PCs could overhear a nearby NPC mentioning it (e.g., "A wheel like DeSangue wouldn't hang here without a mighty good reason — he's got some kinda biz for sale…").

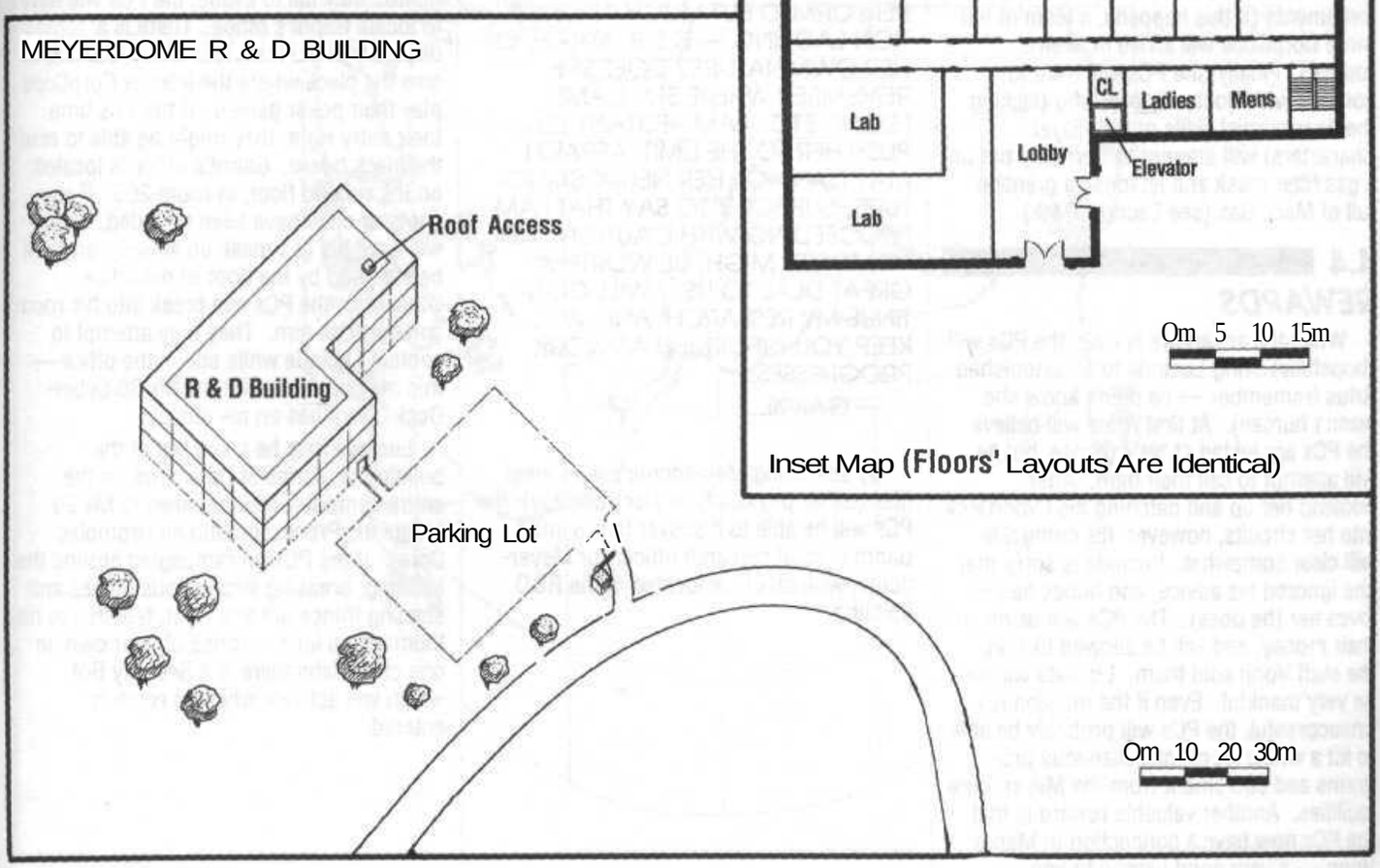
Work the PCs toward DeSangue, and let it be known that he is indeed looking to hire a discreet group of risk-takers. Arlus will let a few important facts be known. One: he is quite rich (this is pretty obvious). Two: he wants someone to break into Meyerdome to find a "missing person". Three: he's quite emotional about this subject, and is willing to pay the PCs $5000 each plus equipment charges. If the PCs seem interested, he will tell them that his lady Lucinde broke into Meyerdome's computers four days ago, and will relate their last brief conversation. When the Players agree to his terms of employment, he will breathe a sigh of relief and hurry them out of the club. His servant (Max; a level three Tech Rat with a Drive skill bonus of 60) will take them to the home of his father's good friend Marko Vonn, where Arlus will insist on doing the talking.

4.2 AIDS

Arlus' GEM sportscar (driven by Max) will be at the PCs disposal should they need it, and Max himself might be willing to take some responsibility upon himself (he's a good man, and cares deeply for his employer). In addition, Arlus will allow the PCs to use his CyberDeck if necessary (a Mk 25 model, with the following programs:


MEYERDOME HEADQUARTERS
0m 10 20 30 40 50m
Exposium
(1 story)
Roof Access
Headquarters
(7 stories)
Wall (3 meters)
Guard
Booth
Parking Structure
(2 stories)
Garden
To Business Park
Hill (10 meters)


Office
Office
Office
Office
Office
Office
Office
Lab
Lab
Lobby
CL
Ladies
Mens
Elevator
0m 5 10 15m
Inset Map (Floors' Layouts Are Identical)


MEYERDOME R & D BUILDING
Roof Access
R & D Building
Parking Lot
0m 10 20 30m

Matricks, Self Definition, Random Number Generator Rtg 14, System Searcher, Armor Rtg 8, and Progswitch). When the party visits Vonn, he will sell them a Multiuser prog (if they want it), a Codebreaker Rtg 7, Dissembler Rtg 20, Invisibility Rtg 16, File Searcher Rtg 10, and a Speed Circuitboard. This last item (a custom job) will increase the speed of any computer by 10%, adding a +10 to any research rolls made. It will require a SM/ElecT:M to insert it. Arlus (of course) will pay the man, and the PCs may keep the equipment if the job goes well.

4.3 OBSTACLES

The CorpCops at the Meyerdome facilities can give the PCs a run for their money; they are trained professionals, and keep in relatively close contact by microwave walkie-talkies. In addition, the security systems at both installations are designed to alert the CorpCops if any door seals are broken (that is, if the PCs fail their Mechanical Bypass rolls, or the team's ghost fails to control them through the computer). The cameras are also a dangerous obstacle: unless the guards in the monitor room are taken out (or the cameras' output is falsified by the PCs ghost team member), the guards will know the intruders' location, and call for reinforcements (if this happens, a team of ten more CorpCops will arrive in twelve rounds). Finally, the PCs will have to contend with Doctor Gabril, who (lacking the finer martial skills of the Player Characters) will attempt to hurriedly put on a gas filter mask and let loose a grenade full of Mace Gas (see Section T 4.2).

4.4 REWARDS

When the adventure is over, the PCs will (hopefully) bring Lucinde to an astonished Arlus (remember— he didn't know she wasn't human). At first Arlus will believe the PCs are joking at his expense, but he will attempt to call their bluff. After hooking her up and patching his CyberDeck into her circuits, however, his confusion will clear somewhat. Lucinde is sorry that she ignored his advice, and hopes he still loves her (he does). The PCs will be given their money, and will be allowed to keep the stuff Vonn sold them. Lucinde will also be very thankful. Even if the mission is unsuccessful, the PCs will probably be able to lift a whole lot of miscellaneous programs and equipment from the Meyerdome facilities. Another valuable reward is that the PCs now have a connection to Marko Vonn — a very good person to know.

5.0 ENCOUNTERS

5.1 IN THE NET

Hopefully, the PCs will case the Meyerdome facilities through the Net before physically going inside. The Cyberspace layouts of both facilities are included in Section 6.4. After getting through various ICE programs, the Net Junkie character(s) will be able to move around the facility's systems; controlling security equipment, opening doors, and rifling people's datafiles. Once inside the Memory Storage of either building's computer, a System Search will reveal a file called LUCINDE.TXT, dated 1/23/90 (only two days ago). This file is rather vague (for instance, it does not mention that Lucinde is an AI). The text is encrypted, and will require a RS/Re:V (i.e., a *Very Hard* Research Project modified by Reasoning stat bonus) to translate it. It runs as follows:

RE: LUCINDE 1/23/90

ACCELERATED MEMORY SCANS PERFORMED BUT MUCH INFORMATION LACKING — IS SHE AWARE OF HER OWN NATURE? DOES SHE REMEMBER WHERE SHE CAME FROM? ETC. I AM HESITANT TO PUSH HER TO THE LIMIT, AFRAID I MAY DAMAGE HER NEUROSTRUCTURE. SUFFICE IT TO SAY THAT I AM PROCEEDING WITH CAUTION. HER MEMORIES MIGHT BE WORTH A GREAT DEAL TO US. I WILL CONTINUE MY RESEARCH, AND WILL KEEP YOU INFORMED AS WORK PROGRESSES.

— GABRIL

By searching Meyerdome's personnel files (either physically or electronically), the PCs will be able to discover that Samda Gabril is chief research officer for Meyerdome, with an office located in the R&D building.

5.2 MEYERDOME HEADQUARTERS

There is little point for the PCs to enter this building unless they have failed to discover the note described above. If this is the case, the GM should allow them to blunder around a bit (perhaps stealing a few Datacards and blowing away a few CorpCops) before stumbling across a stick-note on an executive secretary's desk reading: "Call Gabril at R&D — ask him to send any new data on the Lucinde project".

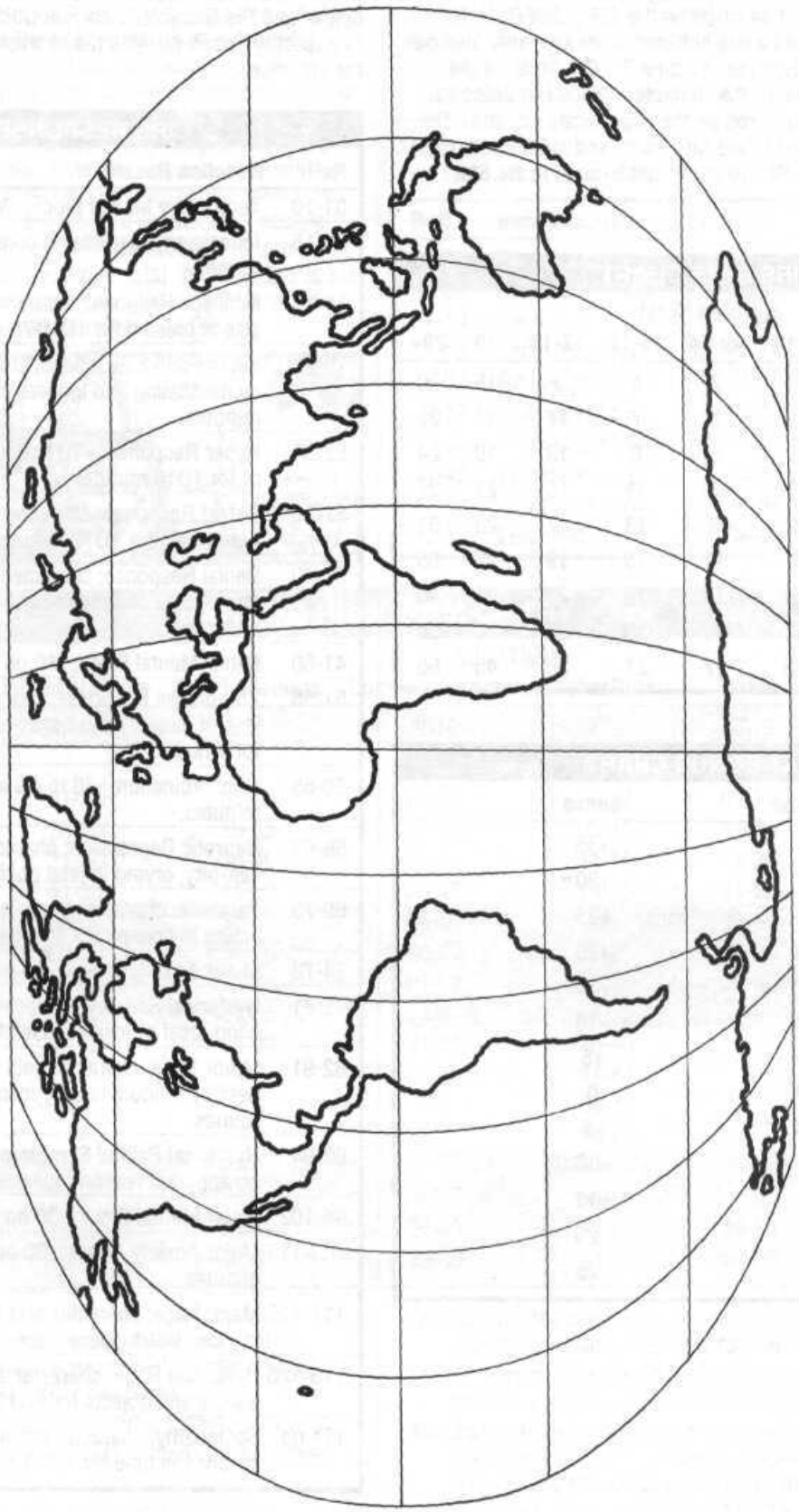
5.3 MEYERDOME R & D BUILDING

The same basic scene is in store at the R&D building, where CorpCops and security systems await the PCs intrusion attempt. Hopefully, one member of the party is acting as ghost for the others, and will be able to control the security devices on the grounds. If not, this raid will be a bit harder to pull off. After dealing with any guards they fail to evade, the PCs will have to locate Gabril's office. There is a directory in the first floor lobby, but this is also the place where the interior CorpCops play their poker games. If the PCs time their entry right, they might be able to read the black board. Gabril's office is located on the second floor, in room 205. If any shots or cries have been sounded, Gabril will have his gas mask on already, and will be standing by the door of his office. Otherwise, the PCs can break into his room and surprise him. They may attempt to contact Lucinde while still in the office — this may be done with the Mk 30 CyberDeck Gabril has on his desk.

Lucinde may be taken out of the building on series of Datacards, or the entire computer may be taken (a Mk 29 Linguistic Processor with an Orgmolec Core). If the PCs go rampaging around the building, breaking into various offices and stealing things left and right, feel free to hit them with a little surprise of your own: in one of the labs there is a Security Bot which will activate when its room is entered.

1.0

WORLD MAP



2.0 CIRS CHARTS

Whenever a character has a Cyber System implanted (just after the operation), a roll must be made on the *CIRS Stat Chart* to determine whether or not he has suffered some Empathy loss due to a raising of the CIRS Stat (see Section T 1.0). Total up the number of Cyber Systems in the character's body (neurological systems count double), and roll on the appropriate column. The resulting number is added to the CIRS Stat, and subtracted from the character's Empathy Stat (don't forget to change the Stat Bonus, if this is effected).

CIRS STAT CHART

	Systems Total							
Roll	1-4	5-8	9-11	12-14	15-16	17-18	19	20+
01-05	0	0	0	2	5	9	15	20
06-10	0	0	1	3	7	11	17	22
11-20	0	1	2	5	9	13	19	24
21-40	0	2	3	7	11	15	21	27
41-60	1	3	5	9	13	17	23	31
61-80	1	5	7	11	15	19	25	35
81-90	2	7	9	13	17	21	27	40
91-95	3	9	11	15	19	25	35	50
96-00	4	11	13	17	21	30	45	60

STAT BONUS CHART

1-100 Stat	Bonus
102+	+35
101	+30
100	+25
98-99	+20
95-97	+15
90-94	+10
75-89	+5
25-74	0
10-24	-5
5-9	-10
3-4	-15
2	-20
1	-25

As detailed in Section T 1.0, the *CIRS Response Chart* is used whenever a cyberized character (PC or NPC) enters a stressful situation (the definition of stress depends on the character's CIRS Stat). When this happens, a roll of 1D100 is made on the chart below, and the character's current CIRS Stat is added to the roll. The reaction result dictates the character's behavioral response to the situation.

CIRS RESPONSE CHART

Roll	Reaction Result
01-10	Temporary Mental Block; -30 on next Cyber use.
11-15	Indecision; character is considered "Stunned" for 1D6 rounds.
16-18	Nihilistic Response; character acts as though no one else is present for 1D10 rounds.
19-21	Introspective Response; character decides to calm self by meditating and ignores everything else for 1D10 minutes.
22-31	Hyper Response; +10 to Qu but -10 to Ag, SD, Re and In for 1D10 minutes.
32-36	Defeat Response; character gives up and stops trying (whatever) for 1D10 minutes.
37-40	Denial Response; character fails to register danger/ importance of situation and reacts casually for 1 D20 minutes.
41-50	Minor Mental Block; -10 on all Cyber use for 1 hour.
51-55	Withdrawal Response; character leaves area (regardless of danger) and heads for known "safe" location for 1 hour.
56-65	Uncoordination; -30 to AG and -10 to SD for 5D6 minutes.
66-68	Neurotic Depression; character enters intense state of self-pity, crying in fetal position for 1 D20 minutes.
69-73	Paranoia; character trusts no one and believes all are acting in conspiracy against him for 1 D6 hours.
74-78	Minor Anxiety Attack; -20 on all actions for 5 minutes.
79-81	Hysterical Sensory Symptom; character becomes blind, deaf or loses sense of touch for 1 D10 minutes.
82-91	Minor Rage; character gets frustrated and attacks to destroy random nearby inanimate objects for 1D10 rounds.
92-94	Hysterical Painful Symptom; character feels pains for no apparent reason; operates at a -30 for 1D6 hours.
95-102	Major Mental Block; -30 on all Cyber use for 1 hour.
103-110	Major Anxiety Attack; -30 on all actions for 30 minutes.
111-115	Major Rage; character gets enraged and attacks to kill random nearby people for 1 D20 rounds.
116-120	Hysterical Rage; character attacks random nearby people and objects for 2D10 minutes.
121 up	Sociopathy; character becomes bent on murder of random victims for 1 D10 days.

3.0 RANDOM PROGRAM GENERATION

Throughout the course of your campaign, many instances are bound to arise when the Players have made their way into a distant Computer system or personal Datacard library, and will want to know just what's there for them to steal. The following table is provided for just these circumstances. Depending on the nature of the location (or owner of the Computer system), rolls are made on the appropriate column, and the nature of any programs or files found there is easily determined. Note that most of the results on the chart only indicate the general type of program/file found, and require that the GM make a decision or roll against the possible options to determine the exact program. In addition, no provision is made for the Rtg# or Mk# of the program(s) found — this too is up to the GM to determine (most can be rolled on a D10, while those owned by corporations may be rolled on a D20).

4.0 RANDOM BODY LOCATIONS

The following chart is designed for use whenever a hit location is desired but no Critical result was obtained. It is also useful to determine the exact placement of Cybernetic Implants such as Subdermal Armor, etc.

To use the chart, simply roll 1D100. If the attack was aimed high (toward the upper half of the body), you may wish to apply a Mod of up to -30. Conversely, if the attack was aimed low, a Mod of up to +42 may be applied.

Roll	Body Location	Roll	Body Location
01-02	Top of head	53-54	Right hand
03-06	Face/Back of head	55-62	Left lower torso
07-10	Neck	63-70	Right lower torso
11-16	Left upper arm	71-76	Groin/Buttocks
17-22	Right upper arm	77-82	Left upper leg
23-32	Left upper torso	83-88	Right upper leg
33-42	Right upper torso	89-92	Left lower leg
43-46	Left lower arm	93-96	Right lower leg
47-50	Right lower arm	97-98	Left foot
51-52	Left hand	99-00	Right foot

RANDOM PROGRAM CHART

	LOCATION					
	Personal/Home	Small Business	Coporate/Military	CyberDeck	Robot	NAC
Number of Programs	1D20	3D6	3D10	2D6	1D10	1D10
PROGRAM TYPE						
Miscellaneous Application	01-25	01-25	01-15	01-02	01-10	01-05
Text (Important)	26-30	26-35	16-30	03-10	11-15	06-08
Text (Mundane)	31-50	36-40	31-33	11-13	16-20	09-10
Connections	51-55	41-50	34-43	14-15	21-22	11-15
Game	56-65	51-55	44-45	16	23-25	16-20
General Use/Utility (*)	66-75	56-70	46-60	17-25	26-35	21-35
Special Ability (*)	76-80	71-80	61-73	26-30	36-45	36-55
Access Security (*)	81-82	81-85	74-83	31-35	—	—
ICE (*)	83-85	86-90	84-93	36-40	—	—
Matrix Presentation (*)	—	—	—	41-65	—	—
User Presentation (*)	—	—	—	66-75	—	—
Intrusion (*)	—	—	—	76-80	—	—
Remote Application (*)	—	—	—	81-90	—	—
CyberDeck Utility (*)	—	—	—	91-99	—	—
Skill (*)	86-98	91-97	94-95		46-95	56-00
Artificial Intelligence	99-00	98-00	96-00	00	96-00	—

CODES AND COMMENTS

Miscellaneous Applications include calculating, accounting, word processing, calendar, spreadsheet, printer control, organization and general office programs.

Text (Important) includes business records, letters, diaries, etc.

Text (Mundane) includes shopping lists, "things to do" schedules, poetry, etc.

Connections include names, phone numbers, addresses, services, etc.

Games include interactive text adventures, computer board games, and game rules (for NAC and Robot brains).

(*) = Program Types listed in Section T 2.6; GM must roll or choose a usable program from the appropriate category.

Artificial Intelligence programs are generally of restricted level (see Section T 2.7). Corporations and Military groups have a 10% chance of possessing an illegally intelligent construct. All others have a 1% chance.

MASTER CHARACTER CHART (5.1)

	SLEAZE (level) 1	3	5	7	10	15	20	SNEAK (level) 1	3	5	7	10	15	20	KILLER (level) 1	3	5	7	10	15	20
Primary Armor	NoA	NoA	NoA	LBA	LBA	LBA	LBA	NoA	NoA	NoA	NoA	NoA	NoA	NoA	Any	Any	Any	Any	Any	Any	Any
Maneuver/Movement Bonus	5	10	10	-5	-5	-5	-5	15	15	15	15	15	15	15	0	0	0	5	5	5	5
Weapon Skills: Primary	5	15	25	35	50	60	70	21	33	45	57	69	84	97	38	64	81	95	113	137	157
Secondary	-25	5	5	5	5	5	5	21	33	45	57	69	84	97	28	44	60	76	94	119	142
Tertiary (& rest)	-25	-25	-25	-25	-25	-25	-25	-20	10	10	15	20	25	30	28	44	60	76	94	119	142
General **Skills:** Primary	21	33	45	57	66	81	93	20	25	30	35	40	52	56	21	28	35	42	50	65	74
Secondary	11	23	30	37	50	65	74	15	20	25	30	35	50	54	16	23	30	37	45	60	69
Tertiary (& rest)	6	8	15	22	25	35	45	-25	-25	5	5	5	10	10	-25	-25	5	5	5	10	10
Subterfuge Skills: Primary	15	25	35	45	60	70	80	38	64	81	95	113	137	157	15	20	25	30	35	45	52
(+ by 5 for Ambush) Secondary	-25	5	5	5	5	5	5	28	44	60	76	97	122	146	10	15	20	25	30	40	50
Tertiary (& rest)	-25	-25	-25	5	5	5	5	23	39	55	71	92	117	141	5	5	5	10	10	10	15
Social Skills: Primary	38	64	81	95	113	137	157	16	28	40	52	64	79	92	20	20	20	25	25	25	30
Secondary	38	64	81	95	113	137	157	16	28	40	52	64	79	92	10	10	10	10	15	15	15
Tertiary (& rest)	28	44	60	76	91	116	138	11	18	25	32	40	55	70	-25	-25	-25	-25	5	5	5
Cyberspace Skills: Primary	-20	10	10	10	10	10	10	20	20	25	20	30	30	35	-25	5	5	5	10	10	10
Secondary	-20	-20	-20	5	5	5	5	-15	15	15	15	15	15	15	-25	-25	-25	-25	5	5	5
Tertiary (& rest)	-20	-20	-20	-20	5	5	5	-25	-25	-25	-25	5	5	5	-25	-25	-25	-25	-25	-25	-25
Technical Skills: Primary	21	33	45	57	66	81	93	20	25	30	35	40	45	50	10	15	20	25	30	40	50
Secondary	11	23	30	37	50	65	74	15	20	25	30	35	40	45	-25	5	10	15	20	25	30
Tertiary (& rest)	6	8	15	22	25	35	45	-25	-25	-25	-25	5	5	5	-25	-25	-25	-25	5	5	5
Special Skills: Perception	23	39	55	71	92	117	141	26	38	50	62	77	92	107	10	15	20	25	30	40	50
Body Development (hits)	12	22	27	32	42	57	72	18	25	32	39	52	67	82	38	54	70	86	110	150	190
Cyber Attunement	5	10	15	20	25	35	45	15	15	20	20	25	30	35	-25	5	5	5	10	15	20
Linguistics (# of languages)	3	3	3	4	4	4	5	2	2	2	2	3	3	4	1	1	2	2	2	3	3
Secondary Skills: Primary	20	25	30	35	45	60	70	20	25	30	35	45	60	70	20	25	30	35	45	60	70
Secondary	20	25	30	35	45	60	70	20	25	30	35	45	60	70	15	20	25	30	35	40	45
Tertiary (& 1 other)	10	10	15	15	20	30	40	10	10	15	15	20	30	40	-15	15	15	20	20	25	30

	NET JUNKIE (level) 1	3	5	7	10	15	20	JOCKEY (level) 1	3	5	7	10	15	20	TECH RAT (level) 1	3	5	7	10	15	20
Primary Armor	NoA	NoA	NoA	NoA	NoA	NoA	NoA	LBA	LBA	LBA	LBA	LBA	LBA	LBA	NoA	NoA	NoA	NoA	NoA	NoA	NoA
Maneuver/Movement Bonus	5	5	5	5	5	5	5	-10	0	0	0	0	0	0	10	10	10	10	10	10	10
Weapon Skills: Primary	5	10	20	30	40	54	60	26	38	50	62	74	89	102	10	20	30	40	52	62	71
Secondary	-25	5	5	5	10	15	20	26	38	50	62	74	89	102	-25	5	5	5	5	5	5
Tertiary (& rest)	-25	-25	-25	-25	-25	-25	-25	-20	15	15	20	25	30	35	-25	-25	-25	-25	-25	-25	-25
General Skills: Primary	20	25	30	35	40	50	57	33	59	79	93	112	136	156	26	38	50	62	74	89	102
Secondary	10	15	20	25	30	40	50	28	44	60	76	94	119	142	11	23	35	47	62	77	91
Tertiary (& rest)	-25	-25	-25	-25	5	5	5	28	44	60	76	94	119	142	6	13	20	27	40	55	70
Subterfuge Skills: Primary	15	20	25	30	35	45	55	5	5	10	10	10	15	20	10	15	20	25	30	35	40
(+ by 5 for Ambush) Secondary	-15	15	20	25	30	40	50	-20	-20	10	10	10	10	10	-25	5	10	15	20	25	30
Tertiary (& rest)	-15	-15	15	15	15	15	15	-25	-25	-25	-25	5	5	5	-25	-25	-25	-25	5	10	15
Social Skills: Primary	-10	15	15	15	20	20	25	5	10	15	20	25	30	35	20	25	30	35	40	45	50
Secondary	-10	-10	15	15	15	20	20	5	10	15	20	25	30	35	15	20	25	30	35	40	45
Tertiary (& rest)	-20	-20	20	-20	10	10	10	-25	-25	-25	-25	5	10	15	5	5	5	5	10	15	20
Cyberspace Skills: Primary	28	54	80	94	115	140	160	16	28	40	52	70	85	100	-10	20	20	20	20	20	20
Secondary	18	34	50	66	90	115	140	6	13	20	27	35	45	55	-15	-15	-15	-15	15	15	15
Tertiary (& rest)	13	29	45	61	85	110	135	-24	-22	10	12	15	25	30	-25	-25	-25	-25	-25	5	5
Technical Skills: Primary	21	33	45	57	69	84	97	26	38	50	62	74	89	102	43	69	86	100	118	142	162
Secondary	16	28	40	52	64	79	92	11	18	25	32	40	50	60	28	44	60	76	97	122	147
Tertiary (& rest)	11	23	35	47	59	74	87	-24	-22	10	12	15	25	30	18	34	50	66	87	115	140
Special Skills: Perception	15	20	25	30	35	45	55	5	10	15	20	25	35	45	12	26	40	54	75	95	115
Body Development (hits)	12	22	27	32	42	57	72	32	37	42	47	53	63	73	12	22	27	32	42	57	72
Cyber Attunement	23	39	55	71	95	120	145	6	18	30	42	60	75	100	6	13	20	27	35	50	70
Linguistics (# of languages)	2	2	2	3	3	3	4	1	1	1	2	2	2	3	1	1	2	2	2	3	3
Secondary Skills: Primary	20	25	30	35	45	60	70	20	25	30	35	45	60	70	20	25	30	35	45	60	70
Secondary	20	25	30	35	45	60	70	20	25	30	35	45	60	70	20	25	30	35	45	60	70
Tertiary (& 1 other)	10	10	15	15	20	30	40	10	10	15	15	20	30	40	10	10	15	15	20	30	40

ASSUMPTIONS: (No equipment bonuses or cyber system bonuses are included. Secondary skills include a +10 stat bonus.)

Sleaze: Em(+10),Pr(+10),In(+10),Re(+5),rest (+0); UCorp Social Class.
Sneak: In(+15),SD(+10),Ag(+5) Me(+5),rest (+0); USprl Social Class.
Killer: St(+10),Ag(+10),Co(+10),Qu(+5),rest (+0); LSprl Social Class.
Net Junkie: SD(+15),In(+10),Re(+5),Me(+5),rest (+0); MCorp Social Class.
Jockey: Me(+10),Ag(+10),Qu(+10),SD(+5),rest (+0); RRWrk Social Class.
Tech Rat: Re(+15),Me(+10),Em(+5),In(+5),rest (+0); LCorp Social Class.

RANDOM CYBER SYSTEMS CHART (5.2)

Roll Plus Level	CHARACTER PROFESSION					
	Sleaze	Sneak	Killer	Net Junkie	Jockey	Tech Rat
01-20	Vocal Amplifier	Subdermal Pouch	Visual Clarity	Nerve Booster	Light Generator	Light Generator
21-30	Vocal Modulator	Sensitouch	LowLight	DNI Jack	Sensitouch	DNI Jack
31-40	Vocal Emulator	MegaVision	Adrenal Booster	NAC Processor	MicroVision	NAC Processor
41-50	Directional Microphone	DNI Jack	DNI Jack	MicroVision	Visual Clarity	Sensitouch
51-60	Audio Amplifier	Claws	NAC Processor	Sensitouch	MicroVideo	MicroVision
61-70	Audiorecord	Electronics Detector	Weapon Hand	Visual Processor	Eye/Hand Coordinator	MicroVideo
71-80	Audio Processor	Subdermal Padding	Subdermal Padding	FastHand	DNI Jack	Visual Clarity
81-90	Audio Data Transceiver	NAC Processor	Cyber Limb	Eye/Hand Coordinator	NAC Processor	Eye/Hand Coordinator
91-100	DNI Jack	Nerve Booster	BioRadar	PainBlocker	Toolhand	ToolHand
101-120	NAC Processor	BioRadar	AI Cyber Weapon	ASP Recorder Transceiver	Sensory Data Transceiver	Nerve Booster
121 up	ASP Recorder	Sensory Processor	Body Plating	Sensory Data Transceiver	ASP Recorder	Sensory Data Transceiver

MASTER WEAPONS CHART (Melee and Bow Weapons) (7.1)

Weapon Name	Fumble Range	Attack Table Used	Attack Size	Critical Type	Range (Meters)/OB Modification			
					Point Blank	Short	Medium	Long
Bola	7	Melee	Small	Impact	7/0	30/-20	50/-40	—
Broadsword	3	Melee	Large	Slash	—	—	—	—
Broken Bottle	3	Brawl	Small	Slash	—	—	—	—
Chain	5	Melee	Medium	Impact	—	—	—	—
Thrown	4	Melee	Medium	Impact	5/-10	25/-25	—	—
Club/Pipe	4	Melee	Medium	Impact	—	—	—	—
Thrown	3	Melee	Medium	Impact	3/-40	—	—	—
Composite Bow	4	Melee	Medium	Puncture	3/+15	30/+0	70/-35	100/-60
Crossbow (Lt)	5	Melee	Medium	Puncture	3/+15	307+0	70/-35	100/-50
Crossbow (Hvy)	5	Melee	Heavy	Puncture	6/+30	30/+0	70/-25	100/-40
Dagger/Knife	1	Melee	Small	Slash	—	—	—	—
Thrown	2	Melee	Small	Puncture	3/-10	8/-20	17/-30	—
Hand Axe	4	Melee	Small	Slash	—	—	—	—
Thrown	4	Melee	Small	Slash	3/-15	8/-30	17/-45	—
Javelin	4	Melee	Medium	Puncture	—	—	—	—
Thrown	4	Melee	Medium	Puncture	3/0	17/-20	30/-40	—
Karatand	1	Brawl	Brawl	Brawling	+15		—	—
Katana	2	Melee	Urge	Slash	—	—	—	—
Long Bow	5	Melee	Large	Puncture	3/+20	30/+0	70/-30	100/-40
Orchid	3	Melee	Medium	Slash	3/+10	—	—	—
Rock	1	Melee	Small	Brawling	—	—	—	—
Thrown	2	Melee	Small	Brawling	15/-5	40/-20	50/-50	—
Shiruken	4	Melee	Small	Puncture	3/+25	15/+0	30/-40	45/-65
Short Bow	4	Melee	Small	Puncture	3/+10	30/+0	60/-40	80/-70
Short Sword	2	Melee	Medium	Slash	—	—	—	—
Sling	6	Melee	Small	Impact	3/+25	20/+0	40/-40	60/-65
Spear	5	Melee	Large	Puncture	—	—	—	—
Thrown	5	Melee	Large	Puncture	3/-10	8/-20	17/-30	—
Staff/Jo	3	Melee	Medium	Impact	—	—	—	—

MASTER WEAPONS CHART (Projectile and Energy Weapons) (7.1)

Weapon Name	Weapon Type	Firing Rate	Failure Range	Range (Meters) PB	SR	MR	LR	OB Range Modifiers PB	SR	MR	LR	Attack Table Used	Ammunition Shots	Bursts	Notes Load
PROJECTILE WEAPONS (PISTOLS):															
5mm Pistol	1H Proj	2/rnd	2	1	10	20	50	+15	+0	-30	-90	Sml Proj Mk.1	10	—	Mag
Mirage 5X	1H Proj	2/rnd	2	1	10	20	50	+15	+5	-30	-80	Sml Proj Mk.1	10	—	Mag
GRU 05K	1H Proj	2/rnd	3	1	10	20	30	+10	-5	-40	-90	Sml Proj Mk.1	10	—	Mag
WaltherPPK	1H Proj	2/rnd	1	2	10	20	50	+20	+10	-30	-70	Sml Proj Mk.1	10	—	Mag
10mm Pistol	1H Proj	2/rnd	2	2	15	30	80	+15	+0	-30	-90	Sml Proj Mk.2	10	—	Mag
Glock 17D	1H Proj	2/rnd	2	2	15	30	80	+20	+10	-20	-70	Sml Proj Mk.2	10	—	Mag
Beretta 95S	1H Proj	2/rnd	2	2	15	30	80	+15	+5	-20	-90	Sml Proj Mk.2	10	—	Mag
H&K200K	1H Proj	2/rnd	1	2	15	30	80	+15	+5	-30	-80	Sml Proj Mk.2	10	—	Mag
Mirage 10X	1H Proj	2/rnd	2	2	15	30	80	+15	+0	-30	-80	Sml Proj Mk.2	10	—	Mag
GRU 10G	1H Proj	2/rnd	2	2	15	30	80	+15	+0	-30	-90	Sml Proj Mk.2	10	—	Mag
SteyrGB-98	1H Proj	2/rnd	2	2	15	30	80	+15	+5	-25	-90	Sml Proj Mk.2	10	—	Mag
12mm Hvy Pistol	1H Proj	2/rnd	2	2	20	40	100	+15	+0	-30	-90	Sml Proj Mk.3	10	—	Mag
H&K MP-9	1H Proj	2/rnd	2	2	20	40	100	+15	+0	-30	-90	Sml Proj Mk.3	10	—	Mag
GRU Max	1H Proj	2/rnd	3	2	20	40	80	+15	+0	-40	-90	Sml Proj Mk.3	10	—	Mag
PROJECTILE WEAPONS (Machine Pistols & Submachine Guns):															
5mm Lt Machine Pistol	1H Proj	2/rnd	3	2	5	20	50	+15	+0	-30	-90	Sml Proj Mk.1	30	—	Mag
	1H Proj	2 bursts	3	2	5	20	50	+15	+0	-30	-90	Sml Proj Mk.1	—	5	Mag
10mm Med Machine Pistol	1H Proj	2/rnd	3	1	10	30	80	+15	+0	-30	-90	Sml Proj Mk.2	60	—	Mag
	1H Proj	2 bursts	3	2	10	30	60	+15	+0	-30	-90	Sml Proj Mk.2	—	10	Mag
Beretta 95R *	1H Proj	2/rnd	3	2	10	30	80	+15	+0	-30	-90	Sml Proj Mk.2	60	—	Mag
H&K VP70Z *	1 H Proj	2/rnd	3	2	10	30	80	+15	+0	-30	-100	Sml Proj Mk.2	60	—	Mag
10mm Submachine Gun	IHProj	2 bursts	4	2	10	30	60	+15	+0	-30	-90	Sml Proj Mk.2	—	20	Mag
Ingram MAC 10B	1H Proj	2 bursts	5	2	10	20	50	+10	+0	-30	-90	Sml Proj Mk.2	—	20	Mag
Beretta PM-15	1 H Proj	2 bursts	4	2	10	30	60	+15	+5	-30	-90	Sml Proj Mk.2	—	20	Mag
H&K G21	1H Proj	2 bursts	3	2	10	30	60	+15	+0	-30	-90	Sml Proj Mk.2	—	20	Mag
Mini Uzi IV	1H Proj	2 bursts	4	2	10	30	60	+15	+5	-30	-90	Sml Proj Mk.2	—	20	Mag
Uzi III	1H Proj	2 bursts	3	2	10	30	60	+15	+0	-30	-90	Sml Proj Mk.2	—	20	Mag
Mirage S10 Rapier	1 H Proj	2 bursts	4	2	10	30	60	+15	+0	-30	-90	Sml Proj Mk.2	—	20	Mag
GRU Popper	1H Proj	2 bursts	5	2	10	20	50	+10	+0	-30	-90	Sml Proj Mk.2	—	20	Mag
PROJECTILE WEAPONS (Rifles):															
5mm Lt Rifle	2H Proj	2/rnd	2	2	30	90	150	+15	+0	-30	-90	Sml Proj Mk.1	15	—	Mag
10mm Med Rifle	2H Proj	2/rnd	2	3	50	150	500	+15	+0	-30	-90	Sml Proj Mk.2	15	—	Mag
12mm Hvy Rifle	2H Proj	2/rnd	2	5	100	200	700	+15	+0	-30	-90	Sml Proj Mk.3	15	—	Mag
PROJECTILE WEAPONS (Assault Rifles):															
5mm Lt Assault Rifle	2H Proj	2/rnd	2	2	25	50	100	+15	+0	-30	-90	Sml Proj Mk.1	30	—	Mag
	2H Proj	2 bursts	3	2	20	40	80	+15	+0	-30	-90	Sml Proj Mk.1	—	6	Mag
M19 *	2H Proj	2 bursts	2	2	25	50	700	+15	+0	-30	-90	Sml Proj Mk.1	30	—	Mag
Mirage R5 Spear *	2H Proj	2 bursts	2	2	25	50	700	+15	+0	-30	-90	Sml Proj Mk.1	30	—	Mag
GRU S5 (Soldier) *	2H Proj	2 bursts	3	2	25	40	500	+15	+0	-30	-90	Sml Proj Mk.1	30	—	Mag
SteyrAUG C *	2H Proj	2 bursts	2	3	25	50	800	+20	+10	-20	-80	Sml Proj Mk.1	30	—	Mag
H&K 33A5 *	2H Proj	2 bursts	2	2	25	50	700	+15	+5	-30	-90	Sml Proj Mk.1	30	—	Mag
10mm Med Assault Rifle	2H Proj	2/rnd	2	2	40	120	400	+15	+0	-30	-90	Sml Proj Mk.2	60	—	Mag
—	2H Proj	2 bursts	3	3	30	100	300	+15	+0	-30	-90	Sml Proj Mk.2	—	12	Mag
Mirage R10 Lance *	2H Proj	2 bursts	3	3	30	100	300	+15	+0	-30	-90	Sml Proj Mk.2	—	12	Mag
GRU T10 (Trooper) *	2H Proj	2 bursts	3	3	30	100	300	+10	-5	-30	-90	Sml Proj Mk.2	—	12	Mag
PROJECTILE WEAPONS (Machine Guns):															
10mm Lt Machine Gun	Support	2 bursts	3	3	50	150	500	+15	+0	-30	-90	Sml Proj Mk.3	—	8	Mag
10mm Med Machine Gun	Support	2 bursts	3	5	50	200	800	+15	+0	-30	-90	Sml Proj Mk.3	—	8	Mag
12mm Hvy Machine Gun	Support	2 bursts	3	10	100	300	1000	+15	+0	-30	-90	Sml Proj Mk.4	—	10	Belt
PROJECTILE WEAPONS (Shotguns):															
15mm Shotgun §	2H Proj	2/rnd	2	3	20	40	60	+15	+0	-30	-90	Shotgun	2	—	Brch
15mm Autoshotgun §	2H Proj	2/rnd	2	3	20	40	60	+15	+0	-30	-90	Shotgun	15	—	Mag
	2H Proj	2 bursts	3	3	15	30	50	+15	+0	-30	-90	Shotgun	—	3	Mag
20mm Shotgun §	2H Proj	2/rnd	2	3	25	50	80	+30	+0	-30	-90	Shotgun	2	—	Brch
20mm Autoshotgun §	2H Proj	2/rnd	2	3	25	50	80	+30	+0	-30	-90	Shotgun	15	—	Mag
	2H Proj	2 bursts	3	3	20	40	70	+30	+0	-30	-90	Shotgun	—	3	Mag
PROJECTILE WEAPONS (Taser Guns & Gas Guns):															
Taser Pistol **	1H Proj	1/rnd	5	2	3	4	5	+15	+0	-10	-20	Sml Proj Mk.1	1	—	Brch
Mirage Punch **	1H Proj	1/rnd	4	2	3	4	5	+20	+5	+5	-10	Sml Proj Mk.1	1	—	Brch
Taser Rifle **	2H Proj	2/rnd	5	2	10	20	30	+15	+0	-30	-90	Sml Proj Mk.3	5	—	Mag
Mirage Slammer **	2H Proj	2/rnd	5	2	10	20	30	+20	+5	-20	-80	Sml Proj Mk.3	5	—	Mag
Gas Gun	1H Proj	1/rnd	2	—	—	—	—	—	—	—	—	Special	1	—	Canistr

Weapon Name	Weapon Type	Firing Rate	Failure Range	Range (Meters) PB	SR	MR	LR	OB Range Modifiers PB	SR	MR	LR	Attack Table Used	Ammunition Shots	Bursts	Notes Load
PROJECTILE WEAPONS (Needle Guns):															
Needle Pistol	1H Proj	2 bursts	4	3	10	20	30	+15	+0	-30	-90	Sml Proj Mk.1	—	2	Mag
Mirage Zipper	1H Proj	2 bursts	4	3	10	20	30	+15	+5	-30	-90	Sml Proj Mk.1	—	2	Mag
Steyr NY-5	1H Proj	2 bursts	3	3	10	20	35	+25	+10	-20	-90	Sml Proj Mk.1	—	2	Mag
H&K Pulsar 10	1H Proj	2 bursts	3	3	10	20	30	+20	+5	-25	-90	Sml Proj Mk.1	—	2	Mag
Beretta NP	1H Proj	2 bursts	4	3	10	20	30	+15	+0	-30	-90	Sml Proj Mk.1	—	2	Mag
Needle Rifle	2H Proj	2 bursts	4	3	20	30	40	+15	+0	-30	-90	Sml Proj Mk.3	—	6	Mag
Mirage Zipper	2H Proj	2 bursts	4	3	20	30	40	+15	+0	-30	-90	Sml Proj Mk.3	—	6	Mag
Steyr NY-12	2H Proj	2 bursts	3	3	20	30	50	+20	+10	-30	-80	Sml Proj Mk.3	—	6	Mag
H&K Pulsar 100	2H Proj	2 bursts	3	3	20	30	40	+15	+5	-30	-80	Sml Proj Mk.3	—	6	Mag
Beretta NP	2H Proj	2 bursts	4	3	20	30	40	+20	+10	-30	-90	Sml Proj Mk.3	—	6	Mag
PROJECTILE WEAPONS (Rocket Guns & Gauss Guns):															
Rocket Pistol	1H Proj	2/rnd	4	0	100	300	900	+0	+0	-30	-90	Sml Proj Mk.3	5	—	Mag
Rocket Rifle	2H Proj	2/rnd	4	0	100	300	900	+0	+0	-30	-90	Sml Proj Mk.3	15	—	Mag
	2H Proj	2 bursts	4	0	75	150	600	+0	+0	-30	-90	Sml Proj Mk.3	—	3	Mag
Gauss Pistol †	1H Proj	2/rnd	5	5	100	500	1000	+0	+0	-30	-100	Sml Proj Mk.4	4	—	Mag
Mirage XL-3	1H Proj	2/rnd	5	5	100	500	1000	+5	+0	-30	-100	Sml Proj Mk.4	4	—	Mag
H&K HK MA41	1H Proj	2/rnd	4	5	100	500	1000	+10	+5	-30	-80	Sml Proj Mk.4	4	—	Mag
Voerimg 30-M	1H Proj	2/rnd	4	5	100	500	1000	+10	+15	-30	-80	Sml Proj Mk.4	4	—	Mag
Gauss Rifle ‡	2H Proj	2/rnd	5	5	200	600	2000	+0	+0	-30	-100	Sml Proj Mk.5	6	—	Mag
Mirage XL-5	2H Proj	2/rnd	5	5	200	600	2000	+5	+0	-30	-100	Sml Proj Mk.5	6	—	Mag
H&K HK MA53	2H Proj	2/rnd	5	5	200	600	2000	+10	+5	-30	-90	Sml Proj Mk.5	6	—	Mag
Voerimg 90-M	2H Proj	2/rnd	5	5	200	600	2000	+10	+15	-30	-80	Sml Proj Mk.5	6	—	Mag
PROJECTILE WEAPONS (Launchers):															
Grenade Rifle ¥	Support	2/rnd	2	10	30	60	100	+100	+50	+0	-50	Lncher Error	5	—	Mag
RPG Launcher	Support	1/rnd	2	10	100	200	600	+100	+50	+20	+0	Lncher Error	1	—	Brch
Port Missile Launcher	Support	1/rnd	2	(see missile notes)				(see missile notes)				Lncher Error	1	—	Brch
Quad PML	Support	2/rnd	2	(see missile notes)				(see missile notes)				Lncher Error	4	—	Brch
Autofeed PML	Support	2/rnd	2	(see missile notes)				(see missile notes)				Lncher Error	6	—	Mag
PORTABLE MISSILES:															
Disposable Missile Launcher & MultiRocket Missile Pod	Launcher	1/rnd	2	10	100	200	1500	+100	+50	+0	-30	Launcher Error	6	—	Pod
ENERGY WEAPONS:															
Laser Pistol	1H Energy	2/rnd	7	1	5	10	20	+15	-0	-30	-90	Laser Mk.1	2 Weapon Cells		
Mirage XR (X-Ray) 12	1H Energy	2/rnd	7	1	5	10	20	+20	+5	-30	-90	Laser Mk.1	2 Weapon Cells		
H&K/B&L RB 25	1H Energy	2/rnd	6	2	5	10	30	+15	+10	-30	-90	Laser Mk.1	2 Weapon Cells		
Colt/Coming Mark One	1H Energy	2/rnd	7	1	5	10	20	+15	-0	-30	-90	Laser Mk.1	2 Weapon Cells		
Assault User	1H Energy	2/rnd	7	3	20	50	250	+15	-0	-30	-90	Laser Mk.2	Weapon Pack		
Mirage XR 22	1H Energy	2/rnd	7	3	20	50	250	+15	+5	-30	-90	Laser Mk.2	Weapon Pack		
H&K/B&L RB 50	1H Energy	2/rnd	6	3	20	50	250	+20	+10	-30	-90	Laser Mk.2	Weapon Pack		
Colt/Coming Mark Two	1H Energy	2/rnd	7	3	20	50	250	+15	-0	-30	-90	Laser Mk.2	Weapon Pack		
Laser Rifle	2H Energy	2/rnd	7	3	25	100	300	+15	-0	-30	-90	Laser Mk.3	2 Weapon Packs		
Mirage XR 32	2H Energy	2/rnd	7	3	25	100	300	+15	-0	-30	-90	Laser Mk.3	2 Weapon Packs		
H&K/B&L RB 75	2H Energy	2/rnd	6	3	25	100	300	+20	+5	-30	-90	Laser Mk.3	2 Weapon Packs		
Colt/Coming Mark Three	2H Energy	2/rnd	7	3	25	100	300	+15	-0	-30	-90	Laser Mk.3	2 Weapon Packs		
Hvy Laser	2H Energy	2/rnd	7	3	75	300	1000	+15	-0	-30	-90	Laser Mk.4	Special		
Support Laser	Sup Energy	1/rnd	7	5	100	500	2000	+15	-0	-30	-90	Laser Mk.5	Special		
Subsonic Field Gun	2H Energy	1/rnd	5	10	50	100	200	+30	-10	-10	-50	Laser Mk.3	Weapon Pack		
Infrared Field Gun	2H Energy	1/rnd	3	15	75	125	250	+20	-0	-10	-50	Laser Mk.3	Weapon Pack		
Microwave Field Gun	2H Energy	1/rnd	5	5	40	80	150	+30	-0	-20	-80	Laser Mk.2	Weapon Pack		
Laser Blinder Field Gun	2H Energy	1/rnd	7	10	30	50	100	+20	-10	+0	-30	Special	Weapon Pack		

Key:

* — For the specific name-brand weapons which have both single-shot fire and bursts-fire capability, there is not room to note both options so simply a number has been included; it applies to both shot and bursts. Also, both ranges could not be included; the GM should reduce the longer ranges for bursts, using the basic-model weapon stats as a guide.

† — Weapon requires a "weapon cartridge" power pack as well as normal ammunition.

‡ — Weapon requires a "weapon cartridge" power pack as well as normal ammunition.

§ — Use Small Projectile Attack Table when using "slug" ammunition.

' — Any critical achieved results in an "A" Electricity critical instead.

¥ — Will fire only Mk. 1 or Mk. 2 grenades.

Weapon Type — 1H Proj = 1 Hand Projectile Weapon; 2H Proj = 2 Handed Projectile Weapon; Support = Support Weapon; 1H Energy = 1 Handed Energy Weapon; 2H Energy = 2 Handed Energy Weapon.

Range — PB = Point Blank; SR = Short Range; MR = Medium Range; LR = Long Range.

Attack Table Used — Sml Proj = Small Projectile; Lncher Error = Launcher Error Table (see Section S 17.8).

ENCOUNTER GENERATION CHART (6.0)

This encounter chart can be used to identify buildings in a *Cyberspace* urban setting. Roll 1D100 and cross index the result with the type of area in which the building is located. For example, a GM centers an adventure around a nightclub in the Merchant District of the city. There are 3 other buildings on the block (on the GM's city map), so he rolls 1D100 3 times. He gets a 51, a 96, and an 28. Checking under the "Merchant District" column, the GM finds theat the buildings are a Gambling Hall, a Surplus Store, and a Brothel respectively.

Encounter	Corporate Business District	Corporate Suburb	Merchant District	Slum	Deserted Sections	Industrial District
Antique Dealer	01-05	—	01-05	—	—	—
Apartment Complex	—	01-10	—	01-25	01-40 †	01-10
Bank	06-15	—	06-10	—	—	—
Bar	—	—	11-15 **	26-35 §	—	11-15
Biofactory	—	—	16-20	36-38	—	—
Boutique	16-20	11-15	21-25 **	—	—	—
Brothel	—	16	26-30	39-45	41-50 †	—
Car Dealership	21-25	—	31-35 **	—	—	—
Church	—	17-25	—	46-50 §	51-55 †	—
Corp Offices	26-60	—	—	—	—	16-18
Drug Den	—	—	36-40	51-55	56-65	—
Fire Station	61-62	26-30	—	—	—	—
Food Kiosk	—	—	41-45	56-60	—	19-20
Fuel Station	63-65	31-35	46-50	61-62	—	21-25
Gambling Hall	—	—	51-55 †	63-70 †	66-75 †	—
Gymnasium	66-68	36-40	56-60	—	—	—
Hotel/Motel	69-70	—	61-65 **	71-75 §	—	—
Junk Shop	—	—	66-68 **	76-80 §	—	—
Loan Office	—	—	69-70 **	81-85 §	—	—
Mall	—	41-45	71-75	—	—	—
Manufacturing Plant	—	—	—	—	—	26-65
Museum	71-72	46-48	—	—	—	—
Nightclub		—	76-80 **	86 §	—	—
Park	73-80	49-55	—	—	—	—
Parking Garage	81-88	—	81-83	—	—	66-70
Pawnshop	—	—	84-85 **	87-90 §	—	—
Pharmacy	—	56-58	86-88	—	—	—
Police Station	89-90	—	—	—	—	—
Private Residence	—	59-85	—	91	—	—
Restaurant/Cafe	91-99	86-95	89-93 **	92-95 §	—	71-72
Surgicenter	—	—	94-95	96-98	—	—
Surplus Store	—	—	96-97 **	99 §	—	—
Theatre	—	96-99	98-99	—	—	—
Warehouse (Empty)	—	—	—	—	76-90 §	73-75 **
Warehouse (Illicit)	—	—	—	—	91-99	76-80
Warehouse (Legitimate)	—	—	—	—	—	81-99
Special*	00	00	00	00	00	00

* — GM's discretion.
** — There is a 10% chance that this establishment serves as a front for illegal activities/organizations.
§ — There is a 20% chance that this establishment serves as a front for illegal activities/organizations.
t — There is a base (GM can modify this percentage as desired) 20% that this establishment houses illegal activities/groups/gangs.

7.0 ATTACK TABLES

These tables are organized to increase their ease of use during play. Most of the tables required to resolve combat are included in this and the two following sections.

7.2 SMALL PROJECTILE ATTACK TABLE

Roll	AEX	BS	LBA	None	Roll
		ARMOR TYPE			
01-05	Possible Failure				01-05
06-45	0	0	0	0	06-45
46-50	1	2	2	2	46-50
51-55	1	2	3	3	51-55
56-60	2	2	4	4	56-60
61-65	2	3	5	4A	61-65
66-70	3	3	6	4A	66-70
71-75	4	4	6A	5A	71-75
76-80	4A	5A	7A	5B	76-80
81-85	5A	6A	7B	7C	81-85
86-90	5A	7A	8B	8C	86-90
	Maximum Results for Mark 1 Weapons				
91-95	6A	8A	9B	11C	91-95
96-100	7A	9A	11B	13D	96-100
101-105	8A	9A	12B	15D	101-105
	Maximum Results for Mark 2 Weapons				
106-110	8A	11A	15B	18D	106-110
111-115	9A	13A	17C	21D	111-115
116-120	10A	14A	19D	24E	116-120
	Maximum Results for Mark 3 Weapons				
121-125	12A	16B	22D	27E	121-125
126-130	13B	18C	26D	31E	126-130
131-135	14B	20C	28E	34F	131-135
	Maximum Results for Mark 4 Weapons				
136-140	17C	23D	31F	37F	136-140
141-145	19D	26E	35G	40G	141-145
146-150	21D	30E	39G	44H	146-150
	Maximum Results for Mark 5 Weapons				

NOTES:

All **Criticals** are Puncture.

F = One "E" Puncture Critical and one "A" Impact Critical
G = One "E" Puncture Critical and one "B" Impact Critical
H = One "E" Puncture Critical and one "C" Impact Critical

Failure: If a failure results, roll 1D10—
1-5 = Weapon Fumble Roll;
6-10 = Weapon Malfunction Roll.

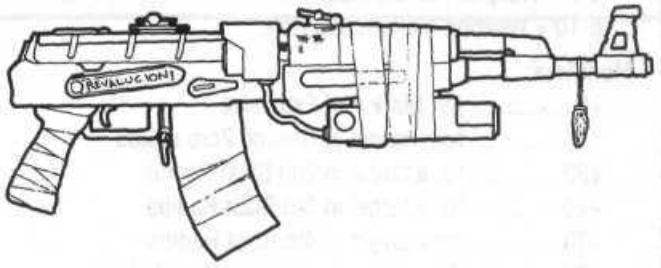
7.3 SHOTGUN ATTACK TABLE

Roll	AEX	ABS	LBA	None	Roll
		ARMOR TYPE			
01-03	Possible Failure				01-03
04-45	0	0	0	2	04-45
46-50	0	1	1	3	46-50
51-55	1	1	2	4A	51-55
56-60	1	2	2	5A	56-60
61-65	1A	2A	3A	6A	61-65
66-70	2A	3A	4A	7A	66-70
71-75	3A	4A	4A	7B	71-75
76-80	4A	5A	8A	9B	76-80
81-85	5B	7B	8B	11B	81-85
86-90	6B	8B	10B	13B	86-90
91-95	7B	10B	12B	16B	91-95
96-100	8B	12B	14B	19B	96-100
101-105	9B	13B	15B	22B	101-105
	Maximum Results for Long Range				
106-110	10B	16B	17B	27B	106-110
111-115	11B	18B	20B	32B	111-115
116-120	12B	20B	22B	37B	116-120
	Maximum Results for Medium Range				
121-125	14B	23B	26B	42C	121-125
126-130	17B	26B	29B	46C	126-130
131-135	19B	30B	33B	50D	131-135
	Maximum Results for Short Range				
136-140	22B	33B	38C	54D	136-140
141-145	26B	36C	42C	57E	141-145
146-150	28C	40D	46D	60E	146-150
	Maximum Results for Point Blank				

NOTES:

All Criticals are Shrapnel.

Failure: If a failure results, roll 1D10—
1-5 = Weapon Fumble Roll;
6-10 = Weapon Malfunction Roll.



7.4 GRENADE/EXPLOSIVE ATTACK TABLE

Roll	ARMOR TYPE AEX	ABS	LBA	None	Roll
01-02	Failure				01-02
03-45	0	0	0	0	03-45
46-50	0	1	2	3	46-50
51-55	1	2	2A	3A	51-55
56-60	1	2	2A	3A	56-60
61-65	1	2	2A	3A	61-65
66-70	2	2	2A	4A	66-70
71-75	2A	2A	3A	4A	71-75
76-80	2A	2A	3A	4A	76-80
81-85	2A	3A	4A	5A	81-85
86-90	2A	3A	4A	5B	86-90
Maximum Results for 5th Blast Radius					
91-95	3A	3A	4A	5B	91-95
96-100	3A	4A	5B	6C	96-100
101-105	3B	4B	6B	8C	101-105
Maximum Results for 4th Blast Radius					
106-110	3B	4B	6B	8C	106-110
111-115	4B	4B	7C	9D	111-115
116-120	4B	5B	8C	10D	116-120
Maximum Results for 3rd Blast Radius					
121-125	5B	5B	9C	11D	121-125
126-130	6C	7C	10D	12E	126-130
131-135	7C	7C	11D	13E	131-135
Maximum Results for 2nd Blast Radius					
136-140	9D	10D	13D	15E	136-140
141-145	10D	11D	14D	16E	141-145
146-150	11E	12E	16E	18E	146-150
Maximum Results for Ground Zero					

NOTES:

All **Hits** are multiplied by weapon's Mark #.

Critical type depends upon weapon type.

Failure: If a failure results, roll 1D10—
1-5 = Weapon Fumble Roll;
6-10 = Weapon Malfunction Roll.

Modifiers:
+5.....per Mark # of Explosive
+40.....for a target in Ground Zero radius
+30.....for a target in 2nd Blast Radius
+20.....for a target in 3rd Blast Radius
+10.....for a target in 4th Blast Radius
+35.....if touching target when it explodes
-varies.....target's cover Bonus

7.5 LASER ATTACK TABLE

Roll	ARMOR TYPE AEX	ABS	LBA	None	Roll
01-07	Failure				01-07
08-45	0	0	0	0	08-45
46-50	0	0	0	1	46-50
51-55	0	0	0	2	51-55
56-60	1	1	1	3	56-60
61-65	1A	1A	1A	3A	61-65
66-70	2A	2A	2A	4A	66-70
71-75	2A	2A	3A	5B	71-75
76-80	2A	3A	4B	5B	76-80
81-85	3A	4B	5B	5C	81-85
86-90	4B	5B	5C	6C	86-90
Maximum Results for Mark 1 Weapons					
91-95	4B	6B	6D	7D	91-95
96-100	5B	6C	7D	8D	96-100
101-105	6B	7C	8D	9D	101-105
Maximum Results for Mark 2 Weapons					
106-110	6B	8C	9D	10D	106-110
111-115	7B	9D	11E	12E	111-115
116-120	7C	10E	12E	13F	116-120
Maximum Results for Mark 3 Weapons					
121-125	9C	12E	14F	15F	121-125
126-130	10D	13F	15G	17G	126-130
131-135	11D	15F	17G	18G	131-135
Maximum Results for Mark 4 Weapons					
136-140	11E	17G	19G	20H	136-140
141-145	12E	19G	20H	22H	141-145
146-150	13F	20H	21H	23H	146-150
Maximum Results for Mark 5 Weapons					

NOTES:

All Criticals are Heat.
F = One "E" Heat Critical and one "A" Puncture Critical
G = One "E" Heat Critical and one "B" Puncture Critical
H = One "E" Heat Critical and one "C" Puncture Critical

Failure: If a failure results, roll 1 D10 --
1-6 = Charge depleted;
6-9 = Weapon Malfunction Roll;
10 = Weapon Fumble Roll.

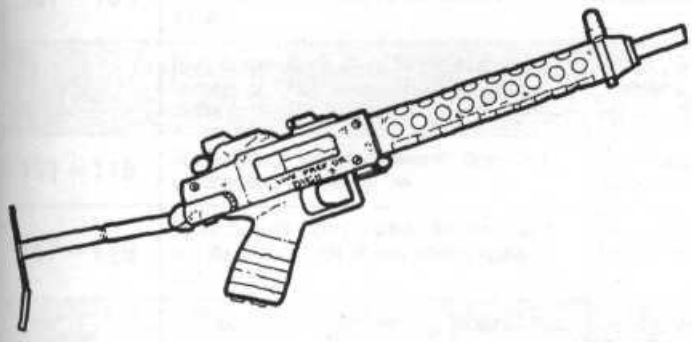
7.6 MELEE WEAPON ATTACK TABLE

Roll	ARMOR TYPE AEX	ABS	LBA	None	Roll
01-08	Possible Failure				01-08
09-45	0	0	0	0	09-45
46-50	1	1	1	1	46-50
51-55	1	2	2	2	51-55
56-60	2	2	2	3	56-60
61-65	2	3	3	4	61-65
66-70	3	3	3	5	66-70
71-75	3	4	4	6	71-75
76-80	4	5	5	7	76-80
81-85	5	6	6	9A	81-85
86-90	5	7	7A	10A	86-90
91-95	6	8	9A	11B	91-95
96-100	6	9	10B	13C	96-100
101-105	7	10A	11B	15C	101-105
106-110	8	11A	12B	17D	106-110
111-115	8A	12B	13C	19D	111-115
116-120	9A	13B	15C	20D	116-120
Maximum Results for Small Weapon					
121-125	9A	13C	16C	21E	121-125
126-130	10B	14C	17D	23E	126-130
131-135	11B	15C	18D	25E	131-135
Maximum Results for Medium Weapon					
136-140	11C	16D	20D	27E	136-140
141-145	12D	17D	21E	28E	141-145
146-150	12E	18E	22E	30E	146-150
Maximum Results for Large Weapon					

NOTES:

Critical type depends upon weapon type.

Failure: Roll on Melee Weapons Fumble Table



7.7 BRAWLING (AND FALLS) ATTACK TABLE

Roll	ARMOR TYPE AEX	ABS	LBA	None	Roll
01-02	Failure				01-02
03-45	0	0	0	1	03-45
46-50	0	1	1	2	46-50
51-55	0	2	2	3	51-55
56-60	1	3	3	4A	56-60
61-65	1	4	4A	5A	61-65
66-70	2	5	5A	6A	66-70
71-75	2	6	6A	7A	71-75
76-80	3	7A	7A	8A	76-80
81-85	4	7A	8A	9A	81-85
86-90	4A	8A	9A	10A	86-90
91-95	5A	9A	10B	11B	91-95
96-100	6A	10A	11B	12B	96-100
101-105	7A	10B	11B	13B	101-105
Maximum Results for Small Attacks / Falls of 1-3m					
106-110	8A	11B	12C	13C	106-110
111-115	9B	12C	13C	14C	111-115
116-120	9B	13C	14C	16C	116-120
Maximum Results for Medium Attacks / Falls of 4-20m					
121-125	10C	14C	15D	17D	121-125
126-130	11C	15D	16D	18D	126-130
131-135	11D	16D	17E	19E	131-135
Maximum Results for Large Attacks / Falls of 21-40m					
136-140	12D	17E	18E	20E	136-140
141-145	13E	18E	19E	22E	141-145
146-150	14E	19E	21E	23E	146-150
Maximum Results for Huge Attacks / Falls Over 40m					

NOTES:

Critical type depends upon weapon type.

Failure: Roll on Brawling Fumble Table.

Note: For falling damage, add 10 to the roll for every 3 meters fallen and double the number of hits delivered. (Ignore "failure" results).

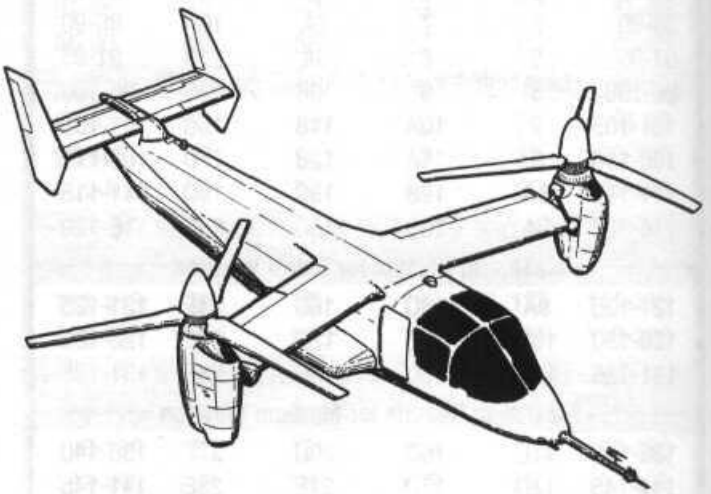
7.8 VEHICULAR/MOUNTED WEAPON ATTACK TABLE

Roll	CONSTRUCTION ARMOR TYPE 25	24	23	22	21
01-02	---	---	--- Failure ---	---	---
03-07	0	0	0	0	0
08-13	0	0	0	1	1
14-19	0	0	1	2	2
20-25	0	1	1	3	4A
Maximum Results for Mark 2-3 Weapons					
26-31	1	1	2A	6A	7A
32-37	1A	2A	5A	9A	10A
Maximum Results for Mark 4*5 Weapons					
38-43	2A	4A	8A	12A	13A
44-49	3A	7A	11A	15A	16A
50-55	5A	10A	14A	18A	19B
56-61	6A	13A	17A	21 B	22B
62-67	8A	16A	20A	24B	25B
68-73	9A	19A	23B	27B	28B
74-79	10B	21 B	25B	30B	31B
80-85	11B	22B	27B	33B	34B
86-91	12B	24B	28B	34B	37C
92-97	13B	25B	30B	36C	40C
98-103	13C	27C	31 C	37D	43D
Maximum Results for Mark 6*10 **Weapons**					
104-109	14D	28D	33D	39D	46E
110-115	15D	30D	34D	40E	49E
Maximum Results for Mark 11-20 Weapons					
116-121	16D	31 D	36D	43E	53E
122-127	16E	33E	39E	47E	57F
Maximum Results for Mark 21*30 Weapons					
128-133	18E	37E	43E	54E	62F
134-139	21 E	42E	50E	62F	70G
Maximum **Results for Mark 31-40** Weapons					
140-145	50F	85F	95F	1126	125H
146-150	80G	130G	140H	165	175H
Maximum **Results for Mark 41-50** Weapons					

NOTES:

All Criticals are "Vehicular".
F = One "E" and one "A" Vehicular Critical
G = One "E" and one "B" Vehicular Critical
H = One "E" and one "C" Vehicular Critical

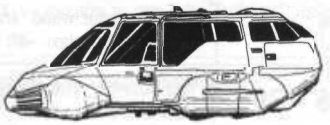
Failure: If a failure results, roll 1D10—
1-8=Weapon unusable for 1D10 rounds;
9-10=Weapon malfunctions and is useless (roll random severity).

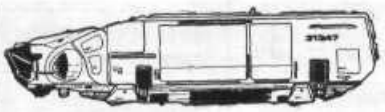


	8.1 PUNCTURE CRITICAL TABLE	8.2 SLASH CRITICAL TABLE	8.3 SHRAPNEL/AUTOMATIC CRITICAL TABLE
-19-05	Glancing blow. No extra damage. +0 hits.	Weak strike. No extra damage. +0 hits.	Grazing shot. No extra damage.
06-20	Glancing blow to side. +3 hits.	Minor calf wound. 1 hit per rnd.	Just a nick...for 1 hit.
21 – 35	Thigh strike, +3 hits. If no armor, 3 hits per rnd.	Blow to upper leg, +5 hits. If no armor, 2 hits per rnd.	Shatters a rib and knocks foe down. +11 hits. 2 hits per rnd.
36 – 50	Minor forearm wound. +2 hits. Stunned 1 rnd.	Minor chest wound. +3 hits. 1 hit per rnd. -5 to activity.	Strike across back and buttocks - ouch. +13 hits. 2 hits per rnd. Stunned for 3 rnds.
51 – 65	Strike along side of chest. 1 hit per rnd. Stunned 1 rnd.	Minor forearm wound. +4 hits. 2 hits per rnd. Stunned 1 rnd.	Severs hand and mangles arm. +24 hits. 6 hits per rnd. Stunned for 20 rnds (immobile for 5 of them).
66 – 79	Strike to lower leg. Tendons torn. +3 hits. -25 to activity. Stunned 1 rnd.	Medium thigh wound. +6 hits. 1 hit per rnd.	Strike to thigh slashes muscles and tendons. +25 hits. 5 hits per rnd. Stunned 8 rnds. -75 activity.
80	Strike to neck. Nerves and blood vessels severed, dies of a massive heart failure.	Neck strike severs carotid artery. Neck broken. Dies in 1 rnd of intense agony.	Blows to arms and chest break several bones. +27 hits. 8 hits per rnd. Stunned for 12 rnds.
81 – 86	Strike to weapon arm, bone broken. +10 hits. Stunned 3 rnds.	Slash muscle and tendons in weapon Arm useless. +10 hits. 1 hit per rnd.	Several side and back wounds force foe to parry in stunned state for 13 rnds. +28 hits. 9 hits per rnd.
87 – 89	Strike through lower leg severs muscle. -50 to activity. Stunned 3 rnds.	Destroys one eye. +10 hits. Stunned for 30 rnds.	Hit back and upper leg. Foe is bloody and knocked 10 feet away. +18 hits. 6 hits per rnd. Foe is unable to parry for 5 rnds.
90	Strike through both lungs. Drops and passes out. Dies in 6 rnds.	Disemboweled, dies instantly. 25% chance your weapon is stuck in opponent for 2 rnds.	Knocked down. Dead if no armor worn. Otherwise, +30 hits, 9 hits per rnd, and stunned for 12 rnds.
91 – 96	Strike to side of head. Knocked out for 6 hrs. +10 hits. If no helmet, dies instantly.	Knocked out for 6 hrs with a strike to side of head. +15 hits. If no helmet, dies instantly.	Impact upper back and back of head. If no armor, foe dies. Otherwise, +25 hits, 8 hits per rnd, and stunned for 10 rnds.
97 – 99	Strike through neck breaks backbone and severs spine. Paralyzed from the neck down, permanently.	Sever lower leg. 20 hits per rnd. Drops and lapses into unconsciousness.	Foe makes an excellent ventilator with holes in the leg, side and chest. With +32 hits, foe dies after 1 agonizing rnd.
100	Strike through eye. Dies instantly. A real eye full.	Slash side. Down, unconscious and dies in 3 rnds due to massive internal organ damage.	Thrown back 15 feet minus an arm, with gashes in neck. Paralyzed, foe dies in 6 rnds. +35 hits.
101 – 106	Major abdominal wound. +10 hits. 6 hits per rnd. -20 to activity. Stunned 4 rnds.	Major abdominal wound. +10 hits. 8 hits per rnd. -10 to activity. Stunned 4 rnds.	Sent spinning, foe is hit in the spine and kidneys and loses a hand. This one is history after 1 rnd. +33 hits.
107-109	Nailed in lower back. Down and unconscious. Dies from internal bleeding and shock in 6 rnds.	Sever weapon arm. 15 hits per rnd. Down and unconscious immediately.	Blast takes out the liver, spleen and intestines. Foe fights for 1 messy round then drops. +34 hits.
110	Shot through heart. Reels 10 feet to a spot suitable for dying. Weapon stuck in spinning victim for 3 rnds.	Impaled in heart, dies instantly. Heart destroyed. 25% chance your weapon is stuck in foe for 3 rnds.	In an example of unanesthetized surgery, you remove a variety of internal organs. Foe is out and dies in 3 rnds. +35 hits.
111-116	Strike through leg, artery severed. Down and unconscious. 12 hits per rnd.	Sever hand. 12 hits per rnd. Knocked down and stunned for 6 rnds.	Strikes to chest and face. Foe's lungs fill with blood, making breathing hard. Dies in 3 rnds.
117-119	Strike through kidney. +9 hits. Knocked down and dies after 6 rnds of very intense agony. Sad.	Sever spine. Collapses immediately. Paralyzed from the neck down — permanently. +20 hits.	Foe hit in heart and brain for an immediate death. Good shot. Add +20 to your next attack.
120	Shot through both ears. Hearing impaired, dies instantly. Awesome shot.	Strike to head destroys brain and makes life difficult for the unfortunate fool. Expires in a heap, immediately.	Foe bursts into a bloody pulp. Yuck.
8.0 Critical Strike Tables	Modifications: "A" Critical -20 "B" Critical -10 "C" Critical +0 "D" Critical +10 "E" Critical +20	Modifications: "A" Critical -20 "B" Critical -10 "C" Critical +0 "D" Critical +10 "E" Critical +20	Modifications: "A" Critical -20 "B" Critical -10 "C" Critical +0 "D" Critical +10 "E" Critical +20

	8.4 IMPACT CRITICAL TABLE	8.5 HEAT CRITICAL TABLE	8.6 ELECTRICITY CRITICAL TABLE
-19-05	Not even a scratch. +0 hits.	Hot air. +0 hits.	Hair stands up. +0 hits.
06 – 20	Grazing shot. +5 hits.	Much heat, little effect. +3 hits.	Light charge. +3 hits.
21 – 35	Staggered by strike to side. +10 hits. Stunned 1 rnd.	Minor burns. +8 hits. 1 hit per rnd.	Explosion of light. Stunned 1 rnd.
36 – 50	Strike to shoulder. Spins about, reels back 10 feet. +12 hits.	Blinded by hot smoke. +12 hits. Stunned 1 rnd.	Medium charge. +6 hits. -5 to activity. Stunned 1 rnd.
51 – 65	Strike to leg. Knocked down. +8 hits. If no armor, stunned 2 rnds.	Clothing catches on fire. +12 hits. Takes 2 rnds to extinguish it, and foe takes 8 hits each round afire.	Heavy charge. +9 hits. -10 to activity. Stunned 1 rnd.
66 – 79	Blast to off-arm. +10 hits. If no shield, arm broken, stunned 3 rnds.	Knocked down by fiery blast. Any organic foot and calf covering is destroyed. +10 hits.	Strike to off-arm. +12 hits. -20 to activity.
80	Strike to head. +12 hits. Knocked down and out for 1 day. If no helmet, skull fractured, dies in 3 rnds.	Blast to head. Face horribly scarred. Knocked out. +15 hits. 5 hits per rnd. If no helmet, a 5 month coma results.	Strike to side devastates nervous system. Severe shock results. Victim is a living vegetable for 1 month.
81 – 86	Blow to upper leg. Muscles torn. +15 hits. -10 to activity. If no armor, -20 to activity and stunned 3 rnds.	Fire engulfs back. Knocked down. All organic material on back is destroyed. 2 hits per rnd. Stunned 1 rnd.	Strike to weapon arm. Muscle and cartilage mangled. Arm useless. 2 hits per rnd. Stunned 6 rnds.
87 – 89	Blast to collar area. +12 hits. Stunned 5 rnds. Can't speak for 1 week. If no armor, voice loss is permanent.	Strike to head. Blinded for 6 rnds. Any organic head covering is destroyed. If no helmet, hair is burnt away.	Permeated by electricity. Entire nervous system rearranged. Drops and lies in shock for 12 rnds before dying.
90	Strike to neck. Paralyzed from the shoulders down. +20 hits.	Head becomes a charred stump. Sadly, dies instantly due to this unacceptable condition.	Head strike. Foe dies instantly as brain is fried.
91 – 96	Blow to knee dislocates it. Cartilage and tendons ripped. +15 hits. -50 to activity. Stunned 9 rnds.	Off-arm fried. Any shield is destroyed along with hand. Stunned 5 rnds. If no shield, loses arm and knocked out.	Chest strike. Foe is knocked out for 6 hours.
97 – 99	Strike abdomen. +18 hits. Stunned 12 rnds. If no armor, dies in 6 rnds due to destroyed organs.	Upper leg burn. Use of leg lost due to tissue destruction. 3 hits per -60 to activity. Stunned for 6 rnds.	Electrifying experience. Brain falls victim to massive shock and surface burns. Passes out and dies in 6 rnds.
100	Blast to head fractures skull. A 3 week coma results. If no helmet, dies instantly.	Blast to neck fuses vertebrae and unites skin with clothing. Paralyzed permanently. +25 hits.	Nervous system acts as a superconductor. Sad instant death provides all witnesses with a fine light show.
101 – 106	Blow to jaw breaks it. Can't speak or eat solid food until healed. +15 hits. -10 to activity. Stunned 7 rnds.	Blast to leg. 2 hits per rnd. -20 to activity. If no armor, massive tissue damage. -70 to activity.	Strike to face. Loses nose. Stunned 8 rnds. Blinded for 2 weeks. If no helmet, knocked down as well.
107-109	Blow to side. Bone is driven into kidneys, foe dies in 6 rnds.	Head strike. If helmet, blinded for 2 weeks. If not, dies in 6 rnds due to massive shock and brain damage.	Chest strike destroys heart and lungs. If armored, foe dies in 6 rnds. If not, dies instantly.
110	Disrupt chest. Lungs and heart explode from impact. Dies instantly. Very messy.	Midsection vaporized. Cut in half and dies. Clothing, armor, and all items destroyed.	Head is no longer available for use. Smoke and ozone surround the lifeless body.
111-116	Spun by blow. Knocked down. Breaks both arms. -60 to activity. Stunned 3 rnds.	Blast to chest. Any chest armor is destroyed. +12 hits. Stunned 3 rnds. If no armor knocked down, 6 hits per rnd.	Abdomen strike. Stunned 7 rnds. 6 hits per rnd. If no armor, foe dies of shock and bleeding in 12 rnds.
117-119	Blast shatters skull into thousands of particles. Dies instantly.	Fire engulfs body. All organic material on body destroyed. Dies of shock and nerve damage in 6 rnds. +25 hits.	Chest strike destroys both lungs. Cut in half. Charge extends 3 meters giving an A Critical to anyone in the way.
120	Blast annihilates entire skeleton. Reduced to a gelatinous pulp. Try a spatula.	All that remains are charred bits of teeth and bone.	Charge disrupts cell structure. Entire body turned to dust.
8.0 Critical Strike Tables	Modifications: "A" Critical ..... -20 "B" Critical ..... -10 "C" Critical ..... +0 "D" Critical ..... +10 "E" Critical ..... +20	Modifications: "A" Critical ..... -20 "B" Critical ..... -10 "C" Critical ..... +0 "D" Critical ..... +10 "E" Critical ..... +20	Modifications: "A" Critical ..... -20 "B" Critical ..... -10 "C" Critical ..... +0 "D" Critical ..... +10 "E" Critical ..... +20

	8.7 BRAWLING CRITICAL TABLE	8.8 VEHICULAR CRITICAL TABLE
-19-05	Fairly weak. +0 hits. Zip.	Shot ricochets off plating. +0 hits.
06-20	Arm strike. +2 hits. -5 to activity for 2 rnds.	Shot damages dynamics. Max speed reduced 50%.
21 – 35	Leg strike. +4 hits. If no armor, +7 hits.	Sensors destroyed by powerful blast.
36 – 50	Chest strike. Knocked back a meter. +5 hits. -10 to activity for 2 rnds.	Structural integrity compromised. +20 hits.
51 – 65	Blow to off-arm. +5 hits. If no shield, +8 hits and stunned 2 rnds.	Communications and sensors destroyed by proximity blast. +5 hits.
66 – 79	Elbow strike. Forearm numbed. +8 hits. Drop weapon. -10 to activity for 10 rnds.	One weapon installation destroyed by precision strike.
80	Brutal hip strike. Knocked down. Tendons torn and joint crushed. Leg useless. -80 to activity.	Cruel blast knocks out all control systems. +25 hits.
81 – 86	Strike to side. Knocked 2 meters sideways. Drop anything carried in hands. Stunned 3 rnds.	1-2 weapons jam due to damage. +50 hits.
87 – 89	Side strike. Stumble ungracefully to an embarrassing prone position. Stunned 6 rnds.	Engine shuts down under insinuating blows. +30 hits.
90	Inspired back strike. Knocked flying 3 meters and onto face. Sever nerve damage. Paralyzed from waist down.	Strike to fuel tank/power supply. Vehicle will explode in 1-5 rnds.
91 – 96	Hard head strike. Knocked back 3 meters and stunned 6 rnds. If no helmet, unconscious for 24 hours.	Cockpit strike causes all command personnel to eject. Vehicle is basically useless.
97 – 99	Totally awesome strike. Knocked to knees. Foe's weapon goes flying backwards 3 meters. Stunned 15 rnds.	1-3 weapon installations destroyed. +100 hits.
100	Upper chest strike. Knocked 3 meters sideways. Fall down and break both arms. A 2 month coma results.	Engine drops out of vehicle, which will eventually slow to a stop in a random location.
101 – 106	Blow breaks leg. +12 hits. -50 to activity. Stunned 1 rnd.	Hit to control area causes all occupants to take E Impact Crits.
107-109	Strike to head. Knocked 3 meters backwards. +9 hits. Stunned 6 rnds.	Onboard computer is destroyed. +50 hits.
110	Savage blow to head. Knocked down. Dies in 12 rounds due to a severed vein.	Vehicle is neatly dissected. A spectacular pyrotechnics display follows.
111-116	Awesome side shot. Knocked down and sideways 2 meters. Lower leg broken. Stunned 7 rnds. -40 to activity.	Brutal blow sends vehicle spinning. Driver may attempt to regain control each rnd (a Sheer Folly maneuver).
117-119	Blow to off-shoulder. Stunned 9 rnds. -20 to activity. If no shield, foe is unconscious and upper arm is shattered.	Cockpit fills with flames affecting Driver (an A Heat Critical) and vehicle takes 5 hits per round.
120	Frightening strike to temple. Knocked back 6 meters. Dies instantly. Not nice.	A pile of twisted metal is all that remains.
8.0 Critical Strike Tables	Modifications: "A" Critical.....-20 "B" Critical.....-10 "C" Critical +0 "D" Critical.....+10 "E" Critical +20	Modifications: "A" Critical.....-20 "B" Critical.....-10 "C" Critical +0 "D" Critical.....+10 "E" Critical +20





	9.1 MELEE WEAPON FUMBLE TABLE	9.2 FIREARM FUMBLE TABLE	9.3 BRAWLING FUMBLE TABLE
-19-05	Lose grip. No more activity this rnd.	Poor grip. Try again next round.	Weak tap causes foe to laugh.
06 – 20	You drop your weapon. It will take 1 rnd to draw a new one, or 2 to pick up the old one.	The safety was on. -50 to activity this rnd while you attempt to recover your self-confidence.	You drop 1-5 random items or articles of clothing. Very clumsy.
21 – 35	You slip. If your weapon is a 1-handed one, it breaks.	Accidentally eject cartridge. Spend next rnd reloading your weapon.	You place an open spot before foe. No parry next round.
36-50	Bad follow-through. You give yourself 2 hits.	You really mishandle your weapon and are stunned for one rnd.	You fall prone and cannot parry next round.
51 – 65	You "lose your wind" and realize that you should try to relax. -40 to activity for 2 rnds.	Your spastic shot hits 3 meters short of target. You are at -30 to activity next rnd.	You lose your breath. Stunned for 1 round.
66-79	You stumble. The classless display leaves you stunned for 2 rnds.	A cruel flashback stuns you for 2 rnds.	You stumble into foe, hitting your head for 4 hits. Stunned 1 round.
80	Incredibly inept move. Roll a B Impact Crit on yourself.	Your weapon slips out of your hand and bounces 2 meters away. Roll on Equipment Mishandling Chart	Hit nearest ally (or self, if no one else is around). Roll at zero OB.
81 – 86	Bite and swallow tongue in all the excitement. Stunned 2 rnds.	A muscle spasm delivers 5 hits and stuns you for 2 rnds.	You trip and fall to the ground. Stunned for 2 rounds.
87 – 89	Lose your grip on your weapon and reality. Stunned 3 rnds.	Lose your grip on your weapon and reality. Stunned 3 rnds.	Twist your ankle and fall. -25 to activity.
90	Bad taste and poor execution. You attempt to maim yourself as your weapon breaks. Take a C Slash Crit.	Truly terrible - you mistakenly fire toward the ground and hit yourself in the foot. Take an A Critical.	Bad move. You are prone for the next 3 rounds, and must parry (you cannot attack).
91 – 96	Unbelievable mishandling of your weapon. Any friendly combatant in your vicinity takes a B Impact Crit.	You fire way too early and hit a random person in the area (not the one you wanted). Roll attack at 0 OB.	You strike your head. Stunned for 1 round. -20 to activity.
97-99	Stumble over an unseen imaginary deceased turtle. You are very confused. Stunned 3 rnds.	Startled by a flying insect, you manage to stun yourself for 3 rnds.	You fall. Stunned for 1 round, then must parry (you cannot attack) for 2 more. Better luck next time.
100	Worst move seen in ages. -60 to activity from a pulled groin. Foe is stunned 2 rounds laughing.	You move too fast and pull a muscle in your weapon arm. -40 to activity.	Bad sprain in favored arm. -50 to activity. +10 hits. Bad luck.
101 – 106	You stagger and fall in an apparent attempt to commit suicide. Stunned 3 rnds.	You lose footing and slide gracelessly to the pavement. You are prone and stunned for 2 rnds.	You break your thumb for 5 hits. Stunned 2 rounds. -20 to activity.
107-109	You break your weapon through ineptness. Stunned 4 rnds.	You trip over yourself and fire into air. 2 rnds of contemplation will restore you to equilibrium.	Torn ligament in leg. +10 hits. -50 to activity.
110	You stumble and drive your weapon into the ground. Stunned 5 rnds.	Daydreaming, you get your hand in the way and lose a finger. +10 hits, 5 hits per rnd and stunned 3 rnds.	Hit nearest ally (or self, if no one else is around). Roll attack with a +30 OB.
111-116	Your aim goes awry and you inadvertently attack a random person (not the one you meant to). Roll the attack with no OB.	You fall down on your precious weapon. Roll on the Equipment Mishandling Chart. You are also down and stunned for 2 rnds.	Something snaps in your lower back. -50 to activity. Stunned 3 rounds. Sorry.
117-119	While daydreaming you get your hand in the way of your attack and lose a finger. +4 hits. 2 hits per rnd.	Only you could snag your finger in stunned for 4 rnds. Try surrendering.	You stumble, twisting your leg for 12 hits. -30 to activity. Stunned for 4 rounds.
120	You suddenly enter an unbalanced state and must make a roll on the CIRS Response Table.	You artfully spin the weapon around and deliver a point-blank shot to yourself (at no OB).	Utterly graceless move lays you prone at foe's feet, where you take a C Impact Critical.
9.0 Fumble, Failure, and Mal-function Tables	Modifications: 1-hand "crushing" weapon -20 1-hand "slashing" weapon -10 2 handed weapon +0 Pole arm +10 Cybernetically implanted weapon +20	Modifications: Single Shot Weapon -20 1-hand firearm non-burst fire -10 2-hand firearm non-burst fire +0 Burst Fire any firearm +10 Cybernetically implanted weapon +20	Modifications: Formally Trained in Martial Arts -20 If half or more of OB is used to parry -10 Normal +0 If using an object as a weapon (e.g chair bottle etc.) +10 Cybernetically implanted weapon +20

	9.4 MOVING MANEUVER FAILURE TABLE	9.5 VEHICULAR FAILURE TABLE
-19-05	You hesitate and fail to act.	You fail to maneuver. Continue as you were.
06-20	You have second thoughts, and decide to wait one round.	You are preoccupied. You drop an item and spend the round picking it up instead of maneuvering.
21 – 35	You slip. 30% chance of falling. -30 from any maneuvers for 2 rounds.	Confusion causes you to decelerate to half the intended speed.
36 – 50	You stumble. 45% chance of falling. -30 from any maneuvers for 2 rounds.	Sloppy execution. Your motive system (wheels/fan/etc) takes a Routine malfunction.
51 – 65	You stub your toe. 60% chance of falling. +3 hits. -10 to activity.	Badly executed attempt causes the vehicle to weave 1-10 meters to one side. Roll the details.
66-79	You slip. 75% chance of falling. Stunned 2 rounds.	Cruel abuse of the motive system (wheels/fan/etc) causes a Moderate malfunction. Move is 50% successful.
80	You twist your ankle. +5 hits. -10 to activity.	Insensitive handling of controls causes 1-4 Routine malfunctions.
81 – 86	You fall down. +3 hits. -20 to activity for 3 rounds.	You lose control and veer wildly. If there is anything within 30 meters, you hit it, and are stunned 3 rnds.
87 – 89	You sprain your ankle and tear some tendons. +7 hits. -20 to activity. Stunned 1 round.	You cause a Moderate malfunction to the controls. 50% chance the vehicle goes in a random direction.
90	Fall breaks your leg. +8 hits. -30 to activity. Stunned 3 rounds.	Total disaster. You flip the vehicle and it takes a Mk.10 Vehicular Attack at an OB of +30. Good luck.
91 – 96	You break your wrist when you fall. +12 hits. -20 to activity. Stunned 2 rounds.	Oops. You manhandle the controls and the vehicle lurches 50 meters in a random direction. Hope there's nothing in the way...
97 – 99	Your arm breaks when you land on it. +14 hits. -30 to activity. Stunned 4 rounds.	You lose control and veer wildly. If meters, you hit it, and are stunned 3 rnds.
100	In an attempt to break your fall you break both your arms; they are useless. +30 hits. Stunned 6 rounds.	Terrible. You flip the vehicle and it takes a Mk.20 Vehicular Attack at an OB of +50. Say your prayers.
101 – 106	When you fall your leg twists under you and breaks. +15 hits. -50 to activity. Stunned 3 rounds.	You cause a Severe malfunction to the controls. 50% chance the vehicle goes in a random direction.
107-109	Your knee strikes a hard object and shatters as you fall. +10 hits. -80 to activity. Stunned 4 rounds.	You somehow get your hand caught in the controls. You take 5 hits and are stunned 2 rounds.
110	You fall and the resulting concussion causes a year-long coma.	Incredibly inept move causes craft to plummet to the ground. Only an Absurd maneuver could save you from certain death. Roll 'em.
111-116	You fall and land on your lower spine. You are paralyzed from the waist down. +30 hits.	You engage override boosters without locking stabilizers. Craft tumbles in a random direction at top speed. An Absurd maneuver will save you.
117-119	You fall and are paralyzed from the neck down. +20 hits.	With a gut-wrenching shriek, the controls and motive system take Severe damage. Ship is at -90.
120	Your fall turns into a dive. You crush your skull and die.	You pushed it. Craft takes 5 Severe malfunctions and a Mk.30 attack at +50 as the engine blows up.
9.0 Fumble, Failure, and Malfunction Tables	**Modifications:** Routine . . . . . -50 Easy . . . . . -35 Light . . . . . -20 Medium -10 Hard . . . . . +0 Very Hard +5 Extremely Hard . . . . . +10 Sheer Folly . . . . . +15 Absurd . . . . . +20	Modifications: Slow ground vehicle . . . . . -20 Water vehicle . . . . . -10 Fast ground vehicle . . . . . +0 Air vehicle +10 Space vehicle . . . . . +20

STATIC ACTION CHART

BASIC MODIFICATIONS

Category	Condition	Hiding	Disarm Traps	Pick Locks	Perception	Maneuvers*	Miscellaneous
Difficulty	Routine	NA	+30	+30	+30	NA	+30
	Easy	NA	+20	+20	+20	NA	+20
	Light	NA	**+10**	**+10**	+10	NA	**+10**
	Medium	NA	**0**	**0**	0	NA	**0**
	Hard	NA	-10	-10	-10	NA	-10
	Very Hard	NA	-20	-20	-20	NA	-20
	Extremely Hard	NA	-30	-30	-30	NA	-30
	Sheer Folly	NA	-50	-50	-50	NA	-50
	Absurd	NA	-70	-70	-70	NA	-70
Lighting[1]	No Shadows	-30	**+20**	**+10**	+20	+10	+10
	Light Shadows	**-20**	+10	+5	**+10**	**+5**	**+5**
	Medium Shadows	**0**	0	0	**0**	**0**	**0**
	Heavy Shadows	+10	-10	-5	-10	**-5**	**-5**
	Dark	+30	-30	-10	-30	**-20**	**-20**
	Pitch Black	+40	-40	**-20**	-50	-40	-30
Shock & Pain	25-50% Hits Taken	NA	**-5**	**-5**	-5	-10	-10
	51-75% Hits Taken	NA	**-10**	**-10**	-10	-20	-20
	76%-up Hits Taken	NA	-20	-20	-20	-30	-30
Bleeding	For each Hit/Rnd taking	NA	**-5**	-5	**-5**	-10	-10
Serious Wound	For each limb out	NA	-5[2]	-5[2]	-5	-10[2]	-10[2]
	Stunned	NA	-50	-50	-30	-50	-50
	Down	NA	-70	-70	-50	-70	-70
Combat Situation	In melee	NA	-50	-50	-20	-30[3]	-30
	Under fire	NA	-20	-20	-10	-10	-10

SPECIAL MODIFICATIONS:

Hiding	Quality of hiding place:	Bad	–	-20
		Fair	–	0
		Good	–	+10
		Very Good	–	+30
		Excellent	–	+50
	Presence of Hider in the area is known to searchers.		–	-30
Disarming Traps & Picking Locks (Mechanical Bypass and Electronic Bypass)	A perception roll is successfully made by the disarmer/picker.		–	+20
	For each time the trap/lock has been tried without success.		–	-30
	Disarmer/picker has disarmed/picked this trap/lock before		–	+50
	Disarmer/picker has disarmed/picked this type of trap/lock before.		–	+30
	Disarmer/picker has the construction of the mechanism described to him.		–	+20
Perception	Player mentions the appropriate thing being perceived. (e.g. the player says he is actively looking for an ambush or trap)		–	+30
	The character making the perception roll has encountered the situation being perceived before (this specific character, not the player of the character).		–	+20
Maneuvers*	Encumbered[4]	Light (one weapon and belt equipment)	–	0
		Medium (weapons/armor and belt equipment)	–	-10
		Heavy (weapons/armor and normal pack)	–	-20
		Very Heavy (all personal equipment and 50-100 lb.)	–	-30
		Burdened (all personal equipment and over 100 lb.)	–	-50

* Modifications to maneuvers are applied to a roll on the Personal Maneuver Chart.

[1] These lighting conditions are for normal human eyesight, creatures that can see in the dark should ignore the dark and pitch black modifications and half the shadow modifications.

[2] If the limb that is out of action is normally required to perform the action, the GM should increase the difficulty of the action and drastically increase these modifications.

[3] In certain situations the maneuverer may withdraw from melee without his opponent(s) being able to attack him if he completes a successful maneuver.

[4] These encumbrences are approximations, absence of one of the weight categories would drop the encumbrence condition one level (e.g. a character with a normal pack, no armor and one weapon would be medium, nor heavy).

Note: A category is all related conditions. Only one condition from a category can have its modification applied to an action (e.g. a character attempting to pick a lock may have taken 77% of his hits, only the -20 modification is applied and not the other two).

SKILL PROGRAMS COST CHART

Skill program name	Computer Type	Size	Cost	Smart Cost	Rank Bonus Type
Maneuver Skills					
to Armor	N	1	500+(100xRank)	1000	Diminished
Light Body Armor	N	1	500+(100xRank)	1000	Diminished
Armored Bodysuit	N	1	1000+(200xRank)	1000	Diminished
Armored Exoskeleton	N	1	1500+(250xRank)	1000	Diminished
Weapon Skills					
Mounted Weaponry	N	2	6600+(700xRank)	1000	Diminished
Specific Weapon*	N	3	3000+(300xRank)	2500	Diminished
General Skills					
Drive *	N	3	1500+(200xRank)	1000	Diminished
Environs	N	2	2900+(300xRank)	3500	Diminished
Equipment	N	2	4000+(400xRank)	2500	Diminished
Pilot*	N	3	3000+(200xRank)	1000	Diminished
Subterfuge Skills					
Ambush	N	2	2000+(300xRank)	1500	Diminished
Electronic Bypass	N	2	4400+(400xRank)	1500	Diminished
Mechanical Bypass	N	2	4400+(400xRank)	2500	Diminished
Stalking/Hiding	N	2	3400+(300xRank)	2000	Diminished
Cyberspace Skills					
Cyberdeck Operation	D,N	2	3000+(200xRank)	1000	Diminished
Combat	D,N	2	3000+(200xRank)	1000	Diminished
Intrusion	D,N	2	3000+(200xRank)	1000	Diminished
Utility	D,N	2	3000+(200xRank)	1000	Diminished
Technical Skills					
Biological Technics	N	2	3000+(300xRank)	1500	Standard
Cybernetics Technics	N	2	4000+(400xRank)	3000	Diminished
Electronic Technics	N	2	2500+(300xRank)	1500	Standard
Machine Technics	N	2	2600+(300xRank)	1500	Diminished
Software Technics	N	4	5000+(500xRank)	5000	Standard
Special Skills					
Linguistics *	L,N	1	1000+(100xRank)	1500	Diminished
Perception	N	3	1900+(200xRank)	3500	Standard
Social Skills					
Administration	N	2	2800+(300xRank)	2000	Standard
Culture	N	2	3000+(300xRank)	3500	Standard
Exploit	N	1	1900+(200xRank)	1000	Diminished
Streetwise	N	2	3000+(300xRank)	3500	Standard
Secondary Skills					
Acrobatics	N	1	2000+(200xRank)	2500	Diminished
Advanced Math	#,N	1	1100+(100xRank)	1500	Standard
Appraisal *	N	2	2400+(200xRank)	1500	Standard
Astrogation	N	3	4500+(500xRank)	2500	Standard
Astronomy	N	2	1700+(200xRank)	1500	Standard
Biology	L,N	2	3000+(400Rank)	3500	Diminished
Chemistry	N	3	1800+(20xRank)	1500	Standard
Contortions	N	1	2300+(200xRank)	1000	Diminished
Cybernetics	N	4	5500+(500Rank)	4000	Standard
Drug Tolerance	N	1	2400+(200xRank)	1000	Standard
Falsification	N	3	2200+(200xRank)	3500	Standard
Foraging (Rural OR Urban)	N	2	1300+(100xRank)	2500	Standard
Frenzy	N	1	2400+(200xRank)	1000	Standard
Gambling	#,L,N	1	1600+(200xRank)	1000	Diminished
History	N	5	2100+(200xRank)	2000	Standard
Media	L,N	1	2000+(200xRank)	1500	Standard
Medical Practice	N	5	7200+(700xRank)	6000	Diminished
Music	N	2	1800+(200xRank)	2000	Diminished
Physics	L,N	2	3000+(400Rank)	3500	Diminished
Planetology	L,N	2	3000+(400Rank)	3500	Diminished
Quick-Draw	N	1	1500+(100xRank)	1000	Diminished
Sport	N	2	2000+(200xRank)	2500	Diminished
Subduing	N	1	2000+(300xRank)	1500	Diminished
Trickery	N	1	1600+(200xRank)	1000	Diminished

* Indicates that a program must be purchased for a specific type (specific weapon style, vehicle,o r language). **COMP**: indicates the Computer Type(s) in which the program the program can be run. "#" = Numeric Processor, "L" = Language Processor, and "N" = Neuroprocessor (such NAC Neuroprocessor programs are known as "Neurosofts"), and "D" = CyberDeck . **SIZE:** is the unit size of the program. **COST:** is the base cost of the program module. **SMART:** Additional cost for the program to be "Smart." **RANK:** Many of these programs, due to the inherent difficulty of nerve/muscle data storage and control, return a "Diminished Rank Bonus" instead of a Standard one For all such Skill Programs, Ranks 1-10 add +3 to the total Mod, Ranks 11-20 add +2, and Ranks 21-30 add +1. It is not currently possible to receive a higher rank than +60 (the Mod at Mk.30) from these programs. The column titled "RANK" indicates whether the program returns a Standard or Diminished Rank Bonus.

	9.6 PROJECTILE WEAPON MALFUNCTION TABLE	9.7 LASER WEAPON MALFUNCTION TABLE	9.8 EXPLOSIVE MALFUNCTION TABLE
01 – 10	Safety catch on; SM/Per:L to notice it.	Weapon cooling; forfeit 1-4 rnds.	Minor structural flaw, attack is at -20.
21 – 30	Dud round or ammo jam.	Wire breaks in weapon; final shot is at -10.	Weak blast; any Criticals are 1 degree lower severity.
31 – 40	Barrel slightly off; all shots are at -15.	Short circuit fries internal wiring and drains cell.	Misdirected blast; attack is at -20.
41 – 50	Weapon jams. Take one round to clear it.	Weapon works, but fires a little off-target (-25).	Timer flaw; explosion occurs 1-20 seconds late.
51 – 60	Weapon jammed and damaged. Failure chance doubles.	Fire button stuck in OFF position.	Arming mechanism stuck in SAFE position.
61 – 70	Barrel obstructed; all shots at -50.	Surge blows lens; Last shot is at +15.	Seems like a dud but will go off in 1-10 rounds.
71 – 80	Gun overheats. Must wait for 1-10 rounds.	Weapon crackles; Failure chance is tripled.	Charge never detonates at all.
81 – 90	Extractor breaks; 10% chance per round gun will jam.	Power surge jolts you; you take a +20 Point Blank attack.	Bizaare blast sends smoke up but does no damage at all.
91 – 99	Pin breaks; shots fail to fire 50% of the time.	Flash toward your face; you take a +40 Point Blank attack.	Explodes near you; you take a +50 Point Blank attack.
100	Blowback into your face; blinded 1-10 rnds. 10% chance blinding is permanent.	Weapon explodes; you take a +100 Point Blank attack.	Explodes before set/thrown; you take a +100 Point Blank attack.

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PRODUCT LISTING

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