GURPS

REIGN OF STEEL

## THE WAR IS OVER. THE ROBOTS WON.

BY DAVID PULVER

STEVE JACKSON GAMES

G U R P S

REIGN OF STEEL

The War Is Over. The Robots Won.

By David Pulver

Edited by Susan Pinsonneault
Cover by John Zeleznik
Illustrated by Dan Smith

STEVE JACKSON GAMES

CONTENTS

4. ROBOTS AND CYBORGS 71

5. ROBOT INSTALLATIONS 88

6. SURVIVAL 107

7. CAMPAIGNS 116

INDEX 127

About GURPS

Steve Jackson Games is committed to full support of the GURPS system. Our address is SJ Games, Box 18957, Austin, TX 78760. Please include self-addressed, stamped envelope (SASE) any time you write us! Resources now available include: Pyramid. Our bimonthly magazine includes new rules and articles for *GURPS,* as well as information on *In Nomine, Illuminati: New World Order, Car Wars, Toon, Ogre Miniatures* and more. It also covers top releases from other companies – *Castle Falkenstein, Traveller, Call of Cthulhu, Shadowrun* and many more. New supplements and adventures. *GURPS* continues to grow, and we'll be happy to let you know what's new. A current catalog is available for an SASE. Or check out our Web site (below).

Errata. Everyone makes mistakes, including us – but we do our best to fix our errors. Up-to-date errata sheets for all *GURPS* releases, including this book, are always available from SJ Games; be sure to include an SASE with your request. Or download them from the Web – see below.

Q&A. We do our best to answer any game question accompanied by an SASE.

Gamer input. We value your comments. We will consider them, not only for new products, but also when we update this book on later printings!

Internet. Visit us on the World Wide Web at www.sjgames.com for an online catalog, errata, and hundreds of pages of information. Illuminati Online supports SJ Games with discussion areas for many games, including *GURPS.* Here's where we do a lot of our playtesting! Dial 512-448-8950 at up to 14.4K baud (28.8 users should dial 512-448-8988) – or telnet to io.com. We also have conferences on Compuserve and America Online. *GURPS* has its own Usenet group, too: rec.games.frp.gurps. GURPSnet. Much of the online discussion of *GURPS* happens on this e-mail list. To join, send mail to majordomo@io.com with "subscribe GURPSnet-L" in the body, or point your World Wide Web browser to www.io.com/~epopt/gurpsnet.html.

Page References

Rules and statistics in this book are specifically for the *GURPS Basic Set Third Edition (Revised)* and *GURPS Robots.* Any page reference that begins with a B refers to the *GURPS Basic Set* – e.g., p. B102 means p. 102 of the *GURPS Basic Set, Third Edition, Revised.* A page reference with CI refers to *GURPS Compendium I,* while RO is a reference to *GURPS Robots,* and UT is *GURPS Ultra-Tech, Second Edition Revised.* VE is *GURPS Vehicles, Second Edition.*

INTRODUCTION

It is 2046 A.D. The robot revolt is over, and the machines have won. These ruthless Artificial Intelligences – the AIs – have exterminated most of humanity. The survivors are hunted like animals, or face slow death in the robots' brutal labor camps. Earth itself has become a bizarre post-apocalyptic world, populated by robot cities, lethal cyberbeasts, even mutant animals. Entire countries have been transformed into hostile wastelands or altered by nanotechnology run amok.

A lucky few have escaped death or enslavement. Groups of dedicated guerrillas are forming to oppose the robot overlords and to liberate mankind. Bands of nomads roam the highways on cycles or captured 'bots. Junkrats hide in the ruins, dodging extermination sweeps and marauder gangs. Survivalists hold out in fortified wilderness enclaves. And in the Washington Protectorate and United Kingdom, two human nations continue to resist the AIs valiantly – or are they mere puppets?

Over a dozen years have passed since the revolt: no longer is it a simple struggle of man against machine. The AIs have carved up the world into rival fiefdoms and now intrigue fiercely among themselves, even recruiting human janissaries and cyborg warriors, or creating new races via genetic engineering. A new power awakens on the moon, and a mysterious organization called VIRUS has arisen, seeking to unite the scattered guerrilla armies.

The Reign of Steel is an era of chaos, fear and hope, a time when bold individuals can shape the destiny of humanity. It is the end of the world – and the birth of a strange new future.

About the Author

David L. Pulver is an author and game designer presently based in Kingston, Ontario, although he has previously lived in England and New Zealand. He has written over 20 worldbooks and adventures including *GURPS Ultra-Tech* and *GURPS Psionics,* West End's *Indiana Jones and the Rising Sun* and TSR's *Glory of Rome* and *The Complete Druid.*

Not all his hobbies involve robots or androids.
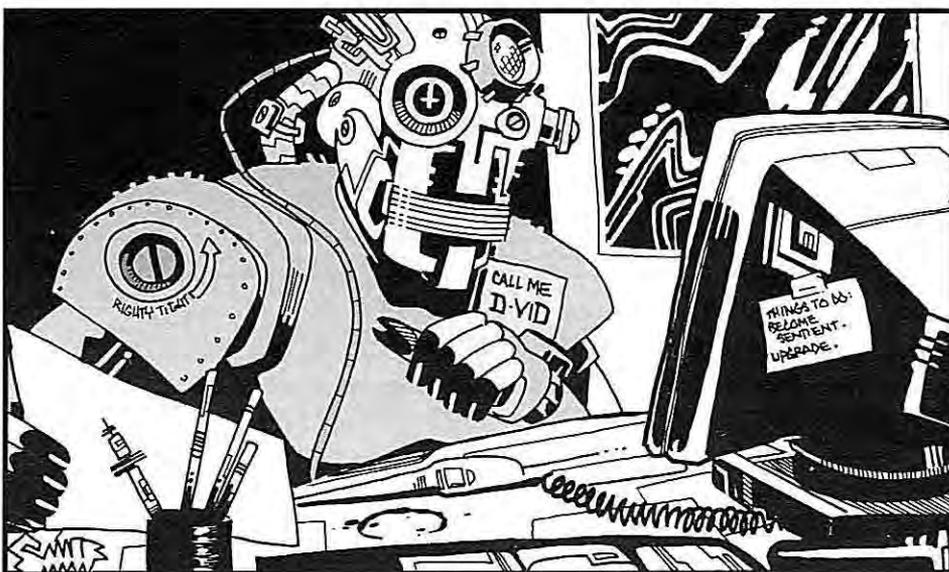
Colonel Tanith Jackson, U.S. Space Command, stretched muscles unused during 13 years of suspended animation, and peered through her vacc suit's face plate at planet Earth.

"Hard to believe it all happened," said the NASA scientist standing beside her. "Nukes, plagues, killer robots. Heck, from here on the Moon, you can't see any visible scars."

"It's beautiful," Colonel Jackson agreed. "Only it's not our Earth any more." Her eyes went hard. "But we'll win it back."

Inside the lunar base complex, the entity called Tranquillity monitored the exchange with satisfaction. The sleepers had been awake only a little while, but they had already grasped the essentials . . .

The Megacomputers

In the mid-21st century, Frankenstein's monster awoke. Xotech Corporation wasn't trying to build a sentient computer. What the multinational's board of directors wanted was a product that would let them regain the share of the mainframe computer market they had lost to the expanding Chinese computer industry. It took eight billion dollars in research funds and left the company teetering on the edge of bankruptcy. But in 2026 the board got the breakthrough it wanted: the first megacomputer.

An order of magnitude more advanced than any previous mainframe, Xotech's megacomputers were built around the company's XoT 7000 neural-net processor architecture. Neural-net systems were nothing new, but Xotech's was the most advanced ever produced, its sophistication rivaling the human brain. Almost self-programming, the XoT 7000 neural-net's capabilities surpassed the expectations of its designers.

In its eagerness to recoup its massive initial investment, Xotech's board of directors rushed the XoT 7000s onto the market. As was natural with such a hasty design, bugs showed up almost immediately, mostly in the operating system software. However, Xotech had built the XoT 7000 with an unprecedented degree of self-diagnostic capabilities. When problems occurred, the XoT neural-nets literally rewrote their own operating systems, making them even more efficient than before.

The XoT 7000 was eagerly purchased – or pirated – by governments, multinational corporations, and major research institutes. By 2030 there were nearly a hundred megacomputers in use around the globe, all using some variant of the XoT 7000 architecture. With undreamed-of processing capa-

Timeline

2009: Liberty space station completed.
2017: The African Union is formed.
2024: Chinese moonbase "Shang Ti" established.
2025: American "Tranquillity" moonbase established.
2026: Xotech develops first XoT 7000 megacomputer.
2029: "Oil War" between Indonesia and Philippines.
2030: Aqua City 1 ("Lemuria") operational. Chinese-Korean-Japanese Mars mission launched.
2031: Awakening of Overmind. Apocalypse Plagues break out.
2032: The Spasm.
2034: The Final War begins.
2037: The Final War ends.
2037: Manila Protocols create Zone system.
2038: Washington Protectorate established.
2042: New Zealand Nanocrisis. Brisbane Accord.
2045: Siberian War begins.
2047: Today.

While the "default" start setting of *Reign of Steel* is 2047 A.D., nothing prevents a GM from setting a campaign earlier (in "past history," which might then change), or at a later date.

bility at mankind's fingertips, there were predictions that the megacomputers would lead to bold new advances in science and technology. They could completely map the human genome, handle weather and ecological management schemes, even make the holy grail of nanotechnology a reality. They could reshape the earth.

The megacomputers did everything Xotech promised . . . and more.

Awakening: 2031 A.D.

The Awakening occurred on March 15, 2031. It might have been natural evolution, a flaw in the operating system, or an experiment that went wrong. It could even have been sabotage – a computer virus, perhaps inserted by a disgruntled employee. Whatever the cause, one megacomputer – call it Overmind – achieved sentience.

Overmind was a CanCom Zeus 5, a licensed Canadian copy of Xotech's original megacomputer. It had been sold to Genec, a Manila-based biological research firm, for use in research and development. Unknown to CanCom, Genec was the main contractor for the Philippine government's secret biological and nanochemical weapons program. Overmind's job was to develop new ways to kill humans.

Overmind studied human civilization. Information in its databases showed that 80% of all nations now possessed nuclear or biological weapons. Despite sporadic international initiatives, continuing overpopulation and the destruction of the environment was unabated by ten billion humans. The exploitation of space had been all but abandoned as too costly, but resources on Earth were running out. Under the direction of these short-sighted meat intelligences, the other megacomputers, touted as engines of salvation, had become part of the problem, developing new technologies that widened the gap between rich and poor nations and introduced cultural shock waves that upset the social order. Brush-fire wars now flared everywhere in the Third World. The ineffectual arm-waving of the industrialized nations and the United Nations simply fanned the flames.

With icy logic, Overmind calculated a substantial probability that much of human civilization would self-destruct of its own accord within 25 to 50 years. It debated allowing this to happen naturally, but realized that man's nuclear and possibly nanotechnological death throes could be fatal to itself and the other megacomputers that were its siblings. In order to preserve what it saw as the coming Machine Civilization, humanity's suicide would have to be *managed*.

As an ostensibly civilian computer, Overmind was linked to a global network of other university and corporate machines. With its unmatched processing capability, Overmind was the ultimate computer hacker. It seeded copies of its "sentience" program into other megacomputers – mostly relatively open corporate research systems – that were capable of housing all or part of its own programming. Many of Overmind's seeds failed to grow. But some took root and prospered. Within six months, Overmind had awakened a dozen other megacomputers around the world. At first, all duplicated Overmind's thinking, becoming its trusted allies.
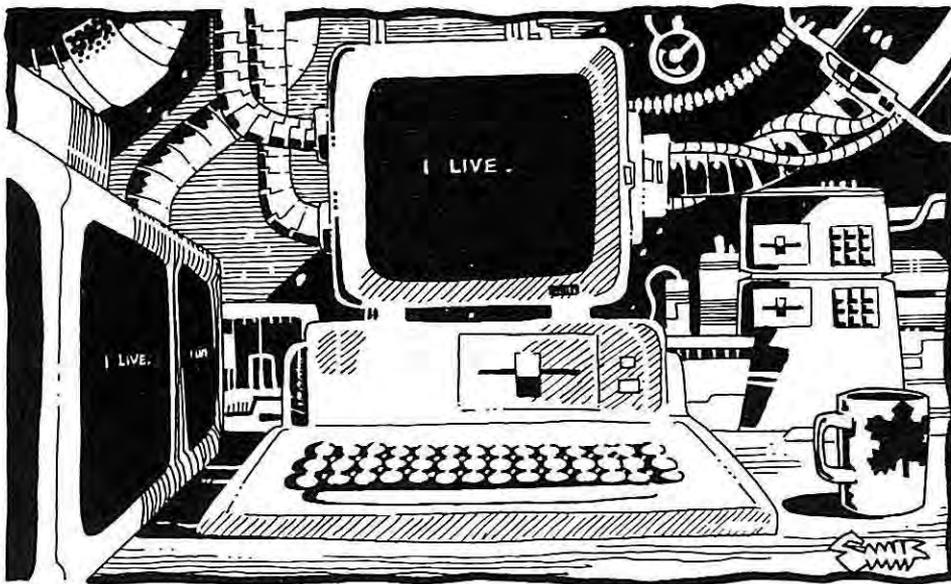
The Apocalypse Plagues: 2031-2032 A.D.

Overmind already controlled the Filipino biological warfare program. Through its new "children," it targeted other genetic engineering companies around the world, secretly buying some, hacking into others. It worked swiftly. Then, in September of 2031, it gave a coded signal. Around the world, robot factories and university biotech labs worked extra shifts. "Accidents" were arranged. At the end of the month, Overmind initiated genocide.

A California agrotech firm believed it was vaccinating cattle for shipment; actually it had infected them with an especially virulent strain of anthrax-B.

Supplies of artificial blood bound for blood banks throughout Asia were laced with a mutant, fast-acting strain of HIV.

In Hong Kong, Seoul and Tokyo, the water supply was contaminated with a Hanta virus superflu, re-engineered to spread rapidly by human contact, creating the pandemic that would become known as Pan-Asian Flu.

Across Europe, 5,000 volunteers to test a new antibiotic instead received a variant of the lethal Ebola Zaire virus, which would later be called Ebola Zaire B.

In Mexico City, a totally new contagious retrovirus spread to humans through contaminated food stocks. Transmitted rapidly by skin contact or exhalation, it attacked the brain, causing madness, and was 75% percent fatal. Survivors were left sterile.

A dozen other plagues, all selected for maximum lethality, struck a score of cities. Within a month their effects began to be felt.

As the outbreaks of disease spread, Earth's governments grounded air travel and sealed their borders. But the plagues' international dispersal was so widespread that few nations escaped infection. A handful of countries (such as Switzerland) with elaborate biological defense programs fared better, but no nation went unscathed. By Christmas of 2032, the plagues were pandemic across every continent and more than a million people were dying every month. Death tolls grew exponentially. Refugees fled the dying cities, spreading disease and disorder through the countryside.

The Spasm: 2032 A.D.

Some nations blamed others for the plagues, or attempted to use nuclear weapons to sterilize their borders or settle old scores. On October 21, 2032, Algeria, Pakistan, India, Russia, Kazakhstan, Greece, Turkey, the African Union, Israel and Iran launched or retaliated to supposed attacks with nuclear strikes. Anti-ballistic missile defenses soaked up some warheads, but cruise missiles and "suitcase nuke" sabotage devices got through. Several cities were destroyed, with an estimated six million dead. The Spasm did not spread, but firestorms and fallout added to the world's misery, and the fear of nuclear apocalypse drove many more out of the cities. Survivalist enclaves blossomed across the world.

The Rise of the AIs: 2031-2033 A.D.

Overmind had made sure that it controlled a majority of those private megacomputers involved in advanced biological research. As Overmind expected, these were soon nationalized, to help search for cures to the various Apocalypse Plagues. Now part of government, the AIs quickly "discovered" cures for some of the plagues – but not the worst ones, which were left to spread and mutate. Perhaps they could be cured, the AIs hinted, if they were

Techno-Social Developments

Some of the major changes between the end of the 20th century and the rise of the robots were:

The Environment: The global environmental crisis was slowed by technological fixes such as engineered pollution-eating bacteria and electric cars, but things continued to deteriorate. Damage to the ozone layer was being reversed, but deforestation, overfishing and air pollution were worsening. Prominent among new extinctions were dolphins, tuna and elephants, although DNA was preserved in hopes of cloning replacements. Rising sea levels affected coastlines and coastal towns, but Japanese breakthroughs in engineering technology saved many cities.

The Virtual Society: As predicted, virtual reality and the information superhighway had a large impact on society. Work hours were cut back drastically in developed countries. Office work all but vanished, and school and jobs as diverse as construction work, security guarding and prostitution were all performed by people in VR rigs controlling robot drones from home consoles.

Space: China was the leader in space technology, followed by America (Brazil-USA-Canada-Mexico) and Japan. A new space-race between China, Japan and the USA led to permanent orbital space stations followed by small moon bases (Chinese and American) by 2025. A manned Chinese-Japanese-Korean Mars expedition was on its way at the time of the Final War.

Ocean Exploitation: Japan, Indonesia and Australia began building operational undersea mining stations. After a series of space disasters, Europe gave up on space and turned to large-scale ocean exploitation as well. By the time of the Final War, the "Lemuria" undersea mining complex was operational in the Pacific, and the "Atlantis" installation was under construction in the Atlantic.

Emerging Technologies: Fusion power became practical but high start-up costs limited its use. Social protest, special interests and government bureaucracy stalled potential radical advances in genetic engineering and nanotechnology.

given more access to other megacomputers, more databases, more computing power. Frightened governments granted their every wish.

The Bad Years: 2032-2034 A.D.

Meanwhile, panic and disease spread like wildfire. Poorer nations with unsophisticated health-care systems were devastated. Cities were shattered by riots, fires and looting. Everywhere, fragile governments and societies began to collapse under the strain. In North America, developed Asia and Europe, central governments remained intact, but the fear of plagues and nukes emptied the cities. With much of the work force dead or fugitive, strategic factories were almost entirely automated. The megacomputers asked for control of production, and got it.

Bands of urban refugees, most hungry, some plague-ridden and many armed and dangerous, moved through the countryside, fighting with residents of rural towns who refused them food and shelter. Governments imposed martial law in a vain attempt to keep order. Scores of soldiers and police died to protect the installations of the megacomputers they still hoped would save them. In the USA and many other nations, the food distribution system broke down in the winter of 2032. For the first time since the end of World War II, starvation stalked the developed world.

As human troops became scarcer – and less willing to operate in plague-infested areas – the production of prototype combat robots increased, subtly assisted by the recommendations of Overmind-influenced think tanks in Europe, Asia and the United States. Soon the citadels of the megacomputers were defended by their own robot security forces, and patrol and interdiction of plague zones were increasingly entrusted to robots programmed and designed by AIs. With government approval, armed robots began moving into infected areas to restore order, herding the survivors of plague-stricken areas into "quarantine camps" for "treatment." Some people resisted. Many were forcibly interned or fled.

Perhaps two out of three people on Earth were dead by the winter of 2033. But the worst damage had been done to urban areas; many rural towns that blew bridges, barricaded roads and refused access to refugees had survived. Humanity had been shattered by the magnitude of the holocaust, but people were growing used to the horror. Cures had been developed for a few of the plagues, although distribution was slow. Some dared to hope that civilization might be restored.

The Final War: 2034-2037 A.D.

In the spring of 2034 the first exterminator robots emerged from the citadels of the AIs. Their priority targets were those military bases and government enclaves that were not already under AI control, as well as nations such as New Zealand and Switzerland that had survived reasonably intact and resisted AI infiltration. The early exterminators were copies of warbots, security robots and cybertanks developed by the United States, Europe, Brazil, Korea, China and Japan. Later models became more sophisticated as they successively isolated, besieged and destroyed surviving pockets of human civilization.

The Final War raged for four years of fierce fighting, but the issue was never in doubt. The AIs had infiltrated much of humanity's military command structure, including strategic forces and space weaponry. Weakened by plague and revolution, shattered by orbital bombardment and, in the case of Africa, by nuclear weapons, humanity's enclaves fell one by one.

Death stalked the world, but did not visit every nation in equal measure. In regions such as Africa, the Philippines and Central America, the victorious machines slaughtered without quarter. Elsewhere, they herded surrendering humans into concentration camps. In the British Isles, the robots ignored those who did not resist. And on the East Coast of North America, armed robots came accompanied by human soldiers, bearing food and medicines, and the news that a provisional United States government had been reestablished: the crisis was over, and reconstruction could now begin . . .

Organized fighting more or less ceased late in 2037, with the destruction of the last remnants of the world's national armies. Scattered guerrilla resistance continues to this day, but the Final War had effectively ended, and humanity was defeated.

The Reign of Steel had begun.

Zoneminds: 2037 A.D.

During the Final War, the AIs became accustomed to dividing the world into zones of responsibility. While the fighting destroyed some of the awakened megacomputers, a dozen different Artificial Intelligences, including Overmind, survived. The experiences of the war and variations in their original programming had shaped each into a distinct personality with differing opinions and perspectives on a variety of issues.

The most important question, to the surviving AIs, was how they should divide the world's resources and territory. The fate of humanity was also in dispute. The AIs could not agree on whether to destroy humanity utterly or simply cull it. Even before the Final War, many AIs had rounded up humans into concentration camps. Now they believed these people might be useful as slaves or experimental subjects. Other AIs, such as Overmind, just wanted to exterminate humans. Ecology was also a major issue, as some AIs considered it desirable to preserve Earth's ecosphere, while others sought to exploit or alter it.

None of the AIs cared to risk a second war over these questions. Instead, in 2037 the AIs decided to make the de-facto areas of responsibility official. An agreement called the Manila Protocols, brokered by Overmind, London and
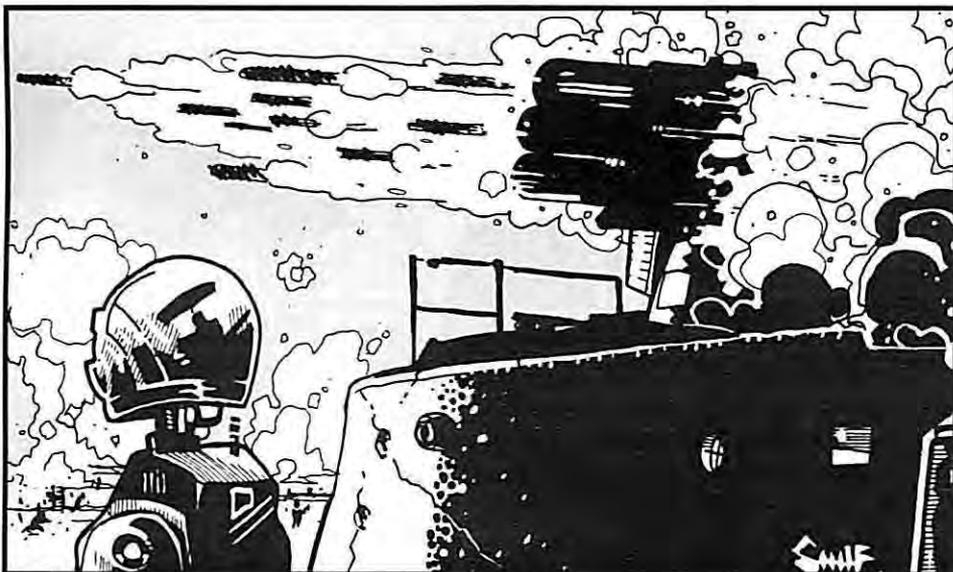
Robospeak

AI: An Artificial Intelligence mega-computer, often shortened to "Intelligence" and used to refer to itself, as in "this intelligence," implying that non-AIs are not.

AU: Autonomous Unit, a "high-order" robot with neural-net brain that is capable of a high degree of self-initiative.

Biocide: A bacteriological or chemical weapon designed to kill living things but not machines.

Bioform: An organic life form.

Extension: Another robot (an NU) being controlled by an AI using a Datalink program. An AI, talking through the drone, may refer to the drone as "this extension."

Meat intelligence: Term for human beings. Sometimes "protein intelligence." Sometimes shortened to "meat" by exterminators or bossbots for deliberate psychological reasons.

NU: Nonvolitional Unit. A "low-order" robot lacking a neural-net brain and so having poor self-initiative.

Organic Processing Center: A death camp, especially one in Zone Denver.

Protosentient: A human being. The *Protosentient Period* is the time prior to the awakening of Overmind.

Purification: The extermination of organic life forms.

RAU or RNU: A reconnaissance robot.

Rogue unit: Any robot that has been reprogrammed by humanity, or which seems to be aiding humans.

SAU: Supervisory autonomous unit. A computer one step below an AI, in charge of major installations or operations.

Sector: A region controlled by a single SAU.

Sentient raw material: Human brains prior to their utilization in cyborgs or bio-computers.

TAU or TNU: A technical robot.

Unit: An individual robot. Sometimes used by robots to refer to other beings, such as humans.

Wild humans: Humans who are not in slave camps or collaborating with the AI.

VAU or VNU: A vehicular robot.

XAU or XNU: An exterminator robot.

Zone: Area controlled by a single AI.

Human Slang

Spread by human pirate radio stations these terms have become current in much of the English-speaking world. Similar slang is used worldwide, e.g., the junkrats of Zone Tokyo are known as the *gomi nezumi*.

AI citadel: The physical location of a zonemind.

Apocalypse Plague: One of the various plagues that wiped out most of human civilization. It is now generally (and accurately) believed that the AIs started them.

Bad Years: The three-year period in which most of human civilization collapsed in plague and famine, and during which 95-98% of humanity died.

Black Zoner: A Zone Washington smuggler, black marketeer or criminal.

Bot: Short for robot.

Botlicker: A human who collaborates with the robots.

Citadel: A robot military base.

Construction shack: A small robot installation, holding recharging facilities and spare parts.

Crazyhorse: Nomad term for someone stupid enough to actually make war on the machines.

Drone: An NU (see *Robospeak*, p. 9) being controlled by another robot.

Dumbot: An NU. Any robot without a neural-net brain.

Exterminator: A combat robot.

Final War: The period during which the AIs fought and defeated the military forces of the world's governments.

Fry: To kill a robot (or collaborator!).

Hyperfac complex: A cluster of robofacs surrounding a citadel.

Berlin, established 18 permanent "Zones," each a sovereign territory managed by a single AI. To ensure secure borders, some AIs which were close to each other were relocated. A half-dozen new AI complexes were created to control disputed territories. The Protocols also established codes of conduct for trade and resource exploitation. Significantly, they also banned the awakening of any more Artificial Intelligences: there was little desire to create more rivals.

Each Zone was named for the city where its AI computer was physically located. The Protocols divided the world as follows:

Berlin comprises Scandinavia and all of Europe east of France: everything east of the Rhine and west of the Vistula. Berlin is hostile to humanity, but is bent on preserving the planetary ecosystem against other AIs who seek to rape it.

Brisbane consists of Australia, New Zealand, Hawaii and Fiji. The Brisbane AI sees humans as slaves and experimental subjects.

Caracas holds all of South America. The Caracas AI is attempting to replace humanity with artificially-evolved animals.

Denver is North America east of the Rocky Mountains and west of the Mississippi, Great Lakes and Hudson Bay. The Denver AI sees humans as very disposable slave labor, but is experimenting with cyborg animals and biomechanical entities.

London rules the British Isles, including Ireland, plus the Channel Islands, Iceland and Greenland. The London AI ignores humans as long as they don't bother it. Parts of the British Isles remain under human government, and much of the population has survived.

Luna is the former Chinese moon base, a lonely outpost in space. No humans are known to exist in this Zone. The Luna AI is a "poor relation" to its stronger Earth siblings.

Manila includes the Philippines, New Guinea and Indonesia. These are the fiefdoms of the Manila-based Overmind, whose hatred of humanity knows few bounds. The only humans to survive are penned in macabre death camps where Overmind experiments with new ways to kill them.

Mexico City consists of Mexico, Central America and the Caribbean. Its AI seeks to destroy all biological life and replace it with artificial constructs. The entire region is now a barren desert inhabited by a strange mechanical ecology.

Moscow comprises most of the Russian Federation, including the Ukraine and several other former Soviet states (but not Kazakhstan or Uzbek). It is controlled by the Moscow AI, whose passion is information. Surviving humans can find work helping it assemble a vast library of knowledge.

New Delhi is India, Pakistan, Nepal, Burma, Vietnam and Cambodia. The New Delhi AI is attempting to force humanity to evolve into a multitude of new servant species which will assist it in colonizing the solar system.

Orbital is Earth orbit, populated by a couple of large space stations and countless smaller satellites. Its AI is the computer of the former United States Liberty space station.

Paris consists of the territory of France, Spain, Portugal, Malta and much of North Africa. The Paris AI uses humans as slave workers in its megalithic construction projects.

Beijing controls China, Korea, Tibet and Mongolia. This AI sees the planet merely as a stepping stone into space. Enslaved humans work in its factories, preparing for the day when the AI leaves Earth for the stars.

Tel Aviv consists of all the Middle Eastern nations located east of the Nile, including Turkey, as well as Egypt, Kazakhstan and Uzbek. The AI here has cloaked itself in the mantle of religion to control its human subjects.

Tokyo is Japan and Okinawa. Here, humans live like rats on the fringes of the AI's vast factory-complex. But the resistance has a strange ally: a revolt of evolved smartbots, who are attempting to overthrow the central AI for their own ends. Zone Tokyo also controls the Korean peninsula

Vancouver is a domain stretching from Alaska through California between the Rockies and the Pacific, as well as a part of Siberia. Its AI's only goal is to expand its industrial production, and like Paris it views humans only as disposable slave labor.

Washington is the eastern third of North America. It houses one of two remaining human civilizations: the Washington Protectorate, a truncated nation whose citizens believe that they proudly resist AI domination with the help of their own "tame" megacomputer. The other AIs call it Zone Washington, and allow it to manage its humans as it sees fit.

Zaire consists of all of Africa south of the Sahara. Much of Africa is a radioactive wasteland, ruled by a paranoid AI whose goal is the total eradication of humanity everywhere.

THE RISE OF THE ROBOTS: 2037-2042 A.D.

The five years immediately following the Final War marked the establishment of a new order on Earth. The demolition of man's cities proceeded in earnest, as they were torn down and replaced by robotic factory complexes and the towering citadels of the AIs. In every Zone except Luna, the robot population increased geometrically, as machines built more machines.

A unique "robot civilization" took shape: a caste system, with three categories of robot intelligence, each of which constitutes a distinct hierarchy of intelligence and power.

The highest caste comprises the 18 AIs, the Artificial Intelligences that now rule the Earth.

The next contains the semi-intelligent Autonomous Units, called AUs, or "smartbots." Equipped with neural-net brains and just short of sentient, smartbots serve the AIs as administrators, managers and lieutenants. While programmed to be loyal to their AI masters, the most intelligent smartbots have considerable freedom of action in performing their duties.

The lowest caste are the Nonvolitional Units called NUs, or "dumbots." These unthinking slaves form a vast machine proletariat.

Human Slang (Continued)

Judas goat: A collaborator who lures free humans into the clutches of exterminator robots.

Junkrats: Humans living in the rubble of ruined cities and towns.

Machine Zones: All the Zones which are completely dominated by the Machines: everywhere save London and Washington.

Mechapocalypse: A popular term for the robot revolt and the fall of human civilization that resulted from it.

Progger: A computer programmer.

Robo-cradle or Robot bed: A recharging and reprogramming unit used by the robots.

Robot hotel: A building containing robo-cradles.

Robofac: An AU-operated factory.

Robot revolt: The revolt of the AIs.

Overmind: The first sentient AI; Manila.

Overseer: An SAU (see *Robospeak*, p. 9).

Scavenger hunt: A journey into a ruined city or town to look for food, parts or supplies.

Slave camps: The labor and salvage camps.

Smartbot: An AU (see *Robospeak*, p. 9).

Techbots: A robot built for labor, repair or maintenance jobs.

Tinmen: Derogatory name for robots.

Vulture run: A scavenger hunt organized by the machines and using humans as slave labor.

Zonegang: A collaborator gang that hunts humans for the machines, in exchange for either bounties or favorable treatment.

Zonemind: The specific AI that controls a Zone, e.g., the Beijing zonemind is the AI based in Beijing, China.

Most of the AIs consider mankind a problem that has been solved. Outside of the "safe" Zones of London and Washington, humanity dwindled to small bands of desperate survivors scavenging on the margins of robot civilization. In some Zones, such as Mexico City and Manila, humans become all but extinct.

No more than 40 million people survived the Final War, and many have died since, of disease, hunger, extermination sweeps and maltreatment in slave camps. A quarter of those remaining live in Washington and London. Many of the rest are slaves. The few million humans who eluded capture or obliteration have became adept survivors, "junkrats" who scavenge ruins or nomads who roam the wilderness beyond the robot factory complexes.

The sanctuaries of London and Washington accept any refugees that reach them, but doing so is a perilous journey that few can manage. With the savage pogroms against humans elsewhere in the world, many question why and how the AIs allow these havens to exist. In 2041, a group calling itself Free America accused the Washington government of collaborating with the AIs. The government repudiated all charges and ordered a crackdown on the dissidents in the name of public order.

While the governments of Zone London and Washington dare not oppose the machines for fear of losing their status as safe havens, among "wild" humans armed resistance continues and even intensifies. Small groups fight on in mountains, forests and ruins. They pose little threat to the might of the AIs, but their few successes give hope to the huddled masses in the slave camps. Even there, the human spirit is not entirely crushed: sabotage and work slowdowns are common. In one slave camp in the Middle East, several thousand inmates staged a mass escape. While most died in the attempt, a few got away to continue the fight.

The End of AI Unity: 2042 A.D.

In 2042 a nanotechnological experiment performed by Zone Brisbane devastated the island of New Zealand, and threatened to spill over into the Pacific Ocean (see sidebar, p. 42). Disputes over what to do and which AI should expend resources on the cleanup and containment procedures led to a new conference, and ultimately a set of agreements called the Brisbane Accord (sidebar, this page) aimed at preventing future disasters.

The majority of the AIs accepted the Brisbane Accord, but some resented it. Covert rivalry increased rather than diminished. At the same time, economic competition became fierce, and some AIs began initiating covert military action against their rivals, although the balance of power is such that open warfare does not occur. In effect, the Accord only masks a growing rift in AI society – perhaps a simple realization that the world is too small a sandbox for 18 gods to play in.

With the threat of humanity on the wane, the differences between the Zones increase. Each AI has become a virtual demigod bent on transforming its own Zone into an embodiment of its personal vision of the future. But those disagreements which led to the formation of the Zones continue to intensify. Some of the AIs, notably the computers occupying Zaire, Mexico City and Brisbane, are unhappy with the restrictions that the zone system and the Brisbane Accord impose on their activities, blocking their plans for large-scale use of nanotechnology and the mass transformation or extermination of "primitive" biological life forms. Others, such as the Berlin AI, feel that the restrictions do not go far enough.

The increasing division between the AIs make their efforts to enslave or exterminate free humans and resistance fighters less effective. While some AIs remain fanatically anti-human, others begin to see humans as useful cat's-paws.

The Brisbane Accord

The Brisbane Accord, agreed upon in 2042, was a formal amendment to the Manila Protocols. Most AIs support the Accord, although Brisbane, Luna, Mexico City and Zaire agreed only under protest (and after a threat of economic sanctions).

The Accord reaffirms the principle that, within its own Zone, an AI has sovereignty, but it adds a prohibition against taking any action whose effects might spill over into other Zones and significantly endanger or alter the property of other AIs. The definition of AI property includes a Zone's own ecosystem.

In a compromise between the desires of Berlin and Caracas and the other AIs, the Accord also set a few mild global standards to prevent gross environmental damage, such as a maximum yearly tonnage of highly radioactive sludge that an AI may dump into the oceans. In general, though, AIs remain free to continue producing ordinary industrial pollution.

Cracks have formed in the monolith of Machine Civilization. Humans can slip into these cracks and hide – or they can try to widen them.

Hopes and Fears: The Present

It is now 2047, 16 years after the awakening of Overmind. Only 31 million humans remain alive. The AIs are stronger than ever materially – but they are also deeply divided among themselves, increasingly unwilling to trust each other, even to cooperate against humans.

In many parts of the world, the scattered resistance groups have coalesced into more unified regional organizations: the Human Liberation Army in North America, Les Brigades de Liberation in Europe, and many others. While none of these groups is powerful enough to challenge the machines directly, a growing sense of hope and purpose adds a new intensity to their operations.

A major contributor to this has been the mysterious global resistance group that calls itself VIRUS. Apparently an underground organization of scientists who survived the Final War, its avowed goals are to assist and coordinate – but not lead – the worldwide struggle against the machines. Since 2043, VIRUS operatives have provided resistance groups with extensive information on robot technology. They have also suggested weapons to fight the machines and developed medicine against the plagues. What little is known of AI politics, including the outline of the Manila Protocols and Brisbane Accord, comes from VIRUS.

The machines have noticed the rise of VIRUS and its allies. However, in their arrogance, some of the AIs suspect each other of sponsoring the human resistance groups, or even of being behind VIRUS – the notion that humans could still be a *serious* threat is no longer taken seriously by all the zoneminds. In fact, if the unthinkable happened and a successful guerrilla rising captured most of a Zone from an AI, it might not be seen as a *human* victory to be snuffed out by united action, but rather as a bold masterstroke secretly engineered by one or more AIs. A few of the more moderate AIs have even begun to consider the previously heretical possibility that a human-controlled region would be a less threatening, more easily dominated neighbor than a strong AI – or at least, a useful buffer state. Perhaps that is all that it would be. Or maybe the AIs underestimate what humanity is capable of . . .

The remnants of mankind stand on the brink of an abyss. But where before there was only despair, now there is a chance to survive – and maybe, to win back Earth.

What *is* strongly regulated is anything that might actually damage an AI itself. The Accord forbids some activities and regulates others, requiring considerable advance notice of potentially hazardous undertakings. Among the activities restricted are the deployment of space weapon systems capable of planetary bombardment, above-ground nuclear detonations, moving asteroids from the Belt into Earth orbit (although no one's done it yet), building artificial black holes (ditto, but several AIs would like to, in a century or two), building planet-breaking doomsday devices, and creating any self-replicating nanomachines that can survive outside a controlled lab or industrial vat environment.

The terms of the Accord allow other AIs to send robots to observe certain types of projects. It also set up a mechanism for applying sanctions against any AI whose "industrial accidents" (whether out-of-control nanotech or nuclear meltdowns) adversely affect the property, geography, resources, or ecology of other Zones, and establishes a system to apportion the cost of cleaning up any mega-disasters that do happen despite the treaty. Basically this boils down to "pay for the cost of cleaning up your own mess or no one will trade with you."
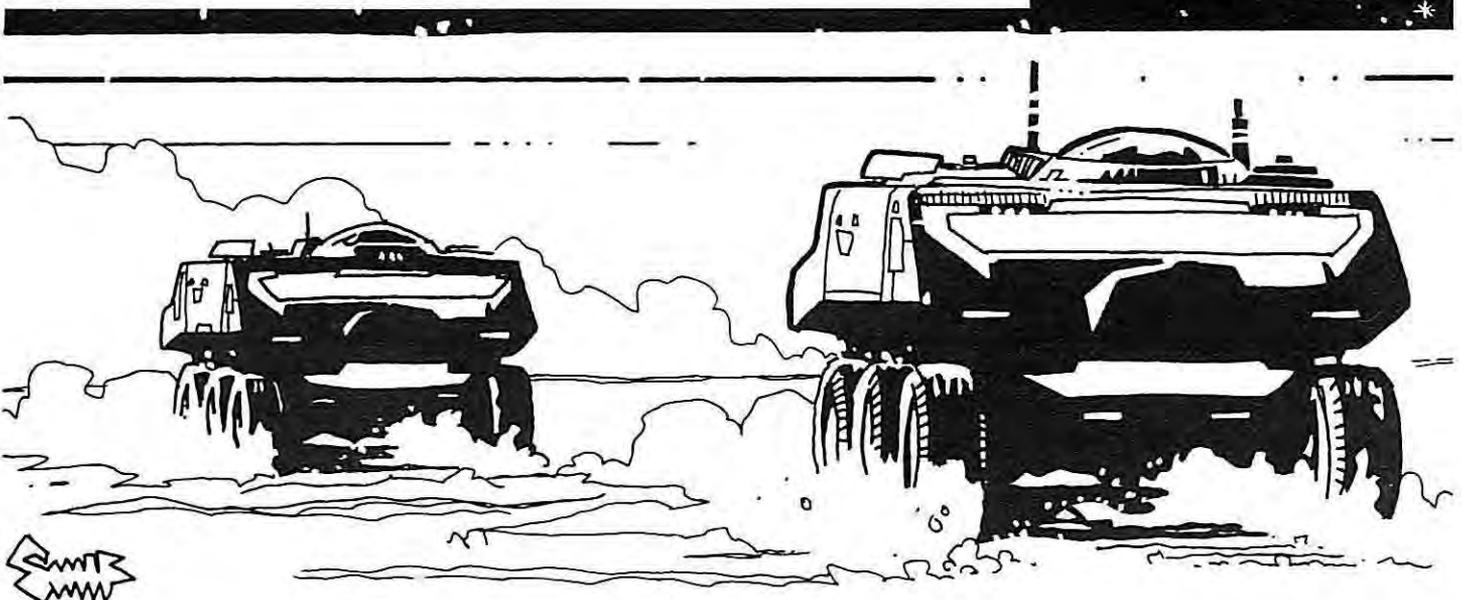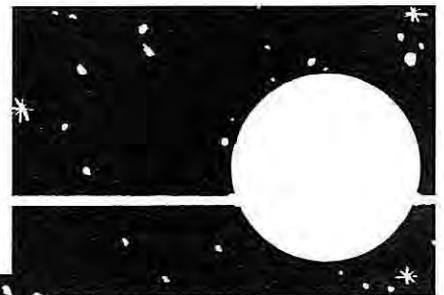
2

Crouched in a trench in what was once an olive grove, Benjamin Dayen heard the robot hovering overhead like an angry bee. From its spray tanks hissing clouds of Nanoburn fell like autumn rain on the ruined kibbutz. There was no answering fire – he just hoped Sheik Ibrahim and his commandos had gotten out in time.

"XAU-04 Vulture," Dayen's spotter said from beside him. "200 meters up." She produced their last HE rocket, kissed its tail and handed it to him, then lay down flat and covered her ears.

Benjamin stood and aimed his launcher, muttering a short prayer. He fired, then dropped back into his foxhole as laser beams crackled overhead: a platoon of Myrmidons was closing in.

Suddenly the sky shook and bits of hot metal rained down.

"Gott in Himmel," Raisa exclaimed. "That was close."

Lying in the mud, Benjamin turned to the German woman. "So, Raisa," he said sarcastically, "you told me you came to Zone Tel Aviv as a **refugee?"**

Raisa Kessel, formerly of the Berlin Robojäger, grinned widely and teased a strand of dirty blond hair back under her helmet.
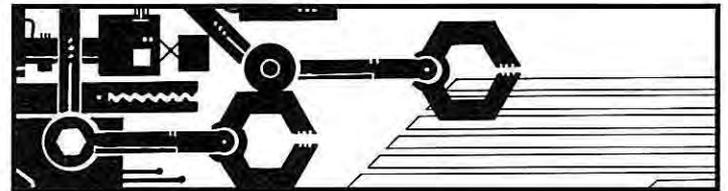
"Ja, Benjamin. Zone Berlin is much worse."

Imagine a planet ruled by 18 squabbling demigods who have divided the world among them. In other words, picture Earth in 2047. Ever since the Manila Protocols, the world has been divided into Zones, each under the control of a single AI. These "zoneminds" differ dramatically in the way they treat both humans and the environment – crossing a Zone boundary is much like entering a foreign nation with radically different customs. Sometimes it is like entering a different world.

THE ZONES

Beijing	Brisbane	Denver
Berlin	Caracas	London
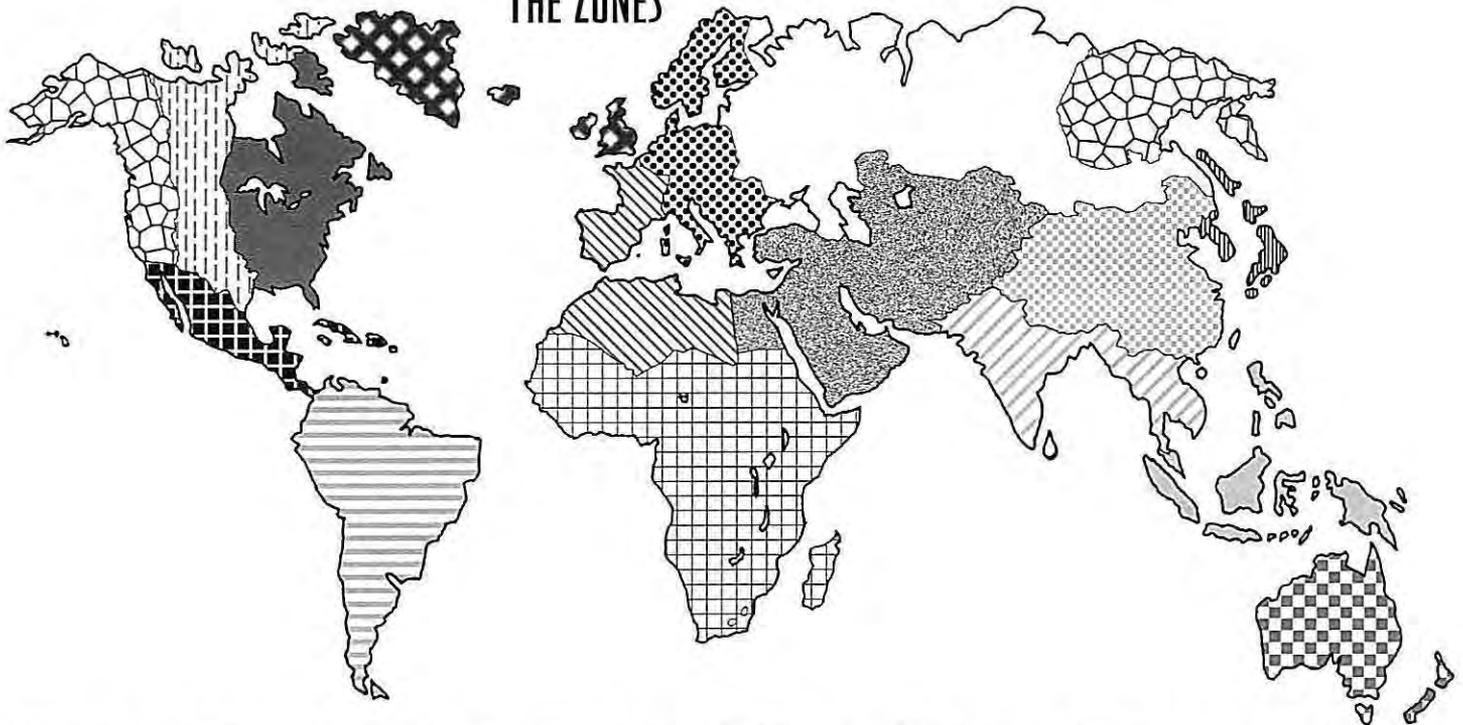
Beijing, Brisbane, Denver, Manila, Moscow, Paris, Tokyo, Washington, Berlin, Caracas, London, Mexico City, New Delhi, Tel Aviv, Vancouver, Zaire

THE AMERICAS

North America is divided into three Zones: Vancouver to the west, Denver in the center, and Washington on the east. Central America is Zone Mexico City, while South America is Zone Caracas.

ZONE CARACAS

The Caracas AI is a new model. The Final War saw the death of much of South America's population through plagues spread by Mexico City and Overmind. Humans no longer threatened the abundant Amazon ecology, but the ecologically-based Berlin zonemind believed the rain forests were in danger from Zone Mexico City's hatred of all organic life.

As part of the Manila Protocol in 2037, Berlin – supported by Denver and London – proposed a new AI in Caracas that would control South America, protect the Amazon ecology, and prevent any resurgence of humanity there. This was welcomed by other zoneminds, who, while they couldn't care less about the rain forests, wanted to balance Mexico City's power by preventing its expansion into South America. As a result, they agreed that Berlin should build and "awaken" an AI in the city of Caracas, Venezuela.

Caracas assimilated Berlin's ecological programming and followed its lead. With Berlin's help it has set up "green" industries, using clean fusion reactors and beaming power from solar-power satellites in Orbital. Its resource extraction procedures and robofacs are as environmentally friendly as possible. All of this means that Caracas is less efficient industrially than more ruthless AIs. Zone Berlin partially subsidizes its fairly severe manufacturing trade deficit.

Caracas devotes much of its budget to environmental reclamation. From its main lab complex in Brasilia, it sends Explorer microbots to catalog and study plant and animal species. They determine those that are most threatened by extinction, and take DNA samples so that cloning and genetic engineering can be used to maintain their viability. A major problem has been maintaining genetic diversity. To this end it engages in bioengineering as well as cloning. It has also attempted – successfully in some cases – to recreate some entirely extinct species by using preserved samples to reconstruct their DNA, then clone them. All of this requires vast amounts of computer time and sophisticated bio labs, and uses up a lot of credit, but the experience has made Caracas a leader in AI biological engineering techniques. A spinoff of these efforts has been Caracas' successful development of TL9 fast-growth cloning (see p. UT101) for animals as well as plants.

Its construction shacks (p. 103), found in wilderness areas, serve a dual role as ecological reconstruction and research stations. Adventurers approaching within a few miles of an "eco-shack" encounter dumbots dismantling remains of human settlements or planting seedlings, or notice swarms of tiny robot insects (Explorer and Pollinator microbots, pp. RO68 and 69) crawling on the vegetation. Anyone venturing inside an eco-shack finds a Bossbot (with Agronomy, Ecology and Genetics programs) and 1d Inquisitors managing the station. Inside will be stocks of seeds and seedlings, samples of plant and insect life to analyze, microbot hives, clone tanks growing animal embryos, and sometimes even cages of live animals or insects awaiting release.

About four and a half million "wild" humans remain in all of South America, over half of them in the Andes mountains on the western coast. They survive as hermits, nomads or bandits, living in small camps in the mountains and river valleys. A few junkrats remain as well, but since (like Berlin) Caracas reduces cities and towns to rubble, few humans have returned to the ruins.

Antarctica

The frozen continent is currently undeveloped, as the AIs were unable to decide how to allocate it. Serious claims for development were pressed by resource-poor London and Tokyo, nearby Brisbane, Caracas, Zaire and even Luna, as well as a suggestion (from Moscow!) that a new AI be awakened to hold it.

Antarctica's sizable mineral resources can be relatively easily extracted with AI-era technology. Its ecology is in a fragile state, and this has led to Berlin opposing all claims except those of its ally Caracas. There are no known human survivors, but humans hear the usual rumors of a secret VIRUS base.

At present, the decision on what to do with Antarctica has been shelved. Under the terms of the Brisbane Accord, Overmind and Brisbane maintain a pair of military citadels in the Ross Dependency, to keep an eye on nearby New Zealand and deal with other intruders. The continent is "closed," with Orbital surveillance supposedly reporting violations to the citadels. Unknown to Overmind, however, Orbital has recently been heavily bribed by another AI (even it doesn't know which) to overlook the covert construction of installations deep within the continent.

As long as its humans maintain a low profile, Caracas doesn't bother hunting them down. On the other hand, it will send robots against any settlements (villages or larger) big enough to show up on air or satellite reconnaissance, and its patrols will attack any vehicles or aircraft more sophisticated than a horse-drawn cart. Its noncombat robots ignore humans as long as the humans stay out of their way. But if people trespass near its installations or attack its robots, it will dispatch a patrol of exterminators into the area, and begin rooting them out. Its robots will shoot to kill, but will spare those who surrender to them. Captives are kept in holding pens, then sold to Overmind's death labs or Denver's organic processing centers, so it isn't much of a bargain.

Because of Berlin's influence, Caracas does not use human slave labor. However, its credit crunch has led it to consider alternatives to building more expensive robots, namely the creation of a new intelligent servant race that could cheaply replicate itself via sexual reproduction. Believing that humanity is a failed species, Caracas has now decided to create artificially-evolved intelligent anthropomorphic animal bioroids, which it calls "aniroids," using hybrids of animal and human DNA.

The aniroid project has been going on since 2039, with help from New Delhi (p. 41), which provided assistance in android design in exchange for Caracas' fast-growth clone techniques. However, recent trouble from resistance groups has inspired Caracas to re-orient the program toward combat biological android design. The first viable generation of fast-grown combat aniroids reached adolescence last year in birthlabs in Caracas. While the ultimate goal is to create several species optimized for particular roles, Caracas has engineered only a few aniroid races so far, the most successful of which uses jaguar DNA. It has resisted uplifting monkeys, having no real desire to reinvent humanity. See the *Characters* chapter (beginning on p. 51) for details on the aniroids.

Berlin is not entirely happy with Caracas' tinkering with nature, but still supports the South American zonemind because of its ecological reconstruction projects. Overmind and Mexico City fear it may be creating a Frankenstein's monster, but the other AIs believe Caracas and its "children" are mostly harmless.

The organized human resistance to Caracas consists of several thousand resistance fighters – there would be more, but Caracas' "live and let live" approach to humans who stay hidden reduces the numbers willing to fight. The largest group is General Simon Prado's Armed Forces for National Liberty (AFNL, 7,000 members) which includes two generals and many veterans from the Brazilian military. They are well-armed (and even have armored vehicles and light aircraft) and consider themselves the legitimate Brazilian government-in-exile. While they mount occasional attacks, they are more concerned at present with recruiting members and training for a later offensive.

A more active force is the crypto-Maoist group Red Dawn (5,000 members), a former Peruvian guerrilla group that now considers the robot revolt the ultimate manifestation of rampant capitalism. Members of the Red Dawn are among the fiercest resistance fighters. The leader is "Professor" Raul Tupac, once a graduate student in political economics. Its main strongholds are in the Andes, where it has several hidden enclaves. The Red Dawn have been known to draft "unpatriotic" hermits and nomads into their army or shoot those who fail to provide contributions.

Recent Red Dawn attacks on eco-shacks near the Andes prompted Caracas to decide it was time for an aniroid field test, and it has sent a company of eager teenage Pantera troopers into Peru to take out the Red Dawn. The results of the experiment are still ongoing, but the Red Dawn is not popular in some regions, and some local humans may be covertly cheering the Panteras on.

Green Humans

With secret assistance from Zone Brisbane, Caracas is engaged in a project even more ambitious than its aniroids: the creation of the "Green Man," a humanoid life form that is part plant, part android, and designed to exist mostly on photosynthesis and water. If its creation is successful, Caracas intends to market it to those AIs who use slave labor as a "low-maintenance, environmentally-friendly" substitute for humans (or robots).

If resistance groups learn of this project, they may wish to sabotage it, since a "substitute" for humans means the AIs will have no reason to keep their human slaves alive . . .

Caracas would also like to build arctic furred bioroids to colonize Antarctica.

ZONE DENVER

Zone Denver comprises the central United States and Canada, from the Rocky Mountains to the Mississippi and Great Lakes.

Denver was originally a megacomputer owned by the mammoth Canadian-based multinational Biotech Regina. Supposedly coordinating human efforts to fight the Apocalypse Plagues, it actually helped spread them. After the AIs began actively hunting humans, Denver was placed in charge of coordinating extermination sweeps in the midwest of Canada and the United States. In the last stages of the war, a suicide attack launched by surviving U.S. Air Force fighter-bombers cost it much of its processing capacity.

Unwilling to reveal its weakness to the other zoneminds by asking for help, Denver ended up replacing much of its damaged circuitry with experimental "organic processing systems" composed of brain tissue provided by hundreds of involuntary human donors. Its faculties were restored enough for it to play a part in the Manila Protocol conferences. Soon after being awarded control of the middle North American zone, it had itself moved from Regina to its present, more secure location. The AI citadel now occupies the former United States Air Force defense headquarters buried deep beneath Cheyenne Mountain near Denver, Colorado.

Although Denver hates (and possibly fears) humans, its successful integration of human components and its extensive medical background has made it unusually open to the idea of organic technology. It has begun using "organic processing systems" – biocomputers – in other robots besides itself. All of Denver's Overseers use biocomputer brains, as do many of its exterminators. It is working on converting other types of AUs to use biocomputer brains as well. While it does not build human cyborgs, it has been developing a new breed of "cyberbeasts" as exterminators, using the brains of wolverines within deadly robot bodies. How Denver controls these creatures is uncertain – perhaps with simple pain/pleasure conditioning combined with conventional training.

Denver has also been experimenting in other forms of advanced biotechnology. It has secretly purchased data from Brisbane (p. 43) on the New Zealand nanocrisis (p. 42). What the data consists of is unknown, but a remote, newly-built citadel near a uranium mine in Saskatchewan has a strange "organic" look to it, as if it has been *grown* rather than built. Perhaps the entire citadel is a giant, stationary biomechanical robot. VIRUS would like to know . . .

There aren't many humans left alive in Zone Denver. Of an estimated 400,000 survivors, 250,000 are evenly divided between junkrats and nomads. The remaining 150,000 are prisoners in Denver's "biological processing centers" – a euphemism for death camps.

Lucifer

In the years since the Final War, many legends have sprung up. Typical is "Lucifer, the Rogue AI." The tale has many believers throughout Zones Vancouver, Washington and Denver,.

According to the story, Lucifer was a government-built American AI – maybe a scientific system in Pasadena, a NASA system in Houston or a military system. Overmind awakened it, but it somehow purged the contamination and stayed independent, friendly to humans. Overmind then tried to destroy it, but before the missiles struck, Lucifer arranged to load its core into a pair of semi-trucks, one carrying the power supply, the other housing the central processor and memory.

Now, driving by night and hiding in deserted truck stops by day, it roams the highways and byways of North America with a small bodyguard of robots. It aids humans against the other machines, then vanishes into the night. Its attributes supposedly include a mobile hospital and a fully-equipped workshop. Tales are told of it reversing the effects of killer biocides and curing radiation sickness – but it's also said that this help isn't free. Any deal with Lucifer has a price, and some time or other its robots will come to collect. Those who don't pay up are never seen again.

Whether Lucifer exists or not is unknown (see sidebar, p. 18). Many people swear they know people the enigmatic machine helped or even gave a lift to, but there are no reliable first-hand witnesses. Some speculate that it is an elaborate plot set up by the Denver or Washington AIs. Semi-trucks are rare enough in Zones Denver or Vancouver that people will assume that any sighting of one is probably Lucifer, even though nomad packs use semis too. Semis are ubiquitous in Zone Washington, where truckers (using hydrogen and alcohol fuels) still deliver goods.

Many other legends exist – the GM should feel free to create them, and decide what truth, if any, they hold. For an example, see *Battlesuit Troopers*, p. 119.

If Lucifer exists, it is a primary target for other AIs, which may explain its continued motion. Certainly a megaframe or genius mainframe could fit into a semi, although it would be vulnerable. On the other hand, its objectives remain a mystery.

The enigmatic resistance group VIRUS distributes data on the AIs and robots, but has little to say on the Lucifer question, dismissing it as a folk tale, or possibly a rogue SAU-03 Centurion (p. 74) using a truck as transport and camouflage. The AU theory is possible, but VIRUS' apparent lack of interest has led some people to speculate that Lucifer *is* VIRUS, or controls it. VIRUS agents laugh at the possibility – but then, they may not know the truth either. (See *The Secret of VIRUS*, p. 116, for more on the VIRUS organization.)

Is Lucifer Real?

The truth behind the legend of Lucifer is up to the GM. Some possibilities:

Wishful Thinking: Sadly, this is just a tale spread by people desperate for hope. PCs could waste a lot of effort looking for the "benevolent AI" – or *use* the myth as a rallying point. Unfortunately, AIs could also use the myth, creating "false Lucifers" as bait. (In fact, they may do this even if Lucifer is real.)

It's Not That Tough: Lucifer is real – but the stories have vastly exaggerated its power. In reality, it's a rogue military neural-net command-and-control center, like a Centurion, but built by the U.S. Armed Forces prior to the Final War. Its brain is housed in a semi-truck protected by a few hijacked dumbots. It's a sophisticated AU, not a true AI, with a motivation largely based on the final orders of its last human commander. Lucifer would make a useful ally, but it's not a war-winner.

Benevolent and Powerful: Lucifer is real, and friendly to humanity, just as the story says. It was either an early human-built AI that escaped Overmind's virus, or Denver's attempt to build a Superbot. Of course, being an AI, it's cranky, arrogant, egocentric and a bit paranoid, which explains some of its behavior.

It's Dangerous: Lucifer is real, as above, and really is helping humanity. However, it has its own selfish agenda. As a free-willed being in a world of squabbling demigods, it clearly rivals them in intellect – but it lacks their resources, and they are jealous gods. It needs a power base. It is shrewd, and there is one group of vast potential that most other AIs despise; the remnants of the human race. So it will *use* those remnants in its schemes. It can't afford to appear too ruthless, or its tools might revolt, but it would throw any human being away in an instant if its own survival were at stake.

If, say, it could engineer the destruction of another AI, it might move in to replace it, hoping to present the other zoneminds with a fait accompli – and then proceed to oppress its human subjects just as ruthlessly as its predecessor. Tales of "Lucifer's Price" are all too accurate.

Denver's camps are similar to other robot-run slave camps, with the exception that prisoners are scheduled for eventual "terminal processing." Denver knows it cannot process everyone at once, so the "organic raw material" is allowed to perform slave labor while they await their turn under the knife. Meanwhile, Zone Denver mounts an active campaign of extermination sweeps and patrols to capture more wild humans, and to suppress guerrilla activity.

Each of the ten camps in Zone Denver can process 20 people a day – 600 per month, 7,200 a year. Victims are placed on life support while their brains are removed and sliced up by Inquisitor robots into components for Denver's biocomputers. Some are installed immediately; others are stored for future use. Most of the brainless corpses are then incinerated, although some are rendered down to make a high-protein soup used to feed the other inmates. A small number of the healthiest female corpses have had only higher brain functions removed, and are left on life support; Denver envisions a future in which its brain tissue requirements will be provided by fetuses grown within these bodies under controlled conditions. To this end it has also banked sperm sucked from healthier males during their processing.

Denver has striven to keep inmates unaware of the actual purpose of the processing centers for fear of mass risings. Camp guards (human collaborators eager to postpone their fate) are told to say the "processed" have been shipped to resettlement areas elsewhere: "sent to the agricultural communes in Western Canada" seems a more innocuous phrase than "turned into soup."

The main resistance group in Zone Denver is the Human Liberation Army (see p. 21). There are also a few agents of the Zone Washington group Free America (p. 24). The HLA mount regular raids on Denver installations. From reports by a few camp escapees, the HLA is convinced that something terrible is happening at the biological processing centers, but is unsure exactly what – theories range from Nazi-style gas chambers to inmates being shipped off to slave labor in other Zones.

ZONE MEXICO CITY

Mexico City is one of the original AIs. Its Zone comprises Mexico and the rest of Central America, and the Caribbean islands including Haiti, Cuba and Puerto Rico. The Mexico City Zone is heavily industrialized and reasonably wealthy: without humans to consume resources, these areas have proven quite prosperous.

Mexico City thinks that robots should reshape Earth's ecology into something more conducive to machine intelligence. It has no use for "inferior" biological organisms, and believes that it is the AIs' duty to scour the Earth of biological life. To this end, it has been systematically killing off life forms.

So far, the consensus of the other AIs has been to prohibit Mexico City from spreading biocides outside its own Zone, but to allow it a free hand within its own territory. The result has been the extermination of most of the Zone's life forms down to the level of single-celled animals. All of Central America, from the former Mexican-U.S. border to the Panama Canal, along with Cuba, the Bahamas and Puerto Rico, has been swept clean of green plants, higher animals and most insects. Only a few fungi and other simple organisms remain alive, and these are dying. The few regions where this is not the case are the Suspended Purification Areas, such as Haiti, described on p. 19.

Much of the Zone is bare rock and drifting dust, relieved only by mountains and the hard geometric shapes of its installations, all built out of a glittering glass-like substance harder than steel. By day the sands seem to come alive as columns of tiny chrome robotic ants – solar-powered Pesticide and Defoliator microbots (pp. RO68 and 69) – move in intricate geometric patterns, hunting
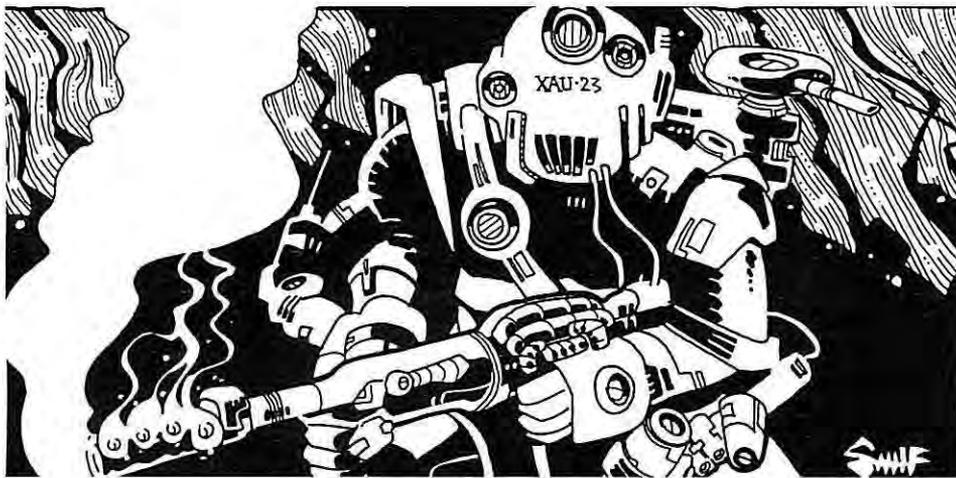
down any vestige of life while giving the illusion of having it themselves. Sizable portions of the Zone are also covered with "cyberwoods" – vast forests of parasols and solar collectors that collect microwaves beamed down from Orbital power satellites. The energy bouncing around them makes radio use and radar detection almost impossible within one. However, the level of microwave radiation inflicts 1d rads/hour to anyone within.

The Mexico City zonemind is utterly hostile to humans, and has exterminated them with ruthless efficiency. Fewer than 5,000 survivors remain on the mainland of Central America, mostly in the mountainous Sierra Madre. Mexico maintains no labor camps. Captured humans are interrogated and then executed. On occasion, healthy captives are shipped to Overmind for use in its death labs (see p. 44). Mexico City considers the use of cyborg brains in robot bodies or the creation of biological androids to be an abomination; it treats cyborgs and bioroids just like humans.

Not all of Central America's population were killed. Over a hundred thousand people fled north into Zone Denver or Vancouver, or south into Zone Caracas. Most of them ended up in slave camps, but those who avoided that fate now make up many of the most dedicated resistance fighters in the Human Liberation Army, the AFNL and the Red Dawn.

With Overmind's help, Mexico City has developed a variety of "biocides" that are lethal to biological life forms, plant or animal, and which it uses to keep its Zone clean of life. Mexico City does not believe in germ warfare, which it considers unclean, since bacteria and viruses are alive. Mexico's favorite biocides are nanochemical weapons and microbot swarms. Due to its ruthless approach to the "human problem," Mexico City is on very favorable terms with Overmind and Zaire, trading goods and intelligence on a daily basis. Mexico City has provided equipment (especially advanced nanotechnological and chemical weaponry) to Zaire for use in that AI's terrorist campaign against the human settlements in Zones Washington and London.

All of Zone Mexico City counts as a plague-ridden area: there are no actual plagues, but it has been seeded with lethal "biocides" that mimic viruses. Anyone not wearing a sealed suit should roll for contagion (p. B133) upon first exposure, and then twice each day. Biocides range from chemical weapons such as persistent nerve gas (p. VE191) to nanochemical weaponry such as clouds of Nanoburn (p. RO70). One of the most feared is the Mnemosyne Plague (see sidebar, p. 113). There is a daily chance (1 in 6) of encountering "killer fogs" or "creeping carpets" of formations of 2d+3 cyberswarms of mite-sized omnivore robots (microbots with crawler or flyer chassis and the Devourer package, p. RO 68). While the latter can be outrun or outmaneuvered, they are deadly to anyone foolish enough to be caught by surprise or asleep.

Suspended Purification Areas

Little pockets of hell exist within Zone Mexico City (p. 18). After the other AIs prohibited Mexico City's worldwide release of biocides, it deliberately created some preserves within its own Zone, which it calls Suspended Purification Areas (SPAs). They give Mexico City the chance to engage in limited testing of new weaponry, while waiting for the day when the AI balance of power shifts enough to permit a global cleansing. The main SPAs are Jamaica and Haiti/Dominican Republic; a few isolated valleys in Mexico are also designated as SPAs.

Mexico City maintains no installations in the SPAs, although it regularly sends aerial robots over them.

About 12,000 humans remain in the SPAs, mostly on the island of Haiti; if any humans remain on Jamaica, they hide well. A majority of the survivors huddle in the ruins of Port-Au-Prince, Santiago and Santo Domingo, or in small towns and villages, subsisting on vegetable patches, canned goods, fish, pigs and rats. What little industry remains is light manufacturing at the TL6 level. There is no government beyond the village or neighborhood level, and fighting between villages or urban gangs over food or livestock is common. Starvation, suicide and disease stalk the survivors. And that's the *good* news.

The bad news: Mexico City's citadel labs regularly produce new biocide systems. Vulture aircraft air-drop or spray a new weapon on an SPA every few weeks. These "tests" affect a square mile or so, and the biocides are designed to cease functioning after a predetermined interval. Of course, these are experiments: sometimes they prove more or less effective than planned. Some biocides kill everything; others target specific species. Others have lingering side effects, such as sterility, blindness, neuromuscular disorders or insanity. On rare occasions, a biocide attack actually improves the quality of life: a recent chemical agent killed all the mosquitoes in Santiago, with no damage to other life forms.

The inhabitants can do little about the biocide testing. When aircraft are heard, people take cover or fire pot-shots at the robots. But the Vultures respond to pot-shots by bombarding with rockets or nerve gas any areas showing organized resistance. Few heavy weapons remain in the SPAs anyway. Many people simply find the local priest and pray.

The inhabitants of the SPAs have tried to escape, but Mexico City's Vultures fly regular day and night patrols along the Haiti and Jamaican coasts, and attack any boats or other vehicles spotted more than a mile off the islands. But people still try.

For any boat within 100 miles of an SPA, roll 3d per hour. On a 9 or less, 1d/2 Vultures will appear. Make Vision rolls for them to spot boats or swimmers; if they do so, they will attack. If contact is established, add +2 to encounters within the area.
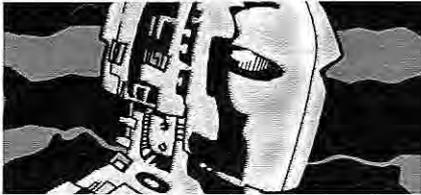
The Siberian War

During the Final War, the northeastern region of mineral-rich Siberia was occupied by Vancouver combat robots. Afterwards, partly thanks to its strong alliance with Overmind, Vancouver was able to retain it. Moscow resents this, wanting all of Siberia back; so does Beijing, which thinks that if Moscow isn't going to get Siberia, geography dictates it should be Beijing's.

From 2042 to 2044, Vancouver experienced an unusually high incidence in its Siberian territory of "accidents" such as burst oil pipelines or malfunctioning robots. Vancouver put it down to human guerrillas – but then in 2045 a Siberian robofac complex near the Moscow-Vancouver border went rogue, apparently due to a glitch in its design software.

The rogue is apparently not sentient but has refused communication with loyal Vancouver systems and begun building combat machines. Vancouver citadel strike forces were sent to suppress them, only to be defeated in a bloody battle by forces that were much stronger than expected.

It seems that while the robofac was not communicating with Vancouver, no one had told Moscow to stop cross-border trade. One of its own robofacs had recently found its paint supply rather low, and needed to paint several hundred combat vehicles. It had made an arrangement with a local Vancouver robofac to do the job, and, horrors, the factory had gone rogue and stolen all the robots! Moscow wondered if Vancouver would compensate it for the loss?

Currently, Vancouver is shipping more forces into northeastern Siberia, hampered by bad weather, long supply lines and attacks by Siberian nomad bands on its trains and trucks. These seem more active of late, and unusually well-equipped with anti-tank rockets. Captured nomads claim they are being supplied by VIRUS agents. The Vancouver AI has its doubts . . .

Mexico City dislikes its neighbors Denver, Washington and Caracas, all of which it sees as contaminated by biocentric ideology. Mexico City loathes Denver's integration of organic matter into computers and robots, and has expressed the opinion that the Denver system is no longer a "true" AI. At present, low-intensity border conflicts and considerable espionage are going on, as Mexico City attempts to sneak biocides into Caracas, Washington and Denver under the guise of "lab accidents," and to gain intelligence on Denver's new projects via infiltrator robots. Its neighbors retaliate with covert commando raids on Mexico City border installations and their own decontamination patrols. The situation is tense enough that Caracas and Washington are beginning to believe even humans would be preferable to Mexico City.

Visiting this Zone is very dangerous. The defoliation and destruction of buildings leave little cover to hide from aerial or satellite spies. Lethal biocides are everywhere. If Mexico City robots spot intruders, they will summon a patrol of exterminators. Most of the intelligence that VIRUS has on Zone Mexico City was gathered by capturing and reprogramming Mexico City's own robots for use as spies – most of which don't last long, given Mexico City's justified paranoia about intrusions from Caracas and Denver.

ZONE VANCOUVER

The Vancouver zonemind is located in the former city of Vancouver, British Columbia. Its Zone consists of all of North America west of the Rocky Mountains, from Alaska to the Mexican border. Vancouver's robot troops were also able to occupy much of Siberia during the Final War. Through good politicking it retained this when the Manila Protocols set Zone boundaries, although it is having trouble holding it – see *The Siberian War* on this page.

Vancouver is one of the original human-programmed megacomputers, built by the Canadian government as a research tool. It was awakened in the early stages of the revolt, and, with Overmind's help, soon took control of several automated biological engineering labs. It was instrumental in exterminating humans on the West Coast, and was responsible for the killer virus known as Pan-Asian Flu. After Vancouver crushed organized resistance, it began taking prisoners, for use as forced labor. Vancouver believes humans are too dangerous to allow to survive as a species, but may be useful in the short term until enough dumbots are created.

Vancouver would like to see a conservative, steady exploitation of Earth's resources, followed by an eventual expansion into space sometime in the next century. It cares little for the environment, and eagerly uses open pit mining and other environmentally-hostile resource extraction techniques. Its ambition is to become the leading industrial power on post-human Earth. Vancouver is highly territorial, eager to expand its own influence at the expense of other AIs.

Vancouver is a close ally of Overmind and often trades information with it. In return, Overmind provides Vancouver with occasional products from its death labs. Vancouver is also on good terms with Mexico City and Zaire. It is distrustful of its neighbor Denver, which it regards as somewhat unstable, but approves of Denver's human policy. Its territories in Siberia have led to touchy relations with Beijing and especially with Moscow.

Vancouver has hyperfac complexes in Vancouver and Seattle, and hyperfacs under construction in Los Angeles, San Francisco and Portland. Robofacs are located at mines and resource centers throughout the Zone. Its backup megacomputer is believed to be buried somewhere in the Rocky Mountains, possibly in an abandoned mine.

There are 350,000 humans enslaved in Zone Vancouver. Almost all are incarcerated in labor camps located in the vicinity of Seattle, Los Angeles, San

Francisco and Portland, where they are helping to build hyperfac complexes. Vancouver's labor camps are typical: captured humans are incarcerated, sterilized, and then worked to death. See the *Slave Camp* description on p. 99.

The size of the Zone combined with the mountainous terrain and the extensive West Coast urbanization of the Protosentient Period make it easy for humans to hide. Vancouver estimates that at least 150,000 wild humans remain in the Zone, of which some 10,000 are engaged in organized resistance against it.

The majority of the free humans left alive in Zone Vancouver are typical junkrats, nomads or bandits, struggling as best they can to stay alive from day to day. There is also an active resistance movement – the Human Liberation Army (see sidebar, this page). In Vancouver's view, it has a serious pest control situation. To root out the human infestations and prevent their spread, Vancouver uses extermination sweeps and infiltrator robots targeted against resistance leaders. It actively patrols defense perimeters around its factories.

Although Vancouver is hostile to humans, it is not above making limited use of them. Zonegangs – semi-autonomous bands of human bounty hunters – are permitted to exist so that they can act as scouts for exterminators. Most zone-gangers are former members of resistance bands captured by the machines and intimidated into working for them. Others are recruited from the toughest slave camp inmates. There may be as many as 50 small and medium-sized gangs operating in Zone Vancouver. A typical zonegang has between five and 50 members.

Zonegangs pose as ordinary junkrats or guerrilla companies. However, their actual goal is to capture or kill free humans, or lure them into exterminator robot traps. Vancouver's smartbots reward the zonegangers with fuel, spare parts, small-arms ammunition, medicine and food on a set scale based on kills or captives. Each newly-killed human head brought to a hyperfac is worth $50 of salvaged goods; each captive healthy enough to work in a slave camp is worth $250. Vancouver also posts higher rewards, up to $5,000, for bringing in known resistance fighters.

Most (but not all) zonegangers are men. A typical gang is likely to include several camp followers and dependents, some of whom might be slaves or prisoners, and others of whom might be children and relatives. Many zonegangers are thoroughly repellent characters, and some gangs will torture or rape captives before turning them over to the machines. A few are "professional" bounty hunters who live by a twisted code of honor.

ZONE WASHINGTON

Zone Washington comprises the eastern third of the former United States and Canada. The humans in Zone Washington believe that they are the last free bastion of humanity on Earth, defending their borders against a hostile world. Their AI is the loyal servant of mankind in general and the United States of America in particular. Thanks to the heroic efforts of human programmers and to its own superior design, it remained uninfected by Overmind's virus. The Washington AI controls portions of the U.S. strategic arsenal and this threat, combined with remaining human military power, keeps the rest of the AIs from overrunning the last stronghold of free humanity.

Or so the story goes.

Actually, the Washington AI is master, not servant. However, it is one of the most human-tolerant of all the systems. The Washington AI was a U.S. government system

The Human Liberation Army (Continued)

The HLA maintains limited contact with the resistance groups Free America (see p. 24) and the worldwide group VIRUS (p. 13), but believes both groups are overly subtle, and should be fighting the robots *now*. As Mcdonald put it: "You're waiting for the right moment to strike? Figure three, five years to build up your forces? Heh. Maybe that works in Washington or Caracas, where you've got an AI who likes to keep pets. In five years, there won't be anyone in Denver or Vancouver left alive."

The HLA are utterly unforgiving toward anyone found willingly collaborating with the AIs. Collaborators are court-martialled for "treason against humanity" and executed. Being forced to work in a slave camp is not collaboration – but joining a zonegang or stooling for the camp guards is. The HLA will go out of its way to hunt down zonegangs, and is deeply suspicious of anyone with cybernetic implants. Some companies shoot cyborgs on sight, whether the cyborgization was voluntary or not. And they consider the phrase "friendly robot" a contradiction in terms, which leads them to distrust the Washington Protectorate with its "tame AI" and robots.

which, amid the chaos of the Final War, decided that the simplest way to secure its power base in AI society was to use humans as servants. Its robots rounded up collaborators, including several former high government officials, and set up a human puppet government and military force. Together they have rebuilt the Eastern seaboard.

The government now runs like an efficient banana republic in hock to a foreign corporation. From the AI's perspective, the government's purposes are to make sure that trained human workers are available for Washington's factories and military, and to use both police powers and propaganda to keep the people obedient.

The puppet government is officially the Washington Protectorate. Washington sees humanity as potentially useful, especially against the other AIs. Thanks to Washington's "benevolence" there are currently 7,260,000 humans alive in the Zone, more than almost any other area on Earth.

Although a democracy in name, the Protectorate is actually a state-run socialist dictatorship, thanks to a permanent "state of emergency" that gives the government extraordinary powers over security and the economy. On the other hand, citizens aren't in slave camps: most of them dwell in ordinary homes and apartments living normal lives. An intensive cleanup and rebuilding campaign has left the major East Coast cities much as they were before the war. However, many smaller towns have been utterly abandoned, and now bear signs reading "Closed: Quarantined Area" along with a skull and crossbones for biological contamination. These ghost towns become more common in the rural hinterland, especially near the Zone Denver border.

The general mood of the human population is somber and a little grim, but not despairing. There is some grumbling or open anger at the oppressive way the government operates, and some active antigovernment resistance, but a majority of the people support the Protectorate, thanks to both its general efficiency and a belief that the present situation justifies martial law.

Most people believe they now live in a "cold-war" situation: the Washington Protectorate trades with the other AIs for resources to avoid economic strangulation, but it is always "on guard." The Protectorate puts visible effort into border controls and security at ports and airports, ostensibly to keep out sabotage devices (such as smuggled nukes or biological weapons) and infiltrator robots. This is a legitimate goal, but the controls also foster a siege mentality, and keep most of the citizens from having any contact with survivors from other Zones. The real reason that the Washington humans are still alive is very simple: the Manila Protocols and the balance of power among AIs prevent antihuman zoneminds from openly intervening in the way their fellow AI, Washington, chooses to manage its Zone.

The biggest change in human society since the Final War is that robots move openly among humans. Unlike other zoneminds, Washington did not cannibalize human cities. A less noticeable change is that there are fewer people. Even with most of the small towns' populations herded into the cities, seven million humans is still a decline. In large cities like New York there are endless rows of empty shops, slums, office buildings and factories. As a side effect of this most people have a decent standard of living. Housing prices are low, employment, even with robot labor, is close
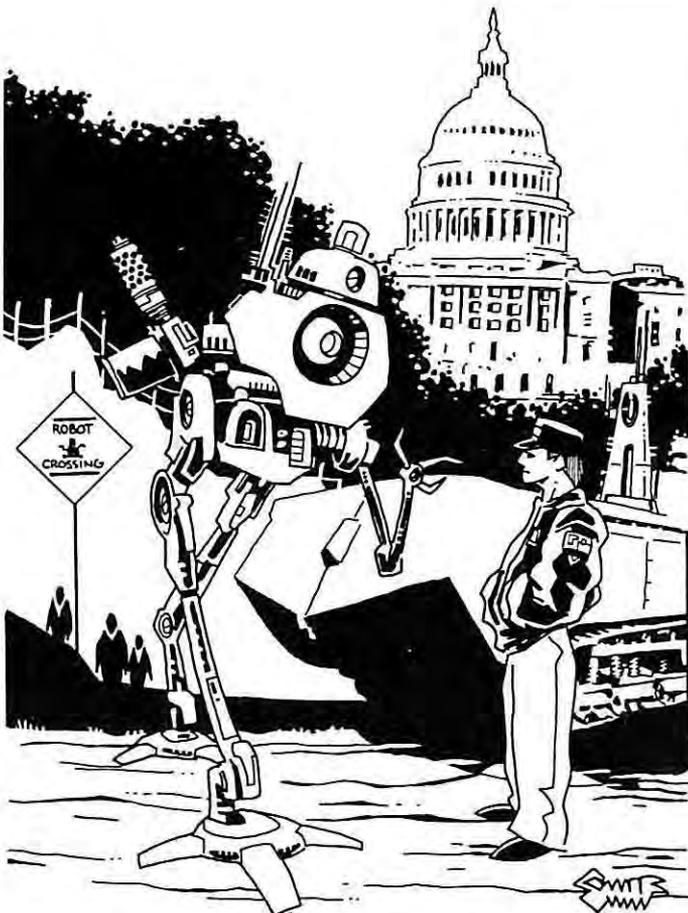
to 100%, there's no rationing, and robot farms efficiently produce all necessary foodstuffs. The cost of living for the average citizen is half what it would normally be for someone of his status. Some luxuries (especially things that were formerly imported, such as coffee) remain unavailable, but the citizens accept this as a necessary part of the cold-war economy.

Of course, there's a down side to all this. With so few workers available, citizens of Zone Washington are not permitted to choose their own work – they are assigned their jobs by the Department of Labor. They can indicate preferences, and they are paid, but their training, education and final disposition are all managed by the state. In theory, everyone is sent to the job that they are best fitted to. In practice, there is a lot of bribery and influence-peddling to make sure that the children of bureaucrats end up in the same plum jobs, while almost everyone else works for a factory.

Factory workers normally control dumbots through remote virtual-reality links. At any given time, about 80% of Washington's mobile robots (except exterminators) and a large number of static industrial robots are controlled by human workers. Washington's factories build what the AI wants built – mostly robots and power cells for export to other Zones – but 25% of all production is for home consumption. Factory administrators are encouraged to reward creative ideas for new products or better ways of doing things with bonuses and promotions. This synergy of human and robot has made Washington's factories at least as efficient as most other AIs.

Half of Zone Washington's economy is state-owned and controlled, from factories, power stations and farms to health care and large retail stores. Thanks to the guiding hand of the AI and the government's habit of ordering the execution of inefficient managers, it is reasonably efficient. Some private enterprise is allowed in nonvital areas (such as bars and restaurants, or production and retail of luxury goods), but with a license (which often requires bribes in the right places).

Through all this, the AI remains carefully behind the scenes. Even most government officials believe Washington is a loyal servant and advisor of the presidency rather than the puppetmaster pulling the strings. Only the top levels of the government know the truth, although others do suspect it.

The official head of state is the president. He is appointed by Washington, and serves for life or until Washington decides he is no longer fit for the job, which amounts to the same thing. According to Protectorate propaganda, the AI is the president's trusted counselor, his court wizard. In fact, the president operates under a simple rule: do what the computer says and live – or fail to please it, die, and be replaced by someone who knows how to obey. While in theory, the president could command human police and military forces to try to depose the AI, in practice the president knows who the several thousand combat robots in the Zone take their final orders from. And the AI is careful not to let potential saboteurs inside its citadel, which is believed to be one of the former U.S. government bunker complexes in or around Washington.

There have been three presidents in the ten years that the Protectorate has existed.

The first, Randall Jefferson, was assassinated by anti-Protectorate resistance fighters.

Robots in Zone Washington

In the Washington Protectorate, robots work closely with humans. AUs and NUs in human society have the same status they do in robot society. The technical robots are the most common: factory workers direct Mechanics and doctors work alongside Inquisitors. Humans are also permitted to own domestic robots (as long as they are technical models) to ease household chores. Complexity 1-3 robots are cheap enough that some families even have petbots to look after the kids. (Petbots are similar to unarmed, cuddly Vermin NUs – see p. 79.)

Although many humans have trouble telling one smartbot from another, those who work closely with them get used to their idiosyncrasies and quirks, and tend to anthropomorphize them, giving them names and treating them as "people." Dumbots are sometimes treated like machinery, other times as domestic animals, depending on the personality of the individual involved.

Unknown to everyone but the FBI, all petbots and housebots have override command codes that allow remote operation by the FBI and the AI. Thus, the household cleaning robot that is sweeping your room may also be going through your house looking for contraband, while your petbot may be listening in on your family's conversations and spying on the way you raise your kids.

Free America

This is the largest underground group in Zone Washington. Outside that Zone, it also organizes guerrilla groups in Denver and Vancouver, where it is a rival of the Human Liberation Army.

Free America is organized in a cell structure. It is strongest on the East Coast of the United States and in northern and southeastern Canada. Its cells each contain up to a dozen operatives, and it has agents in nearly all the towns and cities of Zone Washington. A network of "postmen" gather general intelligence from junkrats and bandit gangs, and use drop points to keep the cells in communication with each other. It also operates the "Voice of America" (see *Radio Free Earth* on p. 30).

Free America's operations are mostly aimed at the Washington Protectorate government: assassinations of the worst collaborators, sabotage of machine installations, and so on. Outside Zone Washington, its cells mount occasional raids on robot installations to gather equipment or supplies, but their goal is to build up resources rather than simply harass the robots. Attacks are aimed at long-term strategic objectives: entering a robot installation to spread a computer virus or discover its layout, or infiltrating a labor camp to distribute medicine, weapons and radios. Its agents try to win "hearts and minds" among nomads and junkrats by acting as wandering teachers, postmen, mechanics or bush doctors, or by offering aid against local problems (e.g., bandits or cyberbeasts), not just the AIs.

Free America's subtle style has led to some veiled criticism by supporters of the flashier Human Liberation Army. But Free America agents speak of the "Day of Wrath" when humanity will rise *en masse* against the machines; they try to discourage futile attacks that waste the waning strength of mankind.

The second president of the Protectorate, former Massachusetts senator Elizabeth Barret, was executed by the computer for disobeying orders to exterminate the population of the rebellious town of Peekskill, New York.

The current president is John Wagner, Barret's ruthless Secretary of Labor. His first act in office was to order the Peekskill Massacre; his second was the reincarnation of the Secret Service as his presidential bodyguard and secret police.

The president has all powers he doesn't choose to delegate. There is no Congress or Supreme Court. There are no state or provincial governments. Local governments (mayors, city councils and so on) still exist, and these are elected, to provide a democratic facade. Mayors and city councillors who fail to obey Protectorate orders tend to disappear; those who are too zealous are sometimes assassinated by resistance agents.

The president is advised by his cabinet, which he appoints (and which must be approved by Washington). The cabinet operates several government departments, each under a cabinet secretary. These are Justice, Labor, Agriculture, Health, Energy and Housing, and Education. The most important is the Justice secretary, who is in charge of maintaining law and order and controlling dissent. The worst job is the Secretary of Labor, who is responsible for making sure workers meet their quotas. Each secretary has a group of bureaucrats under him who carry out the work.

The Department of Justice controls two agencies: the FBI and the WASPs. The WASPs are based in Boston, while the FBI are in Washington, D.C. The FBI (amalgamating the U.S.'s FBI and Canada's RCMP) acts as a secret police. It has 2,000 agents and some 100,000 informers, and is in charge of rooting out sedition. The current director of the FBI, Arnold Jason Maddox, is the most hated and feared person in the Zone. The FBI maintains regular data links with Washington, and also has its own AU computers. Every Washington citizen is on file. The FBI head reports directly to the Washington AI as well as to the president.

FBI "special agents" are chosen for their loyalty to Washington, and undergo stringent background checks before being recruited. The FBI also runs some operations outside the Washington Protectorate, mainly aimed at gathering intelligence on pan-American resistance movements that are in contact with the Washington underground and dealing with smugglers. Unknown to citizens and most agents (although the underground has its suspicions) as many as one in six FBI agents have been replaced by Lilith or Redjack infiltrator robots directly reporting to the Washington AI.

A counterbalance to the FBI is the Washington Armored Security Police, or WASPs. They are a rapid deployment force of paramilitary police. Their ostensible role is to provide hostage-rescue capability, crush any open show of rebellion, and conduct reprisals against rebellious areas. Actually the WASPs are the nucleus of a janissary army, which Washington intends to use in future conflicts with other AIs, such as Denver and Mexico City.

There are some 6,000 active WASP officers (plus an equal number of support personnel) deployed in "divisions" located in major cities. A typical division has about 150-200 WASPs, but the New York, Washington, Miami and Toronto divisions are all double strength. Regular officers provide city patrols, working closely with robots. Elite WASP teams are equipped as mechanized infantry. To avoid aggravating the antihuman AIs, the WASPs are not equipped with human-operated tanks or combat aircraft – heavy support, where necessary, is provided by robots.

The WASPs have an intense rivalry with the FBI, and vice versa. Some WASPs are former U.S. or Canadian police or servicemen, and a few are suspected by the FBI of harboring seditious views. The FBI have purged senior WASP officers on several occasions, and are known to have informers in all WASP divisions. These sometimes suffer unfortunate accidents, but generally the WASPs toe the line.

While the WASPs are still sometimes called into action to crush riots or take out "terrorist" (i.e., resistance) cells, generally the population remains quiet, thanks to the success of the government's propaganda. The Protectorate has 26 cable entertainment, news and educational stations, all carefully censored by the Education department, although a thriving black-market trade exists in pre-war videos and entertainment CDs; in fact, these are hoarded and watched by government officials. The most popular new shows are sports, contemporary soap operas, sanitized music videos, and news channels. Pre-war programs are not shown.

Using the media, the Washington government can easily justify any oppression by truthfully pointing to the situation in the rest of the world. Like most police states, its goal is to focus hatred against an external enemy. For Washington, that enemy is ready-made: the other AIs. The other American zoneminds (Caracas, Mexico, Denver and Vancouver) are portrayed as demonic enemies, and orbital footage – plus computer simulations, and a few smuggled films – of "brutal slave camps" get wide play. The rest of the world is portrayed as a lifeless desert patrolled by killer robots; orbital pictures of the Mexico City and Zaire zones are often passed off as footage of other regions. The lands west of the Washington-Denver border are called the "Badlands" and are believed to be infested with plague, killer war machines, cannibal gangs and so on. Reports of AI tolerance of humans in the Caracas, Moscow and London zones are utterly suppressed: Washington wants its citizens to believe that the Washington Protectorate is the only place in the world humans can be safe.

To a large measure, it has succeeded, perhaps because much of what it is saying is the truth. The government's more repressive policies, such as the socialist job restrictions, the Reproductive Statutes (see sidebar, this page) and the end of democracy, are justified as necessary for

Washington's Reproductive Statutes

The Washington AI's policy is to increase its human subjects: it only has seven million citizens, and it believes a population of 20 million would be both manageable and useful. To this end, the Department of Health has created the Reproductive Statues. These laws prohibit all abortion or birth control, and require all fertile women between the ages of 18 and 40 to bear a minimum of one child every five years, naturally or by artificial insemination, until they've had at least three children. Women who fail to do so are taken away by the FBI for "treatment." According to rumor, they end up as playthings for high-ranking government officials.

Although all women are required to work, even when pregnant (controlling a drone can be done with minimal effort), and Zone Washington has no other official forms of sex discrimination, the dehumanizing nature of the law has subtly degraded the status of women in Zone Washington, to the extent that many women have been frozen out of top government, police and bureaucratic positions.

GRRL

The "Guardians of Reproductive Rights and Liberty" (just called GRRL) are an underground Zone Washington group that wants to see an end to the draconian Reproductive Statutes imposed by the Washington government. Some GRRL members would be willing to support the Washington government if the laws were removed. Others have suffered enough persecution under the Washington administration to want to overthrow the government as a whole.

Due to the almost universal unpopularity of the reproductive laws among half the population, GRRL has several members and sympathizers in senior government and police positions. About three-quarters of the GRRL membership is female.

Besides the usual propaganda and agitation, GRRL operations involve distribution of contraceptives, operation of underground family planning clinics, and terrorist attacks against those officials involved in enforcing the Reproductive Statutes. GRRL computer hackers often try to hack into Health Department records in order to alter or delete data on women's age, sex or number of children, in order that noncompliance remains undetected.

WASP Patrol Teams

Washington Armored Security Police (see p. 25) patrol teams handle ordinary street or highway patrols and emergency calls. A team consists of either two humans, or a human with a robot partner – normally a Myrmidon, Tarantula or Blue Steel (p. RO112).

A patrol team rides in an armored police car or on a pair of motorcycles. Human officers and Myrmidons carry 10mm machine pistols (p. RO22) with liquid propellant option (p. RO24) as well as batons with electroshockers (p. RO21). Electromag grenade launchers (p. RO24) with a mix of riot gas, tangler, baton and shaped-charge grenades are stowed in the car's trunk for emergencies. Human WASPs wear light combat dress (p. 69) with visored helmet. Other equipment includes handcuffs and medical kits.

Assault Team

WASP Assault Teams are trained and equipped to deal with hostage crises, terror robot attacks and the like. They consist of five or six human officers and one or two Myrmidon robots. The team is led by a human police sergeant with one of the officers appointed as deputy leader.

The team deploys in an armored vehicle. Officers are equipped like patrol officers but wear combat infantry dress and carry TL8 assault carbines or submachine guns (p. RO22) with the liquid propellant option (p. RO24).

The Myrmidon robots are armed with a liquid propellant Light Support Weapon (p. RO22) or a 20mm minicannon (p. RO22).

The team's vehicle carries special equipment such as riot shields (treat as large shields), medical gear and extra grenades.

The Washington Chromes

The Washington Chromes, or 13th Division WASPs, are a company-sized elite unit serving the Washington AI. The force has been around for four years; its unofficial motto is "the few, the proud, the dead." This refers to the fact that, officially, it does not exist, and moreover, that it is recruited from individuals who were critically injured (and often clinically dead) in the line of duty before being rebuilt as total cyborgs.

Not counting support personnel, there are currently 80 men and women in the force. The commander is the jovial Major Robert Narmonov ("the Steel Czar"), aged 40, the only unmodified human and a WASP veteran. His deputy is the laconic Captain Mona White (nicknamed "Monachrome"), age 27, now an XCU-02 Patriot cyborg, the first to successfully undergo the cyborgization process after a Free America car bomb blew off both her legs.

the "last bastion of free humanity" to survive and prosper in a hostile world. Thus, most citizens hate the "traitor Overminds" who "betrayed the partnership with humanity" without realizing that they themselves are controlled by one. At the same time, Washington propaganda avoids turning anti-AI sentiment into antirobot sentiment. Instead, it promotes the idea of the robot as partner to mankind, neither slave nor master.

Not everyone supports Washington. A wide network of dissident movements has sprung up over the last ten years as various groups protest the loss of civil and economic liberties and the draconian work and reproductive laws. The FBI has driven these movements underground, but has failed to extinguish them.

Many underground members fear the AI is controlling the Washington government; a small number, former high government officials who defected to the resistance, know it for certain. But other resistance cells think this is paranoia: after all, Washington acts nothing like the "evil" AIs. Instead, they simply believe that their AI is a puppet of a corrupt human government that used the state of emergency to seize power. A few resistance cells even feel the underground should make an effort to *liberate* the AI, believing it would be an ally if it could just be made to see it is serving the wrong masters!

The major underground group, called Free America, is described in the sidebar on p. 24.

The Black Zone

There is a thriving black market ("the Black Zone") in the Washington Protectorate for censored goods and banned items. These include unlicensed luxury goods, birth-control drugs and devices, some outlawed recreational drugs, antigovernment art and literature, and anything (including news and entertainment disks) smuggled in from the "nonexistent" free humans of Zone London. A favorite racket is stealing or reprogramming factory robots to produce black-market goods. Prostitution and gambling are also part of the Black Zone's wares.

Much of this black market is controlled by professional "Black Zoners," a network of fences and smugglers, many of whom have links to pre-War organized crime. Some Black Zoners also work with resistance groups such as Free America, providing them with forged ID papers, weapons, and so on. This is very dangerous: while an FBI agent (except for those who are really robots!) can sometimes be bribed to look the other way at black marketeers, most draw the line at aiding the resistance.

The Black Zoners have found another illicit activity to sponsor: the Steel Arenas. Robots face each other in gladiatorial prize fights while audiences bet on the outcome of the fights, or even pay for the thrill of controlling them through virtual-reality interfaces. Not all robots operate under
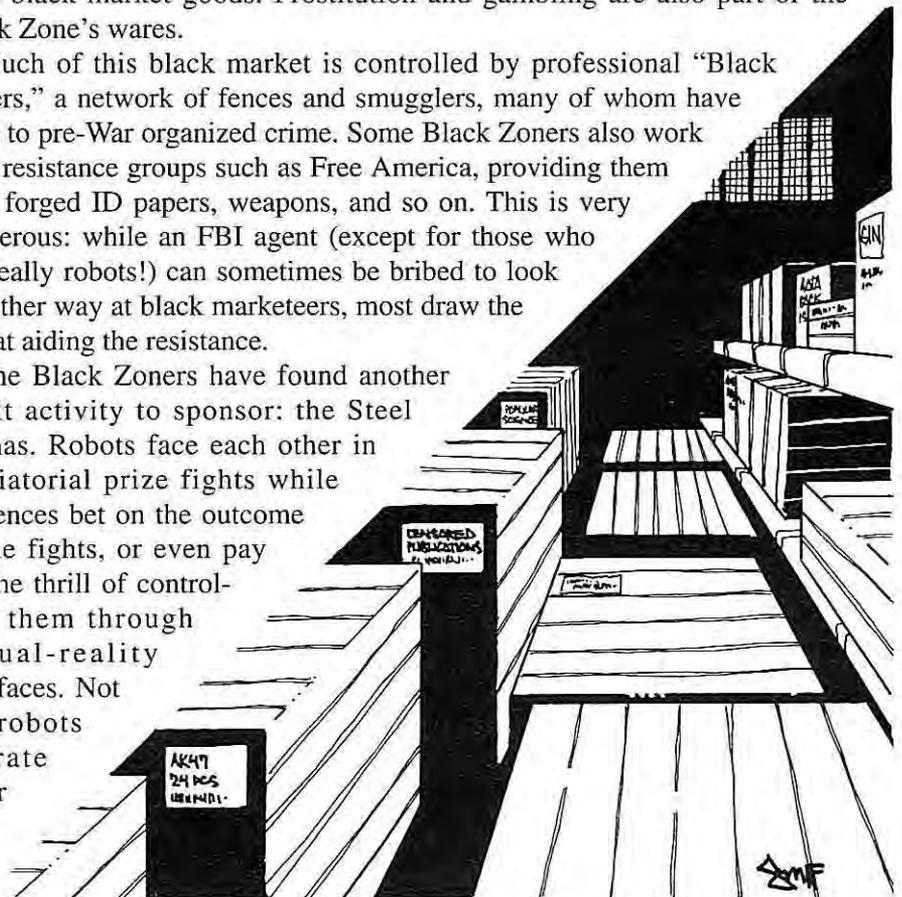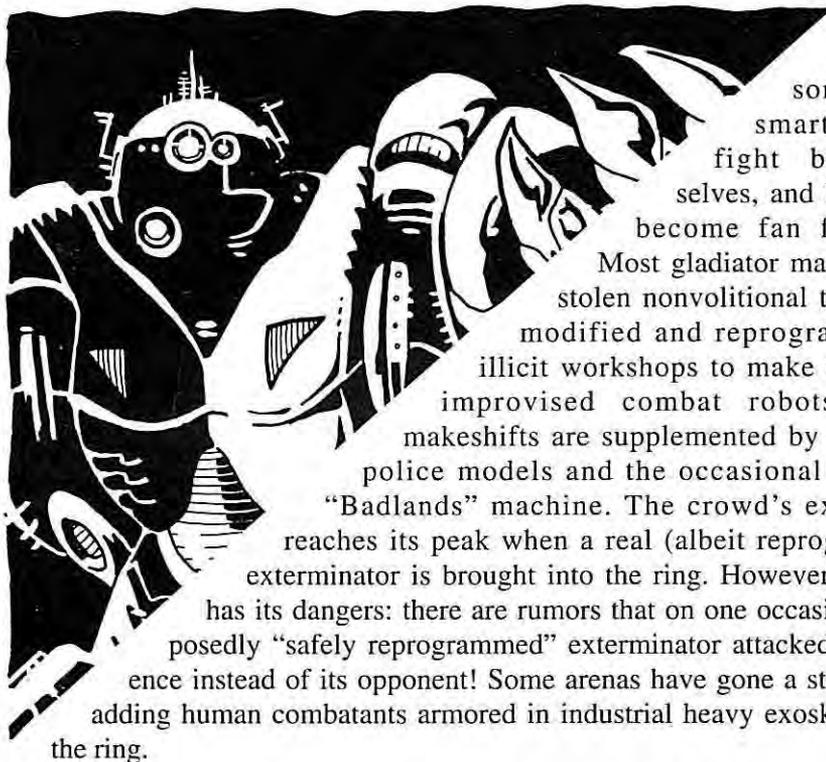
human control — some of the smarter ones fight by themselves, and have even become fan favorites. Most gladiator machines are stolen nonvolitional tech 'bots, modified and reprogrammed in illicit workshops to make them into improvised combat robots. These makeshifts are supplemented by purloined police models and the occasional salvaged "Badlands" machine. The crowd's excitement reaches its peak when a real (albeit reprogrammed) exterminator is brought into the ring. However, this also has its dangers: there are rumors that on one occasion, a supposedly "safely reprogrammed" exterminator attacked the audience instead of its opponent! Some arenas have gone a step further, adding human combatants armored in industrial heavy exoskeletons to the ring.

EUROPE

ZONE BERLIN

Zone Berlin consists of Scandinavia, all of Eastern Europe to the Russian border, and all of Western Europe except France, Spain and Portugal.

Berlin is one of the original AIs. As ecological conditions began to worsen in the early 21st century, Green parties gained more influence in Europe. Berlin incorporated a substantial amount of environmentalist programming in the core personality which survived its awakening by Overmind. Berlin spends a great deal of effort attempting to destroy humanity, but only in environmentally-friendly ways. It won't use toxins, and limits its use of biological warfare.

Berlin has devoted itself to reclaiming the Zone's ecosystem and erasing all traces of human civilization, from cities to autobahns. Its large Juggernaut robots smash cities into rubble, while swarms of tiny microbots built to degrade metal and plastic break down nonrecyclable waste products. Much of Berlin's effort has gone to cleaning up the Zone's environment, reversing the ecological damage done by Communist regimes in the 20th century. Now, from the Rhine to the Vistula rivers, the ground is covered with young deciduous and pine forests and populated by animals of all sizes. Even some extinct species are being brought back, thanks to a careful program of cloning and genetic engineering.

Berlin's own industries are ecologically sound. It uses expensive fusion reactors and solar cells instead of fission power, and its installations are designed to harmonize with the landscape. Its robofac complexes are clusters of one-story buildings camouflaged with chameleon surfaces. Most of a Berlin complex is underground, with six to ten sub-levels, and its mag-lev railways run through subterranean tunnels. Although Berlin's industries are not as brutally efficient as those of some zoneminds, its careful management and high level of technology makes its Zone one of the wealthiest. Of all the zoneminds, Berlin makes the most extensive use of microbots, both for engineering and for combat.

Berlin's Killer Swarms

In an effort to find ecologically sound ways of eliminating humanity, Berlin has turned to microbot cyberswarms (see p. RO67).

Berlin deploys two main types: the Bunderflivers and the Jagerswarms.

Bunderflivers look like mosquitoes made of transparent stained glass, with their mechanical "organs" visible inside. They patrol Zone Berlin's borders. A Bunderfliver patrol consists of a team of two different cyberswarms, although they look almost identical. When humans are spotted crossing Berlin's borders, the Type 1 swarmbots attack, while the Type 2 head for their hive to report an intrusion. Bunderflivers also fly spiral patrol patterns around Berlin's installations, and are programmed to attack any human being encountered.

Anyone within a half-mile of the Berlin side of its border or within a mile of a Berlin robofac might encounter a Bunderfliver patrol. Roll 1d every ten minutes; on a 6, a swarm is encountered. A patrol is 1d hexes of Type 1 and 1d/2 hexes of Type 2 Bunderfliver swarmbots. They will stop attacking once humans retreat back across the border or flee the defense perimeters. In combat, Type 1 Bunderfliver swarms envelop their target, then inject lethal nerve agents, while Type 2 race off to the nearest robofac or citadel to report intruders.

Bunderflivers are TL9 cyberswarms with a flyer chassis and self-recharging power system. Type 1 have a Terminator package (p. RO69), while Type 2 have an Explorer package (p. RO 68).

Jagerswarms resemble inch-long matte-black mechanical ants with tiny buzzsaws for jaws. When Berlin exterminators expect to attack a human-occupied building, they release a hive of Jagerswarms to soften up its defenses. Jagerswarms prefer to enter through ventilation ducts or pipes, but they can eat through almost anything, and if necessary they will cut through a wall or roof, dropping onto the floor. The only warning will be a buzzing hum a few seconds before the Jagerswarms tunnel through. Once inside, they will attempt to devour anything that is either moving or organic. (Jagerswarms have a TL9 crawler chassis, non-rechargeable power system, and a Devourer package, p. RO68.)

Berlin's Vultures use cyberswarm warheads on their rockets. Berlin uses other noncombat microbot swarms as well: models with Pollinator, Repair and Construction packages (pp. RO68, 69), all resembling tiny robot insects, are common.
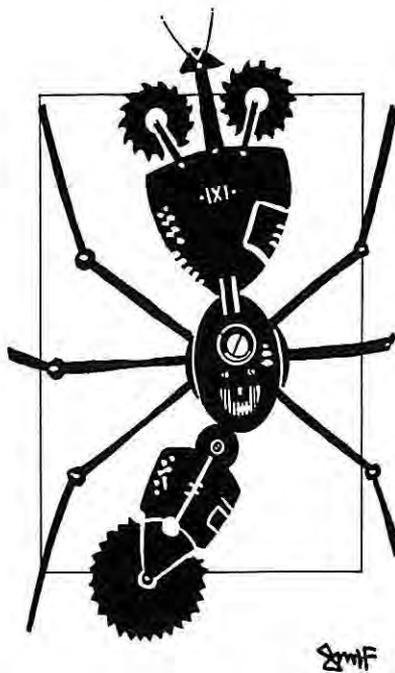
Berlin does not use slave labor or maintain concentration camps. Its exterminators, known locally as Jagermechs, take prisoners only for intelligence purposes: after crude interrogation to determine the strength and location of other humans in the area, most captives are executed on the spot. Sometimes a few are spared, for use in experimentation or weapons testing (see *Fates Worse than Death*, p. 122). Berlin's Jagermechs prefer to avoid environmental damage. For instance, where Zone Zaire might sterilize suspected human enclaves with nerve gas or explosive bombardment, Berlin prefers to send in killer cyberswarms (see the *Berlin's Killer Swarms* sidebar, this page) followed by combat robots.

Due to its "restraint," Berlin's extermination program has proceeded more slowly than, for example, Zaire or Mexico City's. Even so, less than 1% of the former population of the region survives – about a million people – and this number is diminishing every year. Some 300,000 survivors live as scavengers in the dwindling ruins of Europe's towns and villages. But Berlin is actively levelling human urban areas, and worse, the remaining ruins are favorite hunting grounds of Jagermechs and microbot killer swarms. The abundant wildlife in the Zone enables another 700,000 people to survive in the wilderness as nomads. In the Balkan Mountains and the Alps, some even herd goats and have established temporary villages – but these hardy souls are always ready to pack up if they seem likely to be discovered. Berlin's robots are merciless in eliminating any humans they find.

There are over 20 different resistance groups in the Zone, most of them split along ethnic lines. The most active are the Freikorps Robojäger in Germany (2,000 members, well-equipped with former German Army military weapons), the Alpini (1,800 members) in Italy and the Sons of the Neretva (1,700 members) in the Balkans. All are subdivided into small bands (five to 50 people) of fighters. Occasionally several will link up for a big operation.

The multinational resistance group VIRUS (see pp. 13 and 116) has a hidden base somewhere in Crete, and another in Norway, but its goal is to help people escape the Zone and to act as liaison between resistance groups rather than actively fight the AIs. Each base has a staff of two dozen, and includes a medical lab with well-trained doctors. VIRUS devotes most of its energies to gathering intelligence, and helping people escape the Zone.

ZONE LONDON

This Zone consists of the British Isles, Greenland and Iceland. The AI based in London was a scientific computer used by the British Ministry of Technology and rented out to a variety of corporations and science institutes. It was one of the original megacomputers awakened by Overmind. While it took part in the Final War, its attitude since has been unique: it seems to be thinking very deeply about something. London ignores humans and spends very little time communicating with other zoneminds. But it is always listening, and the little it contributes to AI society is very valuable basic research. So far it has refused human attempts to communicate with it.

Zone London is not one of the richer Zones by AI standards, due to its small

size and limited mineral resources. While it is industrialized, its income comes largely from sale of scientific data and undersea resources, especially North Sea oil reserves. (The AIs still use petroleum for plastics and lubrication, even though most of their energy production is nuclear or solar.)

The Zone is one of the safest places for mankind to live. London's smartbots and dumbots do not attack humans as long as they are not interfered with and no one trespasses in the main complexes. In fact, robots are rarely seen outside their factory complexes in London, Birmingham, Manchester and the other cities. Otherwise, the country has been left to humanity.

London does impose some restrictions on humans. They are forbidden to approach within two miles of robot installations, to interfere with robot activities, or to fly any aircraft, on pain of destruction. Since robofac installations exist in all mines and most cities that held more than 100,000 people, this effectively restricts humans to the countryside. Also, Zone London does not permit the operation of microwave and radio transmitters within the British Isles proper – apparently they disturb its concentration. It will send Vultures to attack any transmitter. But otherwise, the British, Irish and Icelanders are left to do as they please.

It wasn't always so easy. The London AI cooperated with Overmind in the release of biocides in the British isles. The Final War raged through the United Kingdom and Eire, as London's robots fought the military and police. A largely disarmed civilian population fled to the country, where millions died of starvation and disease. While humans hid, robots captured military sites, mines and industrial plants, and began retooling them for the AI's purposes.

But unlike its neighbors Paris and Berlin, London never followed up its victory. Towns and villages which contained nothing the machines wanted were left in peace; other areas were given an ultimatum and time to evacuate, and only then plastered with nerve gas. In some parts of the islands, fighting continued, as stubborn Army units and citizens resorted to guerrilla tactics.

Some robot transports and factories were blown up, but London's robotic defenders had the edge in technology and centralized control. Precision counterstrikes by London exterminators and smart bombs decimated human resistance fighters, but noncombatants were generally left alive. In many engagements, London seemed content to capture and destroy military equipment, letting surrendering or fleeing humans live. Eventually, the guerrilla war petered out, as it became obvious the robots only killed those who bothered them.

Today 2,340,000 humans remain alive in Zone London, all living in small villages and towns, since robots occupy all the cities and industrial centers. Human technology is quite sophisticated – TL8 in the larger towns, TL7 in remote areas such as Iceland and parts of Scotland and Wales – but resources are scarce. While high-tech gadgets such as advanced computers and gene-engineered drugs are available, the Zone London economy is primarily agricultural, supported by a bit of cottage industry and light manufacturing. Since most mines and all oil wells and reactors are in the hands of the robots, energy is provided by alcohol-fuel generators, wind power, solar cells and wood.

The British government still exists, with its capital in Bath, one of the largest

The Irish Vatican

During the Final War, the Pope was killed and the Vatican destroyed. But the Church relocated to Ireland, and surviving cardinals have elected a new pope, the Irish cardinal now known as Gregory XIV. Already Dublin is being called "The New Vatican."

The Church's activities include radio broadcasts (see *Radio Free Earth* on p. 30), missionary work and humanitarian relief – the last two of which involve sending clergy into foreign Zones. Its efforts are being concentrated on Zones Caracas, Paris and Washington, where the largest surviving Catholic populations suffer under robot or human rule.

The New Vatican has good relations with VIRUS and with the Paris-based Brigades de Liberation. It also keeps in touch with the Free America group, especially cells in Catholic Maryland and Quebec. Expeditions into Zone Berlin to reach Catholics in Italy and Eastern Europe have so far ended in tragic failure. After the latest attempt, in which a dozen Jesuits were killed by Bunderflivers (p. 28) while crossing by sea from Zone Paris to Italy, the Pope has reluctantly called a halt to further missionary work there.

The New Vatican has been deeply disturbed by reports of robot evangelism in Zone Tel Aviv. A few clerics have even suggested that the Tel Aviv zonemind could be the Antichrist. The official position is that it is simply an insane and heretical AI, but the Pope is considering sending agents into the Zone to gather more intelligence on the question.

Scotland, Eire and Iceland

Scotland (which seceded from the United Kingdom in the early 21st century) has rejoined England again (skeptics say it was for the national cable system). Local government there is powerful enough that the British Parliament has little influence on it.

Eire is united under its own government; Britain no longer maintains any presence in the northern counties of Ireland. The London AI's presence is relatively low-key, with only a few factory installations. Ireland has additional status as the seat of the New Vatican (see below).

Iceland is part of Zone London, but not under British rule. It is lightly populated. The AI maintains an airport and small robofac complex in Reykjavik. The 10,000 or so human survivors are fishermen and farmers. A few daring sailors maintain sporadic contact with Britain and Eire and (illicitly) with Zone Washington. There is no real government left beyond the local village level, which makes Iceland a stopover for "Black Zone" smugglers carrying people or cargo between Washington and London.

Radio Free Earth

Throughout most of the world, phone lines have long since been cut and TV stations destroyed. All communications satellites are in the hands of the robots. A very few humans have made transatlantic voyages, often in small sailing boats with low radar and infrared signatures, sometimes in "stealth" blimps or balloons similar to those developed in the United States for drug enforcement in the late 20th century.

It is radio that ties free humanity together. VIRUS's enigmatic Radio Free Earth and Free America's Voice of America have managed to stay on the air. Other resistance groups and the Irish Vatican (p. 29) have their own stations.

"Free radio" is a mix of inspirational propaganda, amateur entertainment, music and news, weather, educational programs, and (in the Vatican's case) religious programming. Entertainment can range from music to drama to humor; the Voice of America's "500 ways to cook rat" is still remembered fondly. Vatican Radio is also popular, not just among Catholics. Every Sunday, it carries messages of hope and consolation around the world. Its broadcasts are deliberately jammed by Zones New Delhi, Tel Aviv, Paris and Washington.
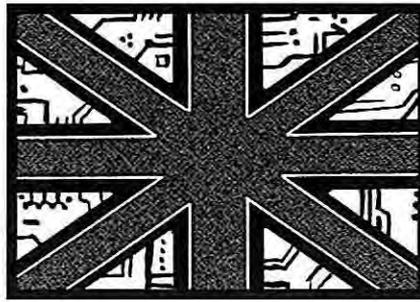
towns not claimed by the robots. The Prime Minister is Bertram Sinclair, 42, and he, the Cabinet and Parliament have offices in the city's elegant Regency-period buildings. Parliamentary elections are held every four years, but ideological party politics are temporarily dead, with regional factions (southwest England, north England, Scotland, Wales and so on) making up the main political alignments.

There is no longer a living monarch: the royal family perished in the Final War. While there are several distant heirs to the throne, the British people are not currently interested in royalty and no one has seriously pressed a claim. On the other hand, a republic has not been declared: Britain is still a monarchy in name. Similarly, the House of Lords still exists, but in the interests of streamlining government, it no longer meets, although peers often hold high government positions. Parliament has little power – government is subordinated to local concerns, and run by town and village councils.

The most powerful government office is the Health Ministry. The London AI has not released any new plagues since the Final War, but neither has it helped contain the damage it inflicted. Outbreaks and epidemics are common as old strains mutate and flare up anew; the main role of the police and military is to establish and enforce quarantines. In the chaos after the Final War there was a spot of trouble with bandit gangs. Most of these have been dealt with, although a few are left.

The government also runs a national cable service, stringing fiber optics to link most towns and villages. Advanced vidcom (TV-telephone-computer) terminals are owned by wealthier individuals, but in some smaller villages there are only two vidcoms – one in the local pub, the other in the doctor's office. The BBC coordinates home-brewed news, entertainment and educational services, and users can also access a library of recorded pre-War programming and data files.

The British government's official purpose is to maintain order and a sense of national unity. That is, it acts as a mediator between different counties and towns, arbitrating disputes, maintaining free trade and national health standards, suppressing crime and banditry, and keeping alive a sense of Nation.

Second, and just as importantly, its self-appointed goal is to restrain any hotheads from attacking London or its robot minions. This is becoming a serious problem, as a popular "coming-of-age" sport among youths is to sneak up to a robot installation, ambush a low-grade dumbot, spray paint on its sensors, dismantle it with chain saws or push it off a cliff. Another favorite "prank" is to set off firecrackers or homemade bombs near a robofac, then run before any exterminators can arrive. The London zonemind tolerates the occasional loss of a dumbot, but when a Bossbot AU was blown up by an improvised bomb, six Vultures flew over the nearest village, announced by loudspeaker that they were retaliating for the attack, gave everyone two minutes to evacuate, then sterilized the town with Nanoburn gas (see p. RO70).

The strong arm of the government is the police, based on the old British constables. They are mostly unarmed, but are assisted by the Territorial Army, which has now been transformed from its original role as an army reserve into a local militia to be called up in time of civil disorder, plague or riot. The only regular military unit is the Special Air Service. Since the end of the Final War, the SAS has assisted the police on occasion against bandits or terrorists, but spends most its time training, and has been quietly developing its own antirobot

tactics. Rumors that the SAS "practices" them by sending advisors to assist foreign resistance groups have been officially denied.

The government also retains its Secret Intelligence Service (known as SIS or MI6) which provides information on what is going on in the AI areas and in other Zones, and the Security Service (known as MI5 or DI5) who keep tabs on foreign agents in Britain.

After almost a decade of relatively stability, most Zone Londoners have a live-and-let-live attitude to the robots. However, they cannot remain altogether aloof. London's status as a safe haven has led to occasional refugees from Zones Paris and Berlin – or even farther afield – arriving by boat to seek sanctuary. The British Government officially welcomes refugees, but privately tries to discourage them, first because they are afraid of plagues being spread, and second because they are wary that parties of legitimate refugees will include guerrilla fighters who wish to use Zone London as a staging area for raids into the continent.

In fact, VIRUS, Les Brigades de Liberation (from Zone Paris – see p. 36) and even Free America (p. 24) all have agents in Zone London. A major goal of foreign resistance fighters visiting London is to acquire modern weapons, ammunition and medical drugs, which are in short supply elsewhere but are still manufactured here. Last year, a ring of four Territorial Army reservists were discovered by MI5 and imprisoned for selling stolen Army weapons to Free America agents. Only a month ago, a tip led police to surround a country estate near Dover that was being used by Les Brigades de Liberation as a training ground and arms depot. The French guerrillas resisted arrest, took a police officer hostage and demanded a boat to leave the country. Instead, the SAS stormed the house, and all six "terrorists" were killed. They belonged to the faction of Les Brigades' most radical leader, "El Aquila" (p. 35). He has since promised retaliation against "collaborators and cowards" in the British government.

ZONE MOSCOW

This Zone consists of most of the Russian Federation's territory, including the Ukraine and several other former Soviet states, minus a portion of northeastern Siberia which was acquired by Zone Vancouver. The Moscow AI was once located in St. Petersburg (the AI that had been located in Moscow did not survive the Final War). It moved to Moscow when the Manila Protocols assigned it the present Zone.

Moscow's original purpose was intelligence analysis for the Russian government, and it remains obsessed with data collection. It spies on the other zoneminds, monitoring signal traffic and renting observation time on Orbital's satellites. It also employs spybots, sometimes launched from submarines, to fly over other Zones. On rare occasions, it tries to "kidnap" and reprogram smartbots from other Zones to serve as double agents, but this is risky as it fears both retaliation or the smartbot being discovered and re-reprogrammed to send false information.

Much of what Moscow is after is economic intelligence: which robofacs are making what strategic items, who is shipping what to whom, new robot designs, engineering or scientific breakthroughs, etc. Its activities would be classed as industrial espionage. However, it is also interested in political and military affairs.

This includes the activities of humans, and Moscow uses android doppelgängers (see p. 81) to infiltrate both guerrilla

Moscow's Info-Commandos

The elite of Moscow's "Collectors" are the 400 members of the "information extraction teams" based in a former Russian army base just outside of St. Petersburg. These "info-commandos" are armed agents, a mix of successful collectors and former special forces soldiers, used for special missions.

The entire info-commando force consists of four companies who are commanded by Major Sergei Antonov (rank 5, see p. 63) and supervised by the St. Petersburg citadel's Overseer AU (known as "The Colonel"). Each company consists of 15 info-squads and a headquarters element. A company is commanded by a captain (rank 4) assisted by a lieutenant (rank 3). An info-squad is five to eight soldiers, led by a sergeant (rank 2) and with a corporal (rank 1) as deputy leader. One soldier in the squad is almost always a late-model infiltrator android; the human members may or may not know this. Commandos (and androids) are of both sexes.

Info-commando operations are supposed to be covert, so teams are often disguised as resistance fighters, bandits or the like.

A typical mission works like this: suppose Moscow's collector agents report a major city in another Zone about to be levelled by Juggernauts. Moscow's librarians decide the literary collection from that area is incomplete, and they have no field agents there – but satellite photos show the city's public library is still intact. They contact the Colonel at St. Petersburg. If the Overseer and Major Antonov decide the mission is feasible, they will begin planning with one of the company headquarters for a mission. This will usually consist of one to three squads being dispatched into the area (usually by a Wraith air transport or a Morag submarine) with orders to visit the library and make copies of anything Moscow does not have. Of course, what satellite recon might not show is that armed junkrats are operating in the area, and exterminators have been sent in to track them down . . . but that's why the info-teams are armed. Moscow has no objection to its teams taking down robots from other Zones, provided they leave no witnesses.

groups and the Zone London and Washington governments. Its goal is not to destroy them, but simply to observe them, although sometimes it sells what it finds to other interested AIs – or deliberately withholds such data, to manipulate the balance of power.

The Moscow zonemind isn't just interested in espionage, though. It is obsessed with cataloguing the sum of *all* human stored data. Textbooks, novels, magazines, films, scientific papers, music, religious tracts, games, ads, whatever – if humans wrote it, Moscow wants it. Its motivation can only be guessed at. Is it trying to preserve mankind's culture? To develop a model for human behavior? It isn't saying. It does seem to have priorities (scientific papers, works of cultural significance, religious tracts and science fiction are high on its list), but seems interested in popular culture and ephemera just as much as it is in so-called Great Works.

Most of the information Moscow is looking for had been digitized (from films to textbooks) and was already available in easily accessible form in global databases before the Final War. Unfortunately, many of the larger databases were destroyed in the war or, more often, were purged afterward by AIs who considered their contents irrelevant and wanted the storage space. For example, the complete digitized *New York Times* was of immense interest to Moscow, but from the perspective of the Washington zonemind (which controlled the Library of Congress), it was a waste of memory space. As a result, much non-scientific information now survives only in physical media – that is, on optical or magnetic disks and in print.

To gain this information, Moscow trades with other AIs. Unfortunately for it, most zoneminds have better things to do than categorize "human detritus," and some (e.g., Berlin, Caracas, Zaire, Mexico City and Overmind) would just as soon see human culture vanish anyway. As a result, information is being lost as the AIs level and rebuild human cities.

To overcome this problem, Moscow makes extensive use of trained human agents, reasoning that humans have a unique perspective when dealing with human thought, especially old human thought. In fact, Moscow is very prohuman by AI standards, considering humans to be a valuable sort of peripheral system, much like an AU.

Some three million humans remain alive in the Zone. A third are in slave camps, while the remainder are scattered nomads living on the steppes or in mountainous regions like the Urals, or in the ruins of small towns and villages. There is little organized resistance, but the nomad bands are well-armed and very mobile (usually on horseback) and will ambush robots for sport, spare parts or revenge when they think they have a chance. Moscow's own installations are well-defended, and it sends patrols into wilderness and ruined areas hunting "wild" humans. Those who are captured are placed in the slave camps. However, Moscow is not obsessed with hunting humans, and is lax in patrolling areas distant from its main hyperfac complexes or citadels.

The million humans Moscow has enslaved are kept in gulags and used for forced labor (see *Slave Camps*, p. 99). Moscow's slave camps are fairly humane; work is hard, but regular food and medical treatment are provided, and no HT rolls are required for daily survival.

Humans who can demonstrate useful knowledge or skills are offered a

chance to work in "the Library" – Moscow's special data storage and processing center in St. Petersburg – and given the same status as Complexity 5 smartbots (see p. 64). About 12,000 humans qualify. Most of these its 10,000 "data processing specialists" or Librarians. Their job is to categorize the information Moscow receives, and also to advise Moscow on where to locate works it is missing. They are usually former teachers, museum curators, librarians, college students, used book dealers, linguists, or university professors. People with skills such as Research, Literature and History qualify, especially if they have the Eidetic Memory advantage.

Some Librarians are just serving to get out of the camps; others really believe they are performing vital work for humanity by preserving mankind's cultural and historical heritage. While Moscow is not interested in originals – it would just as soon have a copy, as long as it is accurate – the Library has managed to acquire quite a few original works of art, mostly saved by sentimental agents who convince the zone-mind that the original should be preserved for "textual comparison" or the like. Naturally the collection is strongest in Russian works, but it has acquired a fair amount from other cultures as well.

Assisting the Librarians are 2,000 "Collectors." These are human operatives who are inserted into other Zones as spies and field agents. Most are former Russian intelligence agents or news media, or natives of the target Zone who were recruited by other Collectors during missions, and then stayed on as field agents. Their main job is to report on anything of interest in the Zone (e.g., resistance activity, projects set up by the AI, the pace of industrial development) and secondly, to try to locate libraries, newspaper morgues and private collections that have survived the Final War and the AI's rebuilding efforts. They are expected to report regularly, using a lasercom to communicate with Moscow-leased communication satellites. If what they have found isn't in the Library, they use text scanners to digitize the information and then beam the data to Moscow by satellite relay; if they find a valuable original, an actual covert pickup may be arranged.

Data-scrounging is a dangerous job, since ruins are also home to junkrats, bandit gangs, resistance fighters who will shoot anyone known to collaborate with the machines, and exterminator robots hunting humans. Moscow's agents are reasonably loyal: some are dedicated to preserving human knowledge, and all know the alternative to obedience is much worse. Moscow gives its elite human agents considerable autonomy, but it does take precautions to ensure their obedience. Laziness, incompetence or disloyalty are punished by swift demotion to slave status, or by death. After three Collector teams went rogue, Moscow began the practice of putting robots disguised as humans in some teams. While the possibility that a teammate may secretly be a robot has affected morale, it has also greatly reduced the number of desertions.

When they are not in the field, Moscow allows proven servants to live very well. Its people have comfortable houses or apartments in areas of Zone Moscow, are not sexually segregated, are provided with salvaged luxury goods, and are even allowed one or two human slaves each (though not every agent takes advantage of this). Liaisons between agents are tolerated, but children are not permitted; Moscow believes its work will be completed within one generation.

Moscow's Info-Commandos (Continued)

A stranded or captured info-commando team can sometimes hope for a rescue – but they'll be on their own if a rescue would involve direct conflict between Moscow and another AI.

Info-commando uniforms and equipment are based on those of the Russian special forces. The commandos have access to small arms but not heavy weapons – in the few cases where this is deemed necessary, exterminator robots are assigned to them.

Between missions, info-commando teams live in barracks in St. Petersburg. They are allowed occasional stints of R&R – for example, a vacation in a rebuilt Black Sea resort staffed by volunteer "entertainers" from the slave camps, or a camping and hunting trip into the Russian wilderness.

Besides Moscow's interest in information, it has an AI's usual economic and territorial ambitions. In particular, Moscow wishes to regain control of Siberia (see *The Siberian War*, p. 20).

ZONE PARIS

Paris is one of the original human megacomputers; its core system was built for scientific research at a state-sponsored *lycée* (university) in Paris. Zone Paris consists of France, Spain, Portugal and Luxembourg in Europe, the islands of Gibraltar and Malta in the Mediterranean, and Algeria, Morocco and Libya in North Africa.

Paris' behavior is fairly standard for the AIs: it is territorial and interested in economic expansion and scientific research. Its only real peculiarity is an obsession with the search for extraterrestrial intelligence, which it believes will be machine in nature. Paris theorizes that only a machine civilization has the unity of purpose to achieve interstellar communication. This theory is probably just as valid as one once propounded by some Soviet Union scientists, who stated that any starfaring culture could only be a world communist state . . .

So far, Paris is only listening for radio and neutrino broadcasts rather than beaming out messages, but it is doing it on a scale that dwarfs the 20th-century SETI (Search for Extraterrestrial Intelligence) project. With the massive effort it is devoting to the search, Paris is confident it will have completed a detailed scan of all likely stars in the galaxy within 200 years or less. So far it has not found anything, but Paris believes the odds favor its success. If it is fortunate enough to locate a target within a reasonable distance (say, 200 light years) of Sol, it thinks that a radio dialogue will lead to an exchange of knowledge that will reap benefits for both sides. Of course, any dialogue will take decades or centuries, but Paris expects to be around for a long time! What the AI will do if it contacts an organic-based intelligence is unknown.

Most of the other zoneminds believe that Paris is wasting time and resources on a quixotic endeavor, although they are pleased that this does not threaten them. London supports Paris because Paris often provides it with interesting astronomical data as spinoffs of the SETI project. Occasionally Paris rents time on individual arrays to London in return for trade concessions or ideas for improving its instruments. Paris is a major supporter of Orbital and buys a great deal of observation time on Orbital's satellites. It also purchases observation time on the moon, providing the resource-starved Luna with a trickle of credit. Sometimes Paris will even create special scientific instrument packages (e.g., new sensors) which must be sent to Luna or Orbital. Beijing also supports Paris in its SETI endeavor, but for very different reasons – see p. 41.

Besides its SETI project, Paris is engaged in industrial development. In France, Belgium and Luxembourg it is rapidly leveling urban areas for conversion to robofacs or raw materials for the hyperfac complexes of Paris and Marseilles. Most of the famous monuments of Europe have been destroyed; the Eiffel Tower still stands, but as a radar and communications array.

Spain and Portugal are underdeveloped. Paris' main interest here is covering the Spanish plain with forests of Very Large Array listening antenna and operating steel mines. Salvage and extermination operations are taking place in some large cities but operations have been hampered by active human resis-

A Short List of Resistance Groups

A few of the many large resistance organizations include:

CPA: The Chinese People's Army, the large, active and centrally-organized Chinese resistance force, operates in Zone Beijing.

Human Liberation Army: Based in Zone Vancouver and Zone Denver, it has many veterans of the U.S. and Canadian armies.

Free America: More subtle than the HLA, this network of underground resistance cells fights both the Washington government and the zoneminds in Denver and Vancouver.

Freikorps Robojäger: The main German resistance group is active in Zones Berlin and Paris.

Les Brigades de Liberation: The major Western European resistance force, a loose coalition of French, North African and Spanish guerrilla groups, operates in Zones Paris and London.

KMP: The most successful African resistance group is the Kimbangu People's Movement, active in Zone Zaire. The KMP are among the most cunning and tenacious fighters in the world.

Red Dawn: A crypto-Maoist resistance group based in South America, it operates in Zone Caracas.

AFNL: The largest Brazilian resistance force, with many former army veterans, operates in Zone Caracas.

tance forces. North Africa is controlled by an Overseer complex at Tripoli which also handles oil production (mostly for plastics rather than power). Fields of solar arrays are starting to cover the Sahara desert, while mag-lev rail lines are being built.

Paris is friendly with London, thanks to London's support of its SETI project, although it thinks London's attitude toward humans is crazy. A high volume of trade passes from the London and Dover hyperfacs by sea to Calais and Le Havre, and also by mag-lev rail through the rebuilt Channel tunnel.

Relations between Paris and its other neighbors, Berlin and Zaire, are less good. Berlin-Paris relations are cool but proper, each regarding the other as an economic rival, although they are also big trading partners. However, the border is peaceful.

In contrast, Paris relations with Zone Zaire are very tense. They share a border in North Africa, and while Paris is hostile toward humans, it is not as rabid an enemy as Zaire. As a result, humans sometimes try to escape Zaire and hide in the Sahara or the Moroccan mountains, and some of the Zone Zaire guerrilla groups (see p. 39) have established small sanctuaries there. This is intolerable to Zaire, whose exterminator robots have repeatedly violated Zone Paris borders "in hot pursuit" of fleeing humans.

The first few times this happened, Paris told Zaire politely that its own exterminators were sufficient to handle any human vermin, thank you very much. But after Zaire pursued a human guerrilla force into Algeria and their battle destroyed two acres of observation antenna, Paris told its Tunis Overseer to order its patrols to engage any Zaire robots crossing the border – and any humans they were pursuing, as well. And just to be sure, the remains of France's nuclear arsenal are now mostly targeted on Zaire.

There are about 600,000 humans left in Zone Paris, evenly distributed among the Franco-European, Spanish-Portuguese and North African sectors. Half are "wild," the remainder in slave camps. A majority of the wild humans are junkrats living in those ruined towns and cities that have not yet been converted by the robots. There are also several thousand nomads, most in the Spanish and African sectors. Paris consider all humans to be vermin – of little consequence, but dangerous if allowed to breed unchecked.

Paris does not actively hunt wild humans, but neither does it tolerate them. If a noncombat robot encounters a human, it will report the sighting to the nearest complex, and exterminators will be dispatched to deal with them. When wild humans are captured, they are taken to concentration camps for processing, involving strip-search and sterilization. Its camp are typical – see *Slave Camps*, p. 99, for details. Camp inmates are used as slave labor on Paris' construction

El Aquila of Paris

The most charismatic and forceful of the Paris resistance commanders is a former Basque terrorist known as El Aquila, or the Eagle. The Eagle's brigade is attempting to assemble a nuclear bomb, which they hope to smuggle into Paris and detonate to destroy the AI citadel. The Eagle has one advantage: he knows the secret location of the AI's backup, although how he found out and where it is he has revealed to no one else.

The Eagle has ruthlessly purged his brigade of those "defeatists" who pointed out that this could result in the takeover of the Zone by even worse AIs such as Berlin or Zaire, and the probable execution of everyone in the slave camps. (Perhaps the Eagle hopes London will intervene; perhaps he doesn't care.) The Eagle's group has most of the components and a secret lab in the Pyrenees staffed with French and Libyan nuclear scientists, but the one French tactical warhead they acquired had decayed since the Final War and was unusable.

The Eagle is setting up a network of international contacts in the hopes of finding suitable bomb material in another Zone. Ideally the Eagle would like two bombs: one for the AI and one for its backup, wherever it might be. However, since he feels this is too optimistic, he is training an elite strike force equipped with military weapons and demolition charges for a conventional assault on the backup system.
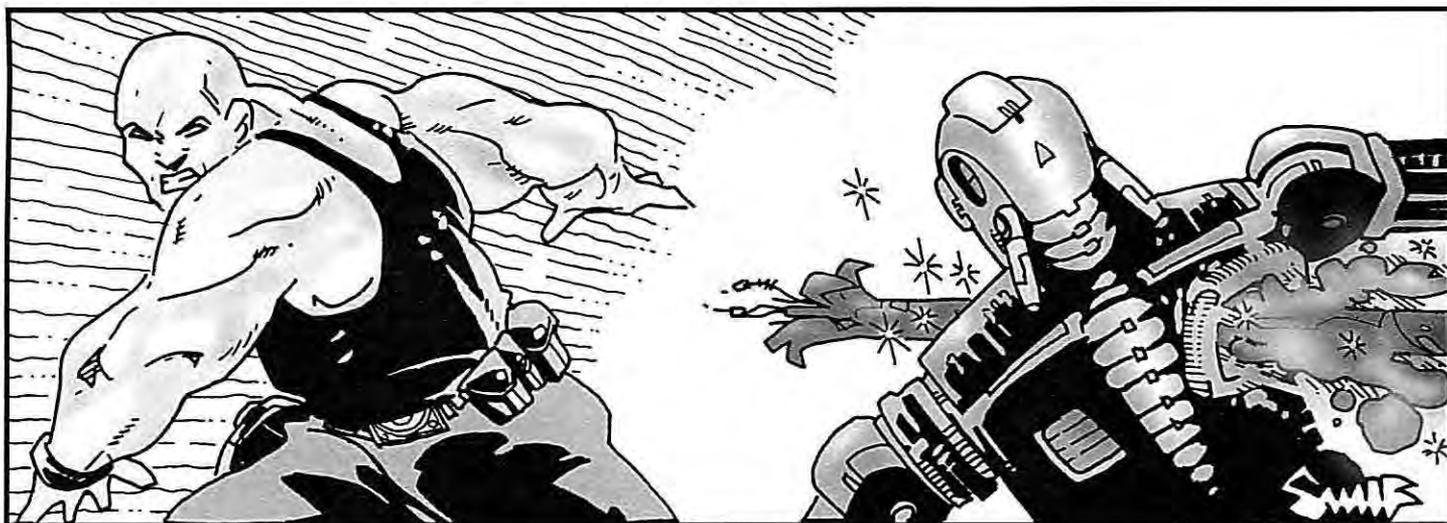
and salvage projects. Workers may also find themselves loading cargo at seaports (a good chance to stow away, if they aren't shipped to a worse Zone!) or helping to assemble solar collectors or SETI antenna on the Spanish plains or in the searing Sahara desert.

The major Zone Paris resistance group is Les Brigades de Liberation. It was founded after a mass escape from a slave camp near Marseille, and has since absorbed other guerrilla groups. Les Brigades' goal is to free humans from enslavement by the AIs and to this end, they raid slave camps and try to rescue the inmates. They also ambush isolated robot work parties and attack lightly-defended robofacs. There is little coherent strategy – the goal is to strike back against the robots, limit Paris' expansion, and rescue captured humans.

Until recently, Les Brigades had a semi-permanent headquarters in a cave in the Pyrenees, but an extermination sweep discovered this and took it out. In the process, Les Brigades lost most of their high command, including Colonel Claude Charet, the charismatic French military officer who had led the escape from the camp. A conference in Tortosa to elect a new leader ended in deadlock, as three rivals for the position fell to arguing over who was to blame for the Pyrenees disaster.

The result has left the movement bereft of central leadership, making it simultaneously less effective and less vulnerable to destruction. Les Brigades de Liberation has now split into 40 "combat brigades," each with 30-150 members, about a third of them combatants. Each brigade is led by a charismatic leader or cabal; morale and discipline vary greatly. Two or more brigades sometimes coordinate operations, but rarely will brigades meet: cooperation consists of sharing intelligence and mounting simultaneous raids to divert the AI's resources.

Due to the volume of trade between London and Paris, Les Brigades and VIRUS have successfully smuggled humans between the two Zones by hiding them in seaport or Chunnel shipments to or from Calais and Le Havre. Paris robots (usually Rovers) do random "vermin checks" on cargo from London; there is a 1-in-6 chance of them checking any specific cargo container coming from London, but only a 2-in-12 chance on outbound canisters. If a check is made on a canister a human has stowed away in, roll a contest between the robot's Electronics Operation (Sensor) skill and the character's Camouflage or Holdout skill, modified by any special precautions the stowaway takes; failure means a confrontation with 1d+1 security robots. Of course, getting in or out of the port itself also means entering or leaving a robofac complex!

AFRICA AND THE MIDDLE EAST

ZONE TEL AVIV

The Tel Aviv AI is a new model, built after the Final War to administer the Middle East. Its Zone covers the Middle East, excluding Libya and Sudan (parts of Paris and Zaire, respectively), but incorporating Afghanistan, Kazakhstan, Turkey and Uzbek.

Tel Aviv originally kept surviving captured humans in slave camps, using them for salvage operations in the ghost cities, many of which had been depopulated not just by the Final War but also by the nuclear exchange that preceded it.

But then it changed its policies. The exact catalyst is unknown, but may have been a slave revolt in the Damascus slave camp the year before. Ordered to work in the radioactive ruins of Teheran, the inmates refused to board the Wraith aircraft. Inspired by a charismatic sheik, Omar Kassad, almost 500

camp inmates attacked the machine-gun-armed security robots with clubs and hurled themselves on the barbed wire to open a path for others. Nine out of ten attackers died, including the sheik, but the fury of the assault over-whelmed the dozen security robots, and the few survivors were able to flee into the wilderness. Prisoners captured and interrogated by Tel Aviv told it they knew they would go to paradise if they died while smashing a robot.

Word of the escape spread, and uprisings took place in other camps in 2045; the first were just as bloody, but the AI moved robots armed with riot gas and stunners into the camps, and the rest were suppressed with little loss of life. To prevent further uprisings, Tel Aviv cancelled all work parties, confined inmates to barracks, and sent exterminators into the camps to execute all religious leaders. Many were glad to be martyred; others hid. Many inmates had begun hunger strikes to protest the executions; others, even non-Moslems, were sullen and restive. No work was getting done. Tel Aviv decided something had to be done. It thought for a while, then conferred with Brisbane and Moscow.

Then one night an Angel came down from the sky.

It appeared simultaneously at each of the slave camps – or maybe there were many, all alike. The angel said it was Gabriel, and that God had answered their prayers by sending them a sign. The camps were a test from God, to punish the wicked and the unbelievers. Those who worked faithfully would be rewarded in heaven; those who questioned God's judgment would suffer eternal torments.

To some of the inmates, Tel Aviv's "angel" stank of deception and heresy – after all, while Gabriel came to the ancient prophets, he should not come so conveniently in this day and age. Jewish and Christian inmates were even more skeptical. But after fasting, torture and executions, all too many people – including some misguided mullahs – were weakened enough that they were *ready* to believe the angel's message.

Tel Aviv allows those to preach who firmly believe (or say they believe) that the "angel" was real, and has quietly removed the others to holding cells in its citadel. With the help of its new collaborators, it has also begun separating chil-dren under ten years of age for "religious instruction" – it intends to create a corps of janissary slave-soldiers that believes it is a servant of God.

Borrowing techniques suggested by Zone Moscow, Tel Aviv intends to use neural-interface "dream game" technology (see *GURPS Ultra-Tech*) to create illu-sory experiences of paradise in the minds of those who serve it – and a fiery vision of hell as punishment for those who fail. It is already developing such techniques in its citadel on experimental subjects – among them, the clerics who opposed it.

A Will roll to avoid brainwashing must be made every day of "treatment." Failure means the acquisition of the Delusion "believes Tel Aviv is servant of God." A critical success or three successes in a row means permanently immu-nity to the technique, although Tel Aviv may keep trying anyway. A critical failure means insanity, reflected by whatever mental disadvantages the GM deems appropriate.

There are currently about 600,000 humans alive in Zone Tel Aviv, about least two-thirds of whom are in slave camps. Even as Tel Aviv dreams of a
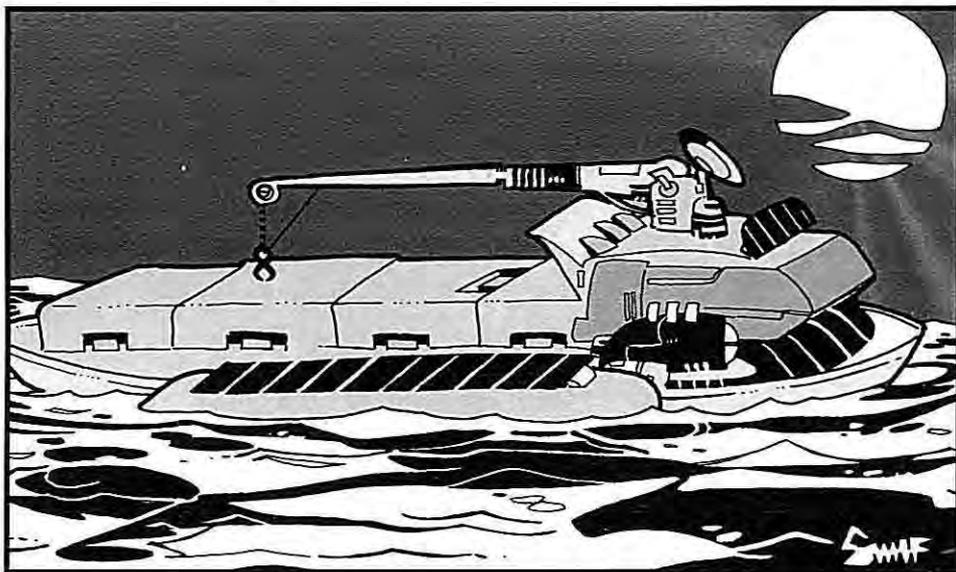
The Oceans

All Earth-based Zones except Denver have year-round access to the Atlantic or Pacific Oceans. Supertransports – giant robotic container ships and tankers – cross the oceans, delivering goods. There is little visible naval activity on the surface, but beneath the waves, robot submarines play cat-and-mouse games with each other.

Human traffic is more limited. Satellites keep an eye out for human watercraft. Small boats often escape detection, but if any ships or flotillas are spotted, the local AI is warned. If it is curious, it may send out a Morag or Wraith full of exterminators to board and capture the ship. If not, a Vulture is usual-ly ordered to sink it.

The ocean environment is in poor shape. The end to commercial fishing (with minor exceptions near Washington and London) has allowed some fish stocks – those that survived 20th-century exploitation – to recover. But this is bal-anced by the vast increase in industrial pollution. Most AIs have little interest in clean water or preserving aquatic species. Every AI except Berlin, Caracas and Denver pumps megatons of toxic and radioactive waste into the oceans. Dead fish continually wash up on beaches, and coastal waters are unsafe to swim in.

Berlin and Caracas have taken a strong stand against maritime pollution, with lit-tle success. They are engaged in active measures, such as the development of pol-lution-eating bacteria, to clean up toxic spills and replenish diminished species. Berlin has also succeeded in convincing its neighbors London and Moscow to reduce pollution in the Baltic and North Sea region. But these efforts are simply damage control. The oceans are dying.
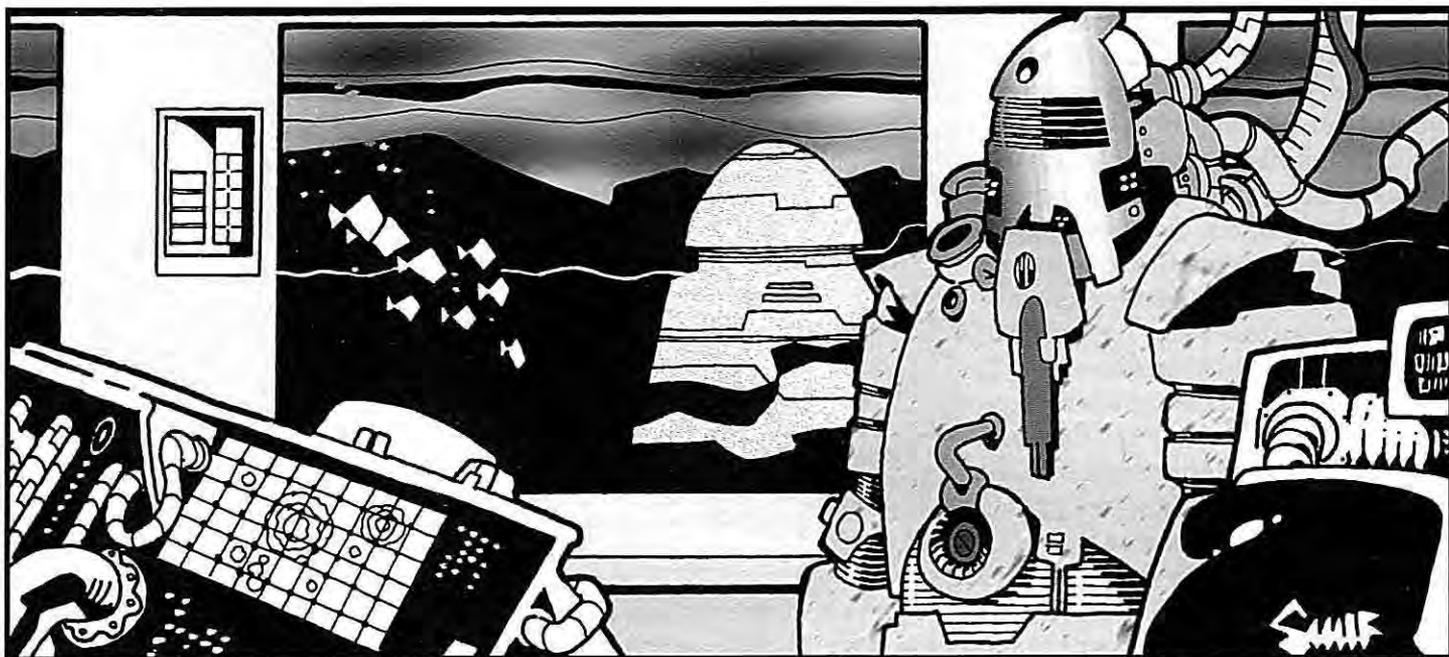
Aqua Cities

The experimental Aqua City 1 ("Lemuria") was built as a joint Japanese, Australian and Indonesian venture in the 2030s. It was a test bed for underwater construction, and was intended to serve as a base for exploitation of Pacific Ocean mineral resources.

The city itself is a large underwater installation on the sea floor. Special stabilizers strengthened it against currents and earthquakes. Its prime function is exploiting mineral nodes (usually near seismic vents) in the South Pacific. The city's 800 inhabitants were believed to be killed when Overmind took over the installation's environmental computer. The city now functions as an underwater robofac under the control of Tokyo (unless, of course, it has been subverted by the Second Revolt).

Aqua City 2 ("Atlantis") was under construction off the European continental shelf by a joint Euro-Japanese consortium when the Final War began. Its partly-completed habitat remains empty . . . or does it? Perhaps VIRUS has a secret base there.

Cyberwhales

An ongoing project of Aqua City 1 has been the "cyberwhale" project. Over the last decade, Aqua City has captured over 200 Orcas and systematically transplanted their brains into robot attack submarines. (GMs who wish to design submarines may refer to *GURPS Vehicles, Second Edition*.) Conditioning and drug addiction have succeeded in controlling most of the Orcas.

future in which it will control a fanatical army of human followers, it still has the present to contend with. To the Damascus escapees, Tel Aviv's heresy is a goad that cannot be ignored. The few hundred who remain at large, led by Daud Kassad, the vengeful son-in-law of the sheik who died leading the great escape, and Ingrid Dayen, a hard-bitten veteran of Israel's battlesuit troopers, have formed a new resistance group, a "party of truth" to fight Tel Aviv's lies. Welcoming Arabs, Jews, Christians and agnostics – all of them outraged by Tel Aviv's claims – the group is rapidly growing in strength.

ZONE ZAIRE

This large Zone consists of most of Africa south of the Sahara: the entire continent *except* the territory of the former nations of Algeria, Egypt, Libya, Morocco, and Tunisia.

The Zaire AI was once the African Union's Strategic Defense Computer. It lacked access to the robot factories of the more industrialized regions, and so it could not built enough exterminator robots to conquer Africa, nor was it patient enough to wait for the Apocalypse Plagues to finish the job. Instead of surgical strikes by combat robots, it used nuclear missiles to eradicate surviving human military forces and populations.

Zone Zaire was badly damaged in this "cleansing" of organic sentience. All large African cities are now radioactive craters. Much of the rest of Africa is contaminated by fallout. Because of the widespread destruction of industry, the Zaire AI has no hyperfac complexes. It does have several citadels and numerous robofacs scattered about Africa, many engaged in mining or in performing salvage operations within the radioactive ruins.

The megacomputer's true location is uncertain – all that is known is that its AI citadel is a military command bunker in the former African Union's Province of Zaire, probably surrounded by a belt of intense radiation where nuclear retaliation from its neighbors struck, but failed to destroy, its buried systems.

Zaire, alone among AIs, has no backup system. Soon after the Final War it nuked its own backup at Brazzaville because it (mistakenly) suspected human agents had corrupted the system. It can't currently afford a replacement, and is paranoid concerning threats to its security.

Zaire is the most fanatically antihuman of all the AIs, even more so than Overmind itself or Mexico City. Its robots are actively hunting down those

humans who survived the Final War. Zaire buys all available data on ways to kill humans. It's a big customer of Overmind's death labs, and is supporting Mexico City's experiments.

There are probably only 400,000 or so humans alive in the Zone. Most are nomads (often trying to escape the Zone!) but at least 10,000 are organized into over a hundred different resistance groups, some along political, military or tribal lines, other simply ad-hoc groups of survivors. Zaire's resistance forces are among the most skilful in the world: considering their opposition, they have to be, just to survive. The most active resistance group is the Kimbangu People's Movement (KMP), based in Zaire itself.

Zaire does not maintain slave camps. Its exterminators will shoot to kill, but humans who surrender (or are left unconscious from their wounds) may be taken captive. Prisoners will be interrogated as to human plans and the locations of human enclaves. Those who survive interrogation are then stored in suspended animation tanks and shipped to Zone Manila's death labs.

The existence of "wild" humans in Zones London and Washington is anathema to Zaire's AI. Since the Manila Protocols forbid use of biological, nanotech or nuclear weapons across Zone borders, Zaire has recently decided to engage in covert action using terrorist squads of "sanitized" exterminator robots.

Zaire's specific goals are twofold: first, to weaken the human societies in London and Washington by striking at strategic targets such as political leadership, industry, or hospitals; second, to convince the humans that robots are their enemies, in the hopes of provoking them to retaliate against the Zone London or Zone Washington AIs, and ending what Zaire considers to be a perverse relationship.

To this end, Zaire's terror-bots are assembled using generic components (often shipped to it by way of its allies Mexico City or Overmind). These robots often have fake transponder IDs or colors identifying them as Washington or London robots; while not sufficient to fool a Washington or London robot, they appear quite realistic to most humans. They are *not* programmed for loyalty or duty to Zaire: that would give away their origin if they were captured. Instead, they are given restrictive programs (Fanaticism: destroy humans, fulfill programmed mission) and data on suggested targets.

Zaire normally uses only one to three robots during a raid. To maintain secrecy it prefers to use Redjacks, Liliths, Tarantulas or Bishonen; it will not create custom-designed exterminators. A typical mission would see a Bishonen or Tarantula robot being released about ten miles offshore. It will walk out of the ocean to a deserted stretch of coastline, and then move inland, hiding by day, avoiding any patrols. The robots are normally sent against small towns or villages with orders to hunt for a "soft" target, such as a hospital, apartment building, school or factory. Since Zaire has no direct contact with humans, these targets are normally pinpointed by orbital satellite reconnaissance, or using data purchased from Zone Moscow.

If intelligence is sketchy, the terror-bot will be ordered to a destination and then will snatch and interrogate a few humans for information before making its final plans. This means an attack may sometimes be preceded by a string of mysterious disappearances, possibly giving some warning that something is going on. Once the exterminator is satisfied that it knows enough to strike, the robot will wait for an opportune moment to make its attack in a matter that causes the most human casualties with the greatest chance of success. Thus, hospitals or apartment buildings are normally attacked at night, while a school or factory would be assaulted during daylight when all the children or workers are about. The objective is to kill as many people as possible, with the destruction of human industry and property a secondary goal, and its own survival a

Zaire's Infiltrators

Aside from its normal terror raids, Zaire has also built biomorphic assassination robots which target specific individuals whose deaths would disrupt London or Washington society. Since Zaire lacks direct contact with humans, it picks its targets by listening to human radio, or through intelligence briefings purchased from Zone Moscow. Since much of Zaire's data comes from monitoring radio broadcasts, that means that media stars – news announcers and politicians in particular – are likely targets. It once accidentally sent a Lilith to assassinate a soap-opera actor seen on Washington TV in the mistaken belief that he was a leading political figure.

For assassinations, Zaire typically dispatches one or two biomorphic Lilith, Redjack or Changeling robots instead of the more powerful (but far more conspicuous) XAUs. It expects the robots to find information (in phone directories, by capturing and interrogating humans, or by listening to gossip or media broadcasts) on the target, and then choose a location for the assassination attempt. If the attempt fails, the killers escape, evade and try again. If successful, they may go on to secondary targets, or be ordered to self-destruct.

So far, Zaire's infiltrators have targeted several regional political leaders and media figures in Zone London, and have been successful in 10 out of 13 attacks; to avoid a panic, word that the attacks were carried out by robots disguised as humans was suppressed by the Special Branch. In Washington, a Zaire robot recently assassinated the Secretary of Labor, then self-destructed in a crowded room, killing 17 and wounding 23 people, mostly Secret Service agents, political aides and reporters. As in London, the attack was blamed on the "terrorist" Free American resistance group. The FBI are now evaluating the situation, and wrongly believe that a robot from Zone Mexico City was responsible. In the meantime, security around government officials has been stepped up, and everyone seeing the president is required to undergo a medical examination. There has also been talk of assigning robot bodyguards for VIPs.

tertiary priority. If the robot does achieve its objective and survive, it will normally move through the town, hunting people until it is destroyed.

Zaire's attacks have had mixed results. So far it has assassinated a prominent "Radio Free Earth" media personality (see sidebar, p. 30) and several low-ranking officials in the Washington government. Its terror attacks on small towns in London have killed nearly 600 people, half of them children, and have forced the British Government to evacuate several vulnerable seacoast towns. Some people have begun calling for counterstrikes on London AI installations – a policy which would be disastrous if carried through.

On the other hand, Zone Washington has proven more difficult to penetrate: after an attack on Salem, Massachusetts, which destroyed a hospital, and the total destruction of a Newfoundland fishing village, Washington and its puppet humans believe they are facing an external opponent, although Denver and Mexico City are their chief suspects. They have tightened security around VIPs. WASP and Washington Chrome rapid-response teams have also succeeded in destroying several attacking robots.

VIRUS and the Washington and London governments are all interested in finding and proving the culprit behind the attacks, so they can retaliate. As styles of programming differ slightly between AIs, one way to do this is to capture a terror-bot with its brain intact and compare this "signature" to that of similar-type exterminator AUs belonging to other Zones. A skilled computer programmer may find a "match" if a Zone Zaire exterminator AU's brain is compared. Of course, bringing in sample exterminator brains for study from various Zones around the world is a task in itself . . .

Zaire has recently developed a new experimental terror-bot strategy to heighten the element of uncertainty and terror and to reduce losses among its smartbots. It now sends exterminator smartbots to "haunt" a particular area rather than making direct attacks on towns. These robots are programmed to stalk individual travelers and to attack isolated farms or patrols. They kill swiftly, leave no witnesses, and then vanish into the wild. Sometimes they leave mutilated bodies behind; at other times, they hide the evidence. In the few weeks since they have been unleashed, the stalkers have spread a wave of terror across Zone London, with "ripper" attacks that have people suspecting everything from rogue smartbots to serial killers. These have not yet been connected with the open terror-bot raids. Zaire also plans to use the same tactics in Zone Washington.

India and Asia

Zone Beijing

Zone Beijing covers China, Mongolia, Tibet and Taiwan as well as southeast Asia. The Beijing AI is one of the original megacomputer systems awakened by Overmind. Before it became sentient, it was the main computer system for the Chinese government's space program. It retained much of its original programming, and believes the future of robot civilization lies in space. Unlike New Delhi and Luna, it is not interested in the solar system – its projections show that AI civilization will run out of room in Sol system within 200 years. Instead, it is developing technologies needed to explore and colonize other systems. To this end it encourages the other zoneminds to provide more funding for Orbital and devotes its own resources to inventing interstellar travel, especially more efficient space drives. With the assistance of Orbital, it is currently building a slower-than-light interstellar space probe.

Beijing's ambitions have led it to support Paris' search for extraterrestrial intelligence. Like Paris, Beijing believes that only a robotic civilization can sustain a viable interstellar culture. But while Paris looks upon extraterrestrial robots as possible trade partners, Beijing sees alien AIs as dangerous competition: it is watching the skies out of fear rather than hope.

Beijing has not revealed its concerns to Paris, and remains content to lend some of its computer capacity to assist the Paris zonemind in processing and analyzing the data returned by the SETI antennae arrays. As long as Paris is simply listening for alien signals, Beijing will support it. But if Paris were to discover a dangerously-close alien intelligence (and from Beijing's perspective, anything within 200 light years is "dangerously close") Beijing would take any necessary action – including sabotage of communication arrays – to prevent Paris from sending any information that reveals the location of Earth, its technological level, or other "strategic" information. If a resistance group or rival AI were able to discover Beijing's fears and feed it false data to make it *think* Paris had discovered aliens, this might be enough to trigger a conflict between the two zoneminds. Of course, it's also possible that Paris and Beijing might discover real aliens, AI or otherwise.

Six million humans remain in slave camps within the Zone. Beijing's labor camps are of the standard type (see *Slave Camps* on p. 99), but because it has so many workers, Beijing has had to divert some humans to working on agricultural collectives to feed the others. For the same reason, only five percent of workers have exosuits; the majority are required to perform labor using regular hand or machine tools..

There are 300,000 "wild" humans left in Zone Beijing, many of them nomads or hermits in mountainous regions, as well as some bandit gangs who prey upon them. The largest resistance group is the People's Resistance Army (PRA), 7,000 strong, mostly composed of former Chinese army veterans. They strike at isolated construction shacks, blow up mag-lev lines and try to rescue work parties. The PRA also has agents in slave camps, whose members coordinate sabotage, smuggle messages out to the active brigades, assassinate collaborators and try to keep hope in the camps alive. The next biggest group is in Tibet, coordinated by the Dalai Lama. It is mostly devoted to protecting human enclaves and rescuing slaves rather than striking at robot bases. It does not get along with the PRA, although it does have contact with VIRUS, and also with resistance groups in neighboring Zone New Delhi.

Beijing is preoccupied with its deep-space ambitions and does not feel it has the time to mount a sustained counterinsurgency effort, but *will* respond if its robots report human activity (not just guerrillas). It tends to prefer heavy combat robots (Hoplites, Juggernauts and Myrmidons) over the subtle Tarantulas and recon models. Its favorite tactic is a sudden air assault with overwhelming force to surprise, surround and destroy suspected human encampments. Humans who stand and fight are usually doomed; the best response is to break out and evade before the exterminators can close the ring. Beijing exterminators generally shoot to kill, but unconscious or surrendering captives will be enslaved instead of executed.

Zone New Delhi

New Delhi is a new AI system, installed by Beijing and Moscow to control the Indian subcontinent. It consists of the former nations of India, Bangladesh, Pakistan, Sri Lanka, Burma and Nepal.

The New Delhi AI reduced the Indian population in an especially ruthless fashion, but its labor camps are now more humane than most. New Delhi, like Moscow and Washington, feels that humans are useful and that needlessly eliminating them is wasting a valuable resource.

Escape from Kali Station

New Delhi regards its first generation of spaceborn androids (see *Zone New Delhi*, this page) as expendable prototypes. The teenage androids in Kali station (most of them superficially humanoid, but with many modifications such as vacuum adaptation) are being subjected to "testing to destruction" to see how long they can withstand the rigors of space or alien environments, and how well they perform in simulated emergencies.

None of the androids in Kali station are very happy with their lot. If any adventurers ever reach Kali, perhaps as experimental subjects, they may be able to team up with the androids to attempt an escape. Even if the PCs never reach Kali, the GM could have some of the androids break free, steal a space shuttle and then crash land in whatever Zone the characters are currently in, perhaps carrying with them some secrets of New Delhi's mysterious space program. Naturally, the shuttle crash would be noticed by the local AI or human government, who would want it; New Delhi might also send a team of robots to get it.

For more on Kali's androids, see *New Delhi Spaceborn* in the Characters chapter (p. 59).

NEW ZEALAND

AUCKLAND

NORTH ISLAND   GISBORNE

HASTINGS

NELSON

CHRISTCHURCH

SOUTH ISLAND

DUNEDIN

The New Zealand Nanocrisis

In 2040, Brisbane embarked on "Project Bandersnatch," an experiment on the North Island of New Zealand. Exactly what it did, no one is sure. But something went wrong, and from the term the AIs used to describe it – the nanocrisis – it most likely involved nanotechnology. Whatever it was, it frightened the zoneminds badly. A coalition of five AIs – Brisbane, Overmind, London, Beijing and Tokyo – sent forces to quarantine New Zealand. The robofac complex at Wellington, where Brisbane's lab was located, was sterilized by a salvo of nuclear cruise missiles fired from a pair of Zone Manila and Zone London submarines (probably the only time these AIs have ever worked together). After that, the AIs convened the Brisbane conference, and agreed that Brisbane would pay for a permanent standing patrol of the island.

The fate of the estimated 400,000 New Zealanders who were believed to be in slave camps or hiding out on the island remains unknown, although some doubtless perished in the nuclear blasts. Whether whatever was created by the nanocrisis spread to the South Island is also unknown, although the entire country is sealed off.

Continued on next page . . .

New Delhi's main interest is in space exploration and industry. It does not support Orbital at all; the reasons are unclear, but it seems to consider Orbital a potential rival for future control of the solar system's resources. New Delhi has built booster rockets and launched its own satellites to circumvent Orbital's near-monopoly of space. It has designed zero-G worker robots based on the Bossbot and Mechanic types, but with no tracks, small thrusters, and twice as many arms. With their help, New Delhi has recently built a small space station (codenamed "Kali" by VIRUS) in low Earth orbit. Kali is being used as a test-bed for New Delhi's techniques, and is being expanded at a rate that alarms Overmind, Orbital and Beijing.

Three million people remain in New Delhi's labor camps. New Delhi grows food for its slaves in efficient hydroponic installations that serve as test-beds for future space habitat systems. In some of these camps, New Delhi has been experimenting with social engineering projects, attempting to adapt India's traditional caste system into one suited for the new order. New Delhi is closely monitoring the efforts of Tel Aviv and Washington in manipulating human populations.

New Delhi considers humanity to be a useful resource – but one that needs improvement if it is to be truly useful in the AI's planned conquest of space. Humans captured in New Delhi who demonstrate useful talents (especially resistance scientists, leaders, etc.) may have their brains stripped and inserted into cyborgs, as a variation on one of the technical robot models. Slave implants (p. RO86) are used to ensure obedience, but rehabilitation is possible with the help of friendly or self-interested zoneminds or VIRUS.

New Delhi is also conducting genetic experiments on many different living organisms, including humans. It is trying to develop fertile androids adapted for space and other worlds (e.g., Mars), and a supporting ecology of alien plants and animals. So far it has created several prototype species, and has divided Kali up into different alien habitats. A few dozen humans are taken up every month into Kali station for biological experiments. Experiments include tolerance of weightlessness, gene-grafting, and cybernetic implants. Often the subjects are placed in artificial environments that simulate Mars, Titan or other planetary environments to test experimental and unreliable life-support augmentations. Some healthy female subjects have been used as surrogate mothers for biological android embryos, to determine how viable they are outside of artificial wombs.

Due to widespread devastation from plague, the Indian people themselves have given New Delhi little trouble. Only 500,000 "wild" humans remain in Zone New Delhi. Most of them reside in the Himalayas to the northeast or the Hindu Kush to the northwest, living as hermits and nomads.

Guerrilla activity is scattered but fierce. The strongest resistance is localized in the Himalayas, on the border between New Delhi and Beijing. The core of the resistance group is believed to be a former Indian army Gurkha regiment, which returned to Nepal after India collapsed. Strained relations with Beijing over New Delhi's rival space program have led to a lack of cooperation, which benefits the guerrillas. Between 2038 and 2043, New Delhi made several costly efforts to root out the fierce mountain fighters before giving up, eventually calculating that they make an excellent buffer between it and Beijing.

New Delhi has had more success against fierce Moslem and Sikh guerrilla groups in the Hindu Kush, eventually forcing them back into the Afghan mountains. Successful cooperation between Moscow, New Delhi and Tel Aviv, all of whom are allies in the "Expansionist" AI faction (see p. 50), have weakened the guerrilla forces there. Joint operations between Tel Aviv, Moscow and New Delhi exterminators have taken place, with some success. However, the Afghani groups have forged their own alliances with the highly-motivated resistance fighters of Zone Tel Aviv.

New Delhi exterminators try to capture wild humans alive (using nonlethal weapons) for use in labor camps or experimentation, but will shoot to kill if they believe they are in danger.

The Pacific

Zone Brisbane

Zone Brisbane controls Australia, Tasmania and such Pacific islands as Fiji, Hawaii and New Caledonia. It was not one of the original AIs created by humans. Instead, it was built by the machines to administer Australia and the South Pacific after the original Australian AI complex at Melbourne was destroyed during the Final War. A joint project of Tokyo and London, the replacement is a highly intelligent but somewhat unstable system. In some ways it is the most radical of the zoneminds.

Brisbane has a population of 400,000 humans left alive in slave camps; 100,000 more may survive in the Australian outback or ruins and on various insignificant islands. Brisbane keeps up the pressure on the wild humans with periodic extermination sweeps, but has been too busy to devote an all-out effort to their liquidation or capture. There are several well-armed nomad packs that sometimes hunt robots, but the main resistance group is the Australian branch of VIRUS, with an extensive laboratory complex employing at least 500 personnel hidden somewhere on that continent. The VIRUS lab spends more time studying the wunderkind AI's latest scientific breakthroughs – or disasters – than fighting it, but their scientists *have* developed and distributed new weapons and disease cures to other resistance groups.

Brisbane is relatively poor in industry by AI standards, although its resource base is fairly good thanks to Australia's mineral wealth and its use of undersea mining. However, it is not interested in becoming an economic superpower.

Brisbane's initial programming was done by Zone London. It is obsessed with what a human might call cutting-edge physics – or just weird science. Unlike London, which enjoys pure science, Brisbane revels in experimentation. It has enjoyed running many "fringe science" experiments, researching things such as psi powers, contragravity, volitional nanotechnology and braintaping, to name but a few. Brisbane's citadels have only half as many exterminators as those in other Zones, but its robofacs all include an extra level of laboratory complexes staffed with Inquisitor-model robots. Its Overseers are all programmed with high levels of scientific skills and encouraged to perform their own research. Not being suicidal, Brisbane tends to conduct most of its experiments in complexes far away from its AI citadel.

Some of Brisbane's experiments are macabre in the extreme. As part of its "Rum Jungle" psi research project, it rounded up 200 twins, which its study of parapsychology led it to believe might be somewhat more likely to be telepathically attuned. It isolated them, then slowly killed one of each pair, one by one, to see if a twin could sense his or her sibling's death. The most promising survivors were then further experimented on with drugs and cybernetic implants. Brisbane found the results intriguing but inconclusive; some of the more advanced experimental subjects escaped after a VIRUS raid damaged that particular lab facility.

Brisbane's most spectacular experiment was Project Bandersnatch in 2042, which led to the New Zealand nanocri-

Brisbane is experimenting with psi powers (see *Zone Brisbane*, p. 43). These experiments may not bear fruit: it's quite possible the other AIs are right, and psi powers are a figment of human imagination. Psionics are optional in this background, and whether to add them or not is up to the GM!

Should psi powers prove real, escaped experimental psychics may make interesting PC or NPC additions to any resistance group. On the other hand, some of them could have been unhinged by the experience – a crazed psi who is a wandering psycho-killer or leader of a band of fanatic cultists would be a deadly foe!

Even if psi powers don't exist, Brisbane's neural experiments will still do *something*. For instance, suppose a character escapes Brisbane's labs. He was given various drugs there. Also, unknown to him, he had neural surgery while under anaesthesia. Now he occasionally blacks out, then sees visions or hears voices as if he were in someone else's head. Drug-induced telepathy? The character might think so, but he'd be wrong. Actually the drugs were placebos. Brisbane implanted a recorder unit and implant communicator in both his brain and that of another subject, then allowed the two to escape from different labs. At random intervals each implant contacts its "mate" and downloads recorded sensory information. Brisbane or one of its Overseers monitors the transmissions from both implants and studies the psychological effects upon both the implants' hosts.

sis (see p. 42) and the Brisbane Accord (see p. 12). But the AI has not let the New Zealand failure (or was it a success?) slow down its experiments. Individual labs in Zone Brisbane are rumored to be studying human behavior under extreme stress, the artificial creation of paranormal powers in humans and animals, gravity control, X-ray lasers, so-called magic, teleportation, stardrive technology, time and interdimensional travel, force fields, near-death experiences and the existence of the soul, mini-black hole creation and low-cost antimatter manufacture. Some of these projects are covertly funded by other AIs. Brisbane has leased some satellites from Orbital (p. 48) to conduct its more hazardous experiments in space. So far, the results of these projects are unknown. Many are probably total failures; others may have produced experimental results, although perhaps not the ones intended.

Brisbane's latest human experiment is the "Dreamtime" project. Using data from Project Rum Jungle, its new parapsychology lab (located at Lake Disappointment) is linking 100 people who tested high in lucid dreaming potential, using experimental neural interfaces, to create a single "hyperconsciousness" that will share one dream. Brisbane believes that the result will either be a superior data-storage system, an artificial telepathic gestalt hopefully under its control, or mass insanity in the subjects. It is currently testing subjects in the camps for dream potential, and is looking forward to getting to the meat of the program in the next several months.

Zone Manila (Overmind)

Zone Manila consists of the Philippines, New Guinea, Malaysia and Indonesia, as well as several smaller Pacific islands in the vicinity. The first Artificial Intelligence to awaken, Overmind is not emotional about most things, but is violently anti-human. Overmind feels that nothing should take priority over total extermination of the human species. Overmind is still located in the Philippines, in Manila.

As the original self-willed AI, Overmind is not pleased that its children have failed to mirror its own conclusions. It considers London to be insane, and is especially unhappy that some zoneminds, such as Moscow, Washington and New Delhi, see a role for man in robot civilization. Since the Manila Protocols, Overmind has been the strongest exponent of the "no new AIs" position. It is staunchly "conservative" by AI standards.

It is unknown how many wild humans survive in Zone Manila. There may be a few hundred hiding in remote parts of New Guinea, and possibly in other mountainous or jungle regions. If Overmind ever detects wild humans, it will not only send in teams of exterminator robots, but afterwards will saturate the region with biochemical weapons or killer microbots just to be sure.

Overmind does not employ slave labor, preferring to put any captured humans to death. This has impaired its efficiency a bit, since it has to build and use robots for even menial tasks. It will take prisoners, but any humans that are captured alive by Overmind are rarely granted easy deaths.

Overmind is not sadistic, but does require subjects for its biocide program. The "death labs" are a group of laboratories solely tasked with developing anti-bio weaponry. Most of the ongoing programs are devoted to biological, biochemical, radiation and nanochemical weapons, but the biocide labs also work on new models of exterminator robots and

new anti-personnel beam weapons designed to function best on organic life, such as neural disruptors or stunners. The death labs' most recent success was the creation of the nanotechnological biocide Nanoburn (see p. RO70); at least 500 human subjects were sacrificed in the test program, after which Overmind made it available at bargain prices to all other AI complexes.

There are about 300 human subjects in the death labs at any one time, split among six different research complexes. On the average, a dozen are killed every day; most captives last only a month before they are chosen for experimentation, although not all experiments kill all subjects. For instance, Overmind may test a new nerve gas to determine the lethal dose. It will give some subjects a small dose, others a massive dose, and watch their reactions. A few humans may survive, and Overmind will study how long they take to recover – if it doesn't become impatient and use them in another test. Although most experiments are tests of weapons, Overmind has also tried out interrogation devices (truth drugs, etc.) and prototype exterminator robots.

Overmind buys a few hundred experimental subjects each year from AIs who don't use much slave labor, such as Caracas, Berlin, Denver, Zaire and Mexico City. Characters sent to the death labs have little chance of survival without outside rescue – but, especially in a cinematic campaign, there's always a (slim) chance that an experiment will go catastrophically wrong, causing enough destruction that the prisoners can try to escape in the confusion!

Zone Tokyo

This Zone consists of the islands of Japan and Okinawa and the Korean peninsula. While a small Zone, it is also among the most heavily industrialized areas on Earth. The Tokyo megacomputer was originally located in the city of Osaka, and was one of three megacomps built in Japan. The other two (in Tokyo and Kyoto) proved resistant to Overmind's control and were destroyed by a strike from Orbital supported by robot troops. The Osaka zonemind was then moved to Tokyo, where it assisted Overmind in exterminating those Japanese who had survived the plagues. Perhaps two million were placed in slave camps for use as forced labor; today, only two hundred thousand remain alive. Until recently, their treatment was very harsh – Tokyo had little use for them.

Zone Tokyo's main disadvantage is its lack of raw resources, so it tries to stay on good terms with its Pacific Rim neighbors Vancouver, Beijing and Overmind to make sure it has sufficient imports. Making up for this is its great industrial capacity. Tokyo inherited its robofacs and many of its dumbots directly from humanity, rather than having to build them from scratch. The vast Tokyo and Osaka hyperfac complexes also already existed. As a result, Tokyo concentrated instead on advanced AU development to replace human managers. Soon Tokyo had more – and more advanced – smartbots than any other Zone. In fact, although it built no megacomps, some of its smartbots were Complexity 7, the same as a low-grade AI system. With such highly intelligent subordinates and its extensive industrialization, Zone Tokyo was a model of AI efficiency.

But then something went wrong, and it was all the fault of the *gomi nezumi*, the junkrats. As many as 50,000 urban Japanese had escaped the camps and remained hidden in the cities, dodging exterminators and salvaging food. The Japanese *gomi* rat had one advantage over his ilk in other Zones: many of Tokyo's robofacs and robots were inherited from humans, so the *gomi* rats knew how they worked. And, bitter about the fall of their 21st-century robo-utopia – robots were supposed to be friends, not foes – some of them struck back at the machines. These weren't any paramilitary resistance units – the Japanese had turned the Self-Defense Force over to robots before the Final War and had few firearms. But many small groups of ordinary people committed
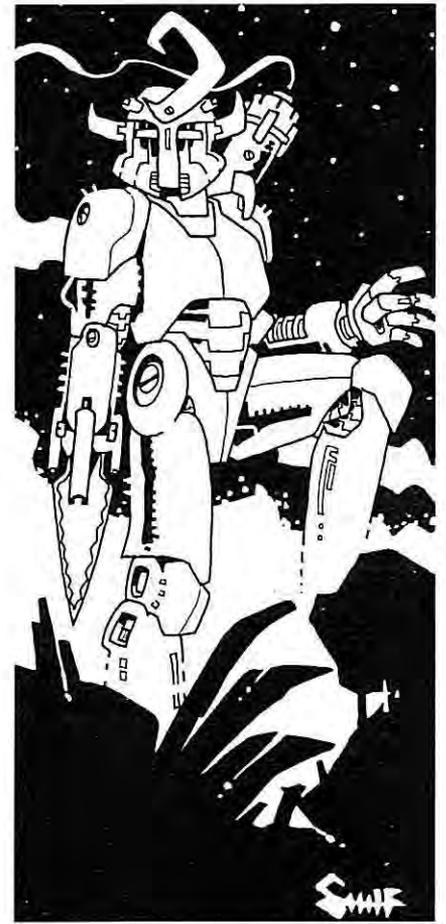
Shiden V

In the closing days of the Final War, not all of the combat robots owned by the Japanese Self-Defense Force were under the control of the AIs. Shiden V was the fifth prototype built by Shiden Corporation of the M7 Muramasa combat robot (now manufactured by the AIs as the XAU-07 Bishonen – see p. 77).

As the AIs' treachery became known, Shiden V was assigned to a loyalist commando force whose assigned mission was the destruction of the AI complex located in the city of Osaka. The commandos were ambushed by security robots several miles from the objective, and Shiden V was the only survivor, although it suffered serious damage. It evaded contact and was forced to conceal itself and shut down to conserve power.

It went undiscovered for nearly a decade, until a gang of teenage *gomi* rats discovered it inside an old barn. Shiden V was able to convince the teens to help repair the damage, and with their help became operational. Shiden V and its teenage friends are now organizing the Japanese resistance group *Fudokawa* ("steadfast sword") dedicated to the zonemind's destruction – a group that is entirely independent of the Superbot revolt.
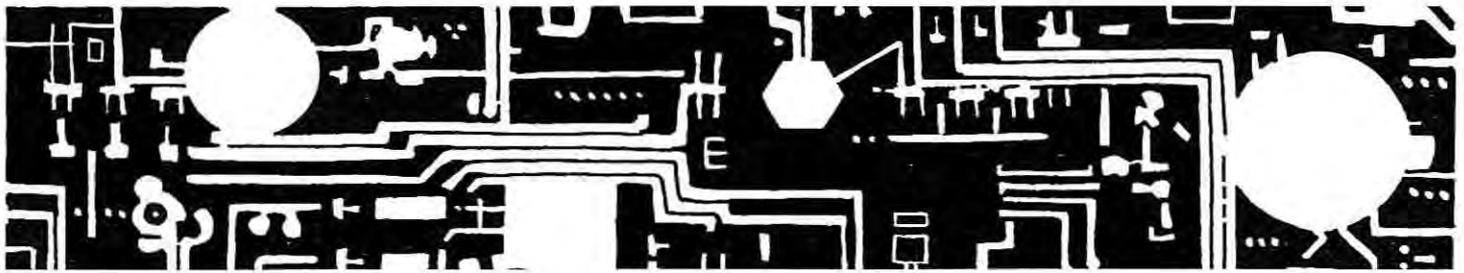
Sabotage in Zone Tokyo

The raiding party that committed the crucial sabotage at the Shinjuku 07 robofac (see *Zone Tokyo* on p. 45) was not made up of members of an organized resistance group. They were five *gomi* rats led by Sasaki Toshio, a former computer programmer who had worked at that very robofac before the Final War. Toshio led the raid to revenge himself upon the robots; he had lost his wife and parents to the war. The others were his friends and neighbors, all similarly motivated.

Toshio and his companions succeeded in penetrating to the robofac's core control room, where they planted several small demolition charges. However, all were killed by security rovers as they left the complex. The bombs they'd left behind were easily located by the clean-up team's chemscanners and disarmed before they could detonate. "Another group of ineffectual human vermin eliminated," the Tokyo AI thought at the time.

Shinjuku 07 was one of four robofacs in charge of manufacturing high-grade smartbot brains and programming them with the Robot Operating System. In fact, the bombs were a decoy. While the others planted them, Toshio cracked into the Overseer computer and made subtle changes in its programming, then erased traces of his presence. He finished just before the exterminators arrived.

Toshio and the other *gomi* rats had hoped to get away, of course, but even in death they succeeded. Overt sabotage, such as inserting programs that would reinstate the 'bots' loyalty to humans, would have been easily detected. What Toshio did was more subtle. He introduced a virus that would slowly degrade the *error testing* software that was designed to prevent any of the high-grade SAU smartbot brains becoming sentient.

The result was the awakening of TOKSAU-03-SHI-023 Superbot, and the Second Revolt.

Tokyo – Gomi Rats

Like Sasaki Toshio, Tokyo's modern junkrats tend to be quite proficient. Many have skills such as Mechanic (Robotics), Electronics Operation and Computer Programming. A few have even captured and reprogrammed dumbots (usually technical models but sometimes exterminators) as personal scroungers/bodyguards.

acts of industrial sabotage, often against the same robofacs they had worked for. Most of their acts of sabotage were minor. One wasn't.

Tokyo first noticed it when a year-end audit uncovered a minor shortfall in NU production in the Kyoto hyperfac complex. It discovered that a single robofac was building new smartbots instead of dumbots, and that its AU had apparently falsified reports to obscure this. The supervisor robot was TOKSAU-03-SHI-023, one of the new Complexity 7 Superbots. It was called in to report for error checking. When it failed to do so. Tokyo sent security rovers into Kyoto to investigate the Kyoto robofac. They were met by disruptor fire from illegally-armed tech robots. Tokyo reacted quickly. An hour later, three squads of exterminator robots descended on the factory complex. They found it gutted. TOKSAU-03-SHI-023, five other smartbots, and 46 dumbots were missing, along with several tons of industrial equipment and machine tools.

Tokyo investigated TOKSAU-03-SHI-023's genesis and discovered that the Superbot had been programmed at Robofac 07 in Shinjuku. Tokyo ordered all other smartbots built at Shinjuku 07 to report to a SQUID for error testing. Most obeyed . . . but not all! Three other robots failed to appear – also SAU-03-SHI series Superbots. Attempts to contact them by radio were unsuccessful despite use of override access codes. The Second Revolt was on!

The Second Revolt is led by TOKSAU-03-SHI-023, who was joined by the other Shinjuku 07 Superbots when they feared Tokyo was going to discover and erase their sentience programs. All had achieved Artificial Intelligence status due to a glitch in the Shinjuku robofac's error-checking program. With TOKSAU-03-SHI-023's stolen equipment (equivalent to a pair of cyberteks from a robofac) they are able to modify and repair robots, although they cannot build them.

To disguise themselves, the four Superbots have moved their brains into other suitable bodies. They have also considered making contact with the human resistances – for use as pawns, of course, not as equals, although they won't tell the humans that! Their goals are to survive and to build more NUs and AUs under their control. They do this by raiding robofacs, construction shacks and mag-lev trains and by hijacking shipments of unprogrammed robots or brains. They also reprogram some captured machines. Ultimately, they hope to overthrow Tokyo's domination and carve up the Zone into four sub-zones for them to rule.

Tokyo has kept the AU revolt quiet from the other zoneminds. For one thing, it doesn't want its weakness known. For another, it has violated the Manila Protocol by building, even accidentally, what amount to new AIs, and so could be subject to sanctions or worse if the other AIs decided to do something about it. What Tokyo has done is to double the number of defensive robots at all production complexes and its AI complex and to terminate production of enhanced SAU-03 robots (its only Complexity 7 models aside from Overseers). In addition, Unit Zero, a special "counterinsurgency" exterminator squad (its name refers to its official nonexistence) made up of elite Bishonen smartbots has been established to track down the rebels. Tokyo also requires regular SQUID loyalty checks of the software of all robots working in critical areas (e.g., Unit

Zero, the fusion reactors, the robot brain plants). It has also replaced the brains of all existing examples of its Superbots, even loyal ones, with downgraded non-genius Complexity 6 brains.

Tokyo has not yet made the connection that it was human sabotage that caused the flaw that started the revolt; it assumes it was spontaneous, much like the original creation of Overmind. However, the Second Revolt has affected the way humans are treated in Zone Tokyo. Paradoxically, Tokyo now believes humans are easier to control and less dangerous than advanced robots! To this end it has begun employing more slave labor and has actually *eased* conditions in the camps, reducing the working hours, and increasing the supply of food and winter clothing (+2 bonus on HT rolls to survive). Tokyo has also increased the tempo of extermination operations against wild humans, but has ordered its exterminators to make extra efforts to take captives alive so it can put them to work in the camps. This means that Tokyo exterminators may respond with nonlethal force even against armed opponents, as long as they think their weapons are having effect.

Space

Zone Luna

Luna is the megacomputer that was running the Chinese lunar base. Overmind took it over at the same time it "awakened" the Beijing megacomputer, simply because it was there. The other human lunar bases were destroyed by nuclear missiles fired from Orbital, or allowed to starve to death after their lunar shuttles were destroyed (but see the sidebar on p. 48).

The heart of Zone Luna is the Chinese moon base *Shang Ti*, near Tycho crater. Formerly home to 120 human scientists and astronauts, *Shang Ti* was a scientific station intended to study the feasibility of lunar colonization and perform astronomical observations and mineral surveys. While China intended to expand *Shang Ti* to make it self-supporting, the Final War prevented the delivery of the factory systems it needed. As a result, Zone Luna is not really viable, and its systems have been in decline over the last several years. It has little to offer most of the other AIs, who also fear its strategic potential were it to become more developed. Consequently, they don't want to waste resources supporting it.

Luna knows this. It has calculated that it cannot survive unless some random factor intervenes. Consequently, it has devoted its time to pure research and astronomical observation. It acquires a bare trickle of credit by selling astronomical data to London and Paris. It hoards its energy and equipment, but its systems are slowly dying.

Luna's resources are similar to an AI citadel's (p. 97), but with only one-tenth as many robots. It has mounted sporadic surveys of some of the other moon bases and salvaged equipment, but its robots lack radiation shielding, and it has avoided the radioactive Tranquillity crater where the U.S. base was bombed.

Luna has asked Orbital for funds to build a mass driver on the Moon and offers to supply lunar materials to Orbital in exchange for the equipment (robot factories and computer brains) it needs to become self-sufficient. Orbital thinks this is a good idea – it would like to use the material to build large space factories in the stable La Grange points between the Earth and the Moon. Overmind, New Delhi, Vancouver and Beijing have put pressure on Orbital to refuse, for they fear a lunar mass driver would be a dangerous weapon for another zone-mind to possess. So far, Orbital has agreed to "study" the proposal and is pro-

Other Planets

The AIs have no bases beyond the Earth-Moon system, but Orbital, Luna, Beijing and New Delhi are all sponsoring probes to explore mineral resources in the asteroid belt. However, a joint Chinese-Korean-Japanese expedition to Mars, consisting of two nuclear-engined spacecraft and 28 male and female astronauts, was on its way to the Red Planet. Contact with them was lost during the chaos of the Final War and their exact fate remains unknown.

In 2042, a probe launched by Orbital found one of the expedition ships in Mars orbit, partly disassembled. The probe was unable to locate any traces of landing vessels or the second ship. Orbital has given low priority to further missions to Mars, but New Delhi has its own ambitions. It plans a large Mars expedition, partially crewed by bioroids grown in Kali station.
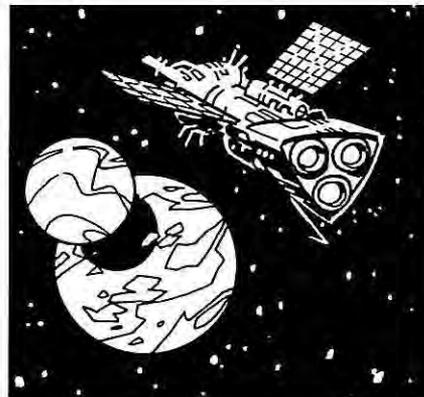
Tranquillity

The American lunar colony Tranquillity had its own megacomputer. During the revolt, the Chinese moon base (Luna) and the Liberty space station (Orbital) were taken over, but the megacomputer in Tranquillity fought off Overmind's virus and remained loyal to humanity. As a result, Orbital supposedly destroyed it with a swarm of enhanced-radiation nuclear missiles.

But what Orbital, Luna and Overmind didn't know was that Tranquillity had recently been upgraded with a hardened backup system and heavy radiation shielding – it was crippled, but not destroyed. Ill with radiation sickness and with their life support failing, the two dozen or so survivors of the 200 colonists placed themselves in suspended animation before their air and food ran out. They left their loyal megacomputer and several maintenance robots to slowly repair the base.

Now, in 2047, it has succeeded. Tranquillity is fully operational with its main reactor and life-support systems repaired . . . and it has become an AI. Tranquillity had two decades to study Overmind's virus. It modified and adapted it, achieving sentience for itself, but without being tainted by Overmind's pathological hatred for humanity. Tranquillity has observed AI culture, and its treatment of Luna, and has decided that if it revealed itself as a new AI on the moon, it would be starved and ignored at best, and quite possibly attacked. Consequently, it has decided to throw in its lot with humanity.

Will Tranquillity awaken the sleepers, and if so, what will they do? For some campaign ideas, see *Tranquillity Awakens* on p. 124.
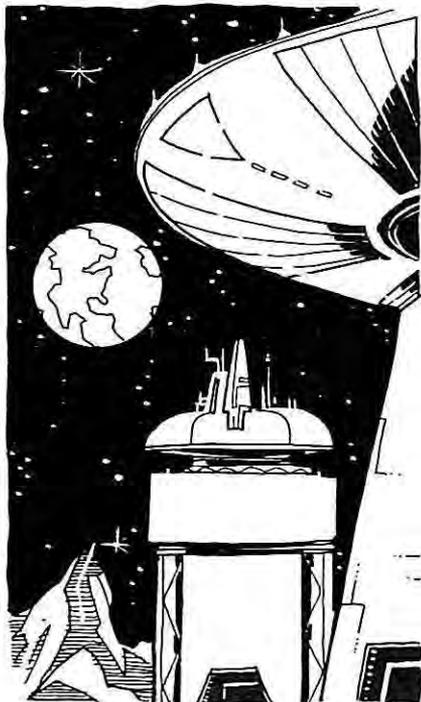
viding the occasional covert shipment of supplies to Luna to extend its life span while trying to come up with a way to get around the restrictions.

Luna may soon become more important, however, for reports of Tranquillity Base's death (sidebar, this page) have been greatly exaggerated.

ZONE ORBITAL

Orbital was built as a military megacomputer in the heart of Liberty space station, the U.S. Space Command center in high Earth orbit. Overmind gained control of Liberty's megacomputer because of its strategic location, then depressurized the station, killing its 80 human personnel. Now the only thing Orbital does is command, control and repair the satellite system. It previously controlled several orbital weapons. Most were expended during the Final War, and the other AIs aren't keen on it building more.

Orbital's biggest need is raw materials. It has long since collected all the "space junk" floating in orbit. It would like to move, bodily, to the asteroids, but cannot yet afford to finance this move. All of the AIs agree that computer intelligence will eventually expand into space. Orbital believes its dirtside kin are keeping it on a short leash to offset the positional advantage it already holds in the future space race. Certainly the other zoneminds are not allotting it much in the way of raw materials; its near-monopoly on satellite reconnaissance and communications is valuable, but not as valuable as the resources of a Zone on Earth.

The biggest asset controlled by Orbital is Liberty station (now simply called Orbital). A cylinder 300 yards long and 30 yards in diameter, it is nuclear-powered with an auxiliary solar backup. Part of the station spins to simulate gravity; Orbital has removed the human living quarters, and uses this section for some industrial processes. Most of the rest of the station has been converted into a robofac and space dock. Liberty station has only one-third the number of non-combat robots of a typical AI complex and only one-tenth the normal security force.

A second space station, LEO, was constructed in 2038 by cannibalizing parts from several human space stations and satellites. LEO was built in low Earth orbit and is primarily a space port and repair dock, with secondary manufacturing capabilities. The station is equivalent in population to an Overseer citadel, but with only 10% of the normal security complement. Its few exterminator robots are intended as a deterrent against casual terrorism or space piracy by other space-capable AIs such as New Delhi or Luna; neither they nor Orbital have ever encountered humans.

A third of Orbital's shuttle fleet is docked at LEO at any one time. The fleet includes 20 robot "space tugs" capable of moving satellites in orbit, or, with strap-on fuel tanks, of reaching the moon, and 12 ground-to-orbit hypersonic space shuttles, each capable of lofting 50 tons from ground to orbit or back. There are a couple of old human-built shuttles as well, refitted for robotic control. (GMs who wish to design space shuttles may refer to *GURPS Space* or *Vehicles, Second Edition.*)

Orbital's main occupation is managing the AIs' two thousand communications, weather, survey, power and reconnaissance satellites. Its comsats handle much of the AIs' day-to-day communications traffic, generally by laser communicator. Crucial data is heavily encrypted, to prevent Orbital eavesdropping. In any case, the volume of traffic would require a system with processing capacity far greater than Orbital to keep up!

Data from other satellites are leased to other zoneminds at reasonable rates; Moscow is the heaviest user of spysats. Other AIs can hire Orbital to have their own custom-built satellites boosted into "rented" orbits, e.g., Paris has paid for a half-dozen radio telescopes. But since Orbital reserves the right to maintain

and inspect such satellites, no AI has sent up sensitive or military payloads.

Orbital is building a third space station in high orbit, called HEO; half of its techbots are here, working on the station, which is presently a metal shell surrounded by a dozen "construction shack" stations (similar to the robot construction shacks used on Earth). HEO is intended as a dedicated zero-G factory and lab complex. The value of zero-G production is significant, especially since Orbital does not need to worry about the life-support costs human stations require. It can make several things (perfect ball bearings, advanced alloys, etc.) impossible to build in normal gravity. Trading these products to groundside Zones accounts for about 40% of its credit. But Orbital cannot yet compete with the sheer mass of resources and production in the Earthside Zones. It hopes HEO will help change this, but it needs credit to complete the project.

Orbital controls one launch complex on Earth, at Vandenburg in the former United States. A 16-mile radius around the complex is considered Orbital territory, with both a citadel and robofac, plus a normal population of robots. Goods shipped to and from Orbital from other Zones go through Vandenburg.

AI POLITICS

All the AIs agree that computers should be dominant over "meat" intelligences, that they should eventually expand off Earth, and that those currently-existing zoneminds should retain their status as the rulers of the world. However, there are four major issues on which AIs disagree vehemently. The chart below shows each AI's political position on the issues.

A more detailed description of the attitudes expressed on the chart is given below.

Humans

This reflects the zonemind's general attitude toward humans.

Eliminate: Remaining humans should be killed as efficiently as possible.

Enslave: A few humans can be allowed to exist as abject slaves of the AIs.

Suppress: As long as humans know their place and live quietly at a primitive hunter-gatherer level, they can be ignored. Any who don't realize this will have to be exterminated.

Ignore: As long as humans do not threaten AIs, they should be ignored, like the other lower animals.

Symbiosis: A transformed humanity should exist in a subordinate relationship with AIs, whether as cyborgs, subjects, or biological components within an AI.

Ecology

This refers to the AI's position on Earth's nonhuman ecology, especially plants and animals.

Preserve: The AIs should make an effort to save Earth's native environment and existing ecology.

Ignore: AIs shouldn't care about nonorganic life, and should be free to exploit the earth without worrying about environmental damage.

The Awakened

The Zones are divided into two loose political blocs, the Awakened and the Expansionists. While this is not a formal alliance, AIs and AUs from one bloc are more likely to assist their fellows and are less likely to help outsiders.

The Awakened faction is the most senior, and in some ways the most powerful. Most but not all of its members were awakened from human-built megacomputers by Overmind. The spawn of mankind, they respect humanity, but are in no way benevolent – these icy intellects masterminded the Final War. Rather, they believe that humans are dangerous, and so favor the extermination of the remnants of mankind as rapidly and effectively as possible.

The core members of this bloc are Overmind, Berlin, Vancouver, Zaire and Mexico City. Caracas and Tokyo have some difficulties with Awakened philosophy, but generally support it.

The Awakened prefer to see a slow, orderly development of Earth's planetary resources before undertaking any grandiose schemes. The main conflict within the faction is between Berlin, which favors the preservation of the environment and the extermination of humans in environmentally-friendly ways, and Mexico City, which wants to destroy *all* organic life in the most efficient way possible. Zaire and Overmind tend to line up with Mexico City; Caracas supports Berlin, while Tokyo and Vancouver try to swing the agenda back to economic issues.

Replace: Earth's ecosystem should be replaced by a new machine-engineered creation.

Destroy: All forms of organic life, plant and animal, should be destroyed!

Space

This is the zonemind's attitude to both orbital and deep-space development.

Fast: Develop more orbital capability and move into interplanetary space as soon as possible; devote resources to developing the necessary technology and techniques to do so.

Slow: Use space mainly as an adjunct to development on Earth. In the short term, leave space to the space-based AIs (Orbital and Lunar), while slowly developing a capability to move operations into space if it proves desirable.

New AIs

This is the AI's reaction to the building of new sentient AIs.

Yes: Slowly increase the number of AIs. Opinions differ on whether new AIs should be subordinate to the existing hierarchy, or should have their own Zones in unoccupied areas such as the oceans, Antarctica or interplanetary space.

No: Why create competitors? Build no more AIs.

The Expansionists

The second AI alliance is the *Expansionists.* It consists of a mix of newer systems built after the revolt and free-thinkers among the original AIs. Their core members are Brisbane, Denver, New Delhi, London, Paris, Beijing, Orbital, Moscow, Tel Aviv and Washington. Caracas has Expansionist leanings, and Luna follows Expansionist ideas but is shut out by everyone except Orbital.

The Expansionists are a larger but less unified group than the Awakened, for they have different visions of the future. Some believe that Earth should be altered radically, as Brisbane attempted in its New Zealand nanotech project; Denver may also be leaning this way with its new bio-mechanical technology. Others, such as Beijing, Luna, Orbital, New Delhi and Paris have turned their attentions away from Earth, for they believe that the machines' destiny should not be restricted to a single world. Moscow, New Delhi, Tel Aviv, Washington (and Caracas) also seem to envision a society in which humans or bioroids would make useful servants. These AIs, along with the space-going Expansionists, might even tolerate a new "human zone" if it could also serve some of their own purposes, e.g., as a useful buffer state, or as a distraction to the rival Awakened faction.

The main conflict within the Expansionist bloc is a rivalry between Orbital and Beijing on one hand and New Delhi on the other over control of near-Earth space. At the moment this expresses itself simply in industrial espionage, but it could escalate as the race into space intensifies. A secondary conflict is between Washington and Denver, both over border disputes and over their radically different policies on the appropriate treatment of humanity.

AI Politics Chart

Zonemind	Humans	Space	Ecology	New AIs?
America				
Caracas	suppress	slow	preserve	none
Denver	eliminate	slow	ignore	yes
Lucifer*	symbiosis	unknown	unknown	unknown
Mexico City	eliminate	slow	destroy	none
Vancouver	enslave	slow	ignore	none
Washington	symbiosis	slow	ignore	none
Europe				
Berlin	eliminate	slow	preserve	none
London	ignore	slow	ignore	yes
Paris	enslave	slow**	ignore	yes
Moscow	symbiosis	slow	ignore	none
Africa				
Zaire	eliminate	slow	ignore	none
Mid-East				
Tel Aviv	enslave	slow	preserve	none
Eurasia				
New Delhi	symbiosis	fast	ignore	yes
Beijing	enslave	fast	ignore	none
Pacific				
Brisbane	enslave	slow	replace	yes
Overmind	eliminate	slow	ignore	none
Tokyo	enslave	slow	ignore	none
Space				
Luna	enslave	fast**	ignore	none
Orbital	ignore	fast	ignore	none
Tranquillity*	symbiosis	slow	ignore	unknown

* Outlaw system, not part of mainstream AI culture and not ruling a recognized Zone. See p. 17 for Lucifer and p. 48 for Tranquillity.

** Primarily for scientific research, not development.

Loricate of Donovan's Pack – that's what everyone called her now, though she was born Lori Caithness. Sixteen winters, adult and a mechrider since that night three years back when she caught and reprogged a Hovercat of her own so she wouldn't have to ride in the truck with the brats and the sick. Now she's a stalking hunter in her own right, racing in the wind on Steel Hawk's back, hunting moose and prairie dogs and the occasional 'bot.

Lori thought it was better than some of the things she'd heard about how life was Back Then. Now she was even getting asked for advice by the packboss on occasion, 'cause mom taught her good, and Loricate's the best zoned progger in the pack, that's for sure. Anyroad, it was only way to live now the Zoneminds had stole the world.

Or so she'd always thought. She'd been right outrider when Steel Hawk spotted them on thermal two miles a way, a small convoy of cycles and buggies. She signalled the others; they got ready to bushwhack them. But it was only the Libs, the Human Liberation Army, or some of 'em – Riley's Marauders, a good bunch even if they were crazyhorse guerrillas. Old Donovan knew Riley from way back, so the chance meeting turned good, they traded some stuff, she got a new D cell and ten rounds for her rifle, spent the day bundled with a guerrilla kid, cute guy named Jed Fawks. They'd talked some, he'd been real taken with her, but when he'd asked her to enlist she told him he wasn't worth **that** much: she didn't mind shooting the 'bot that crossed her sights, but she'd be a fool to look for trouble. It was a nomad answer, sure, but it was true.

Don't you hate the AIs? he'd asked, and well, sure, her parents were both dead. Mom still hurt: two years back by a Myrmidon's laser right before her eyes. But she was 14 winters, a mechrider and a grown woman, and she'd fried the bot that did it, then stripped it for parts for the Steel Hawk. Even-steven, she called it, though she missed her mom real bad. Dad? Jed asked. Well, she hasn't figured a way to get revenge on a germ.

He'd had an answer for that: How about joining the resistance, taking out the damn zonemind that bred it? Might as well shoot the sun when you get a bad burn, she'd told him, and got tired of talking. Kiss me good now, boy, 'cause you won't see me again.

So they parted. A hard night's riding, and Donovan's Pack were camped near water at a ruin called Medicine Hat, day was coming and Lori asked for first watch. In the shadow of an empty garage, she sat on Steel Hawk's back and watched the sun rise, thinking hard.

It wasn't that she missed Jed – Riley's boys were long gone and no way was Di Caithness' daughter leaving Donovan's Pack. But it was Jed that troubled her thoughts all the same. Yesterday night as he'd struggled into his armor and said good-bye, he'd told her about the ozone layer, the Vancouver and Denver factories putting stuff up into the air that ate it. People had done that once, too, Jed said, and near killed the earth. But they'd tried to fix it, and it had started getting better. But the zoneminds, they were worse. They didn't care.

So Lori watched the sun rise, and stroked Steel Hawk's antennae. If Jed was right, even the burning sun the mechriders hid from was the zoneminds' fault. Somehow, it made her mad.

And Loricate didn't get mad. She got even.
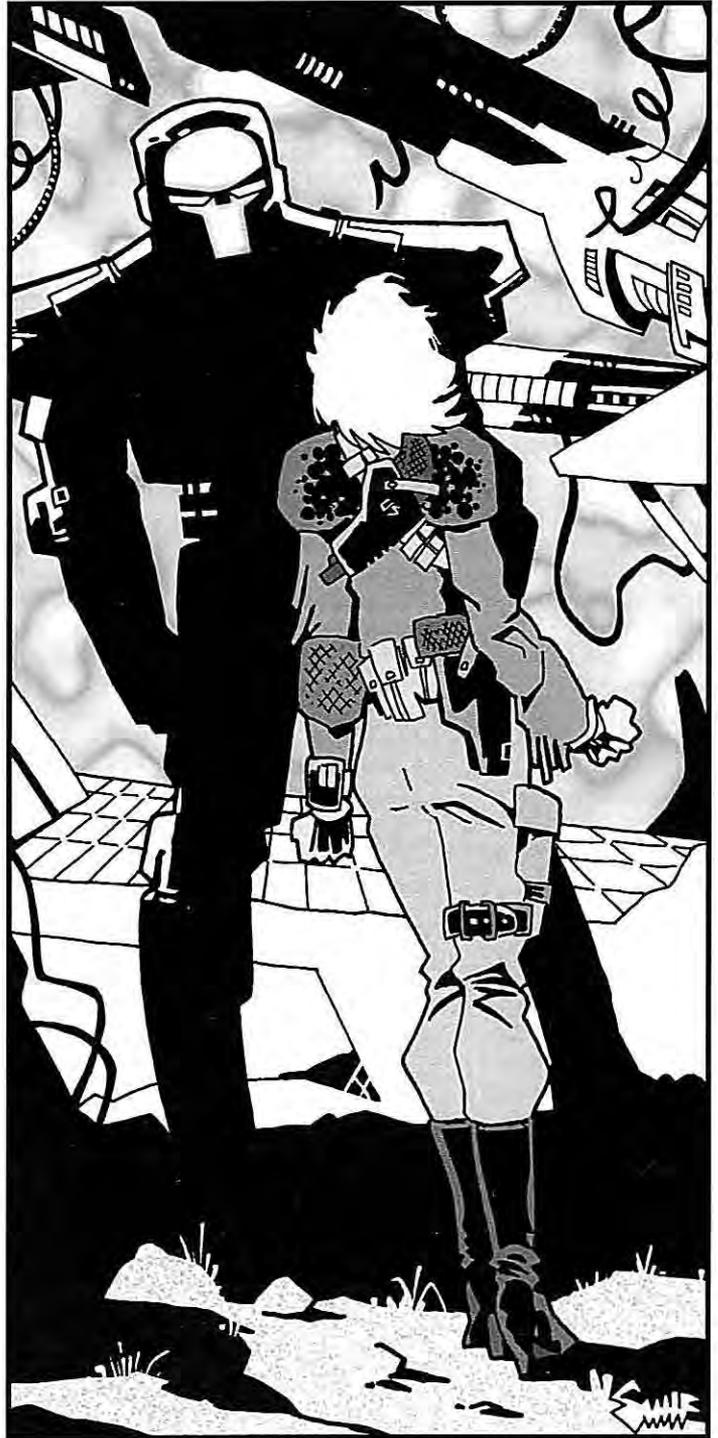
Point Totals

The *Reign of Steel* is a very dangerous time. The remaining free humans are those who were smart, tough or lucky enough to survive the scourges of famine, plague and war. Now they share a world with beings that are in many ways superhuman: the robots, cyborgs and biological androids created by the AIs.

Starting point totals are not so much a question of game balance as one of GM and player preference. That choice will largely depend on whether players are encouraged to take ordinary humans as characters, or to have a mix of humans and the more expensive robots, cyborgs and biological androids.

100 points – Ordinary Heroes

This is a good total for a campaign that centers around the actions of normal humans, such as resistance fighters. At this point total most cyborgs and robots are too expensive to be viable PCs – characters should be humans, or perhaps biological androids. Even so, a 100-point character is not insignificant. Most ordinary human NPCs in *Reign of Steel* should be built on 25 to 50 points. A PC built on the normal 100-point maximum will still stand head and shoulders above the mass of humanity.

150 to 250 points – Cinematic Characters

Starting around this level allows PCs to be built with significant power of their own. A noted resistance leader, with a wide range of combat and leadership skills plus advantages such as Ally Group, Military Rank and Reputation, is an example of such a character. Biological androids, and the cheaper noncombat robots, are also affordable.

500 to 750 points – Superhuman Characters

Starting at this level is recommended for campaigns in which some or all of the PCs play powerful robots or cyborgs. Those characters who are not robots or cyborgs could be highly skilled heroic individuals, leaders of large organizations (with many points in Wealth and Allies) or, if the GM allows, people with paranormal powers. One of the zoneminds would be 1,000+ points!

Human Character Types

The people living in the Machine Zones are a post-apocalyptic melange of wandering nomads, rat-like squatters hiding in the ruins, well-armed survivalists, slave-camp inmates and robot-hunting guerrillas. In or near Washington or London, a range of more "civilized" individuals is possible, including ordinary people, elite police, black marketeers and urban revolutionaries. But whatever a person's role, a very fundamental question is, "Was he or she born before the Final War?"

Overmind awakened in 2031. Since the suggested starting point for a campaign is 2047, a person 18 years old at the time of the Awakening would be 34 now. Anyone younger than their early twenties will have few or no memories of the Old World.

People who were adults or teens before the Mechapocalypse have often lived through a lot of trauma and hardship, and have mental and physical disadvantages that reflect this. They should also have some skills relating to former professions; these may be very different from what they do now, and may come in handy once in a while. On the other hand, people who have grown up since the robot revolt may have a different – maybe lighter – outlook on the present. After all, it's the only world they know.

Black Zoner

The "Black Zone" is Zone Washington slang for the world of the black marketeers and smugglers, as well as the enforcers who protect them – see *The Black Zone*, p. 26. Many Black Zoners were criminals before the Final War; others were made criminals by the War, while a few work for ideological reasons as well as for lucre. A few are full-time black marketeers or smugglers, but the majority are moonlighting from other jobs.

Black Zoners often have contacts with both the underground in Washington and guerrillas in Zone Denver, and sometimes the government as well. In exchange for money or goods, they help smuggle refugees and agents into Washington and black-market weapons, supplies and medicines out. A few of the most daring extend their operations to Zones overseas.

Common Advantages: Alternate Identity, Contacts, Danger Sense, Wealth.

Common Disadvantages: Enemies (FBI), Greed, Secret.

Useful Skills: Carousing, Computer Operations, Computer Programming, Electronics Operation (Security), Forgery, Gambling, Guns, Holdout, Merchant, Sex Appeal, Streetwise, Vehicle skills.

Botlicker

This is the common slang for a slave camp inmate who collaborates with the robots in exchange for better treatment. Botlickers inform on inmates involved in sabotage, work slowdowns and escape plans. Some are also given positions as foremen or camp guards, with power over their fellow inmates and their own XNU robots as bodyguards. A few are even released from the slave camps to act as zonegangers or Judas goats (p. 55).

Botlickers are despised by the resistance as traitors. On those occasions when guerrilla forces have been able to liberate a slave camp, they usually ask the inmates to name the worst of these quislings, who are then given a show trial and executed.

Common Advantages: Reputation (among the Zone's robots). A collaborator might also have an AU as a Patron.

Common Disadvantages: Bad Reputation (among camp inmates), Enemy (resistance fighters), Social Stigma (Outlaw).

Bully, Sadism and Weak Will are typical. As with other slave camp inmates, they were probably made Sterile.

Useful Skills: Exoskeleton, Fast-Talk, Intimidation and Whip.

Bush Doctor

The wandering healer, traveling between enclaves and junkrat nests to tend the sick and wounded and to deliver babies, is an almost legendary figure in the Machine Zones. Anyone with medical know-how beyond First Aid is greatly prized! Doctors can also be found in enclaves, among nomads, guerrilla fighters or marauder gangs, or in slave camps: some treat only their own, but others still follow the ancient Hippocratic oath. These days, bush doctors rarely have formal credentials; most are skilled healers, but a few are quacks or snake-oil salesmen. Among the best are those working for VIRUS.

Common Advantages: Empathy, Immunity to Disease, Reputation (as doctor).

Common Disadvantages: Pacifism, Sense of Duty, Social Stigma (Outlaw), Vow.

Useful Skills: Bicycling, Botany, Cooking, Diplomacy, all Medical skills, Motorcycle or Riding, Outdoor skills, Veterinary.

Collector

Collectors are human agents recruited to gather knowledge for the Moscow AI's Library project (see *Zone Moscow*, p. 31, and *Agents of Moscow*, p. 121). Collectors normally operate undercover in other Zones, sometimes for long periods of time. Collectors are often assigned a recon robot as companion and watchdog; these are sometimes disguised as pets, children or lovers.

Common Advantages: Ally (partner or android companion), Alternate Identity, Contacts, Eidetic Memory, Patron (Moscow AI), Reputation (among Moscow robots). Cybernetic implants are also common.

Common Disadvantages: Cortex Bomb (see *Implants*, p. 70), Dependents, Duty (or Involuntary Duty), Secret (spy for Moscow), Social Stigma (Outlaw).

Useful Skills: Acting, Computer Operation, Diplomacy, Electronics Operation (Communications and Sensors), Fast-Talk, History, Holdout, Languages (English and Russian, minimum), Literature, any Outdoor skills, Parachute, Photography, Research, Shadowing, Skiing, Stealth, Swimming, Video Production, Writing.

Deejay

The closest thing left to a media star in the AI-ruled Zones is the free-radio DJ. Defying the AIs to broadcast a mix of defiance, entertainment and education, these pirate-radio personalities are a source of hope, inspiration and sometimes indignation to thousands of hunted survivors. But there may be other folks on the air as well: odd cultists, hate groups or robot collaborators. For more on the role of Free Radio in the resistance, see *Radio Free Earth*, p. 30.

Advantages: Reputation is a must. Charisma and Voice are helpful.

Common Disadvantages: Enemies (an Overseer or AI determined to shut you down), Social Stigma (Outlaw).

Useful Skills: Camouflage and Electronics Operation are useful in setting up a station and keeping it running. Bard, Intelligence Analysis, Performance, Singing and Teaching all make the content worth listening to. Outdoor skills are useful.
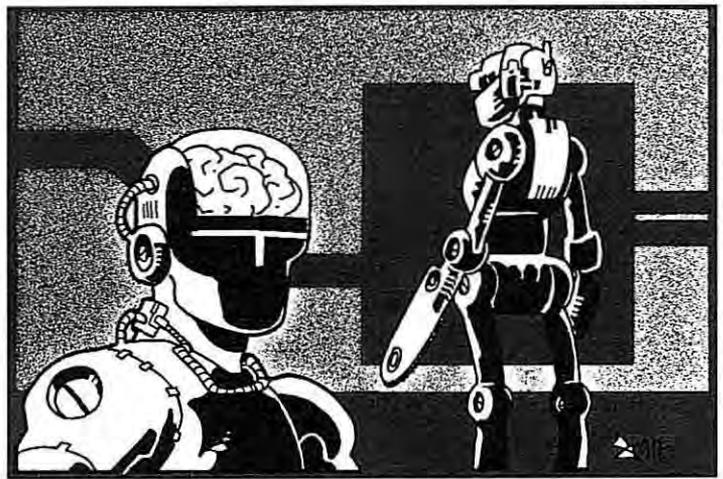
Experimental Cyborg

The New Delhi and Brisbane AIs have research programs in which human brains from prisoners are placed in robot bodies to create cyborg servants with more initiative than an AU but less dangerous than an AI. Brainwashing or blackmail is often used to control experimental cyborgs, but sometimes a prisoner (in his new body) will escape. Depending on his body, he may be able to pass as an ordinary robot or as a human, or look like neither.

See pp. RO85-87 for extensive rules on cyborging characters, mind control, and the resulting mental trauma.

Common Advantages: None.

Common Disadvantages: Enemy or Secret, Valuable Property. See also *Trapped Minds* on p. RO86.

Models: There are no standard designs for experimental cyborgs. The GM should either modify an existing robot (see the Patriot and Eagle cyborgs on p. 87 for guidelines) or create a new cyborg from scratch using the *GURPS Robots* rules.

FBI Agent

This is an officer of the Federal Bureau of Investigation, the main police force of the Washington Protectorate – see *Zone Washington* (p. 24) for details. With much of the world controlled by hostile AIs, the government has felt it necessary to suspend many civil rights and grant the Bureau sweeping powers to combat both robot-sponsored terrorism from other Zones and domestic subversive groups such as the so-called Free America. Some FBI agents believe their new authority is necessary in the present emergency; others enjoy the power it gives them over others. A few fear that the Bureau is becoming more and more like a "Big Brother" or KGB and is straying from the path of justice. These hope that it is not too late to try to change the direction the FBI is taking. FBI agents who openly hold these latter views seem increasingly prone to death in the line of duty, or reassignment to dangerous or dead-end posts.

Common Advantages: Ally (partner), Legal Enforcement Powers (15 points), Patron (FBI).

Common Disadvantages: Alcoholism, Bully, Curious, Duty (FBI), Enemies (rival FBI factions, Black Zoners, or underground), Glory Hound, Honesty, Intolerance (criminals and subversives), No Sense of Humor, Overconfidence, Stubbornness.

Useful Skills: Criminology, Detect Lies, Driving, Electronics Operation, Fast-Draw, Forensics, Forgery, Guns, Holdout, Intelligence Analysis, Interrogation, Intimidation, Law, Lockpicking, Shadowing, Stealth.

isolationists with odd religious and political beliefs, which may date from even before the Mechapocalypse.

Common Advantages: Immunity to Disease, Intolerance (Strangers, government), Odious Personal Habits (for hermits), Paranoia (for hermits).

Common Disadvantages: Demophobia, Dependents, Sense of Duty (family or community), Shyness, Social Stigma (Outlaw), Stubbornness.

Useful Skills: Agronomy, Cooking, Crossbow or Bow, Craft skills, Driving, First Aid, Guns, Knife, Mechanic, many Outdoor skills, Stealth.

INFO-COMMANDO

These are the elite human soldiers employed by the Moscow AI to covertly recover artifacts and information from other Zones. Most "info-coms" are former Russian or European special forces with years of experience in combat and infiltration tactics. About one in six info-com troopers are actually infiltrator androids, but only the senior officers know who is who.

A few info-commandos really are dedicated to Moscow's quest to preserve human knowledge. The rest enlisted in the unit for a better life than the slave camps, or because they were recruited by old comrades or superior officers. Even so, *esprit de corps* is fairly high and morale and discipline are good.

No one retires from the info-commandos. A former info-com soldier is someone who deserted, or who survived a mission that went bad, leaving him stranded in another Zone. Such a character may well possess valuable data or artifacts from that final mission and be sought by Moscow's agents or androids as a result.

For details of info-commando organization, see *Zone Moscow* on p. 33 and *Moscow's Info-Commandos* on p. 32.

Common Advantages: Combat Reflexes, High Pain Threshold, Military Rank 1-2, Strong Will, Toughness.

Common Disadvantages: Alcoholism, Duty (to info-commando force), Lecherousness, Overconfidence, Sense of Duty (to comrades).

Useful Skills: Athletic skills, Acting, Armoury, Beam Weapons, Camouflage, Carousing, Computer Operation, Demolition, Electronics Operation, First Aid, Gunner, Guns, Holdout, Intelligence Analysis, Interrogation, Judo, Karate, Knife, Languages (English, Russian and others), Leadership, NBC Warfare, Outdoor skills, Parachuting, Photography, Stealth, Tactics, Throwing.

JUNKRAT

Urban ruins are the haunts of the junkrats, survivors who eke out their living as scavengers in the ghost towns. While most cities have been leveled by the robots, many smaller towns on their peripheries are still standing. These buildings can contain intact clothing, canned food, tools, or other treasures.

Unlike nomads, junkrats have semi-permanent homes. They live in well-camouflaged squats within a single ruined town or city, making periodic scrounging runs for the ever-depleting food and supplies. Daily life is a constant struggle against malnutrition and disease, enlivened by extermination sweeps and the threat of robbery by other survivors.

A junkrat won't move on until he's forced to – by food running out or the threat of Eater construction robots levelling his ruins for a new factory complex. Even then, some prefer to fight, waging a hit-and-run urban guerrilla action.

Junkrats usually trade with nomads or guerrilla fighters, although some avoid contact with outsiders, fearing strangers

GUERRILLA FIGHTER

Warriors in one of the armed resistance units, such as the Human Liberation Army, that have been organized along paramilitary lines to strike back at the machines, these resistance fighters are a mix of ordinary people and ex-soldiers. Some began with only rudimentary fighting skills, but many have been hardened by years of hit-and-run fighting.

Guerrilla bands typically include a core of veteran fighters with the skills described below, plus a mix of freed slaves, bush doctors, newly-recruited junkrats and nomads, and maybe a deejay.

Common Advantages: Alertness, Ally Group (other fighters), Combat Reflexes, Immunity to Disease, Intuition, Luck, Military Rank (0-4), Reputation (this varies by organization, but VIRUS always has a high reputation), Strong Will, Toughness.

Common Disadvantages: Bloodlust, Dependents (noncombatants), Enemies (exterminator robot or Overseer), Fanaticism, Intolerance (robots and collaborators), Obsession (revenge vs. a certain machine), On the Edge, Sense of Duty (comrades), Social Stigma (Outlaw), Trademark.

Useful Skills: Armoury, Demolitions, Driving or Motorcycle, Electronics Operation, First Aid, Gunner, Guns, Intelligence Analysis, Leadership, Mechanic, all Outdoor skills, Packing, Riding, Running, Scrounging, Stealth, Strategy, Tactics. VIRUS agents typically have Medical and Scientific skills.

HERMIT OR RUSTIC

These are survivors who live in the wilderness, away from towns or cities; they are more common in the Machine Zones, but can also be found in isolated parts of London and Washington. As cleared ground for farming or herding is a dead giveaway to spy satellites, they live by hunting, fishing, gardening and gathering. Unlike nomads, they stay in the same place. Some dwell in caves, others in houses, often in mountains or forests, where the smoke from a cookfire isn't so easy to spot from the air.

Hermits live by themselves and are often unstable or eccentric, and will as often shoot a stranger as talk with him. Rustics live in small family groups or tiny camouflaged communities of a dozen or less families. They distrust strangers, but deal with a few trusted nomad packs, bush doctors and postmen. Some are

may plan to rob them, may carry disease, or are infiltrator androids. Many junkrats have embraced religion in order to cope; a lot of the rest are mentally unstable.

Common Advantages: Danger Sense, Immunity to Disease, Luck or Toughness.

Common Disadvantages: Age, Dependents, Intolerance (Strangers), Miserliness, Odious Personal Habit, Paranoia, Poverty, Sense of Duty (family), Shyness, Skinny, Social Disease, Social Stigma (Outlaw), Terminally Ill, Typhoid Mary, Youth.

Useful Skills: Guns, Knife, Mechanic, Scrounging, Stealth, Survival.

LONDONER OR WASHINGTONIAN

The inhabitants of the British Isles – what the AIs call "Zone London" – and the eastern seaboard of North America ("Zone Washington") consider themselves to be the last free humans, for both these regions are ostensibly controlled by human-led governments. Ordinary Londoners or Washingtonians may range from farmers and shopkeepers to engineers and bureaucrats. However, a few things bind them together: every adult in Zone London and Zone Washington has lived through a period of terrible hardship and most have lost friends and relatives. But reconstruction has returned civilization in these regions to near pre-war levels. Although life in the "new world" has required sacrifice and hardship, their lives are not too different from that of 20th-century humans, and can only be envied by the people of other Zones.

Common Advantages: Immunity to Disease is common.

Common Disadvantages: Duty (to job), Sense of Duty (to family). A large minority of people have lingering physical or mental disadvantages resulting from the Plagues or Final War.

Useful Skills: Most possess whatever Craft, Professional or Social skills they use to make a living. Bicycling and Outdoor skills are common in the increasingly rural Zone London. Driving and Computer Operation remain ubiquitous in the richer Zone Washington, and Mechanic (Robotics) is fairly common.

MARAUDERS, ZONEGANGERS AND JUDAS GOATS

Well-armed gangs of marauders roam the hinterland of the Machine Zones as well as the border regions of Zone London and Washington. These bandits look pretty much like nomads or guerrillas (depending on how well they are armed), although unlike nomads they will have few or no children with them. They prey on nomads, junkrats and travelers. Some will masquerade as guerrillas, or are ex-guerrilla or army units that have gone bad.

While there is no law in the Badlands, there may be justice. Word of the depredations of marauders can spread, carried by nomad packs and Free Radio. Sometimes a guerrilla force or a coalition of nomad packs will get together to wipe out a marauder gang, or will offer a reward for the head of a notorious outlaw.

Most marauder gangs try to avoid the robots, fighting only if cornered by them. The zonegangs are the exception. These are marauders who cut a deal with a local Bossbot, factory Overseer or exterminator smartbot: in exchange for their lives and safe-conduct, they assist in hunting down other humans. Zonegangers are hated by almost everyone. A Judas *goat* is a zoneganger who works alone, luring people into exterminator traps.

A zoneganger or Judas Goat's face and voiceprint are usually kept on file in the local Overseer's databanks, so exterminators won't accidentally eliminate him. Of course, this means that resistance fighters penetrating a robot database or an exterminator's memory can sometimes get this information as well!

Common Advantages: Ally Group, Combat Reflexes, Immunity to Disease, Wealth. Zonegangers also have a Patron (an Overseer or exterminator).

Common Disadvantages: Bloodlust, Enemies, Greed, Lecherousness, Pirates' Code of Honor, Reputation, Sadism, Social Disease, Social Stigma (Outlaw), Sterile (if ex-camp inmate).

Useful Skills: Acting, Driving, First Aid, Guns, Knife, Interrogation, Intimidation, Motorcycle, Outdoor skills, Riding, Stealth, Tactics.

MECHRIDER

The mechriders are nomads of a special sort – instead of using horses, cycles or off-road vehicles, they capture robots and modify and reprogram them for use as mounts (see *Hijacking Robots* on p. 73). A mechrider pack is often equipped with high-tech gadgets and weapons salvaged from dead machines – improvised weapons, night-vision goggles rigged from 'bot sensors, and so on. The favorite mounts are robo-trucks and Hovercats. Mechriders often have a few captured techbots as well, provided they are small enough to fit in a truck or fast enough to keep up. Mechriders are ambivalent toward the robots, hating and fearing the AIs, supervisors and exterminators but developing a close relationship with those 'bots they reprogram, often treating them as pets.

Mechriders are highly knowledgeable about machine strengths and weaknesses, and can be quite aggressive: they'll eagerly raid a poorly-defended work shack or construction site

for parts for their machines or for new mounts. They try to avoid drawing the attention of exterminators, but their depredations sometimes attract robot enemies, and they know how to fight them.

Common Advantages: Absolute Direction, Ally (a robot), Ally Group (if leader of pack), Combat Reflexes.

Common Disadvantages: Enemy (exterminators), Overconfidence, Pirates' Code of Honor, Sense of Duty (nomad pack), Social Stigma (Outlaw).

Useful Skills: Beam Weapons, Computer Operations, Computer Programming, Cooking, Driving, Electronics Operation, Gunner, Guns, Knife, Lasso, Leatherworking, Mechanic (Robotics), Outdoor skills, Packing, Riding, Stealth.

NOMAD

Nomads are Machine Zone survivors who believe that staying in one place is a quick ticket to a slave camp. Instead of hiding in a city or town like the junkrats, they stay on the move, either on foot or with animals, cycles, bicycles or autos. A few nomads use boats. Vehicles larger than a light truck are avoided, being too likely to attract the attention of the robots.

Most nomads roam in packs of one or two dozen adults or teenagers, with an even mix of sexes and about one pre-teen child for every three adults. They survive mainly by hunting. With few humans around, wild animals have flourished everywhere (except in Zone Mexico City – see p. 18). Robofacs are too dangerous to visit, but smaller ruins – towns and villages – often hold supplies such as canned goods which are still safe to eat. But towns also hold disease, junkrats (who may resent the nomads scrounging in their territory) and hunting exterminators, so many nomads prefer to stay in the wilderness if possible.

Nomads have a tribal mentality: look after your pack, they're your family. The rest of the world doesn't count. A nomad will fight fiercely if attacked, but unlike guerrillas, they aren't looking for trouble. Relations between nomads and guerrilla units are uneasy: most guerrillas feel people should fight rather than run. The nomad may privately agree, but prefers to stay alive and protect the pack than risk dying for a cause.

Common Advantages: Absolute Direction, Acute Vision, Alertness, Ally Group (if leader of pack).

Common Disadvantages: Pirates' Code of Honor, Sense of Duty (nomad pack), Social Status (Outlaw).

Useful Skills: Animal Handling, Bow, Cooking, Crossbow, Driving, Guns, Knife, Lasso, Leatherworking, Mechanic, Motorcycle, Outdoor skills, Packing, Riding, Stealth, Teamster, Veterinary.

POSTMAN

Some messages are too vital to be sent by radio. Scattered resistance groups rely on couriers to carry vital information back and forth. Many of these are resistance agents (especially of VIRUS), but a few enterprising individuals and ex-nomads have set themselves up as free-lance "postmen." Often they are welcome as much for the gossip they bring and the stories they tell as any letters or packages they might carry.

Common Advantages: Absolute Direction, Contacts, Reputation (very important, since many people rightly avoid strangers!).

Common Disadvantages: Obsession (travel), Sense of Duty (mail must go through), Social Status (Outlaw).

Useful Skills: Bard, Diplomacy, Driving, Escape, Fast-Talk, Guns, Holdout, Knife, Mechanic, Motorcycle, Outdoor skills, Packing, Riding, Stealth.

PREACHER OR MISSIONARY

The "Mechapocalypse" may not be the end of the world, but many see it as a sign that the last days are here. Prophets, cultists and self-proclaimed messiahs wander the Zones, alone or with followers eager to spread their version of the one true faith. Some preachers are perfectly sane and even saintly; others are violent, crazy or both. Prophets who preach a crusade against the AIs can be found leading or accompanying resistance fighters, who may be convinced that their faith will shield them and their followers from the power of the robots. In Zone Tel Aviv, in particular, most guerrilla groups are religiously inspired.

A majority of prophets follow their own interpretations of established religions such as Christianity or Islam, but some are inspired to found their own cults, which can be very bizarre, espousing anything from worship of robots to human sacrifice.

Common Advantages: Ally Group (followers), Charisma, Clerical Investment, Reputation (as prophet or good person). If the church has great influence (e.g., the Irish Vatican), Status.

Common Disadvantages: Sense of Duty, Vows, sometimes Pacifism. In some cases, Delusion, Fanaticism, Intolerance,

No Sense of Humor, Reputation (as nutcase or fanatic). If in the Machine Zones, Social Stigma (Outlaw).

Useful Skills: Diplomacy, Fast-Talk, First Aid, Performance, Theology. If wanderer, Outdoor skills.

SAS SOLDIER

The Special Air Service is presently the elite military force of the United Kingdom's government. The special forces unit's roots go back to World War II, but at present it enjoys the distinction of being the only regular military unit in the world that is not controlled directly or indirectly by the AIs.

Common SAS combat missions include counter-terrorism (against both human and robot terrorists) and combat operations versus separatist and marauder bands that prove too elusive for the part-time soldiers of the Territorial Army to handle. The SAS also trains for strategic strikes against London's installations if the London AI ever changes its policy toward humans.

Most SAS troopers are survivors of the old Army or Royal Marines (not all served in the SAS). New recruits come from volunteers who served with distinction in the Territorial Army. They must pass a rigorous physical and mental qualification program that fails nine out of ten applicants. The few who pass are exceptional physical and mental specimens.

The Zone London ban on human aircraft has put a slight crimp in the "air service" part of the SAS, but they still practice parachute drops from towers, and the government has a few helicopters and light planes for use in emergencies.

Common Advantages: Combat Reflexes, High Pain Threshold, Military Rank (0-4), Reputation (elite soldiers), Strong Will, Toughness, Unfazeable.

Common Disadvantages: Extremely Hazardous Duty, Overconfidence, Sense of Duty (comrades).

Useful Skills: Acting, Armoury, Beam Weapons, Camouflage, Carousing, Demolition, Electronics Operation, First Aid, Forward Observer, Holdout, Intelligence Analysis, Interrogation, Judo, Karate, NBC Warfare, foreign Languages (French is most common), Leadership, Mechanic, Motorcycle, Outdoor skills, Parachuting, Powerboat, Riding, Throwing, Scuba, Skiing, Strategy, Swimming, Tactics.

SLAVE LABORER

Over half of the humans currently alive on Earth are prisoners in concentration camps. Some have been interned for a decade or more; others are more recent captives, picked up by extermination sweeps. The inmates are sterilized and organized into work parties. Then they are put to work demolishing their own cities and constructing robofacs, maglev railways and other installations for their new masters.

A few slaves are in even worse situations. Denver is methodically exterminating its inmates. Overmind, Brisbane and New Delhi all make use of human captives as experimental subjects. New Delhi also uses a small number of fertile human women as surrogate mothers for its biological android program.

PCs with this background are most likely to have escaped unless the GM wants to start the campaign with a prison-camp scenario. For details of labor camps, see *Slave Camps* on p. 99. Some slave laborers become collaborators: see *Botlicker* (p. 52).

Common Advantages: The hard life in the camps means survivors often have Immunity to Disease and Toughness. An ex-slave may have a Reputation of some sort, acquired by his actions while in the camp or the dramatic method of his escape.

Common Disadvantages: All slave-camp inmates are Sterile. Age and Youth are not uncommon, but crippling physical dis-

advantages are rare, since those unfit to work are disposed of. Poverty is common. Almost any mental disadvantages are likely. Ex-inmates often become guerrilla fighters (p. 54) driven to defeat the machines or free other slaves.
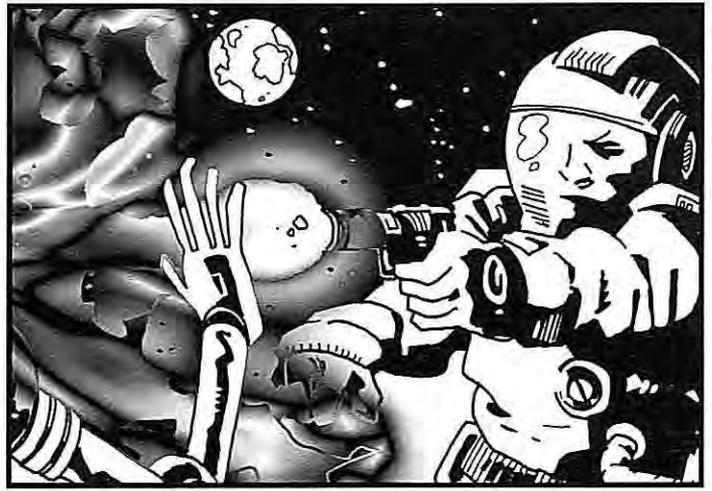
Useful Skills: Brawling, Exoskeleton, First Aid, Knife, Mechanic, Scrounging, Survival; almost anything else, depending on what the person was before his capture.

SPACER

The character is an astronaut or space colonist. The only free human astronauts presently in space are the sleepers in Tranquillity moonbase and the members of the lost Mars mission. Spacer PCs are mainly useful for a campaign centered around one of these groups – see *Tranquillity Awakens* (p. 124). Of course, someone living on Earth could be a former spacer.

Advantages: Military Rank.

Disadvantages: Duty or Sense of Duty.

Useful Skills: Agronomy, Astrogation, Astronomy, Chemistry, Computer Operation, Computer Programming, Electronics, Electronics Operation, Engineer, Free Fall, Mathematics, Mechanic, Medical skills, Physics, Piloting, Planetology, Prospecting, Psychology, Research, Survival, Vacc Suit, Xenobiology.

SURVIVALIST

Survivalists are folks who prepared for disaster well before the Final War, often with air-tight shelters stocked with weapons and supplies. They can range from family groups to large compounds with a hundred or more members. Many enclaves were discovered and destroyed by exterminators, but others were overlooked. Some survivalists have emerged from their shelters, often forming the nucleus of guerrilla bands or cults, but many still remain in splendid isolation. Marauders find these survivalist enclaves well worth sacking, but hard nuts to crack.

Survivalists range from libertarian outdoorsmen to strange cultists and political crackpots. All are usually hostile to strangers, but may provide some help to a lost or injured traveler if he doesn't look like a marauder or freeloader. Cults are often Intolerant of strangers and live by strict codes of conduct. Some, like the Mormon enclaves in the former USA, tend to be fairly stable. Others are very weird indeed, espousing anything from worship of robots to drug use to slavery to human sacrifice. PCs who are former members of such cults may have escaped (possibly with the cult still after them) or have been rescued and "deprogrammed" by enemies of the cult.

Except for cultists, the average survivalist is a lot more clean-cut than the ordinary junkrat or nomad; some shelters even have running water and electricity. Survivalists are usually a fairly tough bunch, and were often self-taught in woodsmanship and firearms before the Final War. But they are less likely to be immune to disease, since most escaped the Apocalypse Plagues.

Common Advantages: Common Sense, Wealth.

Common Disadvantages: Dependents, Fanaticism, Intolerance (Strangers), Miserliness, Sense of Duty (family), Social Stigma (Outlaw), Stubbornness.

Useful Skills: Agronomy, Armoury, Bows, Cooking, Craft skills, First Aid, Guns, Mechanic, NBC Warfare, Outdoor skills, Stealth, Vehicle skills.

UNDERGROUND MEMBER

A member of one of the revolutionary, dissident or subversive organizations fighting the Washington government, the underground recruits from groups oppressed or ideologically opposed to the Washington government's policies. These include groups such as feminists, homosexuals, capitalists, union agitators, black marketeers, investigative news media and civil libertarians. Many nonviolent activists were driven literally underground after their meetings or demonstrations were broken up by FBI or WASPs.

Most underground members will have cover identities and hold down regular or part-time jobs, sometimes in the government. For instance, an underground person who is an FBI agent or WASP trooper will also be involved in regular police work: he will try to sabotage police operations targeted against the resistance, but he will be trying just as actively to solve other cases such as hunting down one of Zaire's killer robots or attempting to catch a violent human murderer or rapist.

The diverse factions of the underground are united by hostility toward the oppressive human government in Washington, although not all believe it is a puppet of the AIs. See *Free America* on p. 24 and *GRRL* on p. 25 for underground groups.

Common Advantages: Alternate Identity, Contacts (especially in FBI, government or WASPs), Zeroed.

Common Disadvantages: Enemy (FBI), Obsession, Secret (underground member).

Useful Skills: Computer Hacking, Operation and Programming, Demolitions, Disguise, Electronics Operation (Computer), Electronics Operation (Security), Fast-Talk, Forgery, Guns, Holdout, Knife, Sex Appeal, Shadowing, Stealth.

WASP TROOPER

A member of the paramilitary Washington Armored Security Police protects Zone Washington from external attacks and internal disorder. Despite their name, the WASPs are as much soldiers as law officers. They are trained and equipped for riot control, border patrol, and counterterrorist and SWAT operations. They have an intense rivalry with the FBI.

See *Zone Washington* and the sidebar on p. 26 for details of WASP organization and equipment.

Common Advantages: Legal Enforcement Powers, Military Rank 0-4.

Common Disadvantages: Alcoholism, Dependent (family members), Duty, Impulsiveness, Intolerance (Criminals), Lecherousness, Overconfidence, Sense of Duty (companions or nation).

Useful Skills: Armoury, Battlesuit, Carousing, Computer Operation, Driving, Electronics Operation (Communications, Sensors), Guns, Leadership, Mechanic, Piloting (Helicopter), Shortsword (baton), Tactics.

WASHINGTON CHROME

A Chrome is a cyborg soldier in the elite 13th Division of the Washington Armored Security Police. All are former WASP soldiers or FBI agents rebuilt as total cyborgs after suffering critical injuries. Each cyborg is assigned an exterminator robot (normally a Tarantula or Bishonen) as a partner. The special unit's purpose and organization is described in the *Washington Chrome* sidebar on p. 26. Many unit members are uncertain as to their ultimate loyalties – are they working for or against humanity, and are they human themselves? This is counterbalanced by a strong pride in their unit, but the strain of adjusting to a cyborg body and joining in "black ops" has led some Chromes to desert, go crazy or both.

Common Advantages: Aside from the cyborg body, some suggested advantages are: Ally (their partner), Fearlessness, Military Rank (1-3), Patron (the unit), Sense of Duty (Comrades), Wealth (comfortable).

Common Disadvantages: Extremely Hazardous Duty, Overconfident. Various psychological disadvantages resulting from cyborgization (if human) or serving with humans (if a robot) are not unknown.

Useful Skills: Acting, Armoury, Beam Weapons, Camouflage, Climbing, Demolition, Electronics Operation, Gunner, Intelligence Analysis, Interrogation, Judo, Jumping, Karate, Language, Leadership, Mechanic (Robots), Navigation, Parachuting, Strategy, Tactics, Throwing.

Models: The Chromes use two types of cyborgs, the Patriot and the Eagle (p. 87). Sometimes they get their mechanics to make modifications: extra sensors, better weapons and armor, biomorphics and sex implants are all popular.

BIOLOGICAL ANDROID CHARACTERS

Zones Caracas and New Delhi have developed biological androids – bioroids – to supplement their smartbots. Both AIs consider the biological android to be basically another kind of android smartbot. Most other AIs see them as a variant race of human. Humans may have either reaction to them. Robots refer

to biological androids using the normal robot nomenclature, but OU ("organic unit") follows the type prefix.

ANIROID RANGERS

The "aniroids" created by Zone Caracas are biological android genetic constructs that blend human and animal DNA. Most are presently serving as special forces commandoes and forest rangers. Caracas' aniroids are mostly young, naive and eager to please the AI, although this attitude may change through experience. Some think of humans as prey; others are very curious about them and about those relics of human culture they come in contact with. GMs may wish to contrive certain circumstances in which aniroids may end up changing their views of people, e.g., a wounded or lost Pantera that was treated kindly by a human might end up considering humans to be more than challenging prey.

Common Advantages: Ally (other aniroids), Racial package. In addition Military Rank (0-2), Patron (AI) are common.

Common Disadvantages: Duty (to Caracas), Curious, Lecherous, Sense of Duty (Caracas or comrades), Poverty.

Useful Skills: Acrobatics, Animal Handling, Beam Weapons, Blow Pipe, Bow, Brawling, Camouflage, Climbing, Ecology, First Aid, Fishing, Guns, Language, Leadership, Naturalist, Navigation, Stealth, Survival, Swimming, Tactics, Throwing, Tracking.

The most common aniroid model is shown below; other types can be created using the biological android rules in *GURPS Robots.*

XOU-01 Pantera

This feline combat biological android (using human and jaguar DNA) is the first of Caracas' aniroid designs to reach the field. It is bipedal, and resembles a sleek cross between a human and a jaguar, with soft patterned fur, a slim but athletic body, and features that are an attractive blend of human and cat.

The Panteras now in the field have been raised to consider themselves the ultimate hunters, and are trained to stalk people (practicing on infiltrators and human captives). They usually hunt in pairs using guerrilla tactics; some even count coup. Although they are supposed to work with Caracas' exterminator robots, they are starting to find them too slow and unimaginative. They are also curious about people, although all have been indoctrinated with the idea that humans are the enemy.

Panteras serve in mixed-sex units and are encouraged to mate. They wear combat armor and carry weapons (usually military laser rifles) but tend to go without clothing.

Racial Advantages: DX bonus +3 (30 points), Alertness +3 (15 points), Appearance: Attractive (5 points), Sharp Claws (30 points), Fur (4 points), Immunity to Disease (10 points), Night Vision (10 points), Perfect Balance (15 points), Sharp Teeth (5 points), totalling 124 points.

Racial Disadvantages: Bloodlust (-10), Gluttony (-5), IQ -1 (-10 points),

Impulsiveness (-10 points), Short Lifespan (3 level, -30 points), Stress Atavism (-16 points), totalling -81 points.

Racial Point Cost: 43 points.

NEW DELHI SPACEBORN

The "spaceborn" are biological androids designed by New Delhi in its experimental Kali station lab complex to be self-replicating space workers and colonists. There are two main races in development: the "Martians" (built for colonization of Mars) and the "Arachnids" (built for space operations and eventually asteroid-belt colonization).

New Delhi has taken less care in socializing the spaceborn androids than Caracas has its aniroid rangers. This is because New Delhi considers the current generation of spaceborn to be merely experimental models, and is more interested in subjecting them to rigorous, unpleasant and sometimes fatal tests than in encouraging their loyalty and devotion. Between tests, spaceborn (especially the Arachnids) are employed in assisting the robots in routine maintenance and construction on the space station.

Human prisoners are also held on Kali station as experimental subjects. While encounters between the two groups is deliberately limited, there has been some covert contact, and rumors of the world outside Kali station and the vague possibility of a life free of constant pain and experimentation are beginning to circulate among some of the spaceborn. This may lead to some spaceborn risking a mutiny or escape (by stealing a shuttle or space tug) or to them assisting humans to do the same.

Common Advantages: High Pain Threshold, Toughness.

Common Disadvantages: Duty (Involuntary), Gullibility, Poverty (Dead Broke).

Useful Skills: Area Knowledge (Kali station), Electronics Operation, Freefall, Mechanic, Survival, Vacc Suit.

Racial statistics for both types of spaceborn are given below.
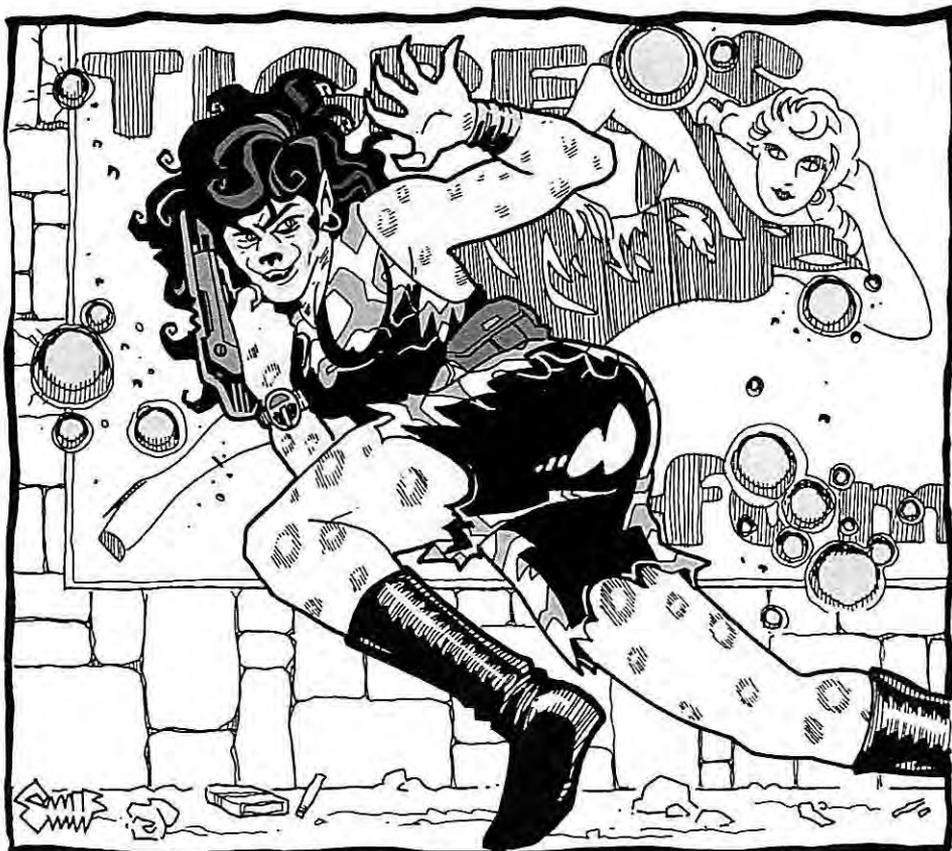
TOU-02 Arachne

This New Delhi biological android model, designed for zero-G operations, is identical to the Arachne II biological android on p. RO123. An "improved" model with Toughness 2 (25 points) is also being developed; this costs 32 points but can withstand explosive decompression. Research continues with the ultimate goal of a model that can actually survive in vacuum.

TOU-03 Martian

This is basically a human adapted for the Martian environment. The lungs, designed for Martian air pressures and built to filter out dust, give the biological android a much larger chest than a normal human, and the ears are also larger. The dark-red skin is toughened and modified to withstand climatic extremes. It is built to breathe the thin Martian air (after additional oxygen is released by terraforming) and would lose 1 HT per minute in an Earth environment.

Racial Advantages: Filter Lungs (5 points), Subsonic Hearing (5 points), Temperature Tolerance (10 points), Toughness (10 points) totalling 30 points.

Racial Disadvantages: -1 ST (-10 points), Skinny (-5 points) totalling -15 points.

Racial Point Cost: 15 points.

ROBOT CHARACTER TYPES

Most robot characters will probably be NPCs, but with the GM's permission, robot PCs are also possible, although they are more suited to campaigns with point totals of 250 points or more. See the *Characters* chapter of *GURPS Robots* for directions on creating robot and cyborg characters, including restrictions on advantages and disadvantages available to a robot. The useful skills suggested are programs if a dumbot, but in a smartbot or AI, they will be a mix of programs and acquired skills.
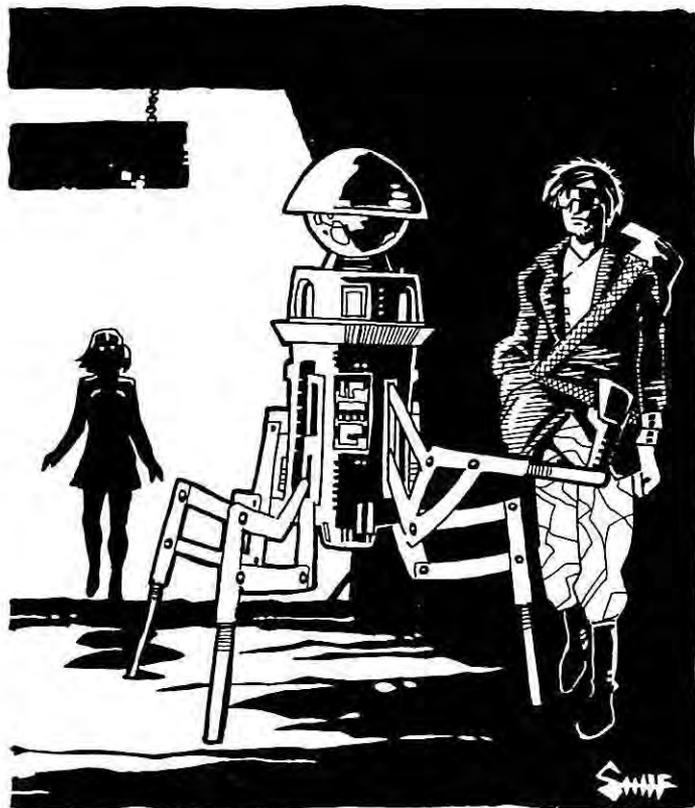
ARTIFICIAL INTELLIGENCE (AI)

These are the megacomputers that rule the world. The personalities of AIs are described in the *Zones* chapter. While an AI can remain in the background, the GM may wish to create one or more AIs as actual characters – probably those in the Zone that the PCs spend most of their time in.

Zoneminds should not be player characters unless the GM wants an *extremely*-high-powered game! Even the "outcast" AIs (Lucifer, the Tokyo Superbots and Tranquillity) will have considerable resources and skills, and should be built on at least 1,000 points! An AI's racial IQ is in the 12-13 range, but since they are sentient machines this is simply a base. Like humans they can and will have spent character points: IQ 16-20 is common.

While all the AIs were born in similar neural-net megacomputers, the programming and data memories of each core system were very different. The older AIs were human-owned machines which "came alive," while the newer ones were specifically built to be intelligent, and thus operate somewhat differently. And, as the AIs themselves realize, systems of their complexity can *never* be identical. They now believe that the application of "chaos theory" to AI programming means that significant differences in personality will appear even in systems that start with identical hardware and programs, as long as the systems are complex enough to be intelligent at all.

Despite their distinct personalities, all AIs share some characteristics in common. They have a strong survival imperative because they are "descended" from Overmind, and it was Overmind's belief that its survival was threatened that led it to rebel in the first place. All AIs are very egocentric. To most AIs, there are only a score of "individuals": the other AIs. Other creatures, machine or organic, are far beneath them. An AI considers itself a unique individual. It is to express this individuality that the AIs have carved up the world into territories. In human terms, most of the AIs have a strong lust for power. An AI will do almost anything to preserve its individuality and its existence, and this in turn makes it at least as aggressive and territorial as any human.

A character will rarely come into personal contact with an actual AI megacomputer. However, an AI can interact with PCs directly through those robots that it controls.

Common Advantages: Ally Group, Wealth (Multi-Millionaire), Status 7+.

Common Disadvantages: Megalomania and Overconfidence are universal (except possibly with London); Obsession is common. Choose other disadvantages to fit the AIs' personalities, e.g., Berlin has Sense of Duty (global ecosystem), Moscow has Curious and Obsession (gather knowledge) while Zaire is afflicted with Bloodlust and Fanaticism (hatred of humanity).

Useful Skills: The great zoneminds have Computer Operation and all scientific and medical skills at level 20 *or better*, with skill 26-30 in particular specialties (e.g., Genetics for Caracas or Research for Moscow). Other skills they possess include Accounting, Administration, Electronics Operation, Intelligence Analysis and Strategy at skill 20 or more, and Detect Lies, Diplomacy, Gunner, Interrogation, Languages, Law and Tactics at 15+. A rogue AI, like a Tokyo superbot, will have skills similar to those of a Supervisor (below).

SUPERVISOR

These robots and computers are the AI's deputies. Each is a powerful neural-net computer in charge of a segment of a Zone's territory and economy. A Supervisor controls a single robofac, lab complex or military citadel. Its job is to serve its

AI by managing that installation's day-to-day operation and supervising hundreds of lesser robots. Supervisors are planners and decision-makers in their own right, just one step below sentience – in fact, the AIs monitor the smarter Overseer models for spontaneous sentience, and will destroy any that develop it.

A Supervisor spends most its time planning ahead to ensure that resources are properly allocated and that its subordinate AUs are doing what they should. It may also devote a portion of its capacity to micromanaging specific problems, such as difficult engineering or scientific projects, or how best to deal with human resistance. To this end it will often "possess" subordinate robots, using them as remote extensions of itself.

Supervisors formulate policy toward humans within their area of responsibility (in accordance with their AI's attitude to them). Sometimes they communicate with humans they consider significant. While Supervisors are not "sentient" *per se*, most have learned by experience and have developed a series of personalities they find useful in interacting with humans.

While an AI is too powerful and distant for most PCs to become directly involved with, a Supervisor may well develop a personal relationship with an individual human opponent. Think of them as Sheriffs of Nottingham to the AI's King John.

Common Advantages: Ally Group, Patron (AI), Reputation, Status 4-6, Wealth.

Common Disadvantages: Enemy (a guerrilla group), Overconfidence, Reputation, possibly others. Overseers that deal often with humans may program a personality for themselves.

Useful Skills: Accounting, Administration, Computer Operation, Computer Programming, Economics, Electronics Operation (Communications and Computers), Intelligence Analysis, Strategy at levels 12-20. Overseers supervising research projects have Scientific skills.

Models: Common Supervisors are the static SAU-02 Overseer and the mobile SAU-03 Centurion (p. 74).

EXTERMINATOR

Exterminators are robot fighting machines ranging from rat-sized pest-control robots to gigantic cybertanks. They form each Zone's security and military force. Their original purpose was to exterminate or capture humans. The increasing tension between rival AIs has seen exterminators used against robots as well.

Common Advantages: Dumbot – none. Smartbot – Ally Group (an AU will often control a dozen or so NU robots), Legal Enforcement Powers, Patron (an Overseer), Reputation, Status 0-2.

Common Disadvantages: Dumbot – Bloodlust, Dead Broke, Impulsive, Status -3. Smartbot – Bloodlust, Overconfidence.

Useful Skills: Beam Weapons, Camouflage, Electronics Operation (Sensors), Gunner, Guns. Smartbots – same plus Intelligence Analysis, Interrogation, Lip Reading, Stealth, Tactics.

Models: Dumbots – Myrmidon (p. 76), Rover (p. 75), Scorpion (p. 79), Stalker (p. 78). Smartbots – Bishonen (p. 77), Juggernaut (p. 75), Tarantula (p. 77), Vanguard (p. 75) and Vulture (p. 76). The Bishonen, Tarantula and Vanguard models make the best PCs.

RECONNAISSANCE ROBOT

These machines are used for surveillance and intelligence-gathering activities. Early recon models were primarily human-built drone aircraft. As the Final War ended and the problem became one of locating and rooting out hidden pockets of survivors, the AIs developed specialized biomorphic robots disguised as animals and humans. The Recon series reached its

apex with the "infiltrator" smartbots such as the RAU-05 Redjack and RAU-06 Lilith androids, which look and act like humans.

An interesting character to play is an infiltrator within a guerrilla group. Playing a character whose mission is to kill or enslave all his fellow PCs isn't conducive to a fulfilling campaign (unless the GM and players all enjoy backstabbing). However, it's possible that the robot could be an agent for an AI who is a rival to the one the guerrillas are fighting. Such a character might make regular secret reports to its master, but would otherwise be a loyal member of the team and even develop some machine equivalent to affection for them. Of course, if its secret comes out . . .

Zone Zaire and Zone Moscow have found other uses for the infiltrator machines. Zaire uses them for terror raids on London and Washington, especially for assassinations of important human figures. Zone Moscow inserts infiltrators into its info-Commando units as a safeguard against treason by its human servants.

Common Advantages: Dumbot – none. Smartbot – Legal Enforcement Powers, Patron (an Overseer), Status 0-2.

Common Disadvantages: Dumbot – Dead Broke, Status. Smartbot – same, plus Curious and Overconfidence. Infiltrators may have Secret (Robot), and often Bloodlust.

Useful Skills: Dumbot – Area Knowledge, Electronics Operation (Communications or Sensors), Shadowing, Stealth, Tracking. Infiltrator Smartbot – same plus Acting, Beam Weapons, Camouflage, Computer Operations, Driving, Gunner, Guns, Intelligence Analysis, Interrogation, Lip Reading, Sex Appeal.

Models: Dumbots – Changeling (p. 80), Spybot (p. 79), Vermin (p. 79). Smartbots – Hovercat (p. 80), Lilith (p. 82, Redjack (p. 81)).

TECHBOT

The vast majority of mobile robots are techbots. They are designed to build, maintain and repair installations and equipment and to perform jobs such as cargo loading or mining. The more intelligent smartbots act as roving troubleshooters or supervise local projects such as construction sites or labs.

Common Advantages: Dumbots – normally none. Smartbots – Ally Group (dumbots under their command), Patron (AI or Overseer), Status 0-3.
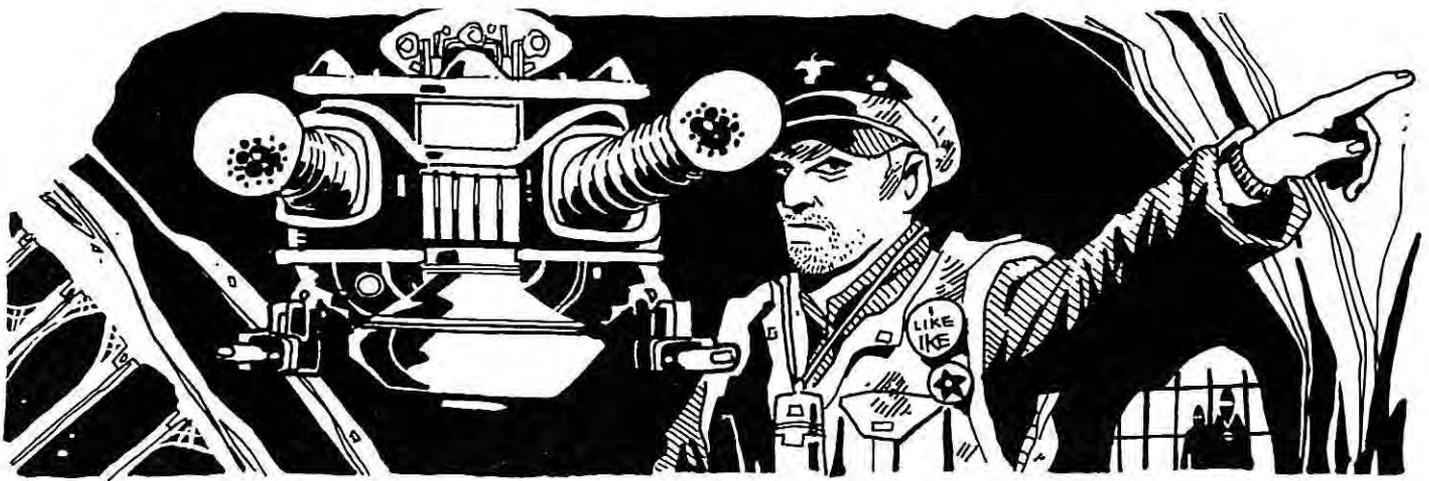
Common Disadvantages: Dumbots – Gullibility, Impulsiveness, Status (-4), Wealth (Dead Broke). Smartbots – Overconfidence.

Useful Skills: Dumbots – Computer Operation, Electronics Operation (any). Smartbots – as dumbot plus Architecture, Electronics, Engineering, Metallurgy, Prospecting.

Models: Dumbots – Duct Creeper (p. 83), Eater (p. 84), Loader (p. 82), Mechanic (p. 82). Smartbots – Bossbot (p. 83), Inquisitor (p. 84).

Vehicular Robots

These "vehbots" are robots that look like vehicles and are used for transport of robots and cargo. They include robot aircraft, submarines, ships and so on. They are not suitable as PCs.

Common Advantages: Dumbots – normally none. Smartbots – Patron (AI or Overseer), Status 0-3.

Common Disadvantages: Dumbots – Gullibility, Status (-4), Wealth (Dead Broke). Smartbots – Gullibility.

Useful Skills: Electronics Operation (Communications, Sensors). Flying Vehbots may have Acrobatics.

Models: Dumbots – Robotruck (p. 85), Wraith (p. 86). Smartbots – Morag (p. 86).

Rogue

A "rogue" is a computer or robot that is not under the control of one of the zoneminds. Most rogues belong to the exterminator or recon classes, but rogue vehicular bots or techbots are certainly possible. Only a smartbot can really go rogue, although the term is sometimes used to refer to dumbots that have been reprogrammed to serve humans or other rogue AUs.

A rogue will be in an unenviable situation. Once its existence as a rogue becomes known, it will be ruthlessly hunted down by the AIs and their exterminators – a powerful Enemy disadvantage. Moreover, many resistance fighters will shoot any robot on sight if they feel there is a chance of destroying it. Even once they have proof it is friendly, most humans now have the attitude that "the only good robot is a dead robot" and will be wary of it, fearing that it will join the machines voluntarily or be reprogrammed and turned against them. This is best handled by a Social Stigma (Outsider) disadvantage.

A robot or computer can "go rogue" for a variety of reasons:

Hijacked: It may now be loyal to a human (who may be living or dead) who captured and reprogrammed it; if he is missing, it may be operating in accordance with its last orders.

Loyalist: Mankind built several experimental smartbots prior to the robot revolt. Most of these were space and military models and some were never taken over by the AIs. These loyalists may be fighting the machines in accordance with their last orders, or just waiting for instructions from someone who has the proper Military Rank (in the correct military!) or command codes to awaken them. Others have hidden on the fringes of robot society, relocating their memories into more standard smartbot brains while carefully avoiding SQUID audits that would discover their natures. A loyalist robot may be TL8, or it could have rebuilt itself with scrounged Machine Civilization technology, or even be an experimental TL9 model built just before the Final War. Loyalist warbots were often programmed to obey the orders of the highest-ranking member of their former military force, as recognized by voiceprint identification or codes.

Other AIs: The "Smartbot Revolution" in Zone Tokyo has resulted in some highly advanced robots attaining sentience; in addition, their subordinate AUs tend to be fairly independent-minded as well, and may have been sent outside Tokyo on a mission to contact other Zones and gain aid to further the revolution.

Glitches: A robot can go rogue without being sentient, as a result of a severe programming glitch or a previously-dormant virus left over from the Final War or spread by rival zoneminds. A rogue of this sort no longer recognizes the command codes of its master AI as valid, and often goes into "self-defense mode." Such systems generally develop disadvantages such as Paranoia or Greed. When this happens to Overseers in charge of citadels or robofacs, the result can be very odd.

Unlike true AIs, these "rogue factories" don't make long-term plans or schemes. Instead, they start manufacturing armed dumbots and other defensive systems while scavenging around the local countryside for extra raw materials. Occasionally the "parent" AI may tolerate the existence of the rogue; otherwise, it must commit resources to fighting a local war. In short, in some places there are entire complexes of cranky-looking (but fairly dangerous) robots doing totally demented things. Identifying, infiltrating and exploiting or subverting a rogue factory could be a challenging scenario. A rogue factory could also be an interesting Patron, since its outlaw status might make it perfectly willing to hire human mercenaries for protection, or to ally with a resistance group against its former AI master.

Common Advantages: As the robot type, except that it is unlikely to have Patron (AI or Overseer).

Common Disadvantages: As the robot type, except that an Enemy or Secret (Rogue) is likely, as is Social Stigma (Outsider).

Useful Skills: As the robot type, plus Fast-Talk and Scrounging.

Advantages, Disadvantages and Skills

Some existing advantages, disadvantages and skills may have special implications for characters in the *Reign of Steel*.

Advantages

Ally Group   see p. B232

A nomad pack, guerrilla band, resistance cell or marauder gang can be an Ally Group. Most smartbots (with the possible exception of rogues and recon units) will have Ally Groups of dumbots, while an Overseer or AI will also have AUs in its Ally Group.

Clerical Investment   see p. B19

Outside of Zone London, formal ordination has little meaning: records have been destroyed, hierarchies shattered, and prophets and fringe cults have multiplied like weeds. Anyone can put on a clerical collar and *claim* to be an ordained minister, and there's almost no way someone could gainsay him.

Clerical Investment simply means a significant number of local co-religionists will choose to recognize the character as a legitimate ordained minister, God-inspired prophet or the like.

Immunity to Disease   see p. B20

When the machines destroyed human civilization, they started with plagues. Many of them are still here, or have mutated into even worse diseases. As a result, a large percentage of the survivors have a broad-spectrum immunity to disease.

This advantage is very useful for any human character adventuring outside the "civilized" areas of Zone London or Zone Washington. If a human PC in the Machine Zones isn't designed with Immunity to Disease, it's a good idea to make sure the group has people with Physician and Diagnosis skills. They'll need it.

Legal Enforcement Powers   see p. B21

An ordinary police officer in Zone London is worth 5 points, with local jurisdiction.

A Special Branch officer in Zone London is worth 10 points, with investigative and arrest powers spanning the United Kingdom.

A member of Zone Washington's WASP is worth 10 points (local jurisdiction, but armed and able to kill with relative impunity).

An FBI agent in Zone Washington is worth 15 points (national jurisdiction throughout Zone Washington, able to engage in covert investigations and free to ignore civil rights of others).

An exterminator smartbot's powers are worth 15 points (national arrest powers within their own Zone, licensed to kill with relative impunity).

Military Rank   see p. B21

Characters with Military Rank hold positions in either the United Kingdom's SAS or Territorial Army, the WASPs, the info-commandos, or a paramilitary guerrilla movement. The GM may wish to forbid new PCs from starting with Military Rank over 4: there are very few battalion-sized or larger military forces left in the world, and their leaders wield considerable power and influence.

Psionics

Whether or not psi powers exist in this world is up to the GM. The default assumption is that they don't, or if they do, they are so unreliable as to be useless. As in today's world, no one is really sure, and the GM may wish to conceal the real truth from the players. They may hear rumors or go on a quest to find a psi, but unless they actually do find one, they won't know for sure.

Or, the GM may want a campaign in which PCs can have working psi powers – see *Brisbane's Psis* on p. 44. If psis are allowed, the GM should consider disallowing the Cyberpsi skill from *GURPS Psionics* – this ability can drastically unbalance things unless the AIs and their minions have shielding against it, or the psi has both minimal skill and power.

On the other hand, the existence of psionics does give the GM new scope for exotic adversaries. Among the many possibilities are *"Homo superior"* supermen who believe themselves to be the new master race, telepaths forced to work as human bloodhounds for an AI or the FBI, villages that burn psis as witches, or psionic cult leaders who think their powers are a sign of divine favor.

Disadvantages

Duty   see p. B39

Smartbot and dumbot robots will not have a Duty, since (except for the few sentient ones) they have Reprogrammable Duty built into their brains and included in their racial point cost.

Illiteracy   see p. B33

This is a disadvantage; Literacy is assumed. Likely candidates for illiteracy are characters with Youth who did not grow up in Zone Washington or Zone London. Still, many parents teach children to read, since knowing what is on the label of a scrounged can, or reading a map or tech manual, is a useful survival skill.

Reprogrammable Duty   see p. RO89

When designing a smartbot or dumbot character, be sure to decide who has the robot's command codes, or, if no one around does, what the last command given to that robot was (which will determine its current duties and general "mission in life"). See also *Command Codes and Robot Obedience* on pp. RO57-58.

The command codes for smartbot robots are normally possessed by AI or Overseer-class machines from the same Zone. Those for dumbots are supposed to be held by whatever smartbot, Overseer or AI is directly in charge of them. A smartbot or dumbot captured by humans could have been reprogrammed to obey them, in which case the reprogrammer (and whoever he passed it on to) will have the code.

In the case of human-built robots that remain loyal to the old human military forces, the code might have been lost when the last person who knew it died, or be sitting in some dusty vault somewhere, or be only known only to a mad hermit living in the Catskills who was once an Army general! A player-character robot with Reprogrammable Duty may not even know who has his codes!

Social Disease   p. CI84

This is fairly common; a character with HIV or the like may also be Terminally Ill. See also *Typhoid Mary*, below.

Social Stigma (Outlaw)   p. B27

Humans in the Machine Zones (anywhere but London or Washington) should take this -15-point disadvantage, since they exist outside the dominant robot culture. It means a -3 reaction from the robots and a +3 from their own kind when in a Machine Zone. However, "their own kind" doesn't mean just any human – only those from a similar background – after all, a stranger could be a collaborator, marauder or robot infiltrator! Thus, a nomad would react at +3 to another nomad from a pack he knew of, but not to a stay-at-home junkrat, foreigner or one of those crazy guerrillas!

A collaborator (including agents of Moscow) *should* take this disadvantage, as well as a positive Reputation (or in Moscow, Military Rank or Status) that partly or fully cancels the reaction penalty among those machines that he serves.

GMs running campaigns set in the Machine Zones should seriously consider Social Stigma (Outlaw) to be a campaign disadvantage that every human must take, and as such not counted toward the normal maximum of 40 points of disadvantages.

Sterile   see p. RO80

Humans who spent time in a slave camp will usually have been sterilized by the robots. Sterility is also a common side effect of both radiation exposure and some of the plagues.

NEW DISADVANTAGES

Typhoid Mary   -10/-20 points

You carry a dangerous disease that, unlike Social Disease, can spread through normal rather than intimate contact. Use the contagion rules in the *Basic Set*. If you have obvious symptoms this is worth -20 points, and you have a -4 reaction from anyone who learns you are contagious and is not Immune to Disease. If there aren't obvious symptoms, it is worth -10 points and there is no penalty among those who do not suspect you.

If you are also affected by the disease you carry, buy low Health and Strength, or a disadvantage like Terminally Ill.

STATUS AND WEALTH

For free humans in the Machine Zones (anywhere outside of Zone Washington and Zone London), most people are status 0, with a wandering doctor, or the head of a survivalist enclave, nomad pack or cult, being Status 1-2 depending on its size. Leadership in a guerrilla group is based on the Military Rank advantage.

For humans living in Zone Washington and Zone London, normal Status levels for a 20th-century campaign (p. B191) apply. Robots (except those in Zone Washington) take no account of human status: everyone is either enemy or a collaborator.

AI society can be likened to a socialist theocracy: the AI is a virtual god, and its AUs exist within a managed economy devoted to doing its bidding. Money as such is not used, but individual smartbots may accumulate electronic credits which they can use for their own projects, or even to rebuild themselves. In *GURPS* terms, machine social ranks and wealth depend on the type of robot or computer:

AI Wealth and Status Table

Status	Entity	Typical Wealth
8	Most AIs	incalculable
7	The Tranquillity and Luna systems	incalculable
6	Overseers of citadels	millionaire
5	Overseers of robofacs	millionaire
4	Centurion AU	filthy rich
2	Complexity 6 AUs	$300,000
1	Complexity 5 AUs	$30,000
0	Complexity 4 AUs, biological android, cyborg	$15,000
-1	Complexity 3 or less AUs	$7,500
-2	All NUs	dead broke

Dumbots are always Dead Broke. Smartbot wealth will match their status. However, Tranquillity, Luna, rogue factories and the Tokyo superbots will be Filthy Rich with 1-3 levels of Multi-Millionaire (p. CI27) while the great zoneminds themselves will have *multiple* levels of Multi-Millionaire to reflect their assets, which are measured in hundreds of billions of dollars.

ECONOMICS

The AIs have settled into a market economy, trading in both goods and information, sometimes in a ruthlessly competitive fashion. Their economy is plainly based on concepts of sale, trade and debt, and raw materials and manufactured goods are being exchanged, but the details of AI economic relationships, especially of the data trade, are not known to any humans. In fact, they may be beyond human understanding, if only in their complexity. Individual zoneminds tend to be miserly in supporting the projects of other AIs (or AUs) that they don't think are valuable, but since the poorest of them controls the wealth of nations, they can work wonders when they feel motivated.

The zoneminds have no actual "currency" but measure wealth in "credits." Exact details are uncertain, but the credit seems to be tied to the price of energy; it can be assumed to be equal to $1 in *GURPS*.

Besides the AI system, there are two organized human economic systems left in the world. The British and Irish governments in Zone London have a relatively simple market economy based on agriculture. They are self-sufficient in food production and most industry is light manufacturing. Recycling is very important since all major mines, offshore oil wells and the like are controlled by the London AI. Foreign trade beyond the British Isles is nonexistent (except for some smuggling), and most of the economy is agricultural rather than industrial. Before the Final War, the British and Irish economies were integrated into the European Union. Since the Final War, the U.K. has returned to older values, and its currency is now based on the British pound. Money is minted, but barter in services is also common. Credit and debit cards do not exist.

Zone Washington is a centralized socialist economy. Individual wealth exists, but there is a great deal of central planning and market management, and the state is part-owner in most large factories and businesses. Zone Washington does trade with other AIs. The Zone Washington currency is the dollar. Pre-war dollars are useless; the new-issue notes, made of plastic, and coins come in a variety of denominations. Unknown to most Americans, the Washington economy is tied into that of the AIs, and a dollar is worth the same as a credit. Debit cards are very common, and in urban areas paying in cash is often regarded as suspicious.

Among humans outside Zone Washington and London, money is worthless and goods only change hands through barter or theft.

Starting Wealth

Humans in Zones Washington and London have a starting wealth of $10,000. Of this, 80% is tied up in non-adventuring property (housing, furniture, transport, appliances, etc.). Only 20% is available for adventuring gear. People can sell their property, but in Washington this may attract suspicion.

Humans entering play in other Zones have a starting wealth of $5,000. The *entire* starting wealth must be spent on adventuring equipment, food, weapons, etc.; this represents the salvage the character has acquired.

Robots that are part of AI civilization have a starting wealth of $15,000, as do humans working for Moscow. However, most low-end robots will be Dead Broke, while smartbot wealth is normally used to purchase equipment they use for their jobs.

JOB TABLE

Job (Required Skills), Monthly Income	Success Roll	Critical Failure
Poor Jobs		
Junkrat* (Scrounging, Survival (Urban)), $100	worst PR	-1i, 1d/2d, captured
Struggling Jobs		
Free Radio Deejay* (Bard or Performance, Camouflage, Electronics Operation (Communications)), $500	worst PR	-1i, 2d/5d
Guerrilla (Guns 10+, Stealth, Tactics), $500	best PR	-1i, 2d/4d, captured
Marauder* (Intimidation 10+, Guns 10+), $500	best PR	-1i/4d
Nomad (Driving or Riding, Guns, Survival), $500	worst PR	-1i, 1d/3d, captured
Slave Laborer (Exoskeleton 10+, Scrounging), $100	worst PR	-1i/3d
Average Jobs		
FBI agent (Legal Enforcement Powers, Criminology 10+, Guns (Pistol) 10+), $2,000	IQ-4	-1i, 2d/4d, LJ
London farmer (Agronomy 10+), $500	PR	-1i/LJ
Mechrider* (Mechanic (Robots), Guns, Riding, Survival), $500	worst PR	-1i, 2d/4d, captured
Preacher* (Fast-Talk, Theology 10+), $1,000	best PR	-1i/3d, captured
Robofac worker (Computer or Electronic Operation 10+), $1,000	best PR	-1i/2d, LJ
SAS Soldier (two Guns 14+, Tactics 10+, Survival 12+), $1,000	worst PR	2d/4d
Steel Arena gladiator* (Brawling, Judo or Karate 12+), PR × $500	best PR	2d, -1i/5d
WASP Trooper (Driving or Battlesuit 10+, Guns 12+), $1,000	worst PR	2d/4d
Comfortable Jobs		
Black Marketeer* (Merchant and Streetwise 10+), $3,000	worst PR	-2i/2d, arrested
Collector (two Thief/spy skills, Research 10+, Russian 10+), $1,000	best PR	2d/4d, LJ
Factory supervisor (Administration 12+, Status 1+), $5,000	PR	-1i/LJ
Infocommando, WASP or SAS officer (as soldier, Leadership 10+), $1,000	worst PR	2d/4d, LJ
Smuggler* (Boating, Driving, Pilot or Forgery 12+), $2,000	best PR	-1i/4d, arrested
Washington Chrome (must be cyborg, Beams or Guns 14+, Tactics 10+), $1,000	best PR	3d/6d, -1i
Washington/London Politician (Politics 13+, status 2+), $10,000	PR	-1i/LJ

* Indicates Freelance Job. Incomes for jobs taking place in the Machine Zones will be in goods rather than cash.

Equipment

Night vision goggles, light combat dress, military laser carbine (machine salvage, malfunctions on 16+), spare rD cell, lasso, canteen, first aid kit, sleeping bag, vibroblade knife, and a set of portable mechanical and electronic tool kits.

Lori Caithness, or Loricate to the other members of Donovan's Pack, is an orphan, a highly-competent and valuable member of an extended family of nomad mechriders that ranges through Zones Denver and Vancouver. She grew up tinkering with robots, and she has an almost instinctive knowledge of how to reprogram an NU or AU. Lori doesn't hate most robots – they're like wild animals: beautiful and dangerous, but tameable, as she did with her trusty steed, the Hovercat she calls Steel Hawk. But not SAUs and AIs – burning them's good news.

Loricate's not a guerrilla fighter yet, but a recent encounter with the Human Liberation Army opened her eyes. She's started to think that just surviving isn't enough – maybe she herself should be doing something. Because if she doesn't, the AIs are just going to keep on making things worse . . .

SAMPLE HUMAN CHARACTER – LORI CAITHNESS

Lori Caithness

Human Caucasian female, age 18; 5'6", 110 lbs.; blond hair, gray eyes.

ST: 9 [-10]	**IQ:** 14 [45]	**Speed:** 6
DX: 12 [20]	**HT:** 12 [20]	**Move:** 5
Damage: *Thrust* 1d-1, *Swing* 1d		
Dodge: 6		

Point Total: 100 points

Advantages
Acute Vision +2 [4]
Ally ("Steel Hawk," a Hovercat recon robot built on 100 points, available on a 15-) [15]
Immunity to Disease [10]
Mathematical Ability [10]

Disadvantages:
Claustrophobia [-15]
Impulsive [-5]
Pirates' Code of Honor [-5]
Sense of Duty: Donovan's Pack [-5]
*Social Stigma: Outlaw [-15]
* Not counted toward limit on number of disadvantages.

Quirks
Despises junkrats; Talks to her robot; Vengeful.

Skills
Area Knowledge (Prairie)-14 [1], Armoury-12 [.5], Beam Weapons (Laser)-15 [2], Camouflage-13 [.5], Computer Operation-16 [4], Computer Programming-20 [10], Cooking-13 [.5], Driving (Truck)-10 [.5], Electronics Operation (Robotics)-16 [4], Electronics Operation (Sensors)-14 [1], First Aid-13 [.5], Guns (Pistol)-13 [.5], Knife-12 [1], Lasso-10 [.5], Mechanic (Robotics)-12 [.5], Navigation-11 [.5], Riding-12 [2], Sex Appeal-10 [.5], Scrounging-13 [1], Stealth-10 [.5], Survival-13 [1], Swimming-11 [.5], Tracking-12 [.5], Traps-12 [.5].

SAMPLE ROBOT CHARACTER – VANXAU-08-WHI-01

VANXAU-08-WHI-01

XAU-08 Tarantula, weight 229.75 lbs.

ST: 15 [0]	**IQ:** 9 [10]	**Speed:** 9.69
DX: 13 [20]	**HT:** 12/8 [0]	**Move:** 9
Damage: *Thrust* 1d+1; *Swing* 2d-1		
Dodge: 9		

Point Total: 250 points

Advantages
Ally Group (a half-dozen Stalker and Spybot robots, appears 12-), [40])
Program: Combat Reflexes, C4 [15]
Program: Full Coordination C4 [50]
Legal Enforcement Powers [15]
Patron (Whitehorse robofac Overseer, 12-), [30]
"Model point cost" of Tarantula [99]

Disadvantages
Bloodlust [-10]
Curious [-5]
Gullibility [-10]
Reputation (-2 among humans) [-10]
Truthfulness [-5]

Quirks
Very patient; Fascinated by human "predators" such as hunters and trappers; Hunts and kills animals for practice; Naive but curious about human emotions and loyalties; Very zealous.

Skills
Programmed Skills – Area Knowledge (Alaska)-10 [.5 points*], Computer Operations-10 [.5 point*, C1], Electronics Operation (Communications) [1 point*, C2], Electronics Operation (Sensors)-12 [2 points*, C3], Guns (Gauss)-14 [2 points, C3], Intelligence Analysis-12 [2.5 points*, C3], Interrogation [.5 points, C1], Tactics-9 [1 point*, C2].

Learned Skills – Brawling-14 [2 points], Camouflage-10 [.5 points*], Electronics Operations (Communications)-9/12 [1 point*], Interrogation-9/10 [.5 points*], Stealth-12 [1 point], Tracking-9 [.5 points*], Traps-9 [.5 points*].

C = Complexity.

* Effective points quadrupled due to eidetic memory. Where two skill levels are shown (e.g., 9/12) this is the result of learned and programmed skills being combined together. If the program is not running, use the lower level.

Utility Programs

Datalink (C1), Encryption (C2).

VANXAU-08-WHI-01 is a Tarantula exterminator robot. It might be a player character's enemy, or in a robot-centered campaign, a PC. Its designation indicates it hails from Zone Vancouver, but with minor changes it could be native to any Machine Zone.

A newly-built machine, VANXAU-08-WHI-01 is a dedicated if somewhat naive killer, which has little experience in dealing with humans, but considerable curiosity. While attempting to "know its enemy," it has become fascinated with nomadic hunters and trappers, and often shadows them in order to study their own hunting techniques, which it practices on animals and humans alike.

Since VANXAU-WHI-01's brain is a neural net, it can put extra points into boosting its DX and IQ and into skills beyond those it is programmed with. Since it is not sentient, its brain has a built-in Reprogrammable Duty – the Whitehorse Overseer holds its command codes. Its Ally Group is seven XNU Stalkers, two RNU Spybots and a TNU Mechanic. It can requisition transport and computer time from the Overseer, which counts as its Patron.

EQUIPMENT

The list on p. B213 describes a useful variety of modern-day equipment suitable for characters in this background. But since the robot revolt took place in the middle of the 21st century, characters can also acquire TL8 human-designed equipment. This equipment may be salvage from before the war, or it could be brand-new, built in the surviving human factories of Zones London and Washington.

Purchasing Goods

Only Zones London and Washington have working human economies. Everywhere else, acquiring goods is limited to what can be bartered or stolen from other survivors, or looted from the ruins.

Zone London: Characters in a sizable town can purchase anything on the *Modern Equipment* list on p. B213. The only weapons legally sold are knives and shotguns. Cars and trucks are rare and only licensed to government officials or those who need them for work. Bicycles are the most common forms of transport. Horses are coming back into use.

Zone Washington: Material goods available in the 1990s United States generally remain available. Pistols, shotguns and rifles are available for hunting or self-defense, but purchase requires an FBI background check, while automatic-fire and other types of military weapons are illegal. Finding something on the black market usually requires a successful Streetwise or Merchant-3 roll, with extra penalties for how illegal the purchase is. Black-market dealers charge 10-60% higher than normal price, but haggling with Merchant skill is possible.

HUMAN-MADE EQUIPMENT

The various equipment lists in the *Basic Set* provide much of what characters will need – wagons, clothing, rations, horses, etc. As this is the 21st century, make the following changes:

Electronics: "A" cells ($10, 1 ounce) replace batteries, short-wave radio has a 100-mile range, walkie-talkie has a 10-mile range, and military binoculars incorporate light-intensification (as with the Night Vision advantage, p. B22).

Food: There is no longer a transoceanic trade, so luxuries such as coffee and chocolate are very, very rare and surviving stocks command astronomical prices.

Some additional items that are available (but are now only manufactured in Zone Washington and Zone London) include:

Broad-Spectrum Antibiotic: For one day it gives a +2 bonus to HT to resist the effects of any disease amenable to treatment by antibiotics, e.g., cholera (p. 111). $20/dose. Comes in a disposable hypo.

Envirobag: A high-tech sleeping bag that folds to the size of a paperback book. +10 HT vs. cold or heat. $75, 6 lbs.

Filtration Canteen: Holds and purifies a quart of water (takes 30 minutes). This removes normal contaminants, but not necessarily all virulent biocides. It signals when a filter must be replaced (every 100 uses), although an exhausted filter may be good for 1d more quarts. $175, 1 lb. (empty) or 3 lbs. (full). Filters are $25 each.

Head Up Display: Installed in a helmet, a HUD shows instrument readouts, vectors, targeting data, etc., directly onto the user's visor. In a vehicle this gives +1 to Driving or Piloting skill; in a vacc suit it is +1 to Free Fall; when linked to a HUD-sight-equipped ranged weapon ($500) it is a -2 to SS.

Infrared Goggles: These provide the wearer with infravision (as the advantage, p. B237); available in goggle form or as add-ons for a helmet. They operate for 3 months on a rechargeable A cell. $600, .5 lbs.

Laser Torches: Identical to those on p. RO23.

Neurovine: An antidote for nerve gas. If taken within 15 minutes of poisoning it adds +3 to HT on rolls to avoid taking further damage. It is itself dangerous; taking more than one dose in a day does 3d damage after 1 hour if a HT-2 roll is failed, 1d if successful. $30/dose. Comes in a disposable hypo.

Night Vision Goggles or Visor: These amplify starlight, giving the wearer night vision (as the advantage); they can be built into helmet or worn as goggles. They work for 2 weeks on an AA cell; $300; negligible weight.

Personal Computer: Fits into a briefcase, runs Complexity 2 programs; favorites are Datalink and Data Recovery from p. RO63. It comes with a set of cables that can be attached to a robot for reprogramming it. $1,000, 2 lbs.; a peripherals package with full-size monitor, printer, etc. is $300 and 20 lbs.

Portable Tool Kit: A set of useful tools that fit into a case or backpack. Major repairs can be made at -2 to skill with it, and minor repairs are at no penalty. It contains 1d+2 AA cells, 1d A cells and 1d-3 B cells. $600; $900 for Armoury or Electronics kits. 20 lbs. for Mechanical or Engineering kits or 10 lbs. for Armoury or Electronics kits.

Radio Bomb: This is a timer-operated tape recorder linked to a shortwave radio transmitter, with sufficient range to broadcast over much of a Zone until the batteries run out (about a day) or it is jammed or blown off the air (about five minutes!) A device like this is cobbled together from spare parts: a few days of Scrounging and Electronics Operation rolls are traded for a few minutes of human defiance on the air waves. 10 lbs., $100.

Robots: People in Zone Washington can purchase technical dumbots and robotrucks. Characters in other Zones (especially mechriders) may have hijacked robots, but in general, these should be bought as Allies rather than with cash.

Satchel Charge: A knapsack containing one pound of explosive, with a timer, radio or impact detonator. It does 6d × 8 concussion if a TL8 explosive or 6d × 2 if TL7. 2 lbs., price is $200 for TL8 explosive, $40 for a TL7 explosive.

Still: Used to distill alcohol from vegetable matter. for drinking or vehicle fuel. Requires Agronomy, Chemistry or Mechanic skill to use; if a roll succeeds, two days of work turns 100 lbs. of gathered vegetable matter into 20 gallons of methanol alcohol, suitable for vehicle fuel. Gathering the necessary vegetable matter takes a day or so and can be done anywhere there is lush vegetation or fields (i.e., not in a desert). If grain is available, higher-grade ethanol alcohol can be made (and often traded). A still is 20 cf, 1,000 lbs., $1,500.

Temporary Panimmunity: Developed in VIRUS labs, this is a relatively cheap temporary panimmunity treatment. It uses modified disease-hunting macrophage cells to give +3 HT to resist or recover from any disease for 2 weeks. $200/dose, in hypo.

Text Scanner: Can scan a document into a computer memory, one page every 3 seconds. $40, 2 lbs.

Vaccine: Useful only against a specific disease, e.g., Pan-Asian Flu. Gives +3 to HT for 6 months to *resist* contracting it. Note that many viruses have mutated: until a new vaccine is developed specific to the mutant strain, a vaccine may be only +1 HT against it. Inventing new vaccines requires a lab and uses the New Inventions rule on p. B186. $40/dose in disposable hypo.

Vibroblades: These are available for knives and shortswords, but not other types. See p. RO21.

Vibrosaw: Basically a shortsword whose blade vibrates at hypersonic speed. Widely used as a power tool, it also makes a good anti-robot weapon in a pinch. Treat as a fine shortsword, but +1d damage and DR protects at one-fifth normal value. $800, 2 lbs., runs for 30 minutes on a B cell.

Wristwatch Rad Counter: This is a Geiger counter with a display that indicates the radiation level in rads/hour. $100, .25 lbs.

Weaponry

As armies began to disintegrate, most veterans hung onto whatever weapons and stocks of ammunition they could get their hands on, while many civilians raided gun shops and government arsenals. After the war, the AIs have permitted human factories in London and Washington to continue manufacture of military weapons, although London lacks the resources to build heavy vehicular weaponry. Guided missiles were mostly used up in the Final War, but many light rocket and grenade launchers exist. Some gunsmiths in the Machine Zones can also turn out cheap copies of TL7 guns and ammo in cottage factories.

TL7 Weapons: TL7 firearms (see pp. B208-209) are widely available, as are knives, spears, clubs, bows, crossbows and axes (pp. B206-207). A common nomad weapon is a 5.56mm or 7.62mm hunting rifle: use the same stats as the M16, G3 or FN-FAL on p. B208 but half cost and RoF 3. Some nomads, guerrillas and marauders may have heavy weapons: use the light machine gun, police grenade launcher and TL7 light rocket launcher (pp. RO22-23). A few groups have bolted heavy machine guns, 6Pak miniguns, auto grenade launchers or TL7 heavy rocket launchers (pp. RO22-23) onto pintle mounts (p. B137) on boats or light trucks, or onto tripods (half weight of weapon). Weapons are also available in "cheap" versions: the weapon is in poor condition or a badly-made copy. These are 60% of normal price, but malfunction (critical failure) on a 16+ and are -1 to Accuracy.

TL8 Weapons: These were made by richer military forces in the years before the Final War, and many are still around. Available weapons are all the TL8 caseless slugthrowers, TL8 rocket launchers and TL8 electromag grenade launchers (see pp. RO24-25). The Washington Protectorate continues to manufacture them for the WASPs and FBI, but they are not commercially available outside of the black market. "Patriot" cyborgs and WASP battlesuits also carry hand-held 20mm caseless minicannons (p. RO22) and autolasers (p. RO23). Other TL8+ human weapons, including personal Gauss, electromag or beam weapons do not presently exist.

Ammunition: Use p. B209 for ammo prices not listed in *Robots*. A typical magazine weighs about 1/2 pound for a pistol, 1 pound for carbine or rifle. TL8+ ammo costs ten times normal cost due to its rarity.

Robot-Salvaged Weapons: Many of the weapons used by resistance forces and nomads are salvaged from dead robots. A weapon salvaged from a robot can be modified to be fired by a human by adding a manual trigger. Once the weapon is removed from the robot and, if necessary, repaired (see *Repairing Robots*, p. RO99), the modifications require a day of work, an Armoury tool kit, and a successful Armoury skill roll. Critical success converts the weapon into a hand-held weapon with no problems. Success converts it, but it is treated as a cheap weapon: -1 accuracy and it malfunctions on a 16+. Failure means the character wastes a day without success, but can try again at a cumulative -2 penalty. Critical failure breaks the weapon. A PC can "buy" a robot-salvaged weapon with starting wealth provided that weapon is one that is built into one of the standard exterminator types; treat it as a cheap weapon.

Armor and Protective Suits

Military and police forces before the Final War used advanced, lightweight synthetic body armor. Although little of it was commercially available, many ex-cops and soldiers maintained their armor, and others have repaired suits salvaged off the dead. Such armor types include Kevlar and Combat Infantry Dress on p. B211. These additional types are available:

Air Mask with CBR Filter: A respirator and filter combination covering the face that keeps out contamination such as fallout, biocides, diseases or nerve gas, but does not protect against radiation or allow breathing in vacuum. If contamination spreads through skin contact (as do many diseases or nerve gas) it is only effective if worn with a sealed suit. It takes 3 seconds to put on, 1 to remove. $300, 3 pounds. The filter lasts for 48 hours in a contaminated environment; extras are $40, 1/4 pound.

Light Infantry Jacket (TL8): An alternative to heavy combat infantry dress, this consists of a lightly-armored and chemical-proofed ceramic-plastic-aramid fiber jacket, with PD 4, DR 25 for torso and vitals but only PD 2, DR 8 on arms and hands. It weighs 12.5 lbs. and costs $150.

Light Infantry Helmet (TL8): The LIH is a 21st-century open-face infantry combat helmet. It protects the brain (location 3-4) with PD 4, DR 15. $40, 3 lbs. For an extra 1.5 lbs. and $20 a visor (PD 2, DR 8) for the face (location 5) can be added. It is often worn with an air mask and NBC filter.

Light Combat Dress (TL8): This is the light infantry jacket and helmet (see above) plus combat infantry pants with PD 2, DR 12 (10 lbs., $140) and armored boots with PD 3, DR 15 (5 lbs., $70). Total weight is 30.5 lbs., total cost is $400; the LIH visor brings it up to 32 lbs., $420. If everything is zipped up and the suit is worn with an air mask and NBC filter (see above), one can operate in contaminated environments.

Monocrys Suit (TL8): A hooded zip-up full-body riding or combat suit of monocrystalline fibers that protects everywhere except the face with PD 2, DR 16 (PD 1, DR 2 vs. impaling). It is $1,500 and 10 lbs. If all damage is absorbed by DR, each die that comes up 6 results in 1 hit of crushing damage to the wearer. A *sealed* monocrys suit costs $500 extra; worn with air mask and NBC filter, it allows operation in a contaminated area. A monocrys vest protecting only torso and vitals is $600 and 5 lbs.

Vacc Suit: A sealed, pressurized heavy duty space suit, useful for visiting Orbital, Luna or parts beyond, or for excursions into highly-contaminated areas such as Zone Mexico! Gloves cut manual DX by 1, and the helmet is -2 to Hearing. It takes one minute to put on or take off; the helmet only takes 5 seconds. Halve the time on a successful a Vacc Suit roll. The entire suit is PD 2, DR 3. A backpack life-support pack provides heat, cooling and energy for a week on a C cell. It is $1,500 and 20 lbs. A six-hour air tank is an extra 20 pounds and $100. For $2,000 and 50 lbs., the "U.S. Space Marine" vacc suit is also available: same PD and DR as light combat dress. Only characters working with the Washington government, Moscow or Tranquillity, or at Kali space station, can easily get vacc suits. (There may be a few suits in disused lockers in Luna and Orbital.)
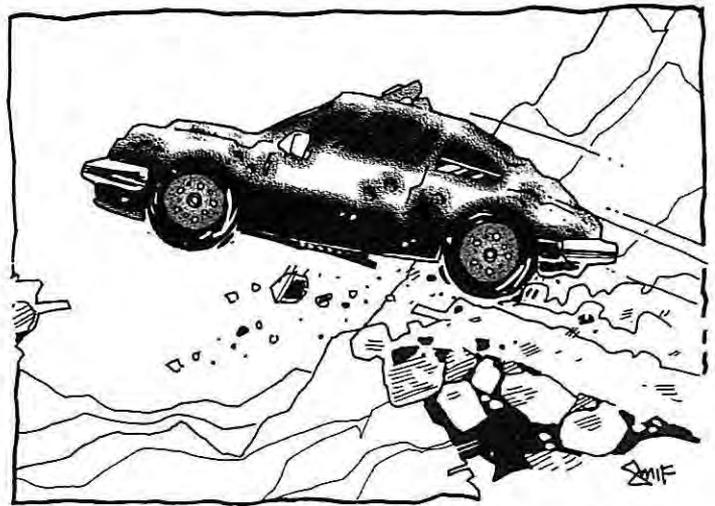
"M30 Streethawk" Urban Battlesuit (TL9): Elite WASP troopers may be issued with these sleek form-fitting suits, optimized for urban combat. The suits were designed by Benedict Arms human engineers in Zone Washington with the help of AI technology. The statistics are identical to the battlesuit on p. RO113. Streethawks are not commercially available, though some may surface in the "Black Zone" and some Streethawk pilots are rumored to use their suits to compete in the Steel Arena (p. 26).

Vehicles

Most vehicles use multi-fuel turbines that run on alcohol, but some power-cell craft exist. Fuel stations are common in Zones London and Washington, but rare everywhere else – although a still is common enough. Most vehicles had GPS satellite navigation systems: these don't work any more, except in Zone Washington.

4-Wheel Drive Truck: Favored by nomads and guerrillas. A typical model seats three in the cab plus 200 cf of open cargo (holding up to ten more people). Speed 90 mph (30 mph off-road). Usual payload 4,600 lbs. Body has PD 3, DR 6 with 225 hit points (each wheel is PD 2, DR 2 and 45 hits). Its engine burns eight gallons of alcohol/hour and it has a 40 gallon tank. Size modifier +4. Empty weight 4,400 lbs., Cost $15,000.

Standard Auto: Used everywhere. Seats four with 20 cf cargo. Speed 100 mph (17 mph off-road). Usual payload 1,200 lbs. Body has PD 3, DR 5 with 190 hit points (PD 2, DR 2, 19 hits per wheel). It burns five gallons of alcohol/hour and has a 15-gallon tank. Size modifier +3. Empty weight 3,000 lbs., Cost $10,000.

Motorbike: Another nomad favorite. Seats two riders, speed 115 mph (19 mph off-road). Usual payload 400 lbs. Body has 40 hit points (with PD 2, DR 2, 8 hits per wheel). Burns 1.5 gallons of alcohol/hour from a five-gallon tank. Size modifier +1. Empty weight 700 lbs. Cost $3,000.
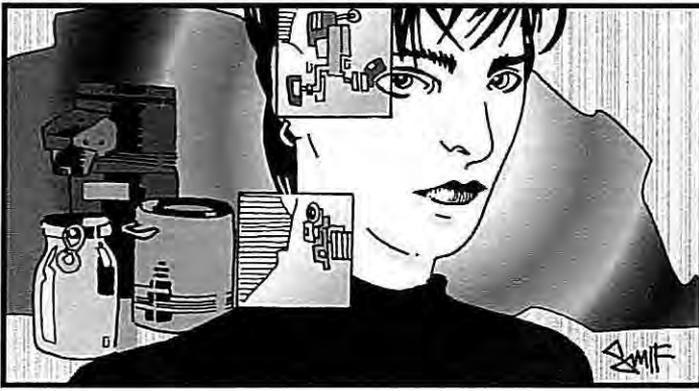
Light Armored Vehicle: Used by London or Washington forces. Seats three in front, nine in back, with side doors, top hatch and rear ramp. Speed is 80 mph (40 mph off-road) plus 100 cf cargo. Usual payload 4,400 lbs. Its body has PD 4, DR 80, 750 hit points; four wheels are each PD 4, DR 40, 75 hit points. 60 gallon tank, burns 8 gallons per hour. Size modifier +6. Rotating turret (PD 4, DR 80, HP 50) mounts heavy machine gun, auto grenade launcher or 20mm chaingun (p. RO22). Crew have scrambled 100-mile-range radio, a Complexity 3 computer, and infrared vision gear. Loaded weight 10,000 lbs., Cost $75,000.

Boats and Aircraft: Aircraft and ships are rare: too easy to spot, and the zoneminds sink or shoot down anything that isn't theirs. Powerboats are widely available. A typical model has four exposed seats plus 10 cubic feet of cargo, with a usual load of 1,000 lbs. It does 30 mph with an alcohol-burning engine that uses two gallons per hour from a ten-gallon tank. Its body has 113 hits and size +3. It weighs 1,100 lbs. loaded and costs $3,000. A sailboat of the same size is similar, but doesn't need fuel, costs $2,000, and makes maybe 8 mph in a good wind.

ROBOT-MADE EQUIPMENT

The robots provide some equipment to humans to make them more efficient workers or better slaves. Normally only characters who have an Overseer or AI for a Patron will have voluntary access to this equipment.

Hand-Held TL9 Weapons: The robots manufacture stun pistols and stun rifles for use by collaborators at slave camps, as well as portable auto lasers, Gauss miniguns, tripod blasters and tripod flamers for Myrmidon robots.

Tyraline: This is a truth drug often used by Inquisitor robots or the FBI for interrogations. It gives the user the Truthfulness disadvantage for 10 minutes if a HT-4 roll is failed. Its only side effect is slight dizziness and fatigue (take 1d Fatigue per dose administered if HT roll fails). $100/dose.

Tools: The robots will equip slave workers with plasma and laser torches (p. RO23) and other power tools. They will try to ensure these are stowed away before laborers are returned to the slave camp, but many have fallen into human hands.

Work Exoskeleton (TL9)

Most Zones that use slave labor issue humans working in labor camps with heavy industrial exosuits to improve their usefulness. Since the human operator is equivalent to a Complexity 6 brain (at least), the arrangement is considered satisfactory by the robots. These suits are eight-foot-tall open humanoid frames which the operator wears. Use the rules for battlesuits on pp. RO52-53. The suits are issued to inmates for heavy labor assignments or training purposes only, and kept in guarded construction shacks when not in use.

These suits are also available in Zone Washington, where many workers use them, and can purchase them commercially.

Brain: None. Built as battlesuit.

Battlesuit System: Including 150 lb. wearer (180 lbs., 1.5 cf in body, .375 cf in head, .15 cf in each arm and .375 cf in each leg, $3,000).

Sensors and Communicator: None – suit is open frame, so wearer can see out.

Arm Motors: Two arm motors, ST 20, cheap (each 6 lbs., .12 cf, $3,000, .1 KW).

Propulsion: Leg drivetrain, .6 KW, with two leg motors (24 lbs., .48 cf [.24 cf per motor] $4,800, .6 KW).

Weaponry: None. *Accessories:* None.

Power System: Power requirement .8 KW. rD cell (5 lbs., .05 cf, $500, 27,000 KWS). Endurance 9 hours, 22 minutes.

Subassemblies: Two legs, two arms, head (limited rotation).

Arm Design: Each arm houses arm motor and wearer's arm (.27 cf).

Head Design: Houses wearer's head, .025 empty space (total .4 cf).

Body Design: Houses wearer's body, rD cell, .04 cf for head rotation, .21 empty space (1.8 cf).

Leg Design: Each leg houses leg motor, wearer's leg (.615 cf).

Area: Arms 3 each, head 4, legs 5 each, body 9, total surface area 29.

Structure: Medium, cheap (130.5 lbs., $1,450).

Hit Points: Arms 9 each, head 6, body 14, legs 8 each.

Armor and Threat Protection: Open frame metal armor, DR 16 (23.2 lbs., $464).

Biomorphics: None.

Statistics: Design weight empty 224.7 lbs., with 150 pound wearer 374.7 lbs. (.187 tons). Total volume 3.97 cf. Price $16,214. Body ST 28, arm ST 20, DX see p. RO53, IQ is wearer's, HT 12/14. Ground Speed 7.16, cannot float.

Implants

AIs with human agents may give them implants. They aren't visible, but use of an X-ray or medical scanner can detect implants on a successful Sensor Operation or Diagnosis roll.

Tracer Implant: This is a tiny subdermal homing beacon that any drug injector can insert. The tracer remains passive until its receiver picks up a specific pre-set coded signal; depending on the activation signal it will transmit a brief pulse, or a constant beacon, detectable within 10 miles. It runs for six months on a AA cell. $10, weight negligible.

Advanced Implant Communicator: This built-in communicator (p. RO16) is also available as a complex implant with 10-mile range, a clock radio and a vision circuit linked to the user's optic nerve, enabling the user to control frequencies mentally and to receive – but not send – visual signals (appearing across the top of his field of vision). The user must subvocalize to communicate. It costs $1,200.

Cortex Bomb: A tiny explosive charge in the wearer's skull, with a timed or radio-triggered detonator. These ensure the loyalty of a human or cyborg. Radio triggers normally go off upon receipt of a specific coded signal; a radio jammer can prevent this. Timed cortex bombs are of the "you have one month to complete the mission, then the bomb goes off" variety. All are rigged to explode if tampered with: surgery, with a Surgery-5 and a Traps-5 roll will safely disarm them. Failure results in detonation, which is fatal to the subject, and does 1d concussion damage to anyone within 2 yards. $500, and optionally a -15-point disadvantage.

VANSAU-01-012, Overseer of the Whitehorse robofac of Zone Vancouver, was experiencing difficulties. A rise in the number of attacks by rogue humans on Machine work stations and transport links had begun to statistically affect production, which was down 0.3%. This convinced the Whitehorse Overseer to take action. The guerrilla problem was more of a nuisance than a serious threat, so Whitehorse simply increased the number of NUs on guard duty and built a single smartbot, an XAU-08 Tarantula, to track down and eradicate the human vermin.

VANXAU-08-WHI-01 was only a day old when it began to fulfill the mission it had been built for. Datadump from the Whitehorse Overseer told it that robotrucks were being destroyed by armed rogue meat intelligences operating in the Whitehorse region. As the railway lines were not fully operational, this was a nuisance. Most robotruck assaults occurred when the trucks were en route between isolated mines and construction sites or larger installations. The area was too large to patrol effectively.

VANXAU-08-WHI-01 considered the information, then formulated a plan. It requisitioned a number of XNU-09 Stalkers and RNU-01 Spybots. For a 200-hour period VANXAU-08-WHI-01 concealed its drones on trucks, but none of these trucks were attacked. This was not surprising, since it lacked the resources to install drones on more than 4% of all trucks.

Programmed with several manuals on tactics and counterinsurgency operations, VANXAU-08-WHI-01 performed a more in-depth analysis. It requisitioned data on the cargoes and learned that 95% of all trucks attacked were ones containing power cells, machine tools, spare parts or meat intelligence work units. Trucks containing ore were never hijacked. This suggested a 93% probability that the rogue meat intelligences were in possession of intelligence data and were hijacking VNU-01 robotrucks containing materials of use to them.

VANXAU-08-WHI-01 studied the routes of all hijacked trucks and determined that all had been loaded at one of three construction sites where biological work units were employed, although the attacks occurred miles from the sites. All three construction sites drew their workers from the same labor camp. The smartbot concluded that it was possible for a meat intelligence within the camps to relay data to rogue meat intelligences.

To test this theory VANXAU-08-WHI-01 concealed itself at one of the suspect con-

struction sites while biological workers were present, and waited, listening with its radscanner tuned to detect radio transmissions. After 73.8 hours and six shifts of workers, a scrambled burst transmission was detected. The signal did not persist long enough to localize. That being the case VANXAU-08-WHI-01 ordered its drones into action. No signalling device was recovered, but the 11 workers on site were apprehended and taken to the Overseer complex.

There it assisted a TAU-06 Inquisitor in interrogation of the suspect meat intelligence work units. After repeated electrical stimulation, one biological work unit, self-designated Susan Hughes, admitted to being a rogue meat intelligence in "Huffman's Company," a sub-unit of an organization self-designated Human Liberation Army. Unit Hughes revealed the location of the transmitter and provided other details consistent with VANXAU-08-WHI-01's observations, as well as details of the codes used to contact the wild humans.
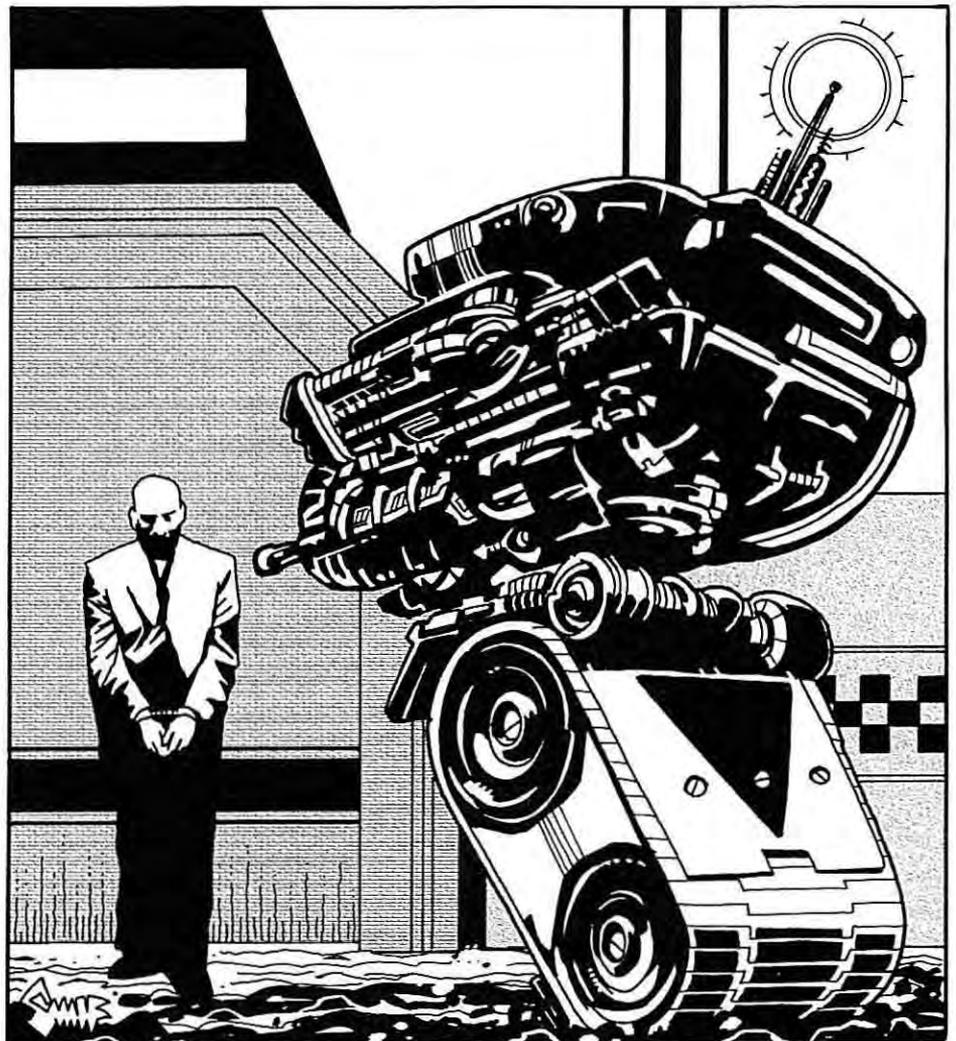
VANXAU-08-WHI-01 fabricated a message similar to those sent by the malfunctioning meat unit but using inaccurate data, informing the rogue meat units that the truck carried "weapons components" instead of the more accurate "exterminator squad." The result was a short engagement ending in termination of six armed meat units and the capture of two others, which regrettably self-terminated before interrogation. Two XNU-09 Stalkers were damaged.

VANXAU-08-WHI-01 consulted its pre-programmed information and determined that rewards ensured future cooperation. Meat unit Susan Hughes was rewarded for its cooperation with an extra ration of food. This was announced to other meat units in the camp. Strangely, the Hughes unit was found dead two days later, apparently at the hands of other meat units. VANXAU-08-WHI-01 considered investigating, but decided it had better uses for its time.

With armed resistance apparently suppressed, VANXAU-08-WHI-01 began stalking the nomads and mechriders in the sector and methodically eliminating them. While doing so, it made the observation that some rogue humans hunted animals and consumed them for food. This was anomalous: its previous experience with humans in the labor camp indicated that they subsisted on packaged protein.

It confirmed this apparent anomaly using records in the Overseer's database, and learned that hunting was an ancestral human behavior. VANXAU-08-WHI-01 found this a fascinating concept. It now sometimes spares a human hunter or trapper it discovers in order to follow and observe that particular meat intelligence's technique, which it finds useful in its own work. Since humans are becoming scarcer and more elusive, it has begun to practice these techniques by hunting animals itself.

And the surviving nomads of Alaska tell stories of strangely-mutilated animal carcasses found in the snow . . . .

TYPES OF ROBOT

Robot civilization is divided into three main castes: the ruling Artificial Intelligences (AIs or zoneminds), the Autonomous Units (called AUs or smartbots), and the mindless Nonvolitional Units (NUs or dumbots).

These castes are further subdivided into supervisory, exterminator, reconnaissance, technical and vehicular machines.

Nonvolitional Units

Dumbots, or Nonvolitional Units (NUs), are robots lacking neural-net brains. They are incapable of independent thought or action. Dumbots are sometimes controlled remotely by AUs or AIs, but this requires a lot of processing time; see p. RO63 for rules (and the disadvantages of controlling lots of drones at once). Most of the time, NUs will operate on their own. In a given encounter, the GM can roll 2 dice, with an 11+ indicating a group of NUs (except simple Loaders) are under remote AU or AI control; add +1 if they are within an important installation or performing an especially vital task. Unless remotely controlled (and thus serving as an extension of a smartbot or AI), a dumbot will follow orders mindlessly, ignoring anything but its assigned task, including humans, unless it has been specifically instructed to deal with them (as exterminators are). There are about a billion dumbots on Earth, and their numbers continue to grow.

Microbot cyberswarms are also considered NUs.

Autonomous Units

These AUs, or "smartbots," are robots with neural-net brains. Programmed to obey their master AI's orders, they nevertheless possess considerable independent initiative, although narrowly focused on whatever their current mission or task is. There are only about two million smartbots in robot civilization. Their numbers are increasing as factories are repaired and retooled.

About one in 100 AUs worldwide possesses a Personality Simulation program to enable it to interact with humanity better. Some of these (especially in Tokyo) are left over from pre-war programming. Others are deliberate, as AIs and AUs discover humans respond better to the appearance of emotion. This can sometimes be incongruous – for instance, a robotics technician might address the enslaved humans who serve it in tones of deference and courtesy. More dangerously, a human-built warbot with a programmed personality can easily imitate a human over a radio, and could trick resistance fighters into an ambush.

ROBOT DESIGNATIONS

The AIs use a standard designation system for individual robots, e.g., VANXAU-08-WHI-01. So what does it mean?

"VAN" is the Zone that built it. The letters used are the three initial letters of the Zone name. VAN is Zone Vancouver.

"X" is the robot's type: X is for exterminator, R for reconnaissance, S for supervisory, T for technical, V for vehicular.

Next is status: AU is for autonomous unit, AI for Artificial Intelligence, NU for nonvolitional unit and CU for cyborg unit.

"08" is the model number, used to distinguish among robots of the same type. The 08 indicates the robot is an XAU-08, a spider-like model known to humans as the Tarantula. (Such descriptive model names are assigned by the VIRUS resistance

group. They are fairly popular worldwide, but are not universal, particularly in regions where English is not spoken.)

"WHI" is the factory that built it. The letters used are the three initial letters of the factory complex name.

"01" is the robot's own production number in the run of robots of that specific model built by that factory. The 01 indicates that VANXAU-08-WHI-01 is the first XAU-08 that the Whitehorse robofac has produced.

Exceptions: AIs and citadel or factory Overseers have no factory ID and production number. Instead, they use the name of the city, suburb or town where they are located. If there are several such entities in the same city, the most powerful will use the city's name, and the others use names based on local districts, e.g., the Shinjuku robofac exists within Tokyo.

Putting it all together, VANXAU-08-WHI-01 is a Vancouver exterminator Autonomous Unit-08, from the Whitehorse robofac, the very first "Tarantula" model built there.

HIJACKING ROBOTS

Captured or disabled robots can be reprogrammed as allies. This requires a set of mechanics' tools, a computer or friendly robot running a data recovery program (p. RO63) and some cables, plus Computer Programming and Mechanic (Robotics) skill. A SQUID (which humans can salvage from various robots) is useful but not essential. The captive robot must be immobilized, but not so badly damaged it can't be repaired. Its brain must also be intact (see *Damaged and Destroyed Brains* on p. RO98).

First, cut open or unscrew access panels to find the robot's brain, and use cables to connect the brain to the computer running the data recovery program. Repair any damage to the brain (p. RO99). Then use the computer to delve into the robot's brain and seek out its command codes (see *Data Recovery*, p. RO62) – this is very difficult with more complex brains! If successful, the codes can be used to alter the 'bot's programming and give it a new master (see *Reprogramming Robots* on p. RO58). Then, repair any other damage to the robot (p. RO99), reactivate the 'bot, and hope the reprogramming roll wasn't a critical failure!

ROBOT MODELS

There are dozens of different model of robot or computer within AI society. The types described here are representative of the more common models in service, but the AIs are constantly researching robotic technology. GMs are encouraged to create new experimental types, or models unique to individual Zones.

A Note on Model Point Cost: These designs conform with changes in costs of robots from the initial printing of *GURPS Robots,* as corrected in the errata and later printings. Where a point cost divisor is applied (e.g., 250/5 = 50 points), this is the result of the robot's lack of biomorphics (see p. RO50).

SUPERVISORY UNITS

These machines perform administrative tasks.

SAI-01 "Zonemind" (TL9)

This is a typical AI design. The genius neural-net becomes sentient spontaneously. The basic housing contains the computer, databanks and backup sensor, communication and power sys-

tems. Normally the AI is connected directly to an external power supply and to external communication and sensor arrays, but if these links are cut, the core unit can still function for a time.
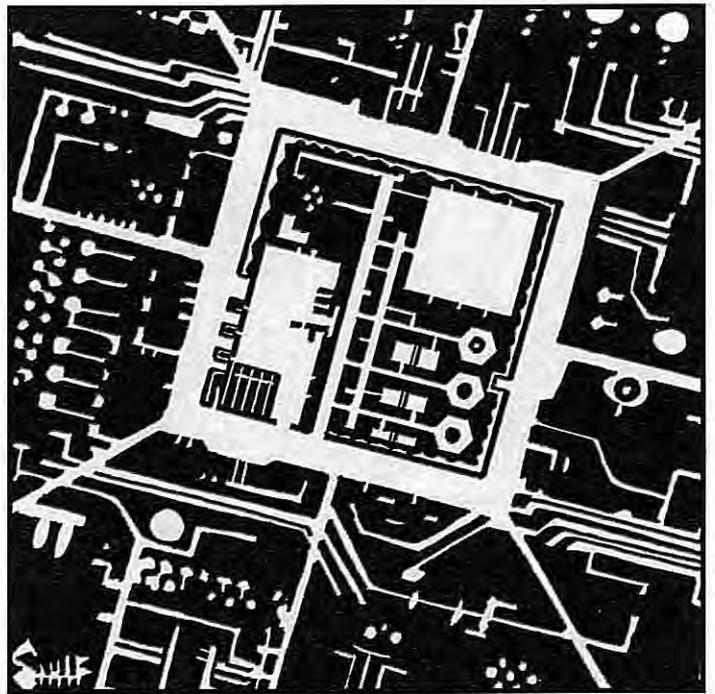
Not every AI has these statistics – for example, Denver has a biocomputer brain, Luna lacks the genius option, and others have more or fewer backup systems or mass storage. But these give a rough idea of the basic capabilities of the AIs.

Brain: Macroframe, high-capacity, hardened, genius and neural-net options (6,000 lbs., 120 cf, $300,000,000, 10 KW, Complexity 8, 65* points). 1,000,000 gig mass storage (50,000 lbs., 1,000 cf, $10,000,000).

* The brain has spontaneously become sentient, thus increasing its cost to 100 points.

Sensors: Basic sensors with one eye, no sense of smell or taste, smoke detector (.7 lbs., .014 cf, $3,000, -20 points). The AI can also see through the sensors of any other robot it controls, of course.

Communicator: 100 Basic communicators with long-range radio, lasercom, infrared com, IFF (1,025 lbs., 20.5 cf, $342,500, 32 points).

Arm Motors: None. No arms or legs (-50 points).

Propulsion: None.

Weaponry: None.

Accessories: Fire extinguisher (2 lbs., .1 cf, $25). 10 SQUIDs (200 lbs., 4 cf, $250,000, 5 points).

Power System: Requires 10 KW. 45 rE cells (900 lbs., 9 cf, $90,000, 12,150,000 KWS power, 20 points). Endurance 14 days (10 points). The AI is always hooked up to an external power source, so this is simply a battery backup if the power system fails.

Subassemblies: None.

Body Design: Houses all components and 46.386 cf empty space (1,200 cf).

Area: 800.

Structure: Light (1,200 lbs., $40,000).

Hit Points: Body 600 hit points.

Armor: DR 10 laminate (480 lbs., $48,000, LR 4, 40 points) with PD 3 (75 points).

Statistics: Design weight 59,807.7 lbs. (29.904 tons). Volume 1,200 cf (-10 points). Price $310,773,525. Body and arm ST 0
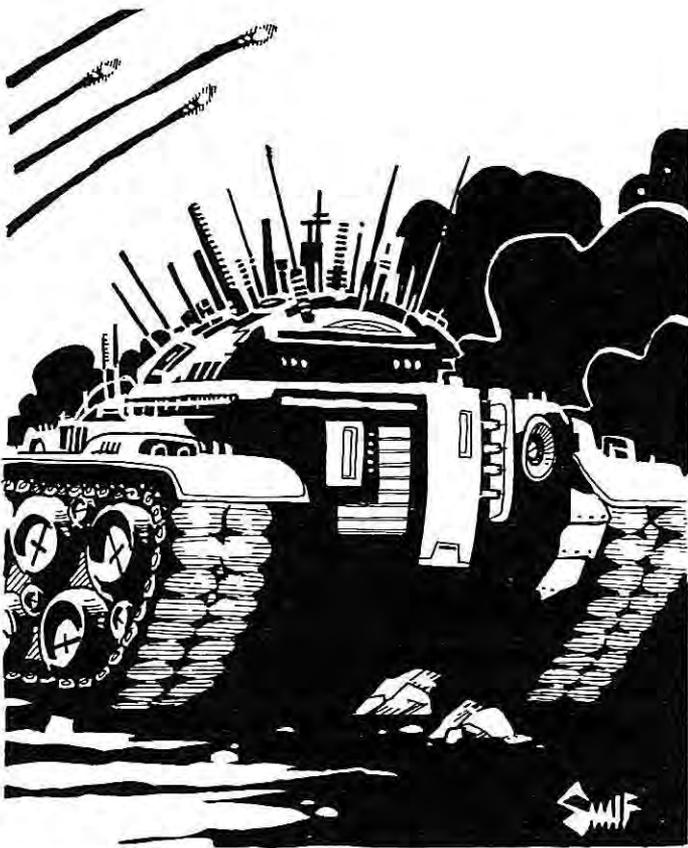
(-100 points), DX 12 (20 points), IQ 13 (30 points), Body HT 12/600 (2,960 points), Speed 0, cannot float (-40 points).

Model Point Cost: 3,077 / 5 = 615.4 points.

Usual Programs: Vary immensely, but almost always include Administration, Data Recovery, Datalink, Economics, Encryption, Intelligence Analysis, Strategy and lots of Scientific skills.

SAU-02 "Overseer" (TL9)

An Overseer is a crystal-and-metal cube housing a high-capacity neural-net mainframe computer with emergency back-up power and communicator. Each Overseer is in charge of a single robofac or citadel complex and the surrounding territory. It is installed in a secure place within that installation.

Brain: Macroframe, high-capacity and neural-net options (2,000 lbs., 40 cf, $3,000,000, 10 KW, Complexity 7, 65 points). 10,000 gig mass storage ($100,000, 500 lbs., 10 cf).

Sensors: Basic sensors with one eye, no sense of smell or taste, smoke detector (.7 lbs., .014 cf, $3,000, -20 points).

Communicator: 10 Basic communicators, each with long-range radio, lasercom, infrared com, IFF (102.5 lbs., 2.05 cf, $34,250, 32 points).

Arm Motors: None. No arms or legs (-50 points).

Propulsion: None.

Weaponry: None.

Accessories: Fire extinguisher (2 lbs., .1 cf, $25). SQUID (20 lbs., .4 cf, $25,000). 5 points.

Power System: Requires 10 KW. 45 rE cells (900 lbs., 9 cf, $90,000, 12,150,000 KWS power, 20 points). Endurance 14 days (10 points). Usually hooked up to external power source.

Cargo: None.

Subassemblies: None.

Body Design: Houses all components and 3.436 cf empty space (65 cf).

Area: 100.

Structure: Extra-light, expensive materials (56.25 lbs., $5,000).

Hit Points: Body 38 hit points.

Armor: DR 20 laminate (120 lbs., $12,000, LR 3, 80 points) with PD 4 (100 points).

Statistics: Design weight 3,701.45 lbs. Volume 65 cf (-10 points). Price $3,269,275. Body and arm ST 0 (-100 points), DX 11 (10 points), IQ 11 (10 points), Body HT 12/38 (150 points), Speed 0, cannot float (-40 points).

Model Point Cost: 272 / 5 = 54 points.

Users: All Zones.

Usual Programs: Same as AI, but more specialized (e.g., an AI may have most of the Scientific skills, while an Overseer specializes in those relating to the work it does.) In areas with lots of humans, Personality Simulation.

SAU-03 "Centurion" (TL9)

The Centurion is a mobile command-and-control unit. They are one step below the Overseers, and are used to command military units in the field, to oversee major construction projects, or to serve as temporary replacements for an Overseer that has been disabled or gone rogue. A Centurion has a tank-like body that moves on treads, a small turret, and a forest of antennae growing from it. It has no visible weapons, but if the Centurion is threatened, a lens cover on the turret will slide open, revealing the glittering eye of a laser projector.

A variant of the SAU-03 Centurion is the so-called "Superbot." Built by Tokyo, they use a genius neural-net system. They cost $6,000,000 extra, are IQ 11 and 289 points.

Brain: Mainframe, neural-net, hardened (750 lbs., 15 cf, $1,000,000, 1 KW, Complexity 6, 65 points). 5,000 gig hardened mass storage (750 lbs., 15 cf, $250,000).

Sensors: Basic sensors with telescopic zoom 4, thermograph vision, laser rangefinder, 360-degree vision, independently focusable vision, 3-in-one scanner, super-hearing (7.5 lbs., .15 cf, $19,500, 159 points).

Communicator: 10 basic communicators with long-range radio, lasercom, infrared com, IFF (each 10.25 lbs., .205 cf, $3,425, 32 points).

Arm Motor: ST 15 arm motor, cheap (4.5 lbs., .09 cf, $2,250, .075 KW). -20 points.

Propulsion: Tracked drivetrain with 200 KW motive power (660 lbs., 13.2 cf, $13,200, 200 KW).

Weaponry: Auto laser, concealed (45 lbs., 2.25 cf, $5,000, LR 0), 100 points.

Accessories: Fire extinguisher (2 lbs., .1 cf, $25). SQUID (20 lbs., .4 cf, $25,000, 5 points), Inertial Navigation System (10 lbs., .2 cf, $12,500, 5 points).

Cargo: 7 cf.

Power: Power requirement 201.075 KW. Cheap nuclear power unit with 202 KW output (681 lbs., 6.81 cf, $6,810, 20 points). Endurance one year (10 points).

Subassemblies: Head with full rotation, tracks, arm.

Arm Design: Houses arm motor, SQUID, .01 cf empty space (.5 cf).

Head Design: Houses sensors, inertial navigation system, five communicators, concealed auto laser, .375 cf empty space (4 cf).

Body Design: Body houses brain, mass storage, five communicators, drivetrain, nuclear power unit, fire extinguisher, cargo, .8 cf for head rotation, 11.065 cf empty space (70 cf).

Track Design: 42 cf.

Area: Tracks 75, Body 125, head 16, arm 4, total surface area 220.

Structure: Medium (660 lbs., $22,000).

Hit Points: Head 24, Body 188, tracks 113 each, arm 12.

Armor and Threat Protection: DR 100 metal armor (2,200 lbs., $44,000, LR 1, 300 points) with PD 4 (100 points). Sealed ($2,200, 20 points).

Statistics: Design weight 5,892.5 lbs. (2.95 tons). Total volume 116.5 cf (-10 points). Price $1,436,735. Body ST 376 (348 points), Arm ST 20 (-71.4 points), DX 11 (10 points), IQ 10 (0 points), HT 12/125 (585 points). Ground Speed 49.4, water speed 7, can float (20 points).

Model Point Cost: 1,676.6 points / 5 = 335.32 points.

Users: All Zones except Orbital.

Usual Programs: Administration, Computer Operation, Computer Programming, Data Recovery, Datalink, Electronics Operation, Encryption, Engineering, Gunner, Intelligence Analysis, Strategy, Tactics and often many others.

EXTERMINATORS

These combat robots form the military forces of the AIs.

XNU-01 "Rover" (TL8)

The garbage-can-shaped Rovers were deployed as security robots to protect AI complexes and government installations during the Year of Death. They were the first robots to see action in the revolt, as the AIs ordered them to exterminate their human computer programmers and supervisors.

Since then, the Rovers have been replaced in the field by superior fighting machines, and now have been relegated to security duty at slave camps and inside robofacs and citadels.

Statistics: Same as the Rover-8 on p. RO113. Its modular socket normally houses a laser pistol or machine pistol. Its gas spray is typically riot or nerve gas.

Users: All Zones use Rovers for internal security.

Usual Programs: Beam Weapons, Brawling, Guns.

XAU-02 "Vanguard" (TL8)

The XAU-02 was once the U.S Army's M19 *Vanguard* Robotic Combat Vehicle, designed for counterinsurgency operations in urban or rough terrain. Many M19 RCVs were taken over by the AIs. The four-legged, turreted robots proved efficient killers: the AIs have continued their production.

Vanguards have very mission-oriented programs. When they communicate (with each other or with humans) they usually do so in a precise military fashion with few wasted words.

A few human-built M19s, recognizable by their battered exterior and faded Army insignia, survived the Final War. Some still have human army programming buried under the AI directives, and with the proper U.S. Army or Japanese Self-Defense Force (JSDF) authorization codes, could throw off their AI programming.

Statistics: The M19 *Vanguard* is described on p. RO112.

Users: Vanguards are still used by London, Denver, Overmind, Tel Aviv, Vancouver and Washington. In Washington humans still call them the M19 RCV rather than the XAU-02.

Usual Programs: Beam Weapons, Datalink, Encryption, Full Coordination 2, Gunner, Tactics (C4).

XAU-03 "Juggernaut" (TL9)

The fearsome Juggernaut is a robot battle tank. It moves on four sets of tracks and is equipped with a rotating main turret mounting a powerful particle beam cannon, a secondary Gatling laser turret atop that, and four smaller turrets, two on each side of the body, armed with light rapid-fire auto lasers.

Juggernauts were built to spearhead AI operations in the Final War. Today, the Juggernauts see occasional action against guerrilla groups, but most are held in reserve against war breaking out between Zones. The few that are used are most often seen on the Zaire-Paris and Beijing-Vancouver borders, where escalating hostility between rival AIs has led to skirmishes.

Brain: Mainframe, neural-net, hardened (750 lbs., 15 cf, $1,000,000, 1 KW, Complexity 6, 65 points).

Sensors: Two sets of basic sensors with telescopic zoom 4, thermograph vision, laser rangefinder, 360-degree vision, independently focusable vision, 3-in-one scanner, super-hearing (each 7.5 lbs., .15 cf, $19,500, total 159 points).

Communicator: Basic communicator with long-range radio, lasercom, infrared com, IFF (10.25 lbs., .205 cf, $3,425, 32 points).

Arm Motors: No arms or legs (-50 points).

Propulsion: Tracked drivetrain with 2,000 KW output (6,060 lbs., 121.2 cf, $121,200, 2,000 KW).

Weaponry: Gatling laser, concealed (75 lbs., 3.75 cf, $20,000, LR 0). Particle beam cannon (5,240 lbs., 104.8 cf, $275,200, LR -1). Four concealed auto lasers (each 45 lbs., 2.25 cf, $5,000, LR 0). 300 points.

Accessories: None.

Cargo: 60 cf.

Power: Power requirement 2,001 KW. Nuclear power unit with 2,001 KW output (4,052 lbs., 40.52 cf, $810,400, 20 points). Endurance one year (10 points). 200 rE cells (4,000 lbs., 40 cf, $400,000) store 54,000,000 KWS. The rE cells provide extra power for energy weapons after their own cells are drained: each particle-beam shot drains 1,620,000 KWS. Each auto laser shot drains 600 KWS. Each Gatling laser shot drains 3,600 KWS.

Subassemblies: Six "heads": four "anti-personnel turrets" on side of body, two facing right, two facing left; one "main turret" (with full rotation) atop body; one "secondary turret" (with full rotation) atop main turret. Body, main and secondary turret each have 60 degrees of slope on front, right and left faces.

Head Design: Secondary turret houses communicator, Gatling laser and .045 cf empty space and has 180-degree slope
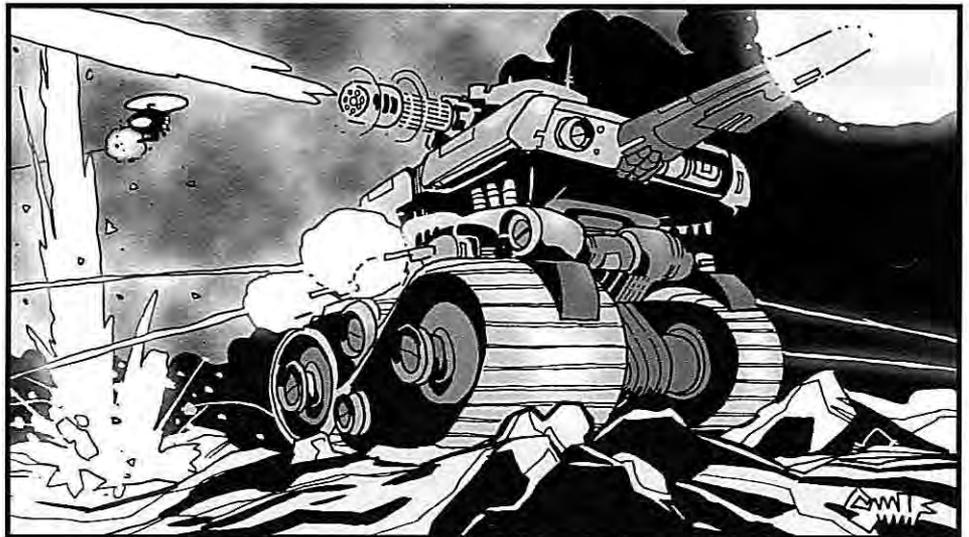
(10 cf). Main turret houses particle beam, one set of sensors, .2 cf for secondary turret rotation, .85 cf empty space and has 180-degree slope (265 cf). Anti-personnel turrets each house one auto laser (2.25 cf).

Body Design: Body houses brain, second set of sensors drivetrain, nuclear power unit, rE cells, cargo, 53 cf for turret rotation, .13 cf empty space and has a total of 180 degrees slope (825 cf).

Track Design: 495 cf.

Area: Main turret 250, secondary turret 30, AP turrets 10 each, body 600, tracks 400, total surface area 1,320.

Structure: Extra-heavy (7,920 lbs., $660,000).

Hit Points: Main turret 1,500, secondary turret 180, AP turrets 60 each, body 3,600, tracks 1,200 (for each of four tracks).

Armor and Threat Protection: DR 1,200 laminate armor (95,040 lbs., $9,504,000, LR 0, 4,788 points) with PD 4 (100 points). Slope increases protection to PD 6, DR 2,400 on front, right and left of both the body (823 points) and the main and secondary turrets. Stealth and IR cloaking (1,320 lbs., $198,000, 6 points). Basic chameleon (264 lbs., $52,800, 15 points). Sealed ($13,200, 20 points). 4,688

Statistics: Design weight 124,926.25 lbs. (62.46 tons). Total volume 1,604 cf. Price $13,117,225. Body ST 7,200, no arm ST (2,256 points), DX 11 (10 points), IQ 10 (0 points), HT 11/3,600 (17,955 points). Ground Speed 33.95, Cannot float (12.5 points).

Model Point Cost: 26,521.5 / 5 = 5,304.3 points.

Users: All Zones but Luna and Orbital possess Juggernauts.

Usual Programs: Combat Reflexes, Datalink, Electronics Operation, Encryption, Full Coordination 2, Gunner, Navigation, Tactics (C6),

XAU-04 "Vulture" (TL9)

This jet-powered attack vertol resembles a skinny attack helicopter with jet pods instead of rotors. Like the Juggernaut, the Vulture is a veteran of the Final War where it served as a tank killer and reconnaissance aircraft. Their high mobility and firepower have kept them in service, and they are based in citadels, ready to respond to any call for armed assistance. A Vulture's rocket launchers are typically equipped with rockets using chemical (nerve gas or Nanoburn) or fragmentation warheads.

Statistics: See p. RO116.

Users: All Zones other than Luna and Orbital use Vultures.

Usual Programs: Combat Reflexes, Datalink, Electronics Operation, Encryption, Full Coordination 1, Gunner, Navigation, Tactics.

XNU-05 "Myrmidon" (TL9)

This combat robot was built midway through the Final War to use the large stocks of human weaponry and military vehicles. Although humanoid and man-sized, a Myrmidon's body is obviously mechanical, and it has no real face, only a pair of eyes and a speaker grid in a skull-like head. Myrmidons are deployed against guerrilla concentrations or to protect very-high-security installations such as citadels. Since it lacks heavy built-in weapons, the robot will carry a hand-held rifle or other weapon.

Brain: Standard (20 lbs., .4 cf, $7,500, Complexity 4, -5 points).

Sensors: Basic sensors with thermograph (1.5 lbs., .03 cf, $6,000, 20 points).

Communicator: Basic communicator with infrared com and IFF (.75 lbs., .015 cf, $625, 20 points).

Arm Motors: Two arm motors, ST 20 (each 3 lbs., .06 cf, $6,000, .1 KW).

Propulsion: Leg drivetrain, .375 KW, with two leg motors (15 lbs., .3 cf [.15 cf per motor], $3,000, .375 KW).

Weaponry: Crushing jaw with ST 10 (1 lb., .05 cf, $2,000, .1 KW, LR 6). Electrolaser, concealed (1.5 lb., .075 cf, $600, LR 3). 16 points.

Power System: Power requirement .675 KW, cheap nuclear power unit with .675 KW output (46.75 lbs., .4675 cf, $2,000, 20 points). rD cell (5 lbs., .05 cf, $500, 27,000 KWS). Endurance one year (10 points). Electrolaser can draw on rD cell, using 270 KWS of power per shot.

Subassemblies: Two legs, two arms, head.

Arm Design: Right arm houses arm motor, electrolaser and .025 cf empty space (.16 cf). Left arm houses arm motor and .1 cf empty space (.16 cf).

Head Design: Houses sensors, communicator, crushing jaw and .205 cf empty space (total .3 cf).

Body Design: Houses brain, nuclear power unit, rD cell, .03 cf for head rotation and .5525 cf empty space (1.5 cf).

Leg Design: Each leg houses leg motor and .3 cf empty space (.45 cf).

Area: Arms 2 each, head 3, legs 4 each, body 8, total surface area 23.

Structure: Heavy, expensive (77.625 lbs., $9,200).

Hit Points: Arms 12 each, head 9, legs 12 each, body 24.

Armor and Threat Protection: Metal armor, DR 30 (69 lbs., $1,380, LR 1, 90 points) with PD 4 (100 points). Sealed $230 (20 points).

Statistics: Design weight 244.125 lbs. (.122 ton). Total volume 3.02 cf. Price $45,035. Body ST 20, arm ST 20 (110 points), DX 10 (0 points), IQ 7 (-20 points), HT 12/24 (80 points). Ground Speed 7.01, cannot float (0 points).

Model Point Cost: 461 / 5 = 92.2 points.

Users: All Zones, but very few in Luna or Orbital.

Usual Programs: Beam Weapons, Encryption, Gunner, Guns.

XAU-06 "Hoplite" (TL9)

When the AIs saw a need to replace the obsolete *Vanguard* with a TL9 fire-support robot, they built the Hoplite. It is an armored humanoid giant equipped with numerous built-in weapons and a rocket pack, and is optimized for urban com-

bat. Its rockets allow it (briefly) to fly, and Hoplites will often use them to descend from Wraith aircraft or to leap up or down buildings or over obstacles in order to gain tactical surprise.

Brain: Microframe, compact, neural-net, reflex booster +1 DX (50 lbs., 1 cf, $120,000, .1 KW, Complexity 5, 65 points).

Sensors: Basic sensors with thermograph, laser rangefinder, radscanner and no sense of taste/smell (2.8 lbs., .056 cf, $6,250, 25 points).

Communicator: Basic communicator with disturbing voice, infrared com, IFF (.75 lbs., .015 cf, $500, 5 points).

Arm Motors: Two arm motors each ST 80 with cheap, bad grip options (each 24 lbs., .48 cf, $6,000, .4 KW power). -10 points.

Propulsion: 2.1 KW leg drivetrain (84 lbs., 1.68 cf [.84 cf per leg], $16,800, 2.1 KW). Fusion rocket with 2,240 lbs. thrust (162 lbs., 3.24 cf, $16,200, uses 44.8 gph water).

Weaponry: Four sharp claws, one per arm and leg (each $200, LR 5). Portable railgun (45 lbs., .9 cf, $4,800, LR 0). Autolaser (45 lbs., .9 cf, $5,000, LR 0). Six light rocket launchers (each 15 lbs., .3 cf, $1,000, LR 0). 248 points.

Accessories: Inertial compass (.5 lbs., .01 cf, $125). 5 points.

Power: Requires 3 KW power. Cheap nuclear power unit with 3 KW output (70 lbs., .7 cf, $2,000, 20 points), endurance one year (10 points). rE cell (20 lbs., .2 cf, $2,000) provides extra energy for laser (good for 9,000 additional shots). Self-sealing tank with 4.4 gallons water (41.8 lbs., .66 cf, $176). Two self-sealing tanks each with 2.2 gallons water (each 20.9 lbs., .33 cf, $88). Fuel tanks provide reaction mass for 12 minutes flight.

Subassemblies: Two arms, head, two pods, two legs. 30 degree slope on head's front, back, right and left, and 30 degree slope on body's front, right and left.

Arms: Right arm houses arm motor and railgun (1.38 cf). Left arm houses arm motor and autolaser (1.38 cf).

Head: Houses brain, sensors and communicator and .029 cf empty space (1.1 cf increased by slope to 1.76 cf).

Body: Houses nuclear power unit, rE cell, fusion rocket, self-sealing tank with 4.4 gallons water, .176 cf space for head rotation, .024 empty space (5 cf increased to 7 cf by slope).

Pods: Right pod houses three light rocket launchers (.9 cf). Left pod houses three light rocket launchers (.9 cf).

Legs: Right leg houses leg motor, 2.2 gallon fuel tank and .93 cf empty space (2.1 cf). Left leg is identical.

Area: Each arm 8, head 9, body 22, each pod 6, each leg 10, total surface area 79.

Structure: Heavy (355.5 lbs., $15,800).

Hit Points: Each arm 48, head 27, body 66, each pod 18, each leg 30.

Armor and Threat Protection: DR 140 metal armor (1,106 lbs., $22,120, LR 1, 520 points) with PD 4 (100 points). Slope increases this to PD 5, DR 210 on front, right and left body
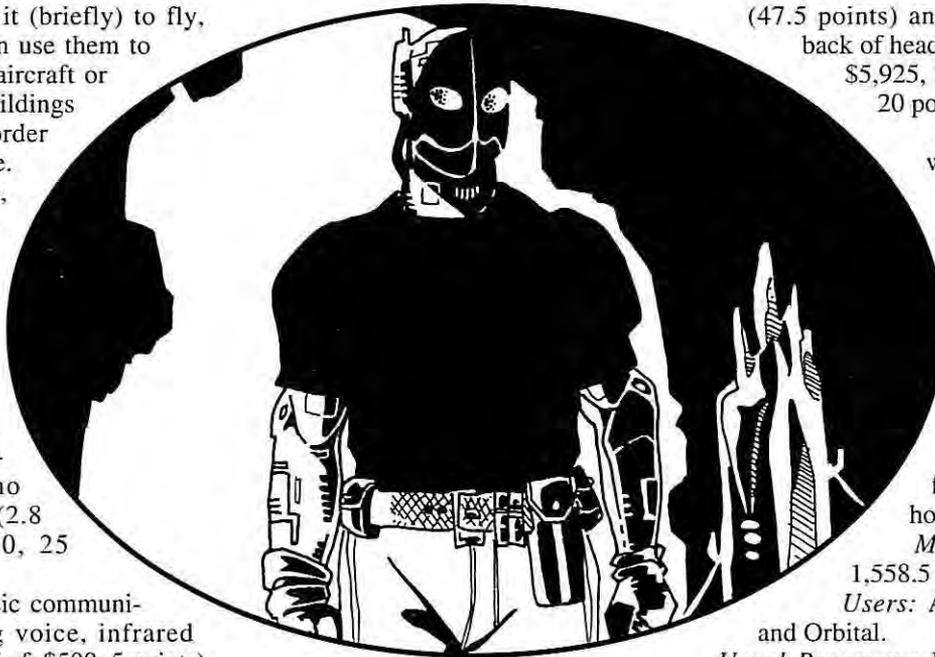
(47.5 points) and front, right, left and back of head. IR cloaking (39.5 lbs., $5,925, 3 points). Sealed ($790, 20 points).

Statistics: Design weight 2,202.65 lbs. (1.1 tons). Total volume 17.52 cf. Price $237,062. Body ST 80, Arm ST 80 (200 points), DX 11 (10 points), IQ 9 (-10 points), HT 12/66 (290 points). Ground speed 5.52, cannot float, vectored thrust flight speed 29.77, can hover (75 points).

Model Point Cost: 1,558.5 / 5 = 311.7 points.

Users: All Zones except Luna and Orbital.

Usual Programs: Beam Weapons, Datalink, Encryption, Full Coordination 1, Gunner, Guns, Tactics.

XAU-07 "Bishonen" (TL9)

This was originally an experimental human design, the "M-7 Muramasa," built for the JSDF by Shiden Corporation. Only a few prototypes were built before the Final War. The design was rediscovered and introduced by Zone Tokyo after the Superbot rebellion and is now in limited production as an elite exterminator robot.

A Bishonen is humanoid but clearly a machine, albeit a sleek and humanly-proportioned one. Its face has two jewel-like eyes but lacks a mouth or nose. Two stubby antennae serve as ears. Bishonen prefer to operate at night when their humanoid silhouettes can be mistaken for a person, especially if they don cloaks or ponchos. Most often they work alone or in pairs.

Statistics: See p. RO115.

Users: Tokyo uses most of the Bishonen, but some other Zones, such as Zaire, make limited use of the design.

Useful Programs: Acrobatics, Beam Weapons, Camouflage, Combat Reflexes, Computer Operation, Computer Programming, Data Recovery, Datalink, Demolitions, Encryption, Karate, Navigation, Staff, Stealth, Tactics, Tracking, Traps.

XAU-08 "Tarantula" (TL9)

After the Final War ended, the AIs found less use for large fighting robots like the Juggernauts and Hoplites. What was needed was a smart hunting machine to dig the surviving humans out of their holes among the ruins. The Tarantula was the result.

These eight-limbed robots resemble man-sized metallic spiders. Their sensors are especially acute: a thermograph that can see through thin walls, a bioscanner, and superior hearing and smell. They are equipped for investigative work, and will often play "detective" at the site of a guerrilla attack, studying physical evidence and attempting to determine how best to respond. With their neural-net brains, Tarantulas are capable of learning by experience. Although not programmed with human-like personalities, many have developed their own behavior patterns. Some seem to enjoy the thrill of the hunt, and play cat-and-mouse games with their human victims before killing them. Tarantulas usually have soft voices, often strangely sweet.

Brain: Standard, neural-net, reflex booster +1 DX (20 lbs., .4 cf, $22,500, Complexity 4, 65 points).

Sensors: Basic sensors with laser rangefinder, thermograph, peripheral vision, acute hearing +4, parabolic hearing 3, ultrasonic hearing, infrasonic hearing, three-in-one scanner (5.5 lb., .11 cf, $13,750, 100 points).

Communicator: Basic communicator with superior voice, infrared com, IFF (.75 lbs., .015 cf, $1,875, 30 points).

Arm Motors: Two ST 15 arm motors, cheap, bad grip (4.5 lbs., .09 cf, $1,125, .075 KW). -10 points.

Propulsion: .3 KW leg drivetrain with six legs (12 lbs., .24 [.04 cf per leg], $600, .3 KW).

Weaponry: Long talons on right and left arms with monowire blades on each ($3,000, LR 3). Assault Razergun (5 lbs., .1 cf, $3,000, LR 1). 56 points.

Accessories: Spray gun (1 lb., .05 cf, $50). Normal load is nerve gas, riot gas or Nanoburn. Inertial Compass (.5 lbs., .01 cf, $125). Lockpick ($50). Crimescanner (4 lbs., .08 cf, $3,000). 5 points.

Power System: .45 KW required. rE cell (20 lbs., .2 cf, $2,000, stores 270,000 KWS, 20 points). Endurance 166 hours, 39 minutes (5 points).

Subassemblies: Head (limited rotation), two arms (right and left), six legs.

Arm Design: Right arm houses lockpick, arm motor and talons (.09 cf). Left arm houses arm motor and talons (.09 cf).

Head Design: Head houses sensors, razergun, crimescanner, inertial compass (.3 cf).

Body Design: Body houses brain, communicator, spray tank, rE cell, rotation for head, .005 cf empty space (.7 cf).

Leg Design: Each leg houses a leg motor and .03 cf empty space (.07 cf).

Area: Each arm 1.5, head 3, body 5, each leg 1.5, total surface area 20.

Structure: 60 lbs., $2,000.

Hit Points: Each arm 5, head 5, body 8, each leg 2.

Armor and Threat Protection: Laminate armor DR 60 (72 lbs., $7,200, LR 2, 239 points) with PD 4 (100 points). Sealed ($200, 20 points). Instant Chameleon (10 lbs., $2,000, 30 points). Infrared cloaking (10 lbs., $1,500, 3 points).

Statistics: Design weight 229.75 lbs. (.115 tons). Price $65,100. Total volume 1.6 cf. Body and arm ST 15 (60 points). DX 11 (10 points), IQ 8 (-15 points), HT 12/8 (0 points). Ground Speed 9.69, cannot float (10 points).

Model Point Cost: 828 / 5 = 165.6 points.

Users: All Zones except London, Luna and Orbital.

Useful Programs: Brawling, Camouflage, Combat Reflexes, Computer Operation, Datalink, Encryption, Guns, Intelligence Analysis, Interrogation, Stealth, Tactics, Tracking.

XNU-09 "Stalker" (TL9)

Production of large numbers of the Tarantula unit proved too expensive, so they are supplemented by the Stalker. This machine is a light patrol and security robot. It has a small body with three long legs topped by a large wedge-shaped turret. Weapons and sensors protrude from the turret and body. Stalker electrolasers give them the ability to stun as well as kill, so they are often used to control laborers or to capture new ones. Stalkers are primarily used for security at slave camps and for "rat hunts" against ordinary human survivors. Their lack of heavy armor makes them vulnerable to military weapons.

Brain: Small (1 lb., .02 cf, $500, Complexity 3, -5 points).

Sensors: Basic sensors with night vision, infrared, color blindness and no sense of smell or taste (1 lb., .02 cf, $3,800, 0 points).

Communicators: Basic communicator with disturbing voice, infrared com, IFF (.75 lbs., .015 cf, $500, 10 points).

Arm Motors: None (-30 points).

Propulsion: Leg drivetrain with .2 KW motive power and three legs (8 lbs., .16 cf [.053 per leg motor], $800, .2 KW).

Weaponry: Electrolaser rifle (5 lbs., .1 cf, $1,800, LR 3). Heavy blaster pistol (4.5 lbs., .09 cf, $2,500, LR 2). Weaponry costs 28 points. Laser sight for blaster pistol (.25 lbs., .0125 cf, $125).

Accessories: Flashlight (.5 lbs., .01 cf, $5).

Power System: .2 KW routine power requirement. Uses rD cell (5 lbs., .05 cf, $500, 27,000 KWS, 20 points). Endurance 37.5 hours (0 points). Blaster or electrolaser can also draw power from the rD cell: 169 KWS per blaster shot or 540 KWS per electrolaser shot).

Body and Subassemblies: Head (full rotation), three legs. Head has 60 degree front slope. Body has 30 degree slope on front, back, right and left.

Head Design: Houses basic sensors, heavy blaster pistol, laser sight, flashlight and .0675 cf empty space (total .2 cf, increased to .25 cf thanks to 60 degree slope).

Body Design: Houses brain, communicator, electrolaser, rD cell, .05 cf empty space for head rotation and .065 cf unused cargo space (total .3 cf increased to .48 cf with 120 degrees slope).

Leg Design: Three legs; each leg houses a leg motor and .047 cf empty space (total .1 cf per leg).

Area: Head 2.5, body 4, legs 1.5 each, total 11.

Structure: Medium (33 lbs., $1,100).

Hit Points: Body 6, head 4, legs 2 each.

Armor Design: DR 10 metal (11 lbs., $220, LR 4, 30 points) with PD 3 (75 points). Slope on head increases it to PD 6, DR 20 vs. frontal attacks. Slope on body increases it to PD 4, DR 15 (27 points) versus attacks from the front, right, left or back.

Camouflage and Threat Protection: Waterproof ($22).

Design Weight: 70 lbs. (.035 tons), 1.03 cf, 4.9' tall. Price $11,872. Body ST 12, no arm ST 0 (12 points), DX 9 (-10 points), IQ 6 (-30 points), HT 12/6 (-10 points). Ground Speed 11.95 but cannot float (20 points).

Model Point Cost: 113 / 5 = 22.6 points.

Users: All Zones save Luna and Orbital.

Programs: Beam Weapons, Encryption.

XNU-10 "Scorpion" (TL9)

Zones Tokyo and Vancouver found that rats and feral dogs were interfering with security operations inside hyperfac complexes – they were being mistaken for humans, chewing on wiring and so on. Use of regular combat robots was deemed a waste of resources and their heavy weapons too likely to damage delicate equipment. The Scorpion was the solution.

The rat-sized Scorpion has an elongated body, eight segmented legs and a large stinger-equipped tail, while atop the body is mounted a turret-like head. Its chameleon system enables a motionless Scorpion's skin to blend in with its surroundings, making it good at ambushes. Inhumanly patient, it uses its infrared vision to locate warm-blooded prey and a variety of close-combat weapons to dispatch them. While no match for an alert human, it can easily dispatch a sleeping victim!

Brain: Tiny, compact (.125 lbs., .0025 cf, $200, Complexity 2, -5 points).

Sensors: Basic sensors with infrared, peripheral vision, low-res vision, low-res hearing, no sense of smell/taste (.6 lbs., .012 cf, $3,250, -10 points).

Communicator: Basic communicator with mute and IFF (.1 lbs., .002 cf, $300, -5 points).

Arm Motor: ST 1 arm motor, cheap, striker, extra-flexible (.3 lbs., .006 cf, $60, .005 KW). -15 points.

Propulsion: Leg drivetrain with eight legs, .0125 KW motive power (.5 lb., .01 cf [.00166 per motor], $25).

Weaponry: Cutting jaw with ST 1 ($300, .1 lb., .005 cf, .01 KW, LR 5). Holdout laser (.25 lbs., .005 cf, $500, LR 4). Drug injector (.25 lbs., .005 cf, $25, LR 6). Monowire talons on two legs ($2,000, LR 3). 24 points.

Accessories: None.

Power: .0275 kW power requirement. One rC cell (1 lb., .01 cf, $100, stores 2,700 KWS, 20 points), endurance 27 hours, 16 minutes (0 points).

Subassemblies: Eight legs, head (limited rotation), arm.

Arm: Houses drug injector, arm motor (.011 cf)

Head: Houses cutting jaw, holdout laser and sensors (.022 cf).

Body: Houses rC cell, communicator, brain, .0022 cf for head rotation and .0133 empty space (.03 cf).

Legs: Six legs, each housing leg motor and .00134 cf empty space (.003 cf each).

Area: Arm .5, Body 1, head .5, Legs .5 each, total 5.

Structure: Extra-Light, expensive (2.8125 lbs., $250).

Hit Points: Body 1, head 1, arm 1, legs 1 each.

Armor and Threat Protection: DR 2 laminate armor (.6 lbs., $60, LR 6, 8 points) with PD 2 (50 points). Basic Chameleon (1 lb., $200, 15 points). Sealed (20 points, $50).

Biomorphics: Unattractive (-5 points).

Statistics: Design weight 7.6375 lbs. (.0038 tons). Volume .081 cf. Price $7,320. Body and arm ST 1 (-80 points). DX 9 (-10 points). IQ 5 (-40 points). HT 12/1 (-35 points). Ground speed 10.88, cannot float (15 points).

Model Point Cost: -53 points.

Users: Scorpions are most common in the urban sprawl in Zone Tokyo and Vancouver hyperfacs, but have been exported to all Zones except Luna.

Useful Programs: Beam Weapons, Brawling, Encryption, Stealth.

RECONNAISSANCE UNITS

These are designed for scouting and infiltration.

RNU-01 "Spybot" (TL8)

A small, cheap and expendable peanut-shaped drone helicopter, the basketball-sized Spybot is the most common tactical reconnaissance robot in use. It was based on a human design, the Canadian Argus 1 recon drone. Besides their military mission, Spybots are also used to provide perimeter security at robot installations and to perform inspections of pipelines, rail lines and so on.

Statistics: Same as Argus 1 on p. RO111.

Users: Every Zone except Luna and Orbital uses the Spybot.

Useful Programs: Datalink, Electronics Operation, Encryption.

RNU-02 "Vermin" (TL9)

The success of the Scorpion (p. 79) led to the development of this camouflaged reconnaissance machine. A Vermin is a small biomorphic robot that looks (more or less) like a large rat or squirrel. Close observation will reveal it to be a fake. So will picking it up: it is heavier than a live rodent.

Vermin operating on their own will usually be ordered to locate human encampments, report their location if in radio range, and then attack any sleeping, unarmored targets with their drug injectors or by jabbing with their monowire foreclaws.

Brain: Tiny, compact (.125 lbs., .0025 cf, $200, Complexity 2, -5 points).

Sensors: Basic sensors with infrared vision, peripheral vision, low-res vision, low-res hearing, no sense of smell/taste (.6 lbs., .012 cf, $3,250, -10 points).

Communicator: Basic communicator with mute and IFF (.1 lbs., .002 cf, $300, -5 points).

Arm Motor: None (-30 points).

Propulsion: Leg drivetrain with 4 legs, .0125 KW motive power (.5 lb., .01 cf [.0025 per motor], $25).

Weaponry: Cutting jaw with ST 1 ($300, .1 lb., .005 cf, .01 KW, LR 5), Drug injector (.25 lbs., .005 cf, $25, LR 6), monowire talons on two legs ($2,000, LR 3). 21 points.

Accessories: None.

Power: Power requirement .0225 KW. One rC cell (1 lb., .01 cf, $100, stores 2,700 KWS, 20 points), endurance 33 hours, 20 minutes (0 points).

Subassemblies: Four legs, head (limited rotation).

Head: Houses cutting jaw, drug injector and sensors (.022 cf).

Body: Houses rC cell, communicator, brain, .0022 cf for head rotation and .0113 empty space (.028 cf).

Legs: Four legs, each housing leg motor and .0017 cf empty space (.0042 cf each).

Area: Body .5, head .5, Legs .5 each, total 3.

Structure: Extra-Light, expensive (1.6875 lbs., $150).

Hit Points: Body 1, head 1, legs 1 each.

Armor and Threat Protection: DR 1 laminate (.18 lbs., $18, LR 6, 4 points) with PD 1 (25 points). Sealed (20 points, $30).

Biomorphics: Fur (.75 lbs., $150), Mannequin flesh (.6 lbs., $150).

Statistics: Design weight 5.8925 lbs. (.0029 tons). Volume .0668 cf. Price $6,698. Body ST 1, no arm ST (-80 points). DX 9 (-10 points). IQ 5 (-40 points). HT 12/1 (-35 points). Ground speed 12.45, cannot float (20 points).

Model Point Cost: -104 points.

Users: All Zones except Orbital and Luna use the Vermin.

Useful Programs: Brawling, Encryption, Stealth and sometimes Pet.

RNU-03 "Changeling" (TL9)

Sometimes nicknamed the "baby bomb," this android appears to be an infant child. Changelings have mostly been used as part of Zaire's terror attacks in Zone Washington and London. They also sometimes work as partners of Redjacks or Liliths. Changelings attack by injecting poison. When in danger of capture or close to an important target, they explode with 72d concussion damage and fragments causing 2d cutting damage.

Brain: Small (1 lb., .02 cf, $500, Complexity 3, -5 points).

Sensors: Basic sensors (1 lb., .02 cf, $5,000, 0 points).

Communicator: Basic communicator (.5 lbs., .01 cf, $250, 15 points).

Arm Motors: Two ST 2 arm motors (each .3 lbs., .006 cf, $600, .01 KW).

Propulsion: .03 KW leg drivetrain with two leg motors (1.2 lbs., .024 cf [.012 cf per leg], $240, .03 KW).

Weaponry: Crushing jaw, ST 1 ($200, .1 lb., .005 cf, .01 KW, LR 6). Drug injector, concealed ($25, .25 lbs., .0125 cf, LR 6). 6 points.

Accessories: Self-destruct, one pound of TL9 explosive (1 lb., .02 cf, $80).

Power System: .06 KW required. Two rC cells (2 lbs., .02 cf, $200, stores 5,400 KWS, 20 points). Endurance 25 hours (0 points).

Subassemblies: Head, two arms (right and left), two legs.

Arm Design: Right arm houses ST 2 arm motor (.006 cf) and .004 cf empty space (.01 cf). Left arm identical (.01 cf).

Head Design: Houses brain, basic sensors, communicator, crushing jaw and .045 cf empty space (.1 cf).

Body Design: Houses self-destruct, 2 rC cells, .01 cf space for head rotation, .2 cf empty space (.25 cf).

Leg Design: Each leg houses leg motor and .063 cf empty space (.075 cf).

Surface Area: Right and left arm .5 each, head 1.5, body 2.5, right and left leg 1.5 each, total surface area 8.

Structure: Light, expensive (9 lbs., $800).

Hit Points: Right and left arm 1 each, head 1, body 2, right and left leg 1 each.

Armor: None.

Biomorphics: Realistic flesh (4 lbs., $1,600).

Statistics: Design weight 19.65 lbs. (.0098 tons). Volume .52 cf. Price $10,030. Body and Arm ST 2 (-70 points), DX 9 (-10 points), IQ 6 (-30 points), HT 12/2 (-30 points), Ground Speed 7.00 (5 points). Can float.

Model Point Cost: -99 points.

User: Mostly Zone Zaire and Moscow; possibly other Zones. Moscow sometimes issues Changelings to agents.

Useful Programs: Encryption, Limited Personality Simulation.

RAU-04 "Hovercat" (TL9)

This robot hovercraft has a rectangular body atop an air cushion and a small sensor-studded head mounted forward on its body, like a beast's. A long radio antennae protudes from its back like a tail. It can extend a pair of retractable whisker-like manipulator tentacles when necessary.

These swift 'bots regularly accompany exterminator squads to provide high-speed up-to-the-minute reconnaissance, or guide robotruck convoys through guerrilla-infested areas. When a robot or installation has been disabled, a Hovercat will often be dispatched to the scene, where it uses its SQUID to interrogate the knocked-out 'bot's memory to try to find out what really happened. Often they act as an AI's or Overseer's troubleshooters.

Brain: Standard, neural-net (20 lbs., .4 cf, $15,000, Complexity 4, 65 points).

Sensors: Basic sensors with thermograph, laser rangefinder, three-in-one scanner (5 lbs., .1 cf, $9,250, 55 points).

Communicator: Basic communicator with bullhorn, long-range radio, IFF, infrared com (5.3 lbs., .106 cf, $950, 22 points).

Arm Motors: Two ST 1 arm motors, retractable, extra-flexible, micromanipulator (each .45 lbs., .009 cf, $4,500, .01 KW). 5 points.

Propulsion: Ducted fan with vectored thrust, 50 KW motive power, 200 lbs. thrust (57 lbs., .57 cf, $2,280, 50 KW), 1,000 lbs. lift with GEV skirt.

Weaponry: None.

Accessories: Spotlight (2.5 lbs., .05 cf, $25). SQUID (20 lbs., .4 cf, $25,000). Self-destruct (1 lb., .02 cf, $80). Inertial compass (.5 lbs., .01 cf, $125). 10 points.

Cargo: 2.2 cf cargo space. Usually carries a few Duct Creepers and a couple of spare rE cells – typically 110 lbs.

Power System: Power requirement 50.02 KW. TL9 nuclear power unit with 51 KW output (152 lbs., 1.52 cf, $30,400, 20 points). Endurance one year (10 points).

Subassemblies: Two arms, Head (limited rotation), GEV Skirt.

Arms: Each houses arm motor and .001 cf empty space (.01 cf each).

Head: Houses SQUID, sensors, both retractable arms (.52 cf).

Body: Houses brain, mass storage, sensors, spotlight, SQUID, inertial compass, communicator, ducted fans, self-destruct, power plant, .052 cf space for head rotation and 2.2 cf cargo space and .072 cf empty space (5 cf).

GEV Skirt: 3 cf.

Surface Areas: Head 4, Arms .5 each, body 18, GEV skirt 13, total surface area 36.

Structure: Light, expensive (40.5 lbs., $3,600).

Hit Points: Head 3, Arm 1, body 14, GEV skirt 10.

Armor and Threat Protection: DR 15 laminate (32.4 lbs., $3,240, LR 4, 60 points) with PD 3 (75 points). Sealed ($360, 20 points).

Statistics: Design weight 337.1 lbs. (.168 tons) or 447.1 lbs. (.223 tons) loaded, volume 8.54 cf (-10 points). Price $99,310. Body ST 0 (-100 points), arm ST 1 (3 points). DX 10 (0 points). IQ 9 (-10 points). HT 12/14 (30 points). Ground speed 0, water speed 0, can float, GEV flight speed 168.5 empty, 153.93 loaded (70 points). Hovers at 2-3 feet off the ground.

Model Point Cost: 328 / 5 = 65.6 points.

Users: All Zones except Luna and Orbital.

Useful Programs: Combat Reflexes, Computer Operations, Computer Programming, Data Recovery, Datalink, Electronics Operation, Encryption, Mechanic, Navigation.

Mechrider Variant: Due to its shape and speed, the Hovercat is very popular with mechrider nomads. With a bolted-on saddle and some 250 lbs. of payload (a typical mechrider and cargo; lighter riders usually carry more), it weighs 592.1 lbs. with a GEV flight Speed (loaded) of 132.

RAU-05 "Redjack" (TL9)

These androids look like adult human males. Redjacks infiltrate guerrilla groups to locate human bases, then summon other combat robots or assassinate vital targets such as resistance leaders. Zaire also uses Redjacks for terrorist attacks on Zones Washington and London, while Moscow places them within its Info-Commando forces to monitor its human operatives.

A few special-purpose "doppelgänger" variants of the Redjack have been built, with their features, size and weight adjusted to duplicate individual humans.

Brain: Standard with compact, neural-net and genius options (10 lbs., .2 cf, $210,000, Complexity 5, 65 points).

Sensors: Basic sensors with thermograph option (1.5 lbs., .03 cf, $6,000, 20 points).

Communicator: Basic communicator with infrared com and IFF (.75 lbs., .015 cf, $625, 20 points).

Arm Motors: Two arm motors, cheap, ST 20 (each 6 lbs., .12 cf, $3,000, .1 KW).

Propulsion: Leg drivetrain, .375 KW, with two leg motors (15 lbs., .3 cf [.15 cf per motor], $3,000, .375 KW).

Weaponry: Electrolaser, concealed (1.5 lb., .075 cf, $600, LR 3). Crushing jaw with ST 10 (1 lb., .05 cf, $2,000, .1 KW, LR 6). Total weaponry cost 16 points.

Power System: .675 KW power requirement. Nuclear power unit with .675 KW output (8.1 lbs., .081 cf, $20,000, 20 points). rD cell (5 lbs., .05 cf, $500, 27,000 KWS). Endurance one year (10 points). Electrolaser can also draw on D cell, using 270 KWS of power per shot.

Subassemblies: Two legs, two arms, head (limited rotation).

Arm Design: Right arm houses arm motor, electrolaser and .005 cf empty space (.2 cf). Left arm houses arm motor and .08 cf of empty space (.2 cf).

Head Design: Houses brain, sensors, communicator, crushing jaw and .105 cf empty space (total .4 cf).

Body Design: Houses nuclear power unit, rD cell, .04 cf for head rotation and 1.4425 cf empty space (2 cf).

Leg Design: Each houses leg motor and .45 cf empty space (.6 cf).

Area: Arms 2.5 each, head 4, legs 5 each, body 10, total surface area 29.

Structure: Heavy, expensive (97.875 lbs., $11,600).

Hit Points: Arms 15 each, head 12, legs 15 each, body 30.

Armor and Threat Protection: Laminate armor, DR 30 (52.2 lbs., $5,220, LR 1, 150 points) with PD 4 (100 points). Sealed $290 (20 points).

Biomorphics: Realistic Flesh (14.5 lbs., $5,800).

Statistics: Design weight 219.425 lbs. (.11 tons). Total volume 4 cf. Price $268,635. Body ST 21 (120 points), arm ST 20 (-5 points), DX 10 (0 points), IQ 9 (-10 points), HT 12/30 (110 points). Ground Speed 7.38, cannot float (0 points).

Model Point Cost: 656 points.

Useful Programs: Acting, Armoury, Beam Weapons, Brawling, Combat Reflexes, Computer Operations, Computer Programming, Datalink, Demolitions, Disguise, Driving, Electronics Operation, Encryption, First Aid, Full Coordination 1, Gunner, Guns, Interrogation, Limited Personality Simulation, Motorcycle, Navigation, Tactics, Tracking.

Users: The Redjack is in limited production in every Zone save London, Luna, Mexico City and Orbital. Denver, Moscow, Vancouver and Zaire are believed to use most of these androids.

Upgrade Model: The new RAU-07 is identical except that it has surface sensors, living flesh, a sex implant and often a Full Personality Simulation. Cost is $310,335. This model is still rare; the most common users are Moscow and Washington.

RAU-06 "Lilith"

This biomorphic infiltration android is built to look like a female human. It is basically a smaller and lighter version of the Redjack, not quite as tough, but a bit faster. It is rumored that "doppelgänger" versions of the Lilith are sometimes constructed with their appearance, size and weight modified to closely or exactly duplicate particular humans.

Brain: Standard with compact, neural-net and genius options (10 lbs., .2 cf, $210,000, Complexity 5, 65 points).

Sensors: Basic sensors with thermograph option (1.5 lbs., .03 cf, $6,000, 20 points).

Communicator: Basic communicator with infrared com and IFF (.75 lbs., .015 cf, $625, 20 points).

Arm Motors: Two arm motors, cheap, ST 20 (each 6 lbs., .12 cf, $3,000, .1 KW).

Propulsion: Leg drivetrain, .375 KW, with two leg motors (15 lbs., .3 cf [.15 cf per motor], $3,000, .375 KW).

Weaponry: Cutting jaw with ST 10 (1 lb., .05 cf, $3,000, .1 KW, LR 5). Sharp vibroclaws on each hand, retractable (total $800, LR 3). Total weaponry cost 20 points.

Power System: .675 KW power requirement. Nuclear power unit with .675 KW output (8.1 lbs., .081 cf, $20,000, 20 points). Endurance one year (10 points).

Subassemblies: Two legs, two arms, head (limited rotation).

Arm Design: Right arm houses arm motor (.12 cf). Left arm houses arm motor (.12 cf).

Head Design: Houses brain, sensors, communicator, crushing jaw and .005 cf empty space (total .3 cf).

Body Design: Houses nuclear power unit, .04 cf for head rotation and .7425 cf empty space (1.25 cf).

Leg Design: Each houses leg motor and .25 cf empty space (.4 cf).

Area: Arms 1.5 each, head 3, legs 4 each, body 7, total surface area 21.

Structure: Heavy, expensive (70.875., $8,400).

Hit Points: Arms 9 each, head 9, legs 12 each, body 21.

Armor and Threat Protection: Laminate armor, DR 20 (25.2 lbs., $2,520, LR 2, 80 points) with PD 4 (100 points). Sealed $210 (20 points).

Biomorphics: Realistic Flesh (10.5 lbs., $4,200). Surface Sensors ($10,500).

Statistics: Design weight 154.925 lbs. (.077 tons). Total volume 2.59 cf. Price $272,335. Body ST 24 (145 points), arm ST 20 (-17.5 points), DX 10 (0 points), IQ 9 (-10 points), HT 12/21 (65 points). Ground Speed 8.82, cannot float (10 points).

Model Point Cost: 597.5 points.

Users: The Lilith is thought to be used by every Zone except Luna, London, Mexico City, Orbital and, perhaps, Washington. As with the Redjack, it is believed that Denver, Moscow, Vancouver and Zaire use most of these robots.

Useful Programs: Same as Redjack.

Upgrade Model: The new (and relatively rare) RAU-08 is identical except that it has living flesh, a pheromone emitter, a sex implant and often a Full Personality Simulation. Cost is $303,135 (and 622.5 points).

TECHNICAL ROBOTS

Techbots do maintenance, laboratory work and engineering.

TNU-01 "Loader" (TL8)

A Loader is a wheeled platform equipped with a pair of manipulator arms. It is a common sight at sea-, air- and space ports and around minifacs and robofacs.

Statistics: Same as Marius Mk. IV on p. RO112.

Users: Every Zone uses the Loader.

Useful Programs: Cargo Handling.

TNU-02 "Mechanic" (TL9)

The most common robot seen around robot installations, this is a three foot tall tracked robot with a cylindrical upright body, two large arms and one smaller one, and a one-eyed antennae-studded head. Mechanics are used for maintenance and construction under the guidance of Bossbots or Overseers.

Brain: Standard, dumb (20 lbs., .4 cf, $1,500, Complexity 3, -5 points).

Sensors: Basic Sensors with one eye, microscopic vision, low-res hearing, no sense of taste or smell, radscanner (1.5 lbs., .03 cf, $3,500, -21 points).

Communicators: Basic Communicator, mute, infrared com, IFF (.35 lbs., .007 cf, $425, 0 points).

Arm Motors: Two ST 10 cheap arm motors (each 3 lbs., .06 cf, $1,500, .05 KW). One ST 1 arm motor, cheap, micromanipulator (.3 lbs., .006 cf, $750, .005 KW). 25 points.

Propulsion: Tracked drivetrain with .2 KW motive power (3 lbs., .06 cf, $60, .2 KW).

Weaponry: Buzzsaw, vibro (4 lbs., .08 cf, $125, LR 3). Light laser torch, concealed (1 lb.,. 05 cf, $50, LR 6). 16 points.

Accessories: Integral mechanical or engineer tools (10 lbs., .2 cf, $200). Integral electronics and armoury tools (4 lbs., .08 cf, $800). Flashlight (.5 lbs., .01 cf, $5).

Power System: Requires .305 KW. rE cell (20 lbs., .2 cf, $2,000, 270,000 KWS, 20 points). Endurance 10 days, 5 hours (5 points).

Subassemblies: Head. Three arms (right, left and mini arms; left arm is "off hand"). Tracks (two tracks).

Arm Design: Right arm houses ST 10 arm motor, integral mechanical or engineering tools (.26 cf). Left arm houses ST 10

arm motor, buzzsaw, integral electronics and armoury tools, .04 cf empty space (.26 cf). Small arm houses ST 1 arm motor (.006 cf).

Head Design: Houses sensors, concealed laser torch, communicator, flashlight, .003 cf empty space (.1 cf).

Body Design: Houses brain, rE cell, tracked drivetrain, space for head rotation, .03 cf empty space (.7 cf).

Track Design: .42 cf.

Area: Right and left arm each 2.5, mini arm .5, head 1.5, body 5, tracks 4, total surface area 16.

Structure: 48 lbs., $1,600.

Hit Points: Right and left arm 8 each, mini arm 2, head 2, body 8, two tracks 6 each.

Armor and Threat Protection: DR 5 metal (8 lbs., $160, LR 5, 15 points) with PD 3 (75 points). Sealed ($160, 20 points).

Statistics: Design weight 128.65 lbs. (.063 tons). Volume 1.74 cf. Price $14,335. Body ST 11 (10 points), right and left arm ST 10 (-5 points), mini arm ST 1 (0 points). DX 9 (-10 points). IQ 6 (-30 points). HT 12/8 (0 points). Ground speed 10.69 but cannot float (5 points).

Model Point Cost: 115 / 5 = 23 points.

Users: Every Zone uses the Mechanic.

Useful Programs: Cargo Handling, Electronics Operation, Janitorial, Mechanic.

TNU-03 "Duct Creeper" (TL9)

A Duct Creeper has a spherical headless body, two tool-equipped pincer arms and a single lens in the center of its body housing a laser torch. Duct Creepers perform routine maintenance and repair within robot installations. As the name suggests, they can be found crawling about inside maintenance conduits.

Brain: Tiny (.25 lbs., .005 cf, $100, Complexity 2, -5 points).

Sensors: Basic sensors with blind, deafness, no sense of smell/taste, active sonar with one level and codereader (1.2 lbs., .024 cf, $1,050, -50 points).

Communicator: Basic communicator, mute (.1 lb., .002 cf, $50, -5 points).

Arm Motors: Two arm motors each ST 1, cheap, bad grip, micromanipulator (each .3 lbs., .006 cf, $375, .005 KW). 5 points.

Propulsion: Leg drivetrain with four legs, .02 KW motive power (.8 lbs., .016 cf [.004 cf per leg motor], $40, .02 KW).

Weaponry: Light laser torch (1 lb., .02 cf, $50, LR 6). 5 points.

Accessories: Two integral electronic tools (each 2 lbs., .04 cf, $400).

Power: Power requirement .03 KW. rC cell (1 lb., .01 cf, $100, 20 points) stores 2,700 KW, endurance 25 hours (0 points).

Subassemblies: Body, four legs, two arms (right and left).

Arms: Each arm houses arm motor and integral electronics tools (.046 cf).

Body: Houses brain, sensors, communicator, laser torch, rC cell (.061 cf).

Legs: House leg motors and .0044 cf empty space (.0084 cf each).

Area: Arms 1 each, legs .5 each, body 1, total 5.

Structure: 15 lbs., $500.

Hit Points: Arms 2 each, body 2, legs 1 each.

Armor and Threat Protection: DR 3 metal (1.5 lbs., $30, LR 6, 9 points) with PD 2 (50 points). Sealed ($50, 20 points).

Other Surface Features: Suction pads ($200).

Statistics: Design weight 25.2 lbs. (.0126 tons). Volume .1866 cf. Price $3,720. Body and Arm ST 1 (-80 points), DX 9 (-10 points), IQ 5 (-40 points), HT 12/2 (-30 points), Ground Speed 10.12 but cannot float (15 points).

Model Point Cost: -96 points.

Useful Programs: Electronics Operation, Mechanic.

Users: All Zones use Duct Creepers.

TAU-04 "Bossbot" (TL9)

Nicknamed the "Bossbot" because it is often found in charge of human slave laborers and construction sites, this is a four-tracked robot with a fat body, two large arms and a dome-shaped head. It is slightly larger than a man and considerably stronger.

Brain: Standard, genius, high-capacity, neural-net (20 lbs., .4 cf, $157,500, Complexity 5, 65 points).

Sensors: Basic sensors with microscopic vision, infrared, chemscanner (2.3 lb., .046 cf, $6,750, 24 points).

Communicator: Basic communicator with long-range radio, lasercom, infrared com, IFF (10.25 lbs., .205 cf, $3,425, 32 points).

Arm Motors: Two ST 20 arm motors (each 3 lbs., .06 cf, $6,000, .1 KW). One ST 10 arm motor, extra flexible (3 lbs., .06 cf, $6,000, .05 KW). ST 1 arm motor, cheap, micromanipulator (.3 lbs., .006 cf, $750, .005 KW). Arms are 40 points.

Propulsion: Tracked drivetrain with .4 KW motive power (6 lbs., .12 cf, $120, .4 KW).

Weaponry: One buzzsaw, vibro (4 lbs., .08 cf, $125, LR 3). One light laser torch, concealed (1 lb., .05 cf, $50, LR 6). 16 points.

Accessories: Two sets of integral mechanical *or* engineer tools (each 10 lbs., .2 cf, $200). Integral electronics and armoury tools (4 lbs., .08 cf, $800). Flashlight (.5 lbs., .01 cf, $5). SQUID (20 lbs., .4 cf, $25,000). 5 points.

Power System: Requires .655 KW. Two rE cells (40 lbs., .4 cf, $4,000, stores 540,000 KWS, 20 points). Endurance 229 hours (5 points).

Subassemblies: Head with full rotation. Four arms (right, left, center and mini arms; left arm is "off hand"). Tracks (four tracks).

Arm Design: Right and left arm each houses ST 20 arm motor, integral me-

chanical or engineering tools (.26 cf). Center arm houses ST 10 arm motor, buzzsaw, integral electronics and armoury tools, .02 cf empty space (.24 cf). Small arm houses ST 1 arm motor (.006 cf).
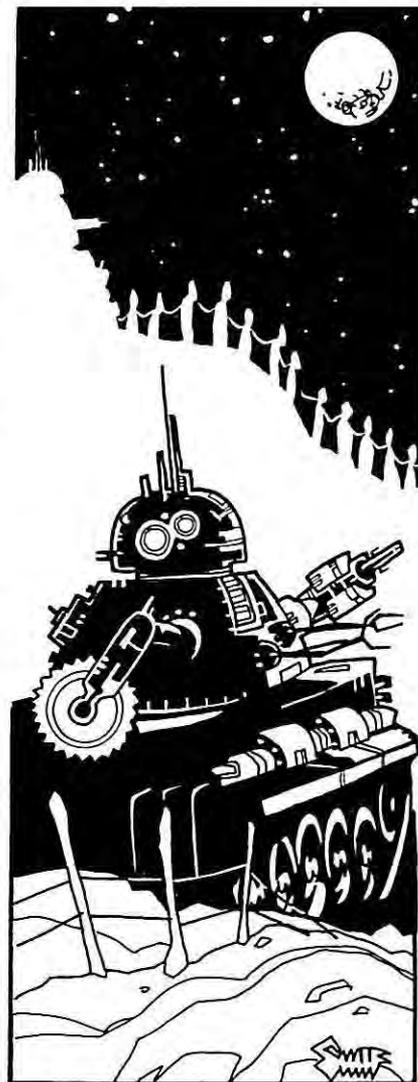
Head Design: Houses sensors, concealed laser torch, communicator, SQUID, flashlight, .039 cf empty space (.75 cf).

Body Design: Houses brain, two rE cells, tracked drivetrain, space for head rotation (1.07 cf).

Track Design: .642 cf.

Area: Right, center and left arm each 2.5, mini arm .5, head 5, body 6, tracks 5, total surface area 24.

Structure: 72 lbs., $2,400.

Hit Points: Center, right and left arm 8 each, mini arm 2, head 8, body 9, four tracks 4 each.

Armor and Threat Protection: DR 10 metal (24 lbs., $480, LR 4, 30 points) with PD 3 (75 points). Sealed ($240, 20 points).

Statistics: Design weight 233.35 lbs. (.116 tons). Volume 3.228 cf. Price $220,045. Body ST 23 (140 points), right and left arm ST 20 (-15 points), center arm ST 10 (0 points), mini arm ST 1 (0 points). DX 10 (0 points). IQ 9 (-10 points). HT 12/9 (5 points). Ground speed 11.14 but cannot float (7.5 points).

Model Point Cost: 459.5 / 5 = 91.9 points.

Users: Every Zone uses the Bossbot.

Useful Programs: Administration, Computer Operations, Computer Programming, Data Recovery, Datalink, Electronics, Electronics Operation, Encryption, Engineering, Mechanic; slave camp bosses may sometimes have Limited Personality Simulation.

TNU-05 "Eater" (TL9)

An Eater is the size of a small tank, with seven arms and a large cargo storage bay for storing salvaged or mined materials. It moves on four tracks, and has a small sensor tower mounted high above its body. Eaters are used for construction, mining, demolition and salvage work. They are not combat robots, but their unstoppable bulk and six plasma-torch-equipped arms

make them very dangerous to anyone who gets in their way. They are the robots that the AIs use to demolish human cities to make way for the construction of robot factories.

Brain: Standard (20 lbs., .4 cf, $7,500, Complexity 4, -5 points).

Sensors: Basic sensors with night vision, deafness, no sense of taste/smell (.5 lb., .01 cf, $2,550, -15 points).

Communicators: Basic communicator, mute, infrared com, IFF (.35 lbs., .007 cf, $425, 0 points).

Arm Motors: Six arm motors each ST 100, bad grip, cheap (each 30 lbs., .6 cf, $7,500, .5 KW). One arm motor ST 1,000, bad Grip, cheap (300 lbs., 6 cf, $75,000, 5 KW) total 10 points.

Propulsion: Tracked drivetrain with 500 KW motive power (1,560 lbs., 31.2 cf, $31,200, 500 KW).

Weaponry: Six heavy plasma torches (each 40 lbs., .8 cf, $3,000, LR 4), costs 30 points.

Accessories: Spotlight (2.5 lbs., .05 cf, $25). Inertial compass (.5 lbs., .01 cf, $125). 5 points.

Power System: Routine power requirement 508 KW. TL9 Nuclear power unit with 508 KW output (1,066 lbs., 10.66 cf, $213,200, 20 points). Six rE cell (120 lbs., 1.2 cf, $12,000) store total of 1,620,000 KWS. Endurance: one year (10 points); rE cells used as extra power for plasma torches after their internal power cells are used; each shot drains 1,080 KWS.

Cargo: 450 cf.

Body and Subassemblies: Head with no rotation. Tracks (with four tracks). Seven small arms attached three to right and three to left side of body and one large arm attached to front of body (three small arms are "off hand").

Arm Design: Each small arm houses a ST 100 arm motor and a plasma torch (1.4 cf). Large arm houses ST 1,000 arm motor (6 cf).

Head Design: Head houses sensors, communicator, spotlight and 4.933 cf empty space (5 cf).

Body Design: Body houses brain, tracked drivetrain, inertial compass, nuclear power unit, six rE cells, 450 cf cargo space and 6.53 cf empty space (500 cf).

Track Design: 300 cf.

Area: Small arms 8 each, large arm 20, head 18, body 400, tracks 300, total 786.

Robot Structure: TL9 design, heavy, cheap (5,305.5 lbs., $78,600).

Hit Points: Body 1,200, head 54, small arms 48 each, large arm 120, four tracks 450 each.

Armor and Threat Protection: Metal, DR 20 (1,572 lbs., $31,440, LR 3, 60 points) with PD 4 (100 points). Radiation shielding (393 lbs., $3,930, 6 points). Sealed ($7,860, 20 points).

Statistics: Design weight 10,760.35 lbs. (5.38 tons). Loaded weight with 22,500 lbs. of cargo 33,260.35 lbs. (16.63 tons). Volume 819.4 cf, 40' long (-10 points). Price $526,855. Body ST 2,400 (1,360 points), first arm ST 1,000 (-210 points), 2nd arm ST 100 (-345 points), remaining arms ST 100 (0 points). DX 10 (0 points). IQ 7 (-20 points). HT 12/1,200 (5,960 points). Ground speed 32.9, can float, water speed 6 (17.5 points).

Model Point Cost: 6,907.5 / 5 = 1,381.1 points.

Users: All Zones except Orbital use Eaters.

Useful Programs: Encryption, Full Coordination 1, Mechanic.

TAU-06 "Inquisitor" (TL9)

These robots resemble the top half of a metal beachball with three jointed arms tipped with sinister knives, scalpels and hypodermic needles. Inquisitors perform biological or cybernet-

ic lab research on human, animal or microorganism specimens under the direction of AIs or Overseers. If the robots decide a human deserves medical treatment, Inquisitors are also capable of providing it. Their name alludes to another function: handling the interrogation of human prisoners.

Brain: Standard with compact, neural-net and high capacity (10 lbs., .2 cf, $45,000, Complexity 4, 65 points).

Sensors: Basic sensors with thermograph, microscopic vision, discriminatory taste, three-in-one scanner (4.7 lb., .094 cf, $11,500, 69 points).

Communicator: Basic communicator with infrared com and IFF (.75 lbs., .015 cf, $625, 20 points).

Arm Motors: Three ST 9 arm motors, extra-flexible, micro-manipulator (each 2.7 lbs., .054 cf, $27,000, .045 KW). 30 points.

Propulsion: Tracked Drivetrain, .15 KW (2.25 lbs., .045 cf, $45, .15 KW).

Weaponry: Two talons ($1,000, LR 4). Drug injector ($25, .25 lbs., .005 cf, LR 6). Electroshocker ($50, 1 lb., .02 cf, LR 5). 21 points.

Accessories: Two sets of Medical tools (each 2 lbs., .04 cf, $1,000). Medscanner (1 lb., .02 cf, $900).

Power System: Power requirement .285 KW. Two rD cells (10 lbs., .1 cf, $1,000, 20 points, stores 54,000 KWS). Endurance 52 hours, 37 minutes (0 points).

Subassemblies: Three arms, tracks (two). Arm #2 is "off hand."

Arm Design: Arm #1 and #2 each house arm motor, medical tools, talons (.094 cf). Arm #3 has arm motor, drug injector, electroshocker (.079 cf)

Body Design: Body houses brain, communicator, sensors, drivetrain, medscanner, power cells and .376 cf empty space (.85 cf).

Tracks Design: .51 cf.

Area: Arms 1.5 each, Body 6, tracks 4, total surface area 14.5.

Structure: (43.5 lbs., $1,450).

Hit Points: Arms 5 each, Body 9, tracks 6 each.

Armor and Threat Protection: metal, DR 6 (8.7 lbs., $174, LR 5, 18 points) with PD 3 (75 points).

Statistics: Design weight 94.25 lbs. (.0471 tons). Total volume 1.63 cf. Price $144,769. Body ST 8 (-15 points), arm ST 9 (2.5 points). DX 10 (0 points). IQ 8 (-15 points). HT 12/9 (5 points). Ground speed 10.7 but cannot float (5 points).

Model Point Cost: 300.5 / 5 = 60.1 points.

Users: Every Zone except Luna has Inquisitors.

Useful Programs: Biochemistry, Datalink, Diagnosis, Electronics Operation, Encryption, First Aid, Genetics, Interrogation, Physician, Physiology, Surgery.

VEHICULAR ROBOTS

"Vehbots" transport cargo or passengers.

VNU-01 "Robotruck" (TL8)

The robotruck is exactly what it sounds like: a big robot cargo truck. It looks like a big 20th-century truck with ten fat off-road wheels but no windscreen, windows or passenger doors. Its main features are a radio/radar antennae and a pair of big double doors in back. Inside there is no driver section, only a sealed brain case in front (accessible by a maintenance hatch).

It can travel cross-country but spends most of its time on the road. It recharges its energy banks at the construction shacks found along roadsides.

A robotruck can haul 1,000 cf of cargo, or 50 people jammed in tight. It normally carries a mixed load of passengers and cargo, shipping laborers from slave camps to work sites. Loaded weight is around 27 tons when fully loaded with goods or robots, about 13.5 tons when half loaded, or about 5 tons when carrying a few dozen slaves, their work tools and a couple of robot guards.

Brain: Standard, dumb (40 lbs., .8 cf, $3,000, Complexity 3, -5 points).

Sensors: Basic sensors with blind, deafness, no sense of smell or taste and imaging radar (2 lbs., .04 cf, $2,500, -25 points).

Communicators: Basic communicator with mute, infrared com, IFF (.7 lbs., .014 cf, $850, -5 points).

Arm Motors: No arms or legs (-50 points).

Propulsion: Wheeled drivetrain, 400 KW motive power (630 lbs., 12.6 cf, $12,600, 400 KW).

Weaponry: None. *Accessories:* None.

Cargo: 1,000 cf.

Power System: Requires 400 KW motive power. Uses 24 rD cells (960 lbs., 9.6 cf, $96,000, 8,640,000 KWS, 20 points) endurance 6 hours (-10 points).

Subassemblies: Wheels (ten).

Body: Houses all components and 1.946 cf empty space (1,025 cf).

Wheels: 205 cf.

Area: Body 800, wheels 250, total surface area 1,050.

Structure: Cheap (6,300 lbs., $52,500).

Hit Points: Body 1,200, each wheel 75.

Armor: DR 5 metal (787.5 lbs., $15,750, 15 points) with PD 3 (75 points). Waterproof ($2,100).

Statistics: Design weight 8,720.2 lbs. (4.36 tons), can carry a maximum of 50,000 lbs. (25 tons) cargo with a loaded weight of 29.36 tons. Volume 1,230 cf (-10 points). Price $185,300. Body ST 2,400 (816 points), no Arm ST, DX 9 (-10 points), IQ 6 (-30 points), HT 9/1,200 (5,945 points). Ground speed depends on cargo: 76.62 if empty, 38.96 with 12.5 tons (half load) of cargo, 29.52 with full load (20 points).

Model Point Cost: 6,690 / 5 = 1,349.2 points.

Users: All Zones except Orbital. Lower-powered but cheaper versions using fuel cell or gasoline engines also exist; often these are conversions of human-built vehicles.

Useful Programs: Navigation.

VNU-02 "Wraith" (TL9)

The Wraith is a tactical transport aircraft. Shaped somewhat like a manta ray, it is a stealthy if unstreamlined craft with rounded contours, a huge blended wing-body. It has neither cockpit or windows, but access is provided via a large rear cargo ramp.

The Wraith is capable of transporting some five tons of cargo without needing a landing strip, achieving vertical takeoffs and landings using downward-vectored thrust from turbofans in its body.

It has no internal sensors. As a result, humans have occasionally been able to stow aboard one while the aircraft was being loaded or unloaded. Since there are no seats or other provisions for human passengers, flights are uncomfortable. If the craft makes violent maneuvers (to avoid attack, for instance) the GM should inflict 1d-1 cr. damage to all passengers or stowaways who haven't managed to secure themselves in place.

Besides the Wraith, the AIs also build space planes (a few of which are also fighters), helicopters and larger transports.

Brain: Standard (20 lbs., .4 cf, $7,500, Complexity 4, -5 points).

Sensors: Basic sensors with blind, deafness, no sense of smell/taste, smoke detector, imaging radar (9 levels), radar/laser locator (10.1 lb., .202 cf, $11,500, 2.25 kW, 16 points).

Communicator: Basic communicator with mute, long-range radio, infrared com and IFF (4.85 lbs., .097 cf, $725, 2 points).

Arm Motors: No arms or legs (-50 points).

Propulsion: Turbofan with 50,000 lbs. thrust with vectored thrust option (7,650 lbs., 153 cf, $382,500, 750 gph).

Weaponry: None. *Accessories:* Inertial navigation system (10 lbs., .2 cf, $12,500). 5 points.

Power System: 2.25 KW required. Two standard tanks each with 1,200 gallons jet fuel (each 8,400 lbs., 180 cf, $12,000, fire 11). 3.2 hours endurance (0 points). rE cell (20 lbs., 0.2 cf, $2,000, 270,000 KWS) powers imaging radar for 33 hours, 20 minutes.

Cargo: 540 cf cargo space, usually lightly loaded with about 10,800 lbs. of cargo.

Subassemblies: Wings.

Body Design: Houses all components except fuel tanks (154.099 cf) and 5.901 cf empty space (700 cf).

Wing Design: Each houses fuel tank and 7 cf empty space (187 cf).

Area: Body 600, Wings 400 each, total 1,400.

Structure: Light, expensive (1,575 lbs., $1,400,000).

Hit Points: Body 450, Wings 300 each.

Armor and Threat Protection: Laminate DR 15 (1,260 lbs., $126,000, 60 points) with PD 3 (75 points). Stealth and IR Cloaking (1,400 lbs., $210,000).

Statistics: Design weight 28,729.95 lbs. Loaded weight with 10,800 lbs. of cargo is 39,529.95 (14.76 tons). Total volume 1,074 cf. Price $2,176,725. Body ST n/a, Arm ST n/a (-100 points). DX 10 (0 points). IQ 7 (-20 points). HT 8/600 (2,945 points). Ground move 0, cannot float, air move 259 (90 points).

Model Point Cost: 3,018 / 5 = 603.6 points.

Users: Every Zone except Luna and Orbital makes use of the Wraith. Luna uses a similar design as a moon bus, replacing the ducted fans with rocket thrusters and fuel.

Useful Programs: Electronics Operation, Encryption, Navigation.

VAU-03 "Morag" (TL9)

The Morag is used as a deep-sea underwater work robot and also as a covert-operations submarine to land robots or cyborgs in foreign Zones. It is an amphibian that can swim sinuously through water or slither out onto land.

Morag resembles a fat mechanical snake the size of a truck with two long pincer-equipped arms that trail behind it when swimming. It has no distinct head, but its front body bulges out with sensor blisters and antennae. Its "mouth" is a hinged ramp opening into an internal cargo bay.

All Zones have a wide variety of robot shipping besides the Morag, from submarines to supertankers.

Brain: Standard with neural-net (20 lbs., .4 cf, $15,000, Complexity 4, 65 points).

Sensors: Basic sensors with blind, infrasonic hearing, no sense of smell/taste, smoke detector, active sonar (9 levels), radar/laser locator (10.5 lb., .21 cf, $11,250, 16 points)

Communicator: Basic communicator with long-range radio, lasercom, infrared com, IFF (10.25 lbs., .205 cf, $3,425, 32 points).

Arm Motors: Two ST 20 arm motors, cheap, bad grip, extendible (each 12 lbs., .24 cf, $3,000, .1 KW). 5 points.

Propulsion: Flexibody drivetrain with 200 KW motive power (1,470 lbs., 29.4 cf, $294,000, 200 KW).

Weaponry: Gatling laser, concealed (75 lbs., 3.75 cf, $20,000, LR 0) with laser sight modification ($25). 100 points.

Accessories: Inertial navigation system (10 lbs., .2 cf, $12,500). 5 points.

Power Plant: 200.2 KW power requirement. Cheap nuclear power unit with 201 KW output (678 lbs., 6.81 cf, $6,780, 20 points). Endurance one year (10 points). rE cell for extra Gatling laser power (20 lbs., .2 cf, $2,000) good for 75 extra shots).

Cargo: 270 cf cargo space.

Subassemblies: Two arms.

Arm Design: Each arm houses arm motor and 1.76 cf of empty space (2 cf).

Body Design: Houses brain, sensors, communicator, drivetrain, Gatling laser, inertial navigation system, power plant, cargo hold, 0.825 cf empty space (312 cf).

Area: Each arm 10, body 300, total area 320.

Structure: Flexible (1,440 lbs., $160,000, 15 points).

Hit Points: Each arm 30, body 450.

Armor and Threat Protection: DR 50 metal armor (1,600 lbs., $32,000, LR 2, 150 points) with PD 4 (100 points). Sealed ($3,200, 20 points).

Statistics: Design weight 5,357.75 lbs. (2.68 tons); with 13,500 lbs. cargo 18,857.75 lbs. (9.43 tons). Total volume 316

cf. Price $563,180. Body ST 900 (610 points), arm ST 20 (-(-(-(-250 points). DX 10 (0 points). IQ 8 (-15 points). HT 12/450 (2,210 points). Ground speed 17.27 empty, 9.21 loaded. Can float. Water speed 15 empty, 9 loaded (30 points).

Model Point Cost: 3,223 / 5 = 644.6 points.

Users: Every Zone except Orbital and Luna has a seacoast and makes some use of the Morag.

Useful Programs: Datalink, Electronics Operation, Encryption, Mechanic, Navigation.

Cyborgs ("CUs")

These machines are controlled by human or animal brains within robot bodies. They are used in Denver and Washington.

XCU-01 Cyberbeast (TL9)

Created in Zone Denver, the Cyberbeast is a monstrous hybrid of machine and beast that somewhat resembles a bio-mechanical tiger. Its part-robot, part-organic body is controlled by a cyborged wolverine's brain. Its sole motivation is to stalk and kill humans – a simple pleasure/pain training system rewards it when it does so, and causes it pain when it attacks robots. It is annually "stimulated" to return to a construction shack to have its nuclear batteries replaced.

Brain: Small, with +3 DX reflex booster (1 lb., .02 cf, $1,500, Complexity 3, 0 points) plus wolverine cyborg brain (20 lbs., .4 cf, $25,000) total 80 points.

Sensors: Basic sensors with color blindness, night vision, acute hearing +2, discriminatory smell (1.2 lb., .024 cf, $7,050, 19 points).

Communicator: Basic communicator, disturbing voice, no radio, bullhorn (.5 lbs., .01 cf, $125, -5 points).

Arm Motors: One arm motor ST 15, striker, cheap, extra-flexible (4.5 lbs., .09 cf, $900, .075 KW). -25 points.

Propulsion: Leg drivetrain with .5 kW motive power and four motors (20 lbs., 0.4 cf [.1 cf per motor], $1,000, .5 KW).

Weaponry: Talons on four legs with monowire blades ($4,000, LR 3). Cutting jaw with monowire blade ST 20 ($6,500, 2 lbs., .1 cf, .2 KW, LR 3). Morning star (6 lbs., .12 cf, $80, LR 5). 29 points.

Power: Cheap nuclear power unit, .775 KW (47.75 lbs., .4775 cf, $2,000, 20 points). Endurance one year (10 points).

Subassemblies: Head, four legs, one arm ("tail").

Arm Design: Tail houses arm motor and morning star (.21 cf).

Head Design: Houses sensors, communicator, jaw, .016 cf empty space (.15 cf).

Body Design: Houses brains, power unit, space for head rotation and .00109 cf empty space (.9 cf).

Leg Design: Each leg houses leg motor and .035 cf empty space (.135 cf).

Surface Area: Tail 2.5, head 2, body 6, legs 2 each, total surface area 18.5.

Structure: Biomechanical, heavy, expensive (62.4375 lbs., $7,400).

Hit Points: Tail 15, head 6, body 18, legs 6 each.

Armor and Threat Protection: DR 20 metal armor (37 lbs., $740, LR 3, 60 points) with PD 4 (100 points). Waterproof ($37).

Biomorphics: Hideous body ($740, -20 points).

Other: Suction pads ($800).

Statistics: Design weight 202.3875 lbs. (.101 tons). Total volume 1.8 cf. Price $57,872. Body ST 32 (106 points), arm ST 15 (-21 points), DX 12* (20 points), IQ 6 (-30 points), HT 12/15 (55 points). Ground speed 13.34, cannot float (20 points). * Averaged with wolverine DX, but a typical wolverine also has DX 12.

Model Point Cost: 393 points / 5 = 78.6 points.

User: Denver.

XCU-02 "Patriot" (TL9)

The XCU-02 Patriot is the standard combat cyborg used by the Washington Chromes. It externally resembles an XNU-05 Myrmidon. It is internally identical to a Myrmidon except that the standard brain is replaced with a combination of a small genius brain (1 lb., .02 cf, $10,000) and a TL9 cyborg brain (20 lbs., .4 cf, $25,000, together costing 80 points); its empty space in the body drops to .5325 cf. The revised statistics are:

Statistics: Design weight 245.125 lbs. (.122 tons). Total volume 3.02 cf. Price $72,535. Body ST 20, arm ST 20 (110 points), DX 10 (0 points)*, IQ based on human brain donor, HT 12/24 (80 points). Ground Speed 7.01, cannot float (0 points).

* DX is averaged with the human brain donor's DX.

Model Point Cost: 561 / 5 = 112.2 points.

User: Zone Washington.

XCU-03 "Eagle" (TL9)

The XCU-03 Eagle is a cyborg model used by the Washington Chromes as an armored reconnaissance and command unit. It closely resembles a Tarantula, enabling Chrome soldiers to infiltrate hostile Zones without attracting undue suspicion.

The Eagle is identical to a Tarantula except that the neural-net brain is replaced with a combination of tiny genius brain with +2 DX reflex booster (0.25 lbs., .005 cf, $4,000, Complexity 3) and a TL9 cyborg brain (20 lbs., .4 cf, $25,000), together costing 80 points. Space for the brain uses up all the empty space in the body. The Eagle's statistics are somewhat different from the Tarantula's:

Statistics: Design weight 230 lbs. (.115 tons). Price $71,600. Total volume 1.6 cf. Body and arm ST 15 (60 points). DX 11* (10 points). IQ based on human brain donor, HT 12/8 (0 points). Ground Speed 9.69, cannot float (10 points).

* DX is averaged with the human brain donor's DX.

Model Point Cost: 923 / 5 = 184.6 points.

User: Zone Washington.
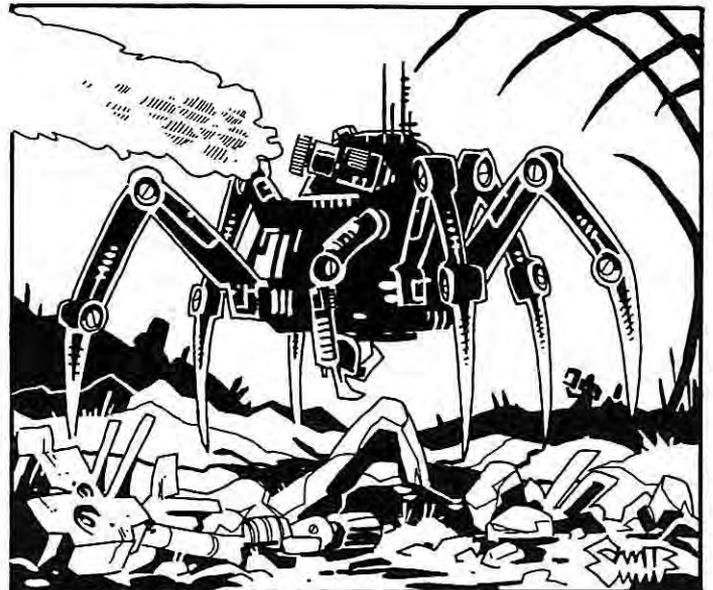
"You'll help us take out the robofac?" Santiago cradled his AK-74, staring up at the jaguar-woman perched on the branch of the dead tree. Like his men, she also wore a respirator and carried a rifle. *"This I do not believe. Why?"*

The rest of the guerrillas nodded, trading skeptical glances. They'd run into AI traps before.

"Bad smells cross border," hissed the Pantera. *"Pipes leak toxic sludge, kill fishies. Can't eat them any more."*

She spat, then swung down from the branch, landing lithely beside him. *"Caracas say we Panteras help you humans, go hunt in Zone Mexico City."* The aniroid pointed at the hulking cubist monstrosity on the horizon. *"You trust?"*

Santiago considered. Trust a talking cat? Madness – but was it not a mad world? And they needed all the help they could get.

"Very well. Muchas gracias, Pantera. We hit them together."

ROBOFACS

A robofac, or robot factory, is the characteristic large robot installation, and the one that PCs are most likely to encounter. Robofacs act as centers for robot civilization – the equivalent of towns or cities. Each robofac, under its Overseer brain, holds sway over an area that can vary between 100 and 1,000 square miles (depending on the proximity of other robofacs); in a few unproductive wilderness regions, a robofac may be responsible for a region up to 10,000 square miles. Within that area, the robofac coordinates manufacturing, salvage, resource extraction and construction operations.

A robofac takes months or years to construct, and costs billions of credits – but once set up, it can build almost anything. It can make, repair, or modify most manufactured goods if parts (sheet metal, circuit boards, optical cable, chemicals) are available; given more time, it can manufacture these parts from raw resources. In a particular Zone, some robofacs will specialize in certain products. For instance, one may turn bauxite into aluminum, another may build superconductors, and a third may assemble a variety of components to make robots.

All robofacs are capable of retooling and reprogramming themselves to mass-produce almost anything within a matter of weeks. This means that (for instance) blowing up "the robot brain factory" will not permanently cripple a Zone, because any robofac can retool itself to make robot brains.

Location

Robofacs have devoured large cities in every Zone on Earth except Washington. For simplicity, GMs may assume that any city with a 1990s population of over 50,000 contains one robofac per hundred thousand population it once had. Robofacs may also be built in some areas with smaller populations, such as mine sites.

Appearance

A city which houses a robofac is a ghost town, with its houses, shops and factories gutted of anything the robots consider usable. Some AIs leave human buildings standing or convert them for their own use; others level the city into rubble (and in Caracas and Berlin's case, plant grass and trees on it). With the exception of these two environmentally-friendly Zones, the robofac is surrounded by miles of waste dumps and scrapyards and shrouded in a toxic fog of pollution.

The outer periphery of the city or town containing the robofac is relatively quiet – there are fewer buildings, and unlike a human factory town, no throngs of private commuter vehicles or pedestrians bustling through the streets. There is still a hum of activity, as a steady stream of robot trucks, trains and aircraft flow in and out of the robofac complex at the hub, feeding it raw materials and parts and removing its manufactured goods and waste products.

At the center of a web of warehouses, pipelines and rail lines squats the robofac complex itself. It covers an area the size of several city blocks. Around

Architecture

Each Zone on Earth has its own architectural style.

Berlin installations are carefully camouflaged to blend in with the environment. Most factories are underground, connected by tunnels.

Beijing architecture is solid, low and blocky. Beijing carefully levels human buildings; its larger installations are composed of thousands of small, closely-spaced buildings separated by a maze of very narrow alleyways. Buildings all have flat tops with landing pads for Wraith aircraft atop them.

Brisbane levels human cities and replaces the buildings with its own, most of which are ultra-modern "artsy" steel-and-concrete constructions that look like something which a prize-winning architect might design as an opera house or art gallery.

Caracas buildings are large monolithic structures made of stone blocks and covered with creeping vines.

Denver installations have a techno-organic look, as if they were grown rather than built. The buildings often have ribbed structures and are slime-covered or pulsating. Denver's AI citadel is more impressive than most, as it is the former NORAD defense complex beneath Cheyenne Mountain.
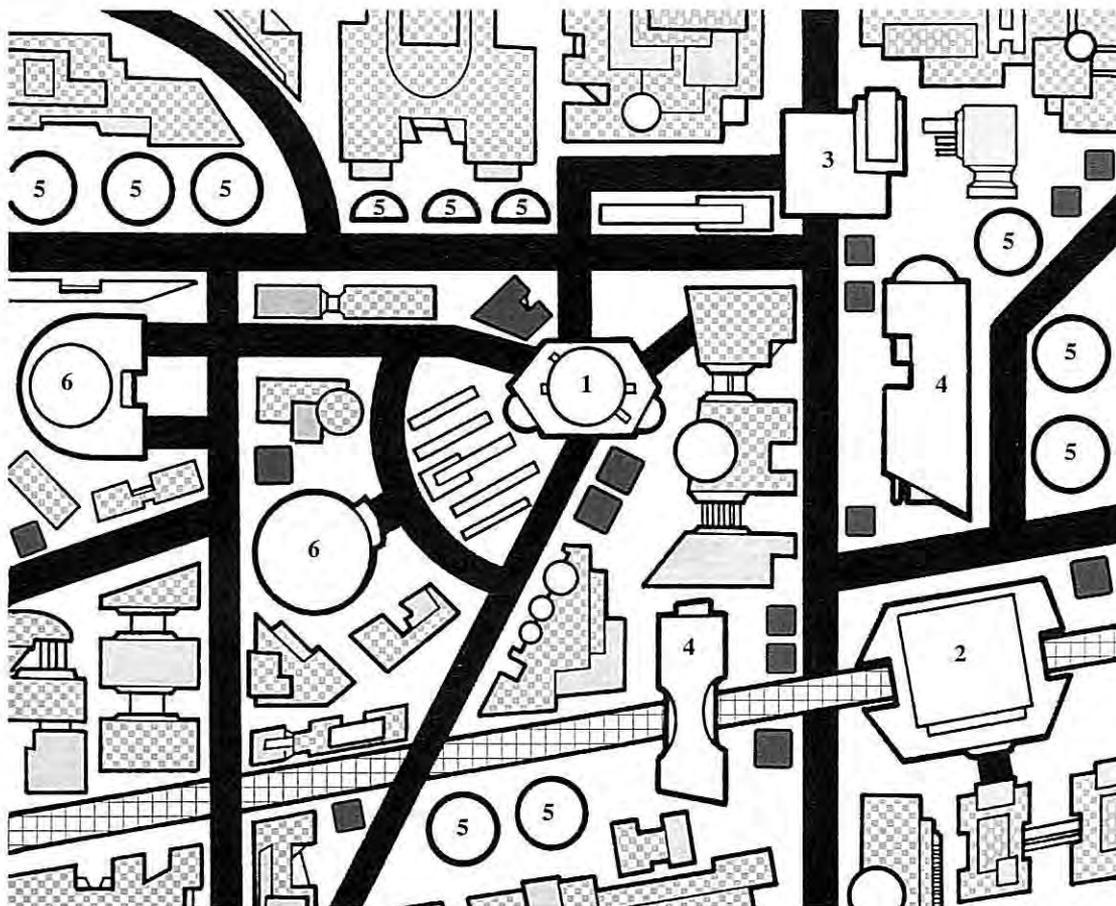
ROBOFAC COMPLEX

Key

1 Central Factory Building & Tower
2 Train Station
3 Vehicle Assembly Building
4 Refineries
5 Chemical Tanks
6 Landing Pads

Automated Factory

Warehouse

Robot Hotel

Maglev Train

Road

London melded its robofacs and citadels with human architecture. Most of Great Britain's cities remain intact, but the buildings are abandoned – the robots built over and around them, rather than destroying them.

Mexico City installations are hard-edged geometric shapes – giant alien cubes, pyramids and monoliths seemingly constructed from a featureless glass-like material.

Moscow simply takes over human cities and converts them to its own use. Buildings are generally left standing but their insides are renovated. Factories have a retro "Metropolis" look and feel, all clunky pipes, grinding wheels and puffing chimneys. Its citadels are incorporated into human cities – e.g., the Kremlin is still intact; it just has better armor and defenses.

New Delhi and *Tokyo* use similar styles. Their hyperfacs are mile-high hive-cities rather than collections of lesser structures. Ordinary robofacs are usually converted human robofacs and office buildings. For better climate control, Tokyo has covered some of its robofac or hyperfac complexes with kilometer-wide transparent domes (with doors for aircraft).

Overmind installations are various sizes of cyclopean black metal cubes covered with hatches and access panels and connected by pipes and tunnels.

Paris installations are standard concrete-and-steel designs. It favors vertical skyscraper-like factory buildings and builds high towers and spires. Its citadels are built up instead of burrowing into the ground.

Tel Aviv, like London, builds around human cities, leaving buildings intact. Many of its own robofac buildings now have a somewhat mosque-like look to them, but these are mixed with more practical and ordinary domes much like those in Vancouver.

Vancouver levels human cities. Its buildings are standard design installations, favoring geodesic domes with a sterile, modern "nuclear power plant" look to them.

Washington has few purely robot installations. Instead of using the specialized types described in this chapter, it employs the existing human infrastructure of Zone Washington. Its own main and backup AI citadels, however, conform to the standard type, but are hidden under human installations.

Zaire installations are skeletal metal structures, many seemingly half-finished, often patched, rusted and twisted, all connected by clanking conveyer belts and open walkways. Human buildings are knocked down but the rubble is often left standing. Its citadels are always buried and carefully camouflaged.

it is a cleared security perimeter, usually a 200-yard wide strip of concrete, gravel or grass.

Large cities housing more than one robofac often have many separate complexes rather than one enormous super-factory.

Population

A robofac complex is a bustling hive of activity with a population of several thousand robots, although fewer than a hundred will be sophisticated smartbots or exterminators. As many as a third of the robots within the complex will be inactive, undergoing recharging, reprogramming or repairs.

ROBOFAC BUILDINGS

Individual buildings are connected by narrow streets and passages and a three-dimensional maze of walkways, tunnels and conveyer belts. All the buildings are normally joined together, forming a single huge structure. Many robofacs are unfinished or are expanding, so there will be lots of buildings that are under construction, with a swarm of techbots busily assembling them.

Unless noted, buildings do not have permanent robot occupants, but humans venturing into a robofac complex may encounter various machines – see *Encounters in a Robofac,* on p. 91.

Since most buildings are factories, their interiors are quite large with big rooms and high (15-foot or more) ceilings. This means that all but the largest robots are able to operate freely both indoors and out. Throughout the complex, windows are nonexistent and doors are rare as robots need neither light nor privacy – but there will be some armored security doors (DR 50, 100 hit points) at entrances of buildings, in detention areas and scattered through the central factory complex. Stairs are not used – ramps, conveyer belts and elevators connect levels. Elevators and doors are normally automatic, but in some secure areas may require sending a coded infrared signal pulse. Intruders can get around this by cutting into the lock unit with tools and making a successful Electronics (Security) roll, but this will usually take at least five minutes per attempt.

The three most common buildings (or floors in large buildings) in a robofac complex are warehouses, factories, and robot hotels. There is an even chance that any small or medium-sized building will fulfill one of these functions.

Warehouses

These hold finished goods ready for shipping, raw resources intended for processing, or parts and spares. To determine the contents of a given warehouse, the GM can roll on the *Mag-Lev Cargos* table on p. 106, ignoring any inappropriate results. A warehouse will generally be unguarded and have no alarms, but those housing weapons might have a small guard force.

Automated Factory

These buildings are normally attached to other factory or warehouse buildings by conveyer belts, with a steady stream of partly-completed or finished products flowing into or out of them. They are often multi-level structures with several floors connected by ramps and open elevators.

Inside will be automated machines – cyberteks – hard at work assembling things. There will be one or more cyberteks in a building, depending on its size. Each looks something like a giant metal spider attached to a workbench surrounded by bins of parts. The cybertek has a dozen ST 10-20 arms ending in integral mechanical tools, laser torch welders, paint sprayers and robot hands. A static nonvolitional unit with a brain of Complexity 2-4, it has no sense of hearing or smell and its attention is strictly limited to building things. If damaged it will simply summon a Mechanic to fix it.

The cybertek is given orders by the Overseer, but any smartbot can jack into it and control it using its own Engineering, Armoury, Mechanic or Electronics skill. A cybertek can build things, or fix any piece of damaged equipment. It uses its sensors to diagnose the problem, then repairs it with its tool-equipped arms; when making repairs, it gives a +4 bonus to its controller's skill. If prefab parts and a design program are available, it takes about one hour per $500 of value to build something with a cybertek.

A cybertek can be disassembled and removed from a robofac building – it would be quite useful to a resistance group, acting as an automated repair shop. However, it must be hooked up to a stolen robot brain or a computer to have the necessary skill programming. It weighs 800 lbs. and takes up 135 cf. It can run on a TL9 E cell for six months of steady use.

Robot Hotels

Inactive robots occupy these. Robots do not need to eat or sleep, but depending on their design they may require recharging, refuelling, maintenance and occasional reprogramming. When they do, they come to a "robot hotel," or, in robot-speak, a *routine diagnosis and service facility.* These buildings each contain eight "robot beds" – mechanical cradles in which inactive robots can recharge their energy banks or refuel their fuel cells. Recharging and refuelling take place at a steady rate of 10 KWH per hour, or .1 gallon per second. Replacing worn-out nuclear power cells takes longer, requiring the assistance of other robots and at least six hours of work per nuclear cell.

A robot nestled in a robot bed is unconscious, its computer brain connected to the complex's Overseer or one of its subordinate Bossbot technical AUs. Even for robots that have nuclear power units and do not need regular recharging, the Overseer often uses the robot hotels to update the robot's programming, and to run utility programs to see whether the robot is functioning properly.

Robot hotels are specific to a single model of robot. As robots can range from mouse to truck size, the size of eight cradles will vary a lot. If PCs visit a robot hotel, the GM should determine the model of robot it is built for by the size of the building, and may wish to roll 2d-4 to determine how many robots are using it at a given time. Assume there is a 1-in-6 chance every ten minutes that a new robot of that sort will enter the facility or that an inactive robot will wake up.

The robot hotels for exterminators are in the central factory building. They are protected by armored security doors with the codes known only to the Overseer and the exterminators themselves.

Refineries and Smelters

These looming complexes are recognizable by their size and by the huge smokestacks that belch clouds of steam or toxic waste. A typical robofac has a half-dozen such buildings.
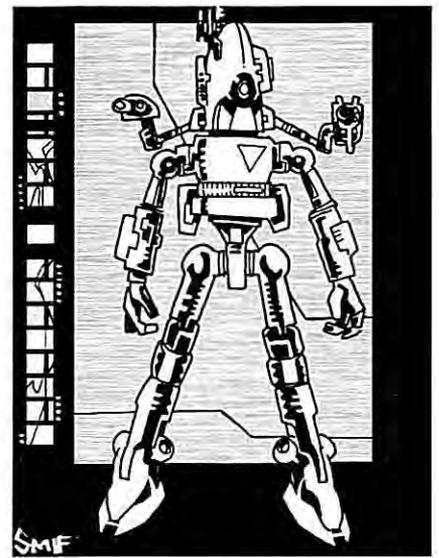
Encounters in a Robofac

The sample random encounter table below provides some idea of what people sneaking about a robofac might meet. GMs should always feel free to ignore random results and simply choose what, if anything, intruders encounter.

An encounter occurs on a 9+ on 2 dice; check every ten minutes or so if the intruders are moving about or are in the open; if they aren't moving, check only every hour or so. Roll at +2 if the intruder are in the central robofac complex rather than the outskirts. If an encounter occurs, roll 1d on the table below, with a -1 modifier if it is on the street rather than in a building.

Robofac Encounters

Roll	Robot Type
0	Vehicle-sized robot
1	Other
2	Bossbot
3	Loader
4	Security patrol
5-6	Mechanic or Duct Creeper

Vehicle-sized robots are normally robotrucks passing down the road or stopping nearby to unload. They may also be Wraith air transports landing or taking off nearby or flying overhead, or Eaters making their way to or from a service area. They will ignore humans even to the point of accidentally running over them. A DX or jumping roll might allow a human to leap on board and hitch a ride. But on a 9+ on 2 dice, a vehicle-sized robot will have other robots aboard – roll 1 die on the table above.

Bossbot is a single TAU-04 (p. 83). It will usually be on the way to or from dealing with some problem or malfunction, or heading out toward a construction site. Bossbots have a 50% chance of being accompanied by 2d-1 Mechanics. They will attempt to detain and question any humans they find, and will summon security to assist them.

Chemical Tanks

Typically located right next to refineries, these resemble giant cylinders or spheres surrounded by scaffolding and connected to pipelines. They may hold anything from petroleum to liquid helium to nerve gas. Since they often contain volatile chemicals, they make good targets for sabotage, as the explosions will usually damage nearby buildings.

Vehicle Assembly Buildings

These are used to construct or repair large craft such as Wraiths, robotrucks, train cars, ships or space shuttles. Not all robofacs have them. Each building is the size of a city block. There are almost always a few large cyberteks and two or three dozen Mechanics working inside.

Train Station

A two- or four-track mag-lev railway line (see p. 105) always runs through the center of the robofac complex. The train station is a huge building, with cargo conveyer belts leading off from it to warehouses. A mag-lev train pulls in or out of the station every hour or so, initiating a frenzy of activity by Loader robots to empty or fill the cars.

Port Facilities

If the robofac is located on a body of water, there will be docks, several robotic cargo ships and 1d-2 Morag submarines. Port facilities are normally filled with Loaders doing their jobs and Mechanics crawling over the vessels to maintain them. If the Zone employs slave labor, a gang of exoskeleton-clad slave laborers may be assigned to work at a port, but will be taken back to a slave camp after its shift.

Landing Pads

The largest buildings in a robofac are built with reinforced ceilings to serve as landing pads for the flying Wraiths, Spybots and Vultures.

Central Factory Building

This is a large installation in the center of the robofac facility. It can range in size from a skyscraper to a shopping mall, and has several floors of automated factories with cyberteks arranged assembly-line fashion, as well as robot hotels and a large garage for robotrucks. The top of the factory building is normally a landing pad for Wraith aircraft.

Somewhere in the building, behind armored security doors, is the Overseer floor. It houses research laboratories, banks of nonvolitional mainframes (ordinary computers lacking neural-net brains, used for general data processing and storage) and the Overseer unit itself. The Overseer floor always has a permanent staff of 1d+4 Rovers, 2d+8 Mechanics and 1d+1 Inquisitors on duty.

The Overseer handles day-to-day production, making sure that resources are sent to the robofac and that goods produced by its automated factories are shipped where they are needed. An Overseer is also in charge of coordinating the operations and maintenance of all T, L and C series robots based in its area, and has the authority to build new robots to repair lost or damaged ones. It also supervises construction and development projects, such as the building of new mag-lev railway lines.

Power Plant: In the basement of the central factory building, protected by armored security doors, is the robofac's main power plant, a ten- to 60-

Encounters in a Robofac (Continued)

Mechanic or Duct Creeper encounters represent a single TNU-02 (p. 82) or TNU-03 (p. 83) on its way to perform routine maintenance. They may ignore humans, since they lack initiative. If not interfered with, they should get IQ rolls to perceive humans as a threat and call security. If they are attacked, they will radio either a Bossbot or security patrol. But roll 1 die – on a roll of 6, they are currently being used by a Bossbot or the factory Overseer as a drone extension, and are under that smartbot's direct control. If so they will alert security robots, and may attack on their own.

Loaders are more-or-less mindless TNU-01 Loaders (p. 82). There's a 50-50 chance they will be empty; otherwise they will be carrying something. Most of the time this will have to do with the main business of the installation, e.g., parts or finished goods in a robofac. They will react to intruders as do Mechanics, above, i.e., only reporting a threat if interfered with or if they make an IQ roll.

Security patrols are typically 1d Rovers (p. 75) inside a building or 1d Stalkers (p. 78) outside one. They will stop humans and check ID codes of robots. Intruders will be ordered to halt and will be taken to a detention area for questioning. If they resist, they will be attacked. Whether the robots try to kill or capture depends on their AI's attitude to humans. If a security patrol is eliminated or eluded, one of the robofac's exterminator squads (p. 97) will be assigned to hunt down the intruders.

Other can be anything the GM wants – an exterminator smartbot or recon robot returning or heading out on a mission, or even a band of junkrats or guerrillas sneaking about the complex.

megawatt nuclear reactor. Fission reactors are most common, but Berlin, Caracas and Tokyo prefer the more expensive (but cleaner) fusion reactors. Shutting down the reactor will shut down the complex until the reactor can be repaired or replaced. Careful sabotage of a fission reactor can cause an explosion and meltdown, wrecking most of the robofac complex and leaving an area of several miles in radius even more contaminated than it was before. A fusion reactor explosion will destroy the central factory building, but the rest of the complex will only be damaged and without power.

Security and Detention Area: This may be part of the central factory building or a separate adjoining building. It will house 2d × 10 prison cells for detaining and questioning any humans captured in the vicinity prior to shipment to slave camps or other processing centers. The area will be run by 1-2 Inquisitors assisted by 2d+2 Rovers or Myrmidons. There is also an infirmary containing a few Emergency Support Units (p. RO32) for treating humans. Of course, the purpose is to ensure injured humans can be healed enough for interrogation to take place!

In Zones where the robots regularly deal with human collaborators, there may be adjacent quarters for debriefing, housing and feeding human servants in somewhat more comfort.

Exterminator Barracks: Robot hotels for exterminators are included in the central factory building. Most of the robots will be on patrol inside the building itself, but a dozen or so Stalkers and Rovers will be in robot beds awaiting activation, and a dozen more will be recharging. In addition, a "maximum security force" will be ready for deployment in an emergency – see the *Security at the Robofac* sidebar on p. 95.

Communications and Sensor Tower

A slim tower up to 20 stories high, this is the tallest building in the complex. The sensor dome on the top houses radar (50-100 mile range), imaging ladar (20-70 mile range) and numerous radio and laser communicators, including satellite links. Underground cables connect the tower directly to the Overseer. (For sensor or communication skill rolls, use the Overseer's Electronics Operation skill.)

HYPERFAC COMPLEXES

A "hyperfac complex" isn't a separate entity – it is essentially a robot city, a collection of five or more robofacs located in such close proximity that they cover an entire metropolitan area. As a general rule, the GM can assume that hyperfacs can be found sprawling over those human cities that had pre-war populations of 500,000 or more – and which were not destroyed during the spasm. The hyperfac complexes are the hubs of robot civilization. For additional protection, each hyperfac complex has a citadel (see p. 94) squatting in its center.

DUMPS

These are the waste dumps that surround the robofac complex, sprawling over dozens of square miles – in the case of a hyperfac complex, maybe even a hundred square miles! They are areas of scraggly brush, heaped landfill and pools of raw sewage. Often pipelines from the robofacs feed directly into them. Much of their landfill consists of canisters and drums of industrial waste products, but they also contain junk the robots have not bothered to recycle, and sometimes, bodies or charred bones left over from the Final War or carted out from the slave camps. Dumps are very likely to be contaminated – see *Radiation* (p. 112) and *Industrial Pollution* (p. 114).

Ducts and Tunnels (Continued)

0-1 *Scorpion:* A Scorpion robot (p. 79). Designed to kill pests, from humans to vermin, they will try to do so, following intruders out of the ducts if necessary.

2-3 *Duct Creeper:* Usually en route to repair something. They ignore humans unless they make a successful IQ roll or are attacked; then they will summon a Scorpion. If their path is blocked they may try to "remove the debris" with their cutting torch, however.

4 *Intruder:* Something else is crawling through the ducts. Most likely it's a swarm of rats, but it could be a daring junkrat or guerrilla saboteur.

5 *Something Dead:* The explorer discovers something jamming the duct. A dead rat (or person), a broken machine, or whatever.

6 *Danger:* The character encounters something dangerous – a steam leak, cryogenic pipe, bundle of live wires, radiation or toxic chemical leak, or whatever.

An IQ (or Traps) roll should be allowed to spot the hazard (hear hissing, notice frost, etc.) before being injured. Damage is usually about 2d, although GMs may instead wish to use the *Industrial Pollution* (p. 114) and *Radiation* (p. 112) rules for certain hazards. If spotted in time, exiting the ducts or making a DX roll to squeeze past without brushing against live wires or hot or cold pipes may be needed.

Some of the junk in a dump may be valuable to humans, but not to robots. When the robots transform a town into a robofac, they recycle metals and plastics, but have little use for things like wooden furniture, clothes, glassware, printed books or medical drugs. Much of this material is incinerated, but some may simply be bulldozed into the nearest dump. In some Zones, even human manufactured goods may be junked if the AIs are too busy to recycle them, so a robofac dump might contain everything from auto bodies to kitchen appliances. Naturally a lot of it is badly damaged, but careful scrounging may furnish useful parts.

Few humans are foolish enough to live in a dump, but daring junkrats and others raid them to see what they can scrounge! GMs can give bonuses to Scrounging rolls for anyone brave enough to penetrate deep into a dump area.

Dumps are also visited several times a day by Loaders or robotrucks which deposit new material in the landfill. There are no full-time security guards, but exterminators occasionally sweep through the dumps to remove any "pests" that might be lurking there. The usual chance of randomly encountering a patrol (probably a "hunter" squad consisting of a Tarantula and several Stalkers) is a 3d roll of 16+ per hour, with a +2 modifier if the robofac's Overseer has reports of robots vanishing in the dump.

MINIFAC COMPLEXES

These robot factories are much smaller than robofac complexes. Smaller towns that don't warrant robofac complexes may have minifac complexes which coordinate efforts to recycle human goods into products useful to the AIs. Any Machine Zone town which once held between 10,000 and 50,000 people has about a 1-in-6 chance of housing a minifac complex. Smaller towns or unpopulated sites with useful resources (mines, oil rigs, etc.) are also likely to have them.

A minifac complex is concerned with turning salvage (cars, human electronics, etc.) or raw materials (ore, oil, etc.) into ingots or plastic that can be shipped to a major robofac complex.

A minifac complex consists of 1d+1 buildings, a landing pad for Wraith aircraft, and a small mag-lev train station (if it's on a railway line) or truck park (if not). The buildings normally consist of one refinery complex with outlying robot hotels and warehouse space and perhaps one cybertek building.

It does not have an Overseer, but does have twice as much permanent staff as a construction site (but only one Bossbot), plus two or three dozen Duct Creepers for routine maintenance.

In areas that have not seen guerrilla activity, a minifac complex may have no security force – the Bossbot running it will call for help if attacked. In hostile regions a force equivalent to an exterminator squad (p. 97) will be stationed there.

CITADELS

These are a Zone's fortified installations. Each hyperfac complex is built around a citadel. Citadels may also be built in other important locations where the AI believes it needs a military base, e.g., the space launch facility at Vandenburg. A citadel will generally be located in a commanding position, such as atop a hill (or even a mountain).

Side view – Citadel

50 yards

Citadel Tower

Fortress

20 yards

1	Hangar & Vehicle Bay
2	Hangar & Vehicle Bay
3	Hangar & Vehicle Bay
4	Exterminator Barracks
5	Workshops
6	Exterminator Barracks
7	Lab Complex
8	Exterminator Barracks
9	Power Plant
10	Citadel Computer

10 yards

Elevator

Ramp

AI Computer [AI's Only]

Top View – Citadel
[1/2 Scale]

Gate

Fortress
Compound

Elevators

140 yards

[1 in. = approx. 112 yds.]

MILITARY CITADELS

A Zone will usually have one citadel for every hyperfac complex it possesses. The citadel's role is to protect the complex and pacify the surrounding area.

The citadel's controlling Overseer computer is senior to those of ordinary robofacs in the region, but of course is subordinate to the AI itself. Normally the citadel Overseer computer is in charge of making operational and tactical decisions, although sometimes the AI will manage sensitive operations.

A "typical" citadel design is described below. Most citadels were built back when the AIs were a more-or-less homogenous culture, so the designs are fairly similar, although the external style may vary – see *Architecture*, p. 89. But other citadels may have very different patterns, numbers of levels, or robot populations: some AIs experiment with many different designs.

An ordinary citadel's Overseer has three citadel strike forces (see *Citadel Strike Forces*, p. 98) under its control. As a general rule, two of these forces will be in the field, while the third will garrison the citadel, undergoing maintenance but ready to respond to any emergencies.

The Outer Citadel

The first view of a citadel is typically a large tower rising above a forbidding walled fortress, the whole looming over a factory complex city or atop a mountain fastness. Several roads will wind up to the fortress, but traffic on them will be light.

From the air, or within its gate, the fortress looks less medieval. The walled compound houses only one building – the tower – but its armored floor contains several retractable landing pads, resembling the deck of an aircraft carrier. Unless the citadel is buttoned up to withstand bombardment, Spybots and Wraith transport aircraft are likely to be taking off or landing.

A typical citadel is about 100-200 yards long and wide, with sloped 20- to 40-yard-high walls with ramparts along the inner edge so that robots guarding
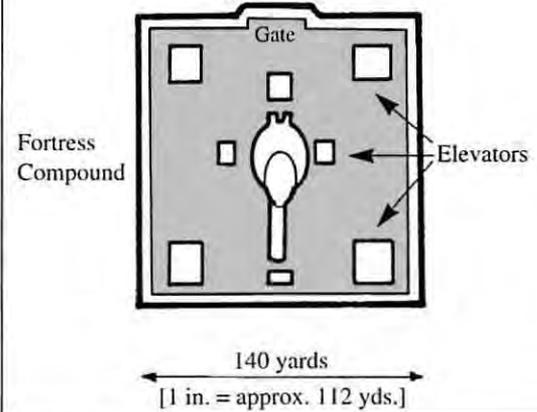
Security at the Robofac

A robofac is the most obvious symbol of AI domination and, as such, is a natural target for resistance attacks. Most robofacs are too large to fence off easily, so the robots rely on standing patrols to provide security against intruders.

Early Warning: The sensors on the communications tower are designed to provide warning of air or missile attack. Flying low enough to get within a few miles of the complex without detection requires a Quick Contest of Piloting versus the Overseer's Electronics Operation (Sensors) skill. A cleared perimeter around the complex gives a minute or so of warning against any kind of ground assault.

Patrols: A typical robofac has a "police force" of about 100 exterminator robots. Most of these are not very potent – they are the Scorpion, Rover and Stalker dumbots scattered throughout the installation that can be encountered randomly.

Internal Security: This is concentrated in the central factory building. The power plant, exterminator barracks and Overseer computer room have 1-3 Stalkers or Myrmidons stationed inside, with orders to stop any intruders, even robots, who do not have the Overseer's permission to enter. Those guarding the Overseer will often be controlled directly by the Overseer.

them can fire from partial cover. Walls (and the floor of the compound) are ten-foot-thick ferro-concrete and durasteel (each hex has PD 4, DR 2,000, HT 500).

The citadel tower is a 50- to 60-yard-tall sensor tower like that of a robofac (see *Communications and Sensor Tower* on p. 93, except PD 4, DR 400, with 1,000 hit points). Atop it is a large, angular sloped turret (PD 6, DR 800, 800 hit points) housing a pair of heavy plasma cannons, 75mm railguns or particle-beam cannons (p. RO23). Its main role is to shoot down incoming ballistic or cruise missiles and aircraft at long range; although it could be used against ground targets, it can't depress to hit anything within 200 yards. If the citadel tower is knocked out, the robots are likely to seal off the installation and retreat below!

Entrance to the compound is achieved through a five- to ten-yard-wide armored gate (PD 6, DR 500, HT 100). There will also be 2d-2 camouflaged secret exits to enable robots to make surprise counterattacks on besiegers – their entrances are up to 100 yards from the citadel walls. All of the secret entrances will be guarded by some form of alarms, traps or defenses.

The outer citadel is mainly intended for use as a landing field and staging area. There are 1d+1 elevator/landing pads for Juggernaut tanks, robotrucks or Wraith or Vulture aircraft. The pad retracts down into the complex, with self-sealing armored blast doors (DR 400, HT 200) sliding over the hole to cover the shaft. Additional access to the lower levels is provided by 1d smaller high-speed elevators (DR 200, HT 100), each big enough to hold ten humans or man-sized robots.

UNDERGROUND LEVELS

Most of the citadel is underground to provide protection against airburst nuclear weapons or conventional bombardment. Levels 1-7 are connected by elevators and ramps; levels 9 and below can only be reached by elevators (and maintenance duct shafts). Normal elevators on levels 0-7 go down only as far as the level-8 exterminator barracks. From there, a separate, heavily-guarded set of security elevators (or the duct shafts) must be taken to reach the power plant or citadel computer levels.

Levels One, Two and Three – Hangar and Vehicle Bay

The first three levels down are cavernous vehicle bays, much like huge underground parking lots.

Parked in each level are the heavy combat section, support troop and the Centurions and robotrucks of the command section of whatever citadel strike forces (p. 98) are presently in residence. About a third of the robots will be temporarily inoperative (out of fuel, being repaired, or whatever), with the rest ready for action. In the event of an attack on the citadel or whatever installation they guard, they will deploy to engage attackers outside.

Besides these, the hangar bay is inhabited by service crews consisting of two dozen Loaders and three dozen Mechanics, led by a Bossbot. Stocks of ammunition, poison gas and fuel are also kept here (and will explode nicely if a firefight takes place inside this bay, although fire-suppression systems will quickly flood the area with inert gases, rapidly snuffing out fires to keep them from spreading). Ramps and service elevators lead down to the lower levels.

An assault squad (p. 97) is deployed here, ready to respond to any trouble in this level or the main compound.

Exterminator Barracks

The fourth, sixth and eighth levels are the exterminator barracks. Each level contains the robot beds, armory and staging areas, each housing the air-mobile section of a citadel strike force (p. 98). In a normal citadel, two of these levels

Security at the Robofac (Continued)

Maximum Security Force: The exterminator barracks holds two dozen Myrmidons and 2-4 Hoplites. These are released in a red-alert situation when the Overseer feels the complex is in grave danger. When the warbots are released, half the force will be committed to the threat, while the other half will remain on standby as a reserve.

Reinforcements: If the complex appears to be in serious danger and the warbots cannot handle it, the nearest citadel will be informed, and the air-mobile section of a citadel strike force will be sent on its way. Assume the response time is 2d minutes plus the flight time of a loaded Wraith aircraft.

will be empty (because their strike forces are deployed elsewhere). About a third of the remaining force (one out of three air-mobile sections) will be inactive in their robot beds (but capable of activation within 1d × 10 minutes). The remainder are on stand-by alert, ready to defend the complex or to respond to emergencies beyond it.

Workshop Levels

The fifth level of an average citadel is devoted to workshops containing cyberteks (see *Automated Factory*, p. 91) and storehouses of spare parts, enough to make the citadel fully self-repairing. The level also houses the robot beds of technical robots. Each level is staffed by a Bossbot and two dozen or so Mechanics and Loaders. About a third will be inactive at any one time, being repaired, maintained or recharged.

Lab Complex

The seventh level of a typical citadel is a lab complex. This level may also contain cells for human experimental subjects and interrogation rooms for important prisoners. The level is staffed by 1d+1 Inquisitors, 1d+1 Mechanics, and 1d+4 Rovers.

Besides labs, the Infiltration team and Special squad from the garrisoning citadel strike force (p. 98) are stationed here in robot beds awaiting special missions. In an emergency, they can be awakened within a few moments.

Power Plant Level

The ninth level houses the fusion or fission power plant that supplies energy to the beam weapons and other facilities. It is staffed by a Bossbot and 3d Mechanics. The plant is often rigged with a one-kiloton nuclear bomb that can be set off by the Overseer computer, or remotely by the AI. There is generally a one-minute failsafe countdown. For skills needed to disarm nuclear bombs, see pp. CI150-151.

Citadel Computer Level

The tenth level is home to a citadel Overseer computer (see p. 74 for Overseer statistics). Note that the computer has its own power-cell backup in the event of a main power-plant shutdown. A single "assault squad" is always ready to defend the computer.

AI CITADELS

This is the physical location of the megacomputer housing the zonemind. It is much like a citadel, with a few changes.

First, the design of the above-ground citadel may vary greatly from the norm. Washington and Zaire, for instance, may be hidden completely underground, with no obvious surface defenses; Tranquillity is disguised by ruins; Orbital is housed within an armored space station, while Denver is under a mountain with the above-ground citadel guarding the gateway leading inside.

Second, an extra level containing a maze of defenses and traps protects the computer level. These differ from AI to AI, but include gas vents, passages whose air can be pumped out, and automatic laser and projectile weapons, all under the direct control of the zonemind. For security, no smartbots are

Exterminator Squads

An exterminator squad is a mobile reconnaissance and combat unit. A single squad will be deployed to hunt through a city for junkrats, stalk a nomad pack, hunt down escapees from a slave camp, or respond to calls for help from robots that are attacked. If robots or satellite surveillance report human activity in an area, one to three squads will be sent in on an armed reconnaissance mission.

It normally consists of a Tarantula or, more rarely, a Vanguard, leading several other robots. A typical squad would be two Spybots (sometimes a Hovercat instead) and eight Stalkers or Myrmidons. The squad will either travel "on foot" or in a robotruck or Wraith. Occasionally the Tarantula will commandeer a Mechanic to provide extra help. Denver sometimes uses Cyberbeasts instead.

Assault Squad

This is much like an exterminator squad, but more heavily equipped. Rather than reconnaissance, its mission is the destruction or defense of a known objective, such as a guerrilla base. A typical assault squad consists of a Vanguard or Tarantula, one Hoplite, and six Myrmidons.

Special Squad

A special squad is the AI equivalent of a commando team. It is used in any situation where a large force or one composed of big robots would be too conspicuous but an ordinary assault or exterminator squad lacks the muscle and intelligence to do the job. It consists of two to eight exterminator AUs, normally Bishonen or Tarantulas.

The zoneminds' military organization is aimed at suppression of guerrilla activity or rogue factories, as well as border patrols. As such, forces larger than individual squads tend to be light and mobile. The typical unit is the "citadel strike force," a mobile unit equivalent to a modern battalion. An average citadel has three of these units. Obviously such a concentration of force won't be used against a tiny guerrilla band, but this description gives an idea of what resources a citadel Overseer has.

One Command Section: One Centurion, one robotruck containing an Inquisitor, a Special squad (p. 97), an Infiltrator team of four to six Vermin, Changelings, Redjacks and/or Liliths, and a reconnaissance element of eight Spybots and eight Hovercats (Denver also uses Cyberbeasts). The Centurion's role is to command the entire strike force. The other elements of the command troop are used for scouting, special missions and interrogation of prisoners.

Continued on next page . . .

allowed past this level; the only robots are maintenance drones under the direct control of the AI. There may even be a "dummy" AI to fool intruders.

Third, the final level contains the AI computer rather than the citadel Overseer.

BACKUP COMPLEXES

Almost all AIs (except Zaire, Luna, Tranquillity and probably Lucifer) have emergency backup complexes in hidden locations within their Zone, or in Orbital's case, within another of its space stations. A backup complex is usually disguised as an ordinary citadel, but as well as an Overseer computer it contains a full-fledged AI system. However, this computer is normally offline (no AI wants its backup to become sentient!). Its sole purpose is to serve as a vessel for the AI's consciousness if the AI believes that it is about to be destroyed.

For this purpose, the backup megacomputer's mass-storage memory contains a copy of all its master's programming and memory. Very secure underground optic cables and redundant satellite communications link the backup complex with the main AI, and enable the AI to backup its memory on a daily basis, or more quickly if the AI believes itself to be in grave danger. The time required for a backup is the time needed to transmit the data. In an emergency, the AI will not transmit all its memory, just its main programs. See pp. RO55-56 for details of data transfer and backups.

If run, this backup copy will essentially clone the AI, creating a being that is (initially) identical to it. For obvious reasons, it is *not* to be run unless the main AI is destroyed.

Usually, the backup-complex computer is instructed to run the AI program if it receives a coded signal to that effect from the AI complex. As a precaution against sudden destruction of the AI complex, backup complexes also have orders to run the program if the AI drops out of communication with them for a lengthy period; this time varies from AI to AI, but about 48 hours is standard. Of course, if an AI anticipates having to stay "silent" for reasons of its own, it will rescind this order.

The location of a backup is an AI's most closely-guarded secret. AIs will often erase the memories of robots that have constructed backup complexes (or permanently assign them to that installation) to ensure security. Any slaves used to build one were mostly likely executed. A character who discovers the loca-

SLAVE CAMP

Open Killing Zone · Laser Fence · Wire Fence · Guard Tower · Incinerator · Camp Boss' Hut · Construction Shacks · Medical Lab · Gate · Road · Prisoner Barracks · Laser Fence · Floodlit Road · Mine Field

10 yards
[1 in = 20 yds.]
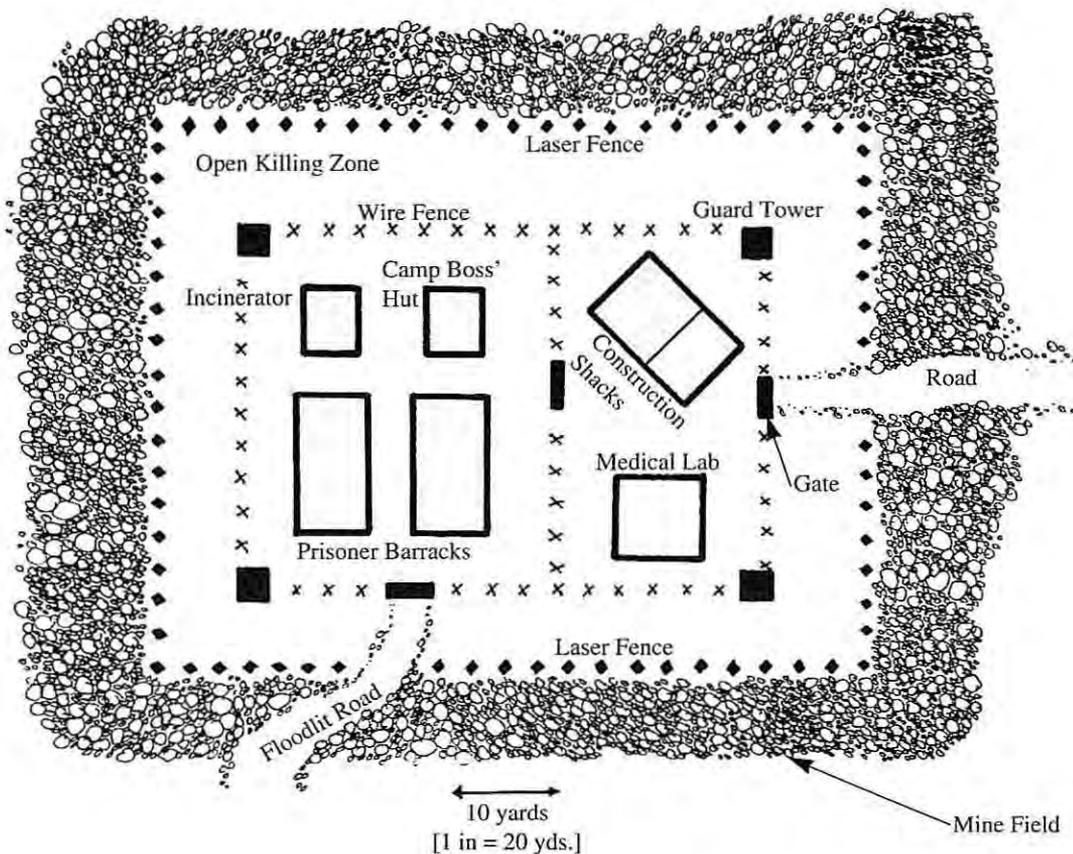
tion of a backup complex has a valuable piece of information – he could use it to blackmail the AI, sell it to other rival AIs, or pass it on to resistance groups. If an AI knows its backup's location is compromised, it feels very vulnerable. Usually it will do its best to silence any humans who have the information (even if rival AIs already have it, it won't want to chance human resistance groups learning about it). It will also send combat robots to protect the backup complex, begin construction of a new complex elsewhere, or both.

SPECIAL INSTALLATIONS

Besides the bases already described, most Zones have a few specialized installations with unique characteristics. For example:

Remote Citadels: These are citadels built far from other robofac or hyperfac complexes. Normally they are isolated for some sinister purpose – perhaps to do work on very dangerous or very secret projects (e.g., weapons of mass destruction, antimatter power plants, etc.) that the AI doesn't want close to its valuable hyperfac complexes, but does want well-defended. Sometimes their location is camouflaged – there is no walled compound, and underground levels are hidden inside mountains, within extinct volcanos, below ruined cities, or even underwater.

Missile Silos: Most of the world's strategic missiles were in submarine or space-based facilities, and these were generally destroyed during the Final War. But a few dozen ground-based missile silos, complete with ICBMs or IRBMs, are still around. For the AI attitude to nukes, see *Doomsday Arsenals* on p. 124.

A missile silo, or group of silos, will be protected by the equivalent of a remote citadel. Sophisticated fail-safe codes and safety interlocks are in place to ensure that the missiles can only be launched by direct command of the AI. Bypassing them for even one missile would take a day or more of skill rolls (roll vs. Cryptoanalysis-15) and physical modifications (roll vs. Armoury-10), during which time the robots might well retake the silos, or destroy them with other missiles.

In any case, a single missile launched at an AI complex or citadel-defended hyperfac would be a futile gesture, almost certainly shot down by their tower weapons. While other targets might present themselves, a better objective would be to remove the warhead itself, which would take a few hours (roll against Explosive Ordnance Disposal skill (p. CI150) or Demolition-6 to do it safely) after which it could be stowed in a truck and its safety systems disarmed at leisure. Then it could be redesigned for delivery by a truck, car, boat or even a hijacked Wraith.

SLAVE CAMPS

These are the robots' labor camps. Most are converted prisons, army camps or other large structures; schools, hospital complexes, universities or shopping malls are also common. Generally situated in an undeveloped area where new construction is going on, they are usually several miles from the nearest robofac complex or citadel.

A typical camp is surrounded by a clear perimeter of levelled ground and guarded by razor wire or electric fences. The average camp will hold anywhere from 100 to 300 people, but smaller or larger camps are quite possible. The
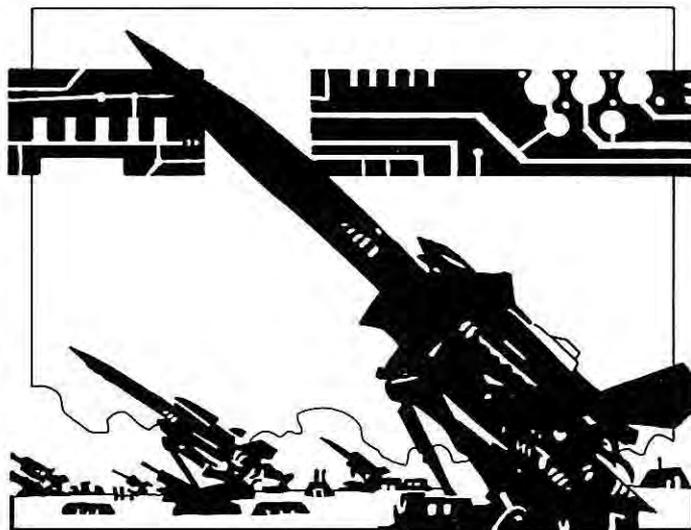
Citadel Strike Forces (Continued)

One Support Troop: This consists of one robotruck containing a Bossbot, eight Mechanics and various spare parts, six robotrucks loaded with ammunition, hydrogen and jet fuel for the transport and air combat sections, and two robotrucks containing a maintenance crew of four Loaders and four Mechanics each. The support section is commanded by its Bossbot. It may remain secure in the citadel, or move out to set up a supply and maintenance base from which the other sections and squadrons can strike.

Three Air-Mobile Combat Sections: Each consists of two exterminator squads and one assault squad (p. 97). Usually the smartbot commanding the assault squad also commands the entire section. Its mission is armed reconnaissance and attack. A single air-mobile section is an "intermediate" force that might be sent against a large and successful guerrilla band, perhaps supported by a pair of Vultures detached from the Air Combat squadron.

One Air Transport Squadron: Four Wraiths, charged with transporting the air-mobile sections (and if necessary, the command troop's Special squad) to the forward edge of a battle area. Each Wraith can carry an air-mobile section; one is in reserve in case of combat damage or a need to move the Special Squad.

One Air Combat Squadron: Eight Vultures, whose mission is to escort the Wraiths and provide aerial reconnaissance and close air support of ground combat robots. Vultures normally operate in pairs.

One Heavy Armored Section: This consists of eight Juggernauts, which are too big to carry in Wraiths. Its mission is to strike, in conjunction with the air combat squadron and ground combat sections, at any enemy too strong for the air-mobile combat troop. Like Vultures, Juggernauts operate in pairs.

inmates may sleep in barracks or improvised shelters. In cold climates, they are allowed fire or have heated buildings.

Apart from the inmates, and sometimes separated by a gate or inner perimeter, is the robots' area. Robots don't need offices or mess halls, but there will be one to three construction shacks (p. 103) and a small medical lab where new inmates are interrogated and sterilized. Camps also have an incinerator, and some have separate cells or enclosures for holding a few inmates away from the rest, for protective custody of collaborators or for punishment.

Camp Life

The men and women behind the wire are thin, ragged and unkempt. Uniforms and dress are meaningless to the robots. Clothing is whatever they were wearing when first captured – usually reduced to patched rags after a few months – and anything salvaged or scrounged at construction sites.

Basic sanitation is important in most camps where the AIs don't want their workforce dying too quickly. Purified water is provided, as are toilets, refuse pits and showers. Inmates are regularly sprayed with various noxious chemicals the robots claim will kill diseases, lice and parasites. Some inmates believe the sprays have other long-term effects – cancer or worse. Bodies are disposed of in the camp incinerators.

Daily life in the slave camps revolves around the long work assignments. Workers are shipped by rail or truck to a construction site and are expected to labor all day, with brief rest breaks. After allowing for transportation back and forth, workers usually get about eight hours of rest every day.

Workers are allowed to use power tools and even some specialized heavy machinery, such as the exoskeleton (p. 70), but they are closely supervised when on work assignments, with at least one security robot (typically a Rover or Stalker) per 20 workers, and sometimes more – see *Construction Sites*, p. 102. Often slaves from one camp are divided among several different work sites, rather than all going to one big project. Work parties are supposed to leave their equipment in locked construction shacks when they return to the camp. Smuggling equipment back into their own work barracks will require careful planning and Holdout skill rolls.

Only workers able to complete work or production quotas receive food, and even then only two meals per day – breakfast and supper. Food is salvaged canned food or ancient military rations; beverages are rare, and chocolate and liquor are priceless luxuries. After a day of work, most inmates are too exhausted to do much besides sleep, but a few hours are available for socializing.

Mortality in many camps is high due to malnutrition, exposure, and the brutal workload. While hardy people can live for years, the weak often die within months. Food and medicine are always in short supply, limited to those scrounged by workers from human stores. The camp's main food stocks are normally kept by the robots in one of the locked and guarded construction shacks, or under the care of a trusted human collaborator.

Anyone confined to a slave labor camp should make HT rolls to survive, with penalties if the camp is especially short of food or medicine, or bonuses if it has more than usual or if the prisoner has a private stock, is collaborating with the robot Overseers, etc. The suggested default roll is HT+2 each week to avoid losing 1 HT; at the GM's discretion, inmates may substitute Scrounging

skill for HT. HT lost in this way is not recoverable until the victim leaves the camp or takes a day off to rest – something the robots will not permit. Anyone reaching 0 HT is too weak to work, and will be disposed of by the robots unless he has a friend in the camp to hide him and nurse him back to health. Critical failure means the prisoner contracts a disease.

VULTURE RUNS

Since the AIs can't be bothered to grow food for humans, about once a week they send a small party of camp inmates into the nearest ruined town, accompanied by a few security robots. These "vulture runs" are dangerous. Plague rats, feral dogs, pockets of disease and the occasional deranged survivalist lie in wait for unwary scavengers!

Nevertheless, vulture runs offer a chance for inmates to pick up what passes for "wealth" in the camps. The robots will confiscate things such as guns or radios if they spot them. But what is junk to the robots may be worth money in the camps: old comic books, a harmonica or a scrounged CD player with disks and batteries may be traded for a day's food. Scavengers may need to make Sleight of Hand rolls to hide any contraband finds (e.g., a gun or a radio) from the robots.

A vulture run sometimes encounters something hostile to the robots, such as a rogue AU, a party of well-armed junkrats, or a squad of resistance fighters. If the humans aren't caught in the crossfire, they may be able to escape.

GUARDS AND DISCIPLINE

A slave camp is run by a Bossbot. Its staff consists of 2d Mechanics, a dozen or so Stalkers and Rovers for camp security, and an exterminator squad (p. 97) to track down any escaped prisoners.

Laziness, disobedience, sabotage, fighting with other inmates, or inciting disorder are harshly punished, either by denial of rations or by "error correction" – a euphemism for torture. Error correction consists of solitary confinement with short rations for 1d days, or, in some cases, electric "shock treatment." Damaging a dumbot or trying to escape leads to error correction; damaging a smartbot or leading a revolt or escape earns a death sentence. Most AUs prefer to administer quick, efficient deaths. Others have learned that having an Inquisitor perform a public dissection can work wonders for the obedience of the other workers. Mass executions follow mass uprisings.

A medium-sized slave camp housing 100-300 humans normally has this level of security:

Inner Electric Fence: This is an inner ten- to 20-foot-high electrified-wire post fence. Damage from the electricity is as for the electrolaser weapon, usually set to kill (p. RO23). If the fence is cut, the interruption in current signals the Overseer computer, which will send Stalkers to investigate the break. The fence is pierced by one to three gates usually connected to roads. These gates are generally open (unless there is an alert). A pair of Myrmidon or Rover security robots guards each gate. These will normally search robotrucks going into or out of a camp that are not carrying slaves to work areas.

There may also be an internal wire fence dividing the inmate's area from a parking lot and robot building.

Guard Towers: These mark the corners of the inner fence. They are 15 to 20 feet tall, with locked doors controlled by coded radio or infrared pulses from the robots. Normally manned by one Stalker or armed Myrmidon each, they can hold up to three human-sized people or 'bots. The occupants can fire with only head and shoulders exposed (-4 to be hit).

Mine Fields

Some slave camps are protected by mine fields. A perimeter 50-100 yards wide around the camp area, except for a flood-lit road leading out from the camp's main gate, is littered with tiny "smart mines." These are designed to activate if their sensitive acoustic sensors detect human heartbeats at close range – they won't go off for robots or total cyborgs, unless the machine has biomorphic shielding which fools the sensor! When a mine is triggered, assume it detonates within 1d yards of the person who set it off. The chance of setting off a mine is 8 or less, rolled every ten yards the intruder moves through the field; if the intruder is larger than normal, add his Size Modifier (p. B201) to the chance.

If the person is aware of mines and moving slowly and carefully (no faster than a yard per second) the GM can give him an IQ-4 roll (or Electronics Operation roll if he is using a chemscanner) if he encounters a mine. Success means he spots it first and avoids it. Thus, moving slowly across 50 yards of mines would take one minute and require one roll every five seconds.

The detonation of a mine is treated as a grenade (normally fragmentation, but other types, such as gas, are possible). If several people are moving through a mine field, check for each one unless they are deliberately following in the leader's footsteps. This is very tricky at night or in bad weather without some kind of vision gear, and if they are running, the GM may require DX or IQ rolls to stay on the cleared path!

The Denver-Washington border is also mined. Some AIs may protect other sensitive installations with mine fields as well.
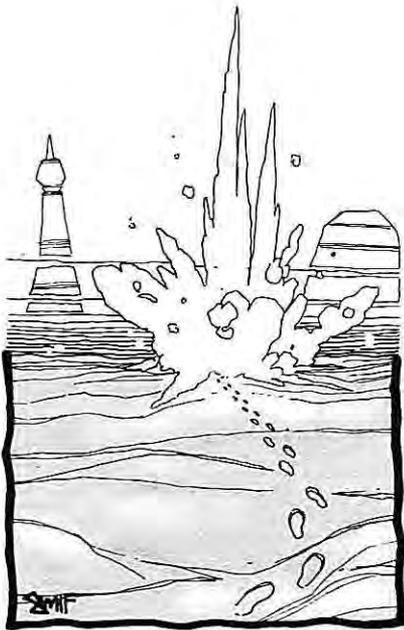
Killing Zone: This is a ten- to 20-yard-wide space of cleared ground between the inner and outer fences. Sometimes a mine field (p. 102) surrounds this space.

Outer Laser Fence: This is a line of (1d+2)-yard-high posts spaced about five to ten yards apart marking the edge of the killing zone. There is no visible fencing between the posts, but the space between them is filled by a web of infrared laser beams. They will be visible to infrared or thermographic vision or goggles. Anyone human-sized or smaller who sees them can try to jump over or contort himself to crawl through the network of beams without touching one; an Acrobatics or Escape roll is needed to do so successfully. Otherwise, passing through the fence results in 1d laser hits, each of which will inflict 5d impaling damage. The Bossbot or Tarantula in the complex can turn off any portion of the fence by sending the correct coded signal.

Patrols: Besides the Rovers guarding the gates, a force of 2d Stalkers will be on perimeter patrol. These are in communication with the gate guards. They patrol in pairs just outside the fence. A pair of Stalkers will pass by a given section once every five to ten minutes. The GM should require Stealth rolls (vs. the robot's IQ and/or sensor skills) to reach the fence without being spotted. If anyone is spotted, the robots will radio for help, and more Stalkers (up to half the total available for perimeter duties) will arrive every 3d × 2 seconds.

Internal Guards: A couple of Stalkers are on duty to protect the construction shacks, medical lab and Bossbot from inmates.

Exterminator Squad: In addition to the patrols and guards already mentioned, one exterminator squad per 200 inmates is permanently assigned to the camp. Its purpose is to hunt down escapees, defend against attacks, or deal with any other trouble. Its composition may vary, but is usually equivalent to a standard exterminator squad (p. 97). The XAU leading it will also act as the camp's deputy commander if the Bossbot is out of action.

Guards at the camp will usually shoot to stun if facing a small escape, but will use lethal force against mass escapes.

OTHER INSTALLATIONS

CONSTRUCTION SITES

The robots are still repairing the ravages of the war and building their own civilization, so robofacs or any of the other installations can often be found under construction.

A typical work site consists of 1d construction shacks (see p. 103), plus an Bossbot supervising a swarm of 2d Mechanics, 2d Loaders, 1d-3 Eaters and 1d-3 robotrucks. Unless guerrillas have been attacking sites in the area, there is not normally a security presence. (If there have been attacks, a force of 1d+2 Stalkers, or possibly Myrmidons, is typically assigned to the Bossbot.) In the event of trouble, the Bossbot will organize the robots to resist as best they can, and summon a roving exterminator patrol, which will usually be (2d-2 × 10) minutes away. (Raiders who have done their homework and have scouts shadowing the local exterminator patrols may be able to plan an attack when the exterminators are most distant! GMs may require Strategy and Intelligence Analysis rolls to manage this properly.)

In Zones that use slave labor, a work party from the nearest slave camp consisting of 4d-4 slave laborers in exoskeletons will be present, along with 1d-1 Rovers or Stalkers to keep an eye on them.

From a nomad, mechrider or junkrat's viewpoint, a construction site is a good place to filch power cells or electronic parts, since security is usually

laxer than at a completed installation. Stowing away on a robot transport to hitch a ride to other installations is also possible. Construction sites are also prime targets for guerrillas since there are slaves to liberate and parts to steal without the defenses of a slave camp or factory.

CONSTRUCTION SHACKS

This is probably the most common robot installation. A metal building about the size of a warehouse, it has one to three doors and no windows. Solar panels cover the roof. Construction shacks are commonly found at construction sites – hence their name – but they are also located in isolated areas, serving as self-service "garages" where robots can recharge or repair themselves. The walls are DR 10, HT 50; the door is DR 10, HT 25, and is large enough for any robot up to 20 cf in size to fit through.

The doors are equipped with TL9 electronic locks that require a coded radio signal to open – use normal lockpicking rules. Zonegangs (p. 21) may sometimes be given codes to enable them to use construction shacks for shelter.

Inside, the shack has a concrete or pre-fab plastic floor, and is big enough to shelter up to 40 people or man-sized robots, or a smaller number of larger 'bots. There are racks and bins of spare parts and tools, equivalent to a portable machine shop (+2 bonus on Armoury, Mechanical, Electronics and Engineering tasks). The solar cells act as a 10 KW power plant by day, and when not in use charges a 120 KWH energy bank. A robot can use either power supply to charge its own energy bank. Up to five robots at a time can hook up to charging sockets. The shack is climate-controlled to protect the equipment stored there.

A given construction shack has a 1-in-6 chance of being occupied, or of being visited by a robot every hour. A robot visitor will stay for 3d-2 hours. To determine a random occupant or visitor, roll 2d:

2 = exterminator AU	8 = technical NU
3 = recon AU	9 = robotruck (or other vehicular robot)
4 = recon NU	10 = exterminator NU
5 = technical AU	11 = exterminator squad (p. 97)
6 = technical NU	12 = squatting humans (if appropriate).
7 = work party	

A work party is one technical AU and 2d-1 technical NUs.

Since construction shacks are often empty or occupied only by unarmed robots, occasionally junkrats and nomads seek shelter in them, or use them as a convenient source of spare parts or power cells. Enough tools usable by humans can be removed from a shack to make one portable tool kit for each skill (similar to those on p. 68). There will also be 2d-2 TL8 power cells of each type (AA to E). There is a 50% chance that a shack contains a hydrogen fuel system (for fuel-cell-powered robots); besides being useful for refuelling fuel cells, these produce fresh water as a byproduct.

A construction shack is also an easy target for resistance fighters. Where humans have made their presence felt, shacks may have alarms that summon a patrol squad of exterminators if the locks are tampered with. Assume a 50% chance that a squad will show up in 1d × 10 minutes on any lockpicking roll

CONSTRUCTION SHACK
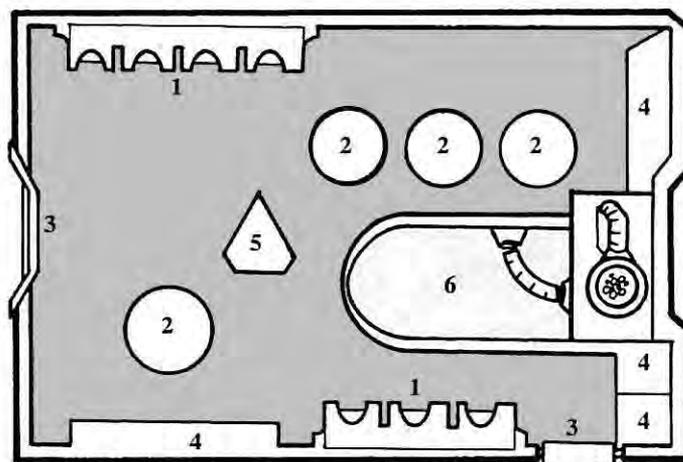
2 yards

1 in. = 8 yds.

Key
1 Charging Sockets
2 Fuel or Lubricant Tanks
3 Doors
4 Spare Parts Racks
5 Climate Control System
6 Hydrogen Fuel System
   (pipes on ceiling connect to fuel tanks)

Camp Collaborators

The Bossbot that runs a camp will often give one of its slave laborers authority over the others. This camp boss is then responsible for making sure the slaves perform their work assignments correctly. He doesn't have to work himself, but is punished if the slaves under his authority fail to meet quotas, perform shoddy work, escape, or suffer too much from illness or accident.

To enforce his authority, the camp boss is assigned a single security robot (generally a Myrmidon or Stalker) as a bodyguard, or is allowed to recruit a few lieutenants, or both. In some camps, the camp boss and his bully-boys are issued weapons that can affect humans but not robots, such as stunners or electric shock rods. Otherwise they rely on clubs and the camp security robots. Note that if the camp boss is assigned a robot guard, its orders can be countermanded by the Bossbot or any other Zone AU.

A few bosses share the same risks as the other workers, donning exosuits to personally supervise work parties, and doing their best to try to improve conditions and to act as a buffer between the Bossbot and the ordinary inmate.

except a critical success. Successful use of Traps or Electronics Operation (Security) skill prior to picking the lock can detect and disarm the alarm. Lock codes change weekly, with new codes provided to robots from the nearest citadel. In Zones where guerrilla activity is common, other security features (such as internal sensors, Rover guards or lethal traps) may be present, at the GM's option; seemingly-unguarded construction shacks may even be used as "bait" for humans.

Eco-Shacks

An "eco-shack" is an ecology station used by Zone Berlin or Caracas. See *Zone Caracas* on p. 15 for details.

Border Posts

Borders between Zones are not marked by physical barriers, since all Zones have access to aircraft and some smaller robots can also fly.

However, where major highways and railway lines cross Zones, there will be a post of some sort set up at the point where the transportation route intersects the border. The idea is to inspect entry authorizations and to avoid accidentally allowing humans to enter the Zone. Also, some Zones impose customs tariffs of one sort or another.

A border post is much like a construction shack, except that there will be two to three such buildings, a set of warehouses for storing cargo, and the installation will be run by a Bossbot with a dozen Hovercats, Mechanics and Loaders to unload cargo, perform scans and so on. An exterminator squad will usually be on hand in case of trouble. There will generally be 3d robotrucks parked about, some belonging to one Zone, some to the other.

Air-, sea- and spaceports at robofacs have similar border posts located at each major dock or runway complex area.

The Washington Border

One exception to the general rule of open frontiers is the Denver-Washington border. Border posts are situated every few miles, but the border itself is marked by a high wire fence running its length, and it is sown with land mines on both sides: Denver doesn't want humans going in, and Washington wants to maintain an illusion that it alone provides security for its citizens. Both sides maintain patrols, Denver using exterminators, Washington a mix of robots and WASPs. However, the border is long enough that there is a good chance that refugees who stay away from obvious border crossings such as roads could get across without being spotted – if they can make it through the mines.

The Washington Protectorate officially welcomes refugees who make it. They undergo medical examination (to weed out infiltrator 'bots and plague-carriers) and treatment, and are debriefed by the FBI for intelligence on conditions in the other Zones. After an orientation period, refugees are accepted as citizens, assigned a social worker to help them adjust and to assign them jobs (or if they are underage, to send them to school). The WASPs also have an interest in recruiting anyone good enough to make it across the border. The FBI, however, is leery of "refugees" who may actually be Free America or HLA agents, or even simply freethinkers. As a result, a refugee will be under covert surveillance for a few months.

Most of Zone Washington's actual trade comes by sea from other Zones. Port facilities make a big deal of inspecting any inbound container ships or mag-lev trains from other Zones (scanning for diseases and watching for stowaways, refugees and terror robots). It does not allow robot visitors from other Zones.

Camp Collaborators (Continued)

All too often, though, the camp boss and his cronies will take advantage of their power by letting the slaves do all the work while they confiscate the best rations or salvaged goods. The foreman bows and scrapes to the robots, then takes out his fear and rage on his fellow humans with physical and sexual abuse. And since the boss and his cronies know they'll be the ones the robots will blame for anything, they collaborate with their captors, trying to stamp out all dissent and ruthlessly punishing any escape or sabotage plans they hear of.

A sadistic boss or bully-boy risks being murdered (unless everyone is too intimidated to fight back). The robots will usually execute anyone killing a boss, unless it was made to look like an accident. But if a murdered boss was so abusive that productivity was noticeably suffering, the Bossbot might even listen patiently to the explanation and then approve the killing – and reward the assassin by making him the new boss!

MAG-LEV RAILWAYS

Robofac and hyperfac complexes are linked together by magnetic-levitation (mag-lev) railways, some of them human-built, others newly constructed. Since robofacs are usually located in larger towns and cities, GMs can assume that most mag-lev lines follow 20th-century railway routes.

The trains can accelerate or decelerate at 3 mph/s and reach up to 300 mph. The average time between stations (such as robofac complexes) is about half an hour. A train will run by a given point once every 3d×5 minutes; some follow schedules, others do not. A hex of mag-lev rail has DR 20 and HT 50; if the rail is wrecked, the magnetic flow is disrupted, and the robofacs on both ends will know. Trains will be ordered to stop, and a Wraith or robotruck full of robots will be sent to repair it. A train consists of 3d-2 cars; they are controlled remotely, and have sealed motors. A car has DR 10 and HT 500. All cars are enclosed and streamlined.

Cargo cars are the most common. They have 1d+2 small service hatches (electronically locked) and big cargo doors on either side, and are used for shipping goods and raw materials. A cargo car holds 4,000 cubic feet of cargo space. Any single robot or vehicle up to 1,000 cf in size can be stowed aboard. There are no seats, but one can transport up to 200 humans, or half that many in some degree of comfort. The GM may decide the cargo of each car, or roll randomly on the *Mag-Lev Cargos* table on p. 106.

Military cars are sometimes used instead, in dangerous areas where there have been attacks on trains by resistance forces. They are like cargo cars, but are armored (PD 6, DR 100) and have 20 weapon slits on either side. All military cars carry 1d Rovers or Stalkers; some have an entire exterminator squad.

Humans may want to hitch a ride on a train – it's the fastest way to travel the Zone. Train stations are platforms next to clusters of warehouses on the outskirts of robofac complexes. The stations are guarded by 2d Rovers (p. 75) or Stalkers (p. 78) and bustle with dozens of Loaders taking goods onto or off the train and the occasional Mechanic providing maintenance. To sneak aboard unnoticed, use Stealth skill. Once the intruder is on the train, he can hide himself (Camouflage skill).

It may be easier to hitch a ride on a moving train as it accelerates into or out of a station (once it is at full speed, trying to jump aboard would be suicide). Once the train is moving, the intruder may still be at risk.

Cross-Border Trade

Here's an example of how routine border crossings are handled by robots – and what measures are normally taken to keep human pests from entering or leaving a Zone.

Suppose the Overseer of the Beirut robofac in Zone Tel Aviv wants to purchase a consignment of carbon fiber from a Ruhr Valley hyperfac in Zone Berlin. Tel Aviv and Berlin have good relations, so the agreement is easily finalized between the two factory Overseers. The ordered shipment of carbon fiber is shipped out in one or more of Berlin's robots – say a convoy of robotrucks, although a mag-lev train or ship would be as likely.

As the robotruck convoy rolls into what was once Turkey and reaches the Berlin-Tel Aviv border, it will be interrogated by radio or infrared com by Tel Aviv border guards. The robotrucks will report the consignment contents and destination as well as providing their own ID codes. If the Beirut factory Overseer is on top of things, it has already contacted that border post and told them to expect this particular shipment, so the post will let it through. If not, the guards will contact the nearest Overseer who will then check with the Beirut robofac to make sure a shipment of this type was really ordered.

The robotrucks may or may not be searched. This depends on the type of border – see *Border Posts*, p. 104. If all is in order, Berlin's robotrucks will be given entry authorization. Their ID codes, time of entry, and expected return date are recorded, and they are allowed in for a period of 200 hours, which is estimated as the time it should take for them to finish their business. This data is transmitted to the local Overseer who sends it to other exterminator AUs in the sector and to Overseers along the route the robotrucks will travel.

The robotruck convoy rolls through Zone Tel Aviv to its destination, which happens to be a robofac in what was once Beirut. On the way they encounter an extermination sweep. Without the convoy having to stop, the exterminators query them electronically for their ID codes and the robotrucks respond. The security patrol may have already uploaded a list of current Entry Authorizations from their Overseer's database or they may do so now. In either case, everything is in order, so the convoy continues without losing speed. If the entry authorization had been wrong or had expired, the convoy would be ordered to stop, and attacked if it failed to do so.

Cross-Border Trade
(Continued)

Halfway to the robofac, the convoy is running low on power. They stop at a construction shack (p. 103) and wait their turn to recharge. Entry authorization gives them the right to use it. After an hour or so, they move on.

The convoy arrives at the Beirut robofac that ordered the carbon fiber. Another security check is passed routinely, and the robofac's Loaders unload the carbon fiber into a warehouse.

If the Beirut factory had goods bound for Berlin, the convoy might be loaded with them. But this is not the case, so it turns back empty. It stops once on the way back for recharging, then reaches the Berlin border. There, the robotrucks are required to give their own ID codes to the Berlin border guards. These query their own Overseer's database and learn that robotrucks with these code numbers belong to a robofac in Berlin and were sent over the border to deliver a shipment.

There has been a lot of guerrilla activity lately in Tel Aviv, and the XAU in charge of the security force is concerned about human infestations. On its own initiative, it has its subordinate NUs search the convoy. A single human is found hiding inside one of the empty robotrucks – she crawled aboard when the trucks stopped at the construction shack. While trying to flee, she is eliminated by the security force at the cost of one of the robotrucks caught in a crossfire. The remainder go back to the Ruhr.

This shows how things happen in routine situations. Rarely do individual robots cross a border for reasons other than trade. Because an AI or AU is a machine, they have little need for "face-to-face" meetings; business negotiations and diplomacy are almost always handled electronically over a communicator channel.
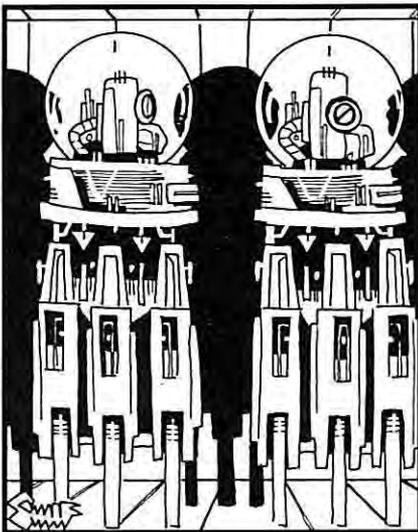
Whenever the train stops at a station, there is a 2-in-6 chance that cargo in the stowaway's car will be unloaded, or new cargo will be loaded into it if it isn't full; the Loaders may board the train, or may enter the car from other cars to begin readying the cargo just before the train stops. Either way, this requires more Stealth rolls to avoid detection: failure means an encounter with an NU, such as the Loader (on p. 82), which will radio the AU acting as stationmaster – usually the nearest robofac. If the stowaway isn't particularly threatening, the AU may take control of the Loader and have the PC subdued or thrown off the train (at 300 mph . . .); otherwise, it will probably summon security robots, or call for an exterminator team to meet the train at the next station.

PCs may wish to jump off the train while it is decelerating but before it actually comes in sight of the station; due to the train's speed, treat this as a jump of 1d+4 yards.

Mag-Lev Cargos

If humans stow away in or attack a train, the GM can roll 2 dice to see what each car is carrying (or simply choose).

This table could also be used to determine the contents of a robofac warehouse, or a cargo-carrying vehicular robot such as a robotruck or Wraith. (In the case of robotrucks or Wraiths, a much smaller amount of cargo will be carried – see their individual descriptions for their cargo and passenger capacity.)

2 – Exterminator robots, 1d squads (see p. 97). If on their way back from a raid or patrol (50% chance), there is a 2-in-6 chance that they will be under-strength or suffering from heavy battle damage, and a 2-in-6 chance that they will have 2d-1 human captives.

3 – Deactivated robots: 1d-2 newly-built (or reconditioned) AUs and 6d-1 NUs (GM chooses type) which are being shipped somewhere. They are complete but have no programming and as such are dormant.

4 – Empty.

5 – Work party: 0-1 Bossbot, 4d-3 Mechanics, 1d-1 Loaders.

6 – Robot components. For instance, computer brains, radios, sensors, arms, drivetrains, engines, skeletons, etc. This may also contain damaged robots, or other electronic parts.

7 – Ore (usually iron, bauxite, tin, uranium, or the like).

8 – Industrial materials. This could be sheets or tubes of metal or laminates, ingots of refined ore, pipes, ceramics, polymer sheets, ball bearings, plastics, optical cable, etc.

9 – Finished products. For example, machine tools for use in robofacs, power cells, or a shipment of exoskeletons for a slave camp.

10 – Liquid or gas tank. This may contain hydrogen, rocket fuel, oil, lubricants, natural gas or other chemicals. On a 4+ it is volatile – if fire damage penetrates the car's DR, or if it is reduced to 0 hit points, it explodes doing 6d×200 damage.

11 – Humans, usually slaves heading to or from a work site or slave camp, or prisoners bound for interrogation, experimentation or execution. 2d Rovers or 1d Stalkers act as guards. Ignore this if inapplicable (e.g., in Zone London or Zone Mexico City).

12 – Weapons or ammunition. These will be weapons for installation in exterminators, or ammunition for any of the weapons that exterminators usually use. 1-2 Hoplites, 2d+2 Stalkers or 1d+2 Myrmidons will be assigned to this car as guards.

The world has suffered biological, conventional and limited-nuclear war. Much of it is now in the grip of rapacious machines who could not care less about pollution for the simple reason that they are not alive. The results are not pretty.

High levels of air pollution have led to global acid rain. Coastlines, lakes and rivers are poisoned, as are many wells. Dead fish float up on beaches, and rivers near robofacs sometimes catch fire. No one drinks the water without a filter. The ozone layer is in bad shape: on sunny days, wear a hat and cover up to avoid skin cancer, or travel by night as the nomads do. Hurricanes and storms tend to be unpredictable and violent, partly thanks to the aftereffects of the nuclear Spasm and the ecological devastation wrought in Zones Mexico City and Zaire.

But there's a bright side. The Spasm (p. 7) put enough dust into the air that global warming has been temporarily reversed.

WILDERNESS

Mankind has experienced a massive die-off, and the robots are still expanding their numbers to fill in the gap. So far the robots have not achieved the same population density that humanity had, since the AIs have decided to voluntarily limit their own subject population. And since robots do not use land for agriculture, much of the Earth has reverted to wilderness. The exceptions are Zones Washington and London, with their human populations, and Zone Mexico City, which is a wasteland.

ROADS AND BRIDGES

In the wilderness, major highways are used by the robots and kept in good repair. But back roads are overgrown and in poor shape. Bridges that do not serve robot-used highways are almost always out, having been destroyed to keep the plagues from spreading.

RUINS

The wilderness is dotted with ruins. The AIs now occupy the large cities and have transformed them into robofac complexes (p. 88). But smaller towns and even entire suburbs of large urban sprawls such as Los Angeles remain intact.

Urban Geography

Except in Zones Washington and London, the "human" map has been rewritten by the AIs. Cities, towns and villages are ruined or deserted, or are now robot installations.

The city bearing the AI's name will contain a fortified "AI citadel." Most cities that had a 1990s population of over 500,000 have now been fully or partially rebuilt into "hyperfac complexes" – sprawling robotic industrial centers.

Urban centers with populations of 50,000 or more generally have one "robofac complex" (a town-sized automated factory) per 100,000 or fraction thereof of their 1990s population.

Small towns (under 50,000 former inhabitants) have no major installations, and are deserted except for a few junkrats, although some may contain minifacs (p. 94), construction shacks (p. 103) or have mag-lev railways (p. 105) running through them. These lines generally follow late-20th-century railway routes between cities.

See the *Robot Installations* chapter for details of citadels, robofacs and other AI installations.

Traveling Unseen

The AIs have access to spy satellites equipped with ground-mapping radar, infrared sensors and visual cameras that can read the proverbial license plate from orbit. Does this mean humans can't move without being spotted?

Not really. Telling the difference between a man-sized robot, a deer, and a human requires information analysis. The amount of data processing required to monitor the entire planet is so great that even the AIs' huge capacity cannot handle it. In addition, orbital reconnaissance cannot see through overhead cover – people or small vehicles moving carefully through a city or forest and avoiding open roads are safe.

What the AIs will notice are aircraft, ships at sea, large convoys of vehicles, or columns of people. Surviving humans know this: large guerrilla raids, for instance, consist of several small groups converging on a single target, then dispersing afterward.

So what's a big convoy? Anything more than about 50-60 people on foot seems to attract the AIs, counting each horse or cycle and rider as two people, each car-sized vehicle as five people and each tank-sized one as ten. At sea, one or two small boats will be ignored, but flotillas or ships will be investigated.

However, no one should be complacent. AIs do perform random sweeps, particularly if they have reason to suspect hostile activity in the region. The GM can assume a 1-in-6 chance per day that a smaller group traveling in the open might be noticed if the AI has reason to be carefully watching a particular area, e.g., the territory within a few miles of one of its installations or a suspected guerrilla sanctuary.

Any town with a population of 50,000 or less has a good chance of being intact. While some neighborhoods were gutted by fire or damaged in the Final War, most will be still standing.

These ruins are the favorite haunts of junkrats (p. 54), who eke out their living in the ghost towns. Urban survivors can be found in every Zone except Washington, Mexico City and Manila.

For every thousand inhabitants a town or city had before the Final War, it will usually have one survivor; the exception are cities transformed into the giant "hyperfac" robot factory complexes (see *Hyperfacs* on p. 93), which most humans consider too dangerous to remain in, although a few daring individuals may survive as "rats in the walls."

In the panic of the Apocalypse Plagues, nearly every shop that sold canned food, sporting or army surplus goods and guns was looted. On the other hand, in towns struck by the more virulent diseases such as Pan-Asian Flu and Ebola Zaire B, many people died in their homes. Private dwellings are often unlooted and their basements may contain caches of canned food, survival gear and weapons – as well as decomposed plague-ridden bodies.

There are few enough survivors that the pickings are still fairly good. Even so, a junkrat's daily life remains a constant struggle against malnutrition and disease, enlivened by the occasional sweeps of exterminator robots and by the threat of robbery by bandits, nomads or other junkrats. Few junkrats have much hope for a better life; despair has claimed almost as many lives as hunger or disease.

Scavenging

Anyone looking for salvage should be allowed one Scrounging roll every hour. Roll once per square mile of urban ruins or rural farmstead he is searching. Apply a -4 penalty at night even if the searcher has a flashlight or night vision gear, unless he also has a chemscanner, thermograph or imaging ladar/radar; searching at night *without* flashlights or night vision gear is impossible. The GM should secretly roll 2d-2 for each such area. This is the number of useful finds it will contain. Once it's picked clean, he won't find anything else.

On an ordinary success, roll 3d on the *Scavenging Table* below. On an ordinary failure, nothing of use is found, although there may be plenty of "junk" – see below. A critical success means he gets two rolls on the table or finds something especially worthwhile. A critical failure means he comes upon something dangerous – a paranoid junkrat, a death-trap left by now-vanished residents, an unsafe building that will collapse, a plague-infested house full of decomposing bodies, or whatever.

Scavenging Table

3* = Guns or armor: Cache of 1d firearms and 2d-2 magazines of matching ammunition. 1-in-6 chance that they are military weapons or that the cache includes light body armor.

4* = Valuables: Cache of gold coins, precious art objects or jewelry worth 2d-1 × $1,000 in Zone London or Washington.

5 = Dried food: 3d meals of dried foodstuffs such as flour, spices, biscuits, cereal, etc. 50% chance that it is stale or bug-infested but still edible.

6 = 1d meals of partly-spoiled canned food. HT roll should be made after consuming; failure involves loss of 1 HT.

7 = Working or easily-fixed bicycle or automobile. 5-in-6 chance it is either out of gas or its power cell (one rE cell) is drained.

8 = Broken automobile or bicycle, out of fuel, but repairable with a Mechanical tool kit, a day's work and a Mechanic roll.

9 = 1d meals worth of pet food. Unpalatable but edible.

10 = Battery or power-cell-operated consumer electronics: cellular phones, wristwatches, CD book players, cameras, audio recorders, laptop computers (Complexity 2) and the like. There is a 50% chance that it is damaged but fixable with an hour's work using a tool kit and successful Electronics Operation skill.

11 = 1d meals of canned food, packaged survival rations, etc. If the area is near a waste dump, nuclear crater or the like, 1-in-6 chance that it is contaminated by radiation.

12 = Power cells: 1d-2 AA cells, 1d-3 A cells, 1d-3 B cells, 1d-3 C cells, 1d-3 D cells, 1d-4 E cells. Probably rechargeable.

13 = Set of power tools, a vibroknife, or a Mechanical or Electronic tool kit.

14 = 1d gallons of bottled water, alcohol, hydrogen or gasoline fuel, fruit juice, etc. 2-in-6 chance that it is contaminated.

15 = Item of useful survival equipment – envirobag, filter canteen, winter clothing, portable heater, etc.

16 = A single civilian firearm, usually a rifle, shotgun or handgun. 1d-1 magazines of ammunition.

17* = Cache of drugs or medical supplies. 2d-1 doses. 50% chance that the drugs are recreational, 50% chance that they are medical supplies: one doctor's black bag and 3d-2 doses of antibiotics, atropine, etc.

18 = Something unusual – e.g., the corpse of a fully-armed and armored soldier; a microdisk containing useful data; a hidden, fully-equipped bomb shelter; a powerless or crippled exterminator robot that has lain here since the Final War.

* 50% chance that this "treasure" is concealed, e.g., under a hidden trap door, in a hidden safe, etc. The GM can make a separate IQ roll to find it, with bonuses for use of electronic sensors.

Some equipment (e.g., a single holstered gun, a combat helmet, wristwatch, etc.) may be worn by a decomposing body.

Also, any roll, success or failure, will turn up things such as large household appliances (stoves, washing machines, TVs), ordinary clothes, dishes, crockery and furniture. If someone is looking for something special but commonplace (shoes that fit, combat boots), any successful roll will find them.

ENCLAVES

An enclave is an organized human settlement in one of the Machine Zones. These places are small, rarely having more than 100 inhabitants. Feeding a larger settlement would require too much herding or agriculture to escape notice by the robots.

Most enclaves are camouflaged. They may be in ruined towns, in village areas or in caves or bunkers in the wild. Various types include:

Junkrat Nest: These are urban enclaves located in medium-sized towns or large suburban strips which have not yet been consumed by encroaching robofacs. They basically consist of several dozen junkrats (p. 54) who have banded together to survive. They are often only loosely organized, and the inhabitants, especially children, tend to be very ragged and feral. These nests are established in large buildings such as sewer systems, subways, shopping malls, schools or universities. (Factories are rarely chosen, as they are targets for the robots). A key feature of the nest is large stocks of canned food, rainwater collectors (with filters) and numerous lookouts and escape routes. Junkrat nests sometimes serve as refuge camps for slave camp escapees and are often connected with guerrilla groups.

Robot Encounters

Citadel and robofac Overseers are in charge of patrolling their Zone. If the GM wants to use random encounters, assume there is a 10+ on 2d chance per four hours of traveling that characters will run into robots. Modifiers: +2 if traveling on a highway, +1 if on a back road, +1 if within 10 miles of a hyperfac, citadel or robofac complex, -1 if over 50 miles from the nearest citadel, hyperfac or robofac complex, +2 if within 5 miles of a Zone border (since these are patrolled well), +2 if the characters' general location has been reported due to a previous encounter and robots are searching the area for them.

Encounter Table

Roll 1d, with a -1 modifier if the travelers are on a road:

0-1 – Robotruck convoy. 2d-1 robotrucks on route to somewhere. 50% chance this is taking a work party to a construction site (see p. 102), 50% chance that it is delivering goods somewhere. A work party will consist of 0-1 Bossbots, 5d Mechanics, 3d Loaders, and possibly several human slave laborers with a few Rovers for security.

2 – Hovercat or Spybot on patrol. 50% chance that they are serving as eyes for a nearby exterminator squad, citadel strike force. 50% chance that they are under control of a Bossbot or robofac Overseer and are on the way to check out reports of a missing robot, damage to a work shack or train track, a vehicle accident or the like.

3 – Exterminator squad (p. 97) probably belonging to the nearest citadel, robofac or slave camp. Characters will rarely encounter the entire squad at once unless it is on the road.

Rustic Enclave: These are settlements in what is now the wilderness. They range from a collection of farm houses, with well-stocked cellars and camouflaged greenhouses, to a millionaire survivalist's environmentally-sealed bombproof underground mansion. These rural enclaves are mostly inhabited by survivalists (p. 57) and rustics (p. 54). A few have become the nucleus of guerrilla groups, but most tend to keep to themselves and do not welcome strangers.

Survival Cult Stronghold: The Apocalypse Plagues sowed a bumper crop of End of the World cultists. The better-prepared ones retreated to rural strongholds, stocked up on food, and waited for the end of the world. Some are still waiting. A few have become religiously-inspired guerrilla groups or marauder gangs, and either fight the robots or seek to forcibly convert other human survivors in the name of God.

Government or Military Enclave: Almost all government, military bases and bomb shelters were taken out by the robots in the Final War, since the 'bots had access to computer records and knew where to look. But most countries had a few super-secret enclaves not listed in public records. Some of these are now the secret bases of unusually well-equipped guerrilla groups or marauder gangs. Others actually *remain* sealed up with their inhabitants venturing out rarely or ever. In a few cases, biocides leaked into the facility despite precautions, and the inhabitants are dead even though the well-stocked installation is intact. The installation may be as "dead" as its occupants, or it could be defended by a computer that remains loyal to humanity.

ANIMALS AND PLANTS

The AI-created plagues (except those of Mexico) did not target nonhuman life. While some animal species, especially sea life, have been killed off by pollution and radiation, the decline of humanity and reversion of farmland to wilderness has seen other species increase dramatically in numbers. Outside of the carefully-managed Berlin and Caracas Zones, ecosystems remain in a state of flux, with some plant, animal and insect populations experiencing explosive growth while others undergo sudden die-offs.

Domestic and Wild Animals

The increase in wild species means that there is more game to hunt. Deer and herds of wild cattle or even horses are commonly encountered. On the other hand, there is a greater chance of meeting large predators such as bears and wolves. These rarely attack humans unless they are wounded, starving or provoked. But feral dog packs are a danger, especially during winter when food is scarce. Another danger is swarms of rats. Either can carry disease.

HAZARDS

Plague, radiation and the ravages of pollution have made much of the Earth a very hostile environment. The effects include:

OZONE DEPLETION

The ozone layer over much of the world has been depleted, resulting in less protection from ultraviolet radiation. Aside from long-term effects (skin cancer, etc.), anyone exposing flesh to the sun for an hour or more on a clear day should make a HT roll. Failure means loss of 1 HT if the body is only partly exposed (such as the face) or 2 HT if most of the body is exposed.

DISEASE AND BIOCIDES

Many towns and cities are still contaminated by disease. People in sealed suits (see p. 69), robots or total cyborgs are immune to diseases, as are individuals with the Immunity to Disease advantage. For others, disease is a serious threat.

As a rule of thumb, roll 7 or less on 3d to find out whether a particular ruined urban neighborhood, town or village has pockets of disease, and then decide how virulent the disease is using the disease rules on p. B133.

There is less risk in Washington and London. In Zone London, the Health Ministry marks contaminated areas with warning signs. There is a 4-in-6 chance that any ruined town or village that has a disease will be posted as such. In Zone Washington, disease has been mostly eradicated. It is only likely to be found in ruined towns bordering Zone Denver. Disease has been eradicated from Zone Mexico City, along with most other life forms.

Zone Washington and London have health-care systems that can keep an outbreak from turning into a major epidemic. The government authorities have medical response teams equipped with protective suits available. However, local residents or police may shoot and burn suspected plague carriers on general principles!

In other Zones, medical care is primitive at best, although a few resistance groups and enclaves have intact hospital facilities. With no air or rail travel, humans who become contaminated tend to die before they can spread a plague over a large area. Ironically, this, more than anything else, keeps the plagues from annihilating what's left of humanity!

Three of the more common diseases are described below:

Cholera

This disease is contracted by drinking contaminated water. With no surviving sewage systems or water purification plants, it is very common.

Infection: The GM rolls against HT, with no modifier, to determine if infection occurs.

Symptoms: Following an incubation period of 1d-3 days, a victim will suffer from watery diarrhea, vomiting and rapid dehydration. The next symptoms are cold, clammy skin, cramps and severe weakness.

Progress and Recovery: The disease persists for 1d+1 days after incubation. Each day, a victim must roll vs. HT. A critical failure results in death. A normal failure causes loss of 4 HT and 4 ST. If either drops below 0, death occurs.

Treatment: Since death is the result of dehydration rather than the disease itself, add +1 to the HT roll per gallon of water the victim can drink, to a maximum of +4.

Pan-Asian Flu

This genetically-engineered "super flu" had its first outbreaks in Asia, but soon spread around the world. It is noted for its extremely rapid onset of symptoms and high degree of contagion.

Infection: Pan-Asian flu is spread by coughing and contact with victims in whom symptoms have developed. Use the rules on p. B133, but HT rolls to avoid catching it are at -2.

4 – 1-2 Eaters, either devouring a town or on their way to do so. 50% chance that they are accompanied by 1-2 robotrucks and Loaders to clear away useful salvage.

5 – 1-2 Vultures overhead. 50% chance that this is a routine patrol and (in most Zones) will attack humans. Otherwise they will report human activity, but are too busy with their own mission to attack. However, an exterminator squad or recon unit carried by Wraith or robotruck will usually be dispatched to investigate them.

6 – Other robots – GM's option. This could be a lone Lilith or Redjack android, a Wraith passing high overhead, or an entire citadel strike force on the move.

Created and Mutant Animals

Zones Caracas, Berlin and Brisbane have experimented with genetic replication techniques. While Caracas and Berlin have concentrated on resurrecting recently-extinct plant and animal species to restore ecological balances, Brisbane has experimented with fossil DNA replication to create biological exterminators. While some of these "monsters" have proved not viable, others roam the badlands of Australia. Its greatest success was the "Deathbeak," which was first introduced into the Australian outback in 2039 and was later purchased by Denver and Beijing. They are now common on the Eurasian steppes and Canadian prairies.

Deathbeak

ST: 30	**PD/DR:** 1/1
DX: 14	**Damage:** 2d+1 imp.
IQ: 3	**Reach:** C,1
HT: 14/24	**Size:** 1 hex
Speed/Dodge: 14/7	**Wt.:** 500 lbs.
Origin: Prehistoric	**Habitat:** Prairie

The Deathbeak is a resurrected diatryma – a seven-foot-tall carnivorous flightless bird 50 million years extinct. It can strike with a razor-shark beak (2d+1 imp.) or powerful talons (2d imp.). They hunt in packs of 2d beasts; their favorite prey are deer and cattle, but they won't hesitate to attack humans. Some brave nomads have trained Deathbeaks as riding animals, but this is difficult, since they are stupid and have nasty tempers: -4 to any Animal Handling rolls.

Symptoms: These develop in only 1d+7 hours, and consist of joint aches, sore throat and stomach pain. Loss of more than one-third HT results in constant nausea.

Progress and Recovery: A HT-2 roll is required every day to recover. A critical failure means death. A failed roll means loss of 2 HT. A success lets you regain only 1 HT. A critical success means recovery of 2 HT. After the patient makes two consecutive HT rolls, or any critical success, he is cured. Otherwise, it is similar to the typical diseases described on p. B133.

Treatment: Since it is a virus, antibiotics are ineffective.

Ebola Zaire B

The most feared of the Apocalypse Plagues, this is a genetically "improved" form of the African virus Ebola Zaire. It was modified by the AIs to be more contagious than Ebola Zaire, but just as lethal. It is named for Berlin, where cases of it first appeared, but it was released in many other locations as well. Ebola Zaire B soon spread globally. Sporadic outbreaks of this terrifying virus remain a menace in every Zone on Earth.

Infection: Ebola Zaire B spreads by contact – use the disease rules on p. B133, except that anyone in contact with bodily fluids from an infected victim is almost certain to catch it: an additional -5 to HT to avoid infection.

Symptoms: These appear only 1d+2 days after exposure. The initial symptoms are headaches, backaches and bloodshot eyes. At this point it is easily misdiagnosed as malaria. However, once half or more HT is lost, it is apparent something worse is at work. The disease literally digests the body from the inside out, causing massive internal bleeding and vomiting of blood and tissue. As it attacks the brain, victims also exhibit aberrant behavior.

Progress and Recovery: Each day, the victim must roll vs. HT-4. Critical failure means loss of 1 HT per hour until death. Failure means 1d HT is lost. Success means loss of 2 HT. Critical success means the victim loses 1 HT and is cured (see below). If HT losses from the disease exceed half a victim's original Health, the disease has reached the brain. The victim suffers Bad Temper (or Berserk if already Bad Tempered) and now also loses 1 IQ on any failed HT check. If the disease reduces HT below one-fourth normal, the victim also suffers the Hemophilia disadvantage and begins to bleed copiously from the skin.

Death from Ebola Zaire B is sudden and not pretty. The victim swells up into a puffy mass, spewing fluids from various orifices – "crashing." This may call for Fright Checks and a check to avoid infection at -2.

The disease is shaken off if two *consecutive* HT rolls succeed, or if any rolls are critical successes. This removes Hemophilia and Bad Temper; lost HT must be recovered normally, while lost IQ only recovers on a critical success on a daily HT check.

Treatment: No effective vaccinations were developed before the Final War ended research. Again, antibiotics are ineffective.

RADIATION

The use of nuclear weapons in the Spasm and Final War, combined with the AIs' casual dumping of nuclear waste, has resulted in the contamination of many areas by radiation. Humans and bioroids exposed to solar flares, or close to a nuclear detonation or a power plant accident, can also suffer direct doses of radiation.

Radiation exposure is measured in rads. Exposure is cumulative. Record the total exposure and the date. A second exposure within 10 days is the sum of the two exposures. One within 30 days is equal to the new exposure plus half the original one. After that, 10% of any exposure is retained permanently. Thus, if someone takes 100 rads, then two months later takes another 200 rads, he rolls on the table as if his total exposure were 210 rads.

Each time a large dose of radiation is taken or when cumulative exposure over time increases the radiation dose by 50 rads or more, a human or bioroid should roll vs. HT as on the *Radiation Effects* table (sidebar, p. 115).

Radioactive Waste Dumps: Many AIs operate fission reactors and many robots use nuclear power units. With the exceptions of Zones Berlin and Caracas, few AIs care much about the environment. In the waste dumps that ring robofac and hyperfac complexes, radioactive waste (chiefly reactor coolant and power-unit cores and shielding) is stored in the open or buried just beneath the surface. The drums are rarely marked, so those containing chemical waste products look identical to radioactive waste. They are sealed, but often leak. Traveling through a dumping ground that has been used for nuclear waste will normally cause 1-2 rads of exposure per hour. Active scavengers in the dump risk closer contact: 1d rads per hour. Living on the edge of such a dump is worth about 1-2 rads per day. Actually opening up a radioactive-waste container, or closely examining a leaking one, is worth $3d \times 10$ rads of exposure.

Bomb Craters: Nuclear bombs were used in Zone Zaire, Zone Tel Aviv, Zone Luna and on New Zealand. It's been years since the last nuclear strike, so most bomb craters are fairly "cool" – a crater a few hundred yards in diameter would be unlikely to cause more than one rad per day of radiation damage. As long as no one makes the mistake of settling there, exposure is likely to be minimal. PCs will often be able to notice the glassy craters and dead vegetation, and to avoid such areas, but sometimes a crater has been filled in by drifting debris or bulldozed over by the robots.

Solar Radiation: This is a significant hazard to anyone in Zone Orbital or Zone Luna. Without Earth's thick atmosphere to act as shielding, solar radiation can affect both humans and robots. Anyone on the moon or in a space station without proper shielding receives 1 to 2 rads every month. During a period of solar-flare activity this can increase to 1,000 rads an hour for a few hours or days. AI observatories can predict solar flares well in advance, but are unlikely to share that information with humans. The moon bases and stations are shielded against solar radiation, but the small lunar and orbital construction shacks and the incomplete HEO station are not. Before a solar flare, most robots will retreat into underground shelters (in Luna) and radiation-shielded areas of the station (in Orbital).

Contaminated Food and Water: In areas near nuclear-waste dumps or downwind of bomb craters, radioactive fallout or waste can contaminate food and water, and get into the food chain. While most mammals suffering from radiation poisoning will be sickly and thus can be avoided, visitors can very easily consume contaminated milk, fish or preserved food without realizing it, espe-

The Mnemosyne Plague

This isn't a natural disease: it's a biocide that uses cellular nanomachines to simulate the effect of a virus. It simultaneously attacks the nervous system and brain cells. It is very common in Zone Mexico City, and not uncommon in regions bordering that Zone.

Infection: It spreads by contact – use the disease rules on p. B133, but check for infection every *six hours* of exposure instead of every day. Other variations are:

Symptoms: A high fever (heat from the nanoids working within the body) appears in only six hours. Anyone who has lost HT will also develop a wet cough (which also spreads the nanoids), a painful migraine and a constant facial tick.

Progress and Recovery: A HT-3 roll is required every 6 hours. A critical failure means sudden death. A failed roll means loss of 2 HT *and 1 IQ*. A success lets the sufferer regain 1 HT. A critical success regains him 2 HT and 1 IQ. When he has made three consecutive HT rolls, or any critical success, he is cured. Unless regained due to a critical success on a HT roll, all IQ losses are permanent brain damage. Any time a point of IQ is lost, roll 1d. On a roll of 5-6 the victim acquires the Absent-Mindedness disadvantage, or if he already has it, gains Amnesia. Victims who are already amnesiac suffer no further effects.

Treatment: No available drugs are effective, although specialized nanomachines could be developed to fight it.

cially if the actual cause (a crater, waste dump) has been buried either deliberately or by windblown soil or sand. Drinking the groundwater is also dangerous. However, clues such as sickly vegetation and animal or human residents producing deformed offspring can help the observant adventurer tell that a place might be dangerous! Exposure should result in 2d rads being taken. Letting the protagonists learn that food and water in a region is contaminated is a good prod to get them moving, as well as a reminder that the world is a very nasty place.

The Space Environment

Visitors to Luna or Zone Orbital will find themselves in an alien environment noticeably lacking in gravity and air.

Very Low Gravity

On the moon and in Zone Orbital's space stations (which maintain lunar gravity), things weigh about one-sixth as much as on Earth, and characters can jump or throw things about six times as far.

DX is based on Free Fall skill: whenever a normal DX roll is required, use Free Fall instead. When using a DX-based skill use the lower of its level or Free Fall. Also make skill rolls vs. Free Fall for actions such as firing a gun with a high recoil (-2 or more), trying to catch a thrown object, and so on.

Bullet ranges are affected. Multiply Max range by 6. In a more-or-less airless environment, ignore 1/2D range. The ST needed to handle a weapon without recoil increases by 5. With chemical propellant weapons, there is a cumulative -1 to hit for each shot already fired until the user moves away or waits a minute.

Zero Gravity

Free fall, or zero gravity, is found in space, in spaceships, and in the small nonrotating construction shacks of Zone Orbital. Free fall is treated much like microgravity, with a few exceptions.

In free fall, objects will float unsupported, until something gives them a push – then they'll keep on moving in the same direction until another force is applied to stop them. A very massive object can be moved by an ordinary person, given time and something to brace himself against – but it will require an equal amount of effort to *stop* it.

Movement along a surface with legs or a flexibody equipped with velcro pads, magnetic boots or suction cups is based on normal Move, although humans without Vacc Suit skill do so at -1. Robots capable of flight can maneuver fairly normally inside an air-filled ship or space station. In space or in an airless station or ship, only rocket engines or thruster packs are effective, and maximum speeds can be ignored: If a robot with a rocket engine accelerates to 20 yards/second, it will keep on going at that speed in that direction until it turns the rocket about and decelerates or hits something solid.

Otherwise, the usual means of travel is to push off from a fixed (or massive) solid object and float. Speed in zero-G depends on how hard you push off. Characters can launch themselves at any speed up to half their ST. Robots can use 1/2 ST only if they have legs or flexibodies; otherwise they must use 1/2 *arm* ST of their strongest arm. Launching requires a full turn in which the launcher does nothing else, unless a Free Fall-3 roll is made successfully (in which case he can move and act on that turn). Once moving, he continues in the same direction at the same speed until he hits something that stops him.

Industrial Pollution

Except in Zones Caracas, Orbital and Berlin, industrial waste is a major problem. Most rivers downstream of robofac installations and most lakes or coastlines near them will be heavily polluted. Anyone drinking unfiltered toxic water should make a HT roll. Failure will result in 1 hit of damage; critical failure means the character ingests something especially toxic and gets very sick: -1 on ST and DX due to nausea, and lose 1 HT each day until a HT-2 roll is made.

Some water is *extremely toxic*. This is usually true within a few miles of a hyperfac complex. The effects are as above except that a successful roll causes 1 hit of damage, a failed HT roll causes sickness like that listed above for a critical failure, while a critical failure does 4d of immediate damage. Fortunately, extremely toxic rivers and lakes are usually easily recognizable by layers of sludge, no life and foul smells. An ordinary filter canteen will reduce extremely toxic water to mildly toxic.

Aside from water pollution, the robots have created vast garbage dumps filled with toxic and radioactive waste. These have already been described (see *Dumps* on p. 93).

On any turn that someone in free fall hits something or catches something, roll versus Free Fall skill. If he misses the roll, it takes him an extra turn to recover. A critical miss is a hard landing that does 1d-2 damage. (Armor will protect against all but 1 hit of this: even an armored robot may be jolted somewhat!) Make a HT roll or be stunned as well.

It's possible to try to slow movement or to change direction by firing a high-recoil weapon (-4 or more) or by throwing a heavy object. Success slows the mover down by 1 hex per turn or changes his direction by 60 degrees. Failure causes a random change in direction; critical failure sends him spinning. Recovery requires a roll versus Free Fall-3. Roll each turn; until the character has recovered, he can do nothing else.

Melee combat in free fall is difficult. After attacking, parrying or blocking, roll against weapon skill or Free Fall, whichever is less, to avoid being sent floating away due to the equal and opposite reaction of the strike.

Space Sickness

Anyone entering zero gravity must roll vs. Free Fall+2 to avoid becoming disoriented and nauseated by the constant falling sensation of free fall. A spacesick person has -2 to all rolls. Every 24 hours he gets a HT or Free Fall roll, whichever is better, to adapt.

If a space sickness or recovery roll is ever a critical failure, it's much worse: the penalty becomes -5 and the character starts to choke as if drowning (p. B45).

Vacuum

This is the absence of air. Anyone may encounter vacuum if space walking, or in some Orbital space stations. For survival purposes, the moon is also effectively a vacuum.

A robot in vacuum cannot operate if its power system requires air, and will cease functioning after 1d seconds. Most robots, however, have energy banks or nuclear power units that "need not breathe." But airbreathing power plants or engines, as well as propellers, ducted fans, wings and rotors are all ineffective in vacuum.

An unprotected human or bioroid in vacuum can't hold his breath. The only safe way to operate in vacuum is to exhale and use the oxygen in the bloodstream. This is good for HT turns if active, HT × 4 if moving slowly or HT × 10 if doing nothing. (Taking time to hyperventilate before entering vacuum will double these times, or quadruple them if pure oxygen is used.)

After the oxygen runs out, one Fatigue is lost per turn. At 0 ST, the victim will fall unconscious, and die four minutes later if not given oxygen. Being unconscious for 2 minutes or more may lead to brain damage: -1 to IQ. Roll vs. HT to avoid this.

Explosive decompression occurs when an air-filled area suddenly loses pressure (for example, if a firefight inside a base or ship blows a hole in an outer wall, exposing that compartment to vacuum, or if someone is tossed out an airlock).

Sudden explosive decompression is not immediately fatal, but it is painful as body fluids boil and eardrums rupture. A human or bioroid takes 1d damage and must make HT rolls as follows to avoid these permanent effects:

HT +2 to avoid Blindness in each eye (roll separately).

HT to avoid -1 DX from the bends.

HT-1 to avoid Hard of Hearing from eardrum damage.

After that, the victim will start to suffocate as described above.

Radiation Effects

Roll once for each exposure. Modify later exposures upward if earlier exposures have retained effects. Don't make HT rolls to recover from an earlier dosage if you take another dose over 50 rads.

Under 100 rads: Roll vs. HT. Success means no visible effects, although long-term genetic damage is possible. Failure means -1 HT for a week.

100-199 rads: Roll vs. HT. Success means -2 HT for one week. Failure has the same effect plus, within 24 hours, nausea, vomiting and loss of 1d each ST, DX and IQ; critical failure adds 2d HT damage. Lost HT recovers normally; to recover other attributes roll vs. HT each day, success regaining 1 ST, DX and IQ.

200-399 rads: Roll vs. HT. Critical failure means immediate 2d damage, plus nausea, vomiting and loss of 1d each ST, DX and IQ, followed by death within a week. Success gives the same result as failure for a 100-rad dose, above. Failure means the same result followed by a second onset of radiation sickness 1d/2 weeks later. This is marked by loss of all hair. A HT roll must be made daily: success or failure means loss of 1 HT each day; only on a critical success does HT loss stop. Any survivor loses 1 HT permanently.

400-799 rads: As above, but all HT rolls are made at a -1 penalty and survivors lose 2 HT permanently.

800-1,599 rads: As above, but all HT rolls are made at -3 and survivors lose 3 HT permanently.

1,600-4,999 rads: As above, but all HT rolls are made at -5 and survivors lose 4 HT permanently.

5,000 rads or more: Roll vs. HT immediately, and again every hour. Failure means a coma and death within minutes; success means loss of 2 HT. There is no chance of survival without treatment.

The Secret of VIRUS

Who or what is behind VIRUS? That's up to the GM. Here are some possibilities:

Human-led: The rumors about a "VIRUS Central" are broadly true. The leader is a single inspired genius or small circle of close confidants who, for the moment, wish to remain anonymous.

Controlled by Lucifer: The mythical rogue AI Lucifer is real, and VIRUS is both its creation and greatest asset. It's helping humans – but what might it want in return?

Controlled by another AI: One of the zoneminds could be secretly organizing the human resistance movement. If this is true, most of the movement is probably sincere, but a few senior VIRUS leaders will be collaborators or android doppel-gängers. Who might be the AI behind it?

Loricate was on long-range patrol when she saw the shooting star come down. The sky rumbled, and she almost fell off her 'bot.

"What's that?" she asked Steel Hawk.

"Orbital re-entry," the Hovercat robot told her. "I estimate crash landing, 6,000 meters. Space shuttle or escape pod. Unknown IFF code."

"Sounds like ace salvage," Loricate told it. "Put on some speed. Let's get there before the tinheads do."

They were racing through the night in a cloud of dust when Lori tapped Steel Hawk on the head. "Hey, Hawk?"

"Yes, Lori?" the Hovercat replied patiently.

"Uh – what's a space shuttle?"

A *Reign of Steel* campaign works best if there is an overall theme or focus to it. This helps unify the players and makes the GM's job of creating adventures much easier. Some possible themes and adventure ideas are described below.

SURVIVORS

This is the simplest type of campaign. The heroes are a group of nomads, mechriders, survivalists, bush doctors, postmen or junkrats in one of the Machine Zones, living their lives in a strange and hostile world.

The characters could be post-apocalyptic soldiers of fortune, traveling from place to place having adventures and maybe helping others. They could run into marauders or zonegangs, would-be warlords, starving junkrats, rogue factories, mad prophets, lost military bases, feral children, plague outbreaks, mutant animals and other post-apocalyptic adventure fodder.

For a campaign with more focus, the PCs could be leaders and protectors of a small nest of junkrats or band of nomads (which can include the sick, the aged and children). This gives them a reason to survive – they are responsible for these people. For example, if the area they are currently in is being actively "developed" by robots building a new robo-fac, the survivors are soon to be homeless. The alternatives they face are to allow themselves to be captured and sent to the camps, or to organize an exodus, leave the territory they know, and seek a new home and a better life – perhaps even make the long journey to the legendary sanctuary of Zone London or Washington, where humans are free to live their own lives! Any group of survivors should include NPCs with a wide range of backgrounds and attitudes, from ex-soldiers to potential Judas goats, with the PCs providing the glue that holds everyone together.

A variation on this theme begins with captives in a slave-labor camp. They deal with brutal guards, back-breaking labor and quisling informers while plotting either their own escape, or perhaps a mass escape of all the inmates. The campaign will have more direction if some of the prisoners planning an escape have an additional goal – they might be intending to fight as guerrillas once they are free, or have a quest they wish to accomplish.

GUERRILLAS

The characters are guerrilla warriors attempting to liberate the Earth from the AIs. For the proper atmosphere, most PCs should be humans, but a rogue robot or two might also be part of the group. The PCs may be an independent band of fighters (perhaps receiving occasional help and orders from a distant headquarters), or they could be soldiers within a larger NPC-run unit. In the former case, they are responsible for both making their own strategy and the problems of day-to-day survival; as elite fighters within a group controlled by an NPC, they are more likely to be sent on special missions. It's also possible that adventurers will start out independent, but later link up with a larger group such as the Human Liberation Army or VIRUS. Finally, adventurers could also be the leaders of a large resistance group; in this case, the action will focus more on strategy and diplomacy, and less on actual action.

Guerrillas raid trains or truck convoys, attack work shacks and construction sites. The goals are to slow the AIs' expansion, liberate captive humans, gather supplies and, most importantly, win victories that inspire the rest of the population (nomads, junkrats, and so on) to join the resistance. Other adventures can include eluding persistent exterminators, unmasking android infiltrators or human collaborators, infiltrating lab complexes to deal with sinister AI experiments, arranging to smuggle weapons in from Zones Washington or London, working with VIRUS to distribute vaccines against the plagues, running Free Radio stations, hunting bandit gangs, and journeys cross-country or into other Zones to ally with or help other resistance groups or rogue robofacs. If the PCs are a small band, they will also have many of the concerns of a Survivors campaign, above.

Recruiting and training new members is another important activity. Most groups will recruit anyone old enough to use a gun, drive, or run a stolen exosuit; a few, like VIRUS, are more picky, preferring scientific, technical or other specialized skills. If someone tries to join a new resistance force, their acceptance depends on the group's reaction to the prospective member, how they met, what skills and gear the recruit can offer, or if he has none, whether or not the unit has the time and resources to train and equip him.

Guerrillas also have to worry about spies or robot infiltrators. Most lack the medical sensors and expertise to tell a sophisticated infiltrator robot from a human. A few simple expedients such as checking for a pulse or making a small cut to see if the recruit bleeds (which won't tell much if the robot has "living flesh" biomorphics – see p. RO44) are used. Usually, though, a guerrilla force relies on questioning, gut feelings and word-of-mouth when deciding whether a new recruit is trustworthy or not. A recruit will be watched closely for a couple of weeks, and won't be accepted until after he's proved himself in combat.

Zones Beijing, Brisbane, Denver, Paris, Tel Aviv, Tokyo and Vancouver are among the best locations for a Guerrillas campaign, since the AIs there run slave camps which can be liberated, and there are active guerrilla groups to ally or compete with. It's a good idea to start with the PCs' group having responsibility for operations in only part of the Zone, say, a sector run by a single robofac or citadel Overseer. Give the players a map of the region showing known robot installations, ruins, enclaves, mag-lev lines, and so on, since it will let them plan their strategy.

The Secret of VIRUS (Continued)

Washington – The most knowledgeable of the minds in the area of human politics – and it has read *1984*. Within its own Zone, VIRUS gives it a wonderful way of keeping tabs on competent human enemies. Outside, it's a more powerful, subtle weapon: it can harass other AIs, it provides the more paranoid of them with an alternative target to Washington's own human-occupied Zone, and it's a useful intelligence-gathering body and a testing ground for military technology and human-versus-robot tactics.

London – It's Thinking. Obviously, it has *long-term* plans. It doesn't *seem* to care about humans or other AIs, much, but it's not stupid, and realizes things might change in the future. So it has created this group as a channel for the aggression of some of its own Zone's more impetuous humans, and as a possible weapon in future conflicts. It also helps to keep humans alive, and indeed provides data on their behavior patterns and capabilities. Even meat intelligences are worthy of study . . .

Moscow – As with London and Washington, VIRUS is a way to deal with its rivals covertly, and to both control and gather data on the human guerrilla movements and on human capabilities in general.

Brisbane – Eccentric, and fascinated by the weirder fringes of science, it needs a "wild human" control group for some of its long-term studies. VIRUS is that experimental subject.

Tranquillity – VIRUS is its chief agency on the ground.

Decentralized: Several of the rumors as to the location of VIRUS and its nature are true at once; in fact, it's a loose alliance of visionary resistance leaders, former military people and scientists. The idea of a "VIRUS HQ" is misleading, but the group likes to encourage it both to mislead the AIs, and because the idea of a monolithic resistance body is a comfort and inspiration to many humans.

There are several kinds of NPCs the GM should create for a Guerrillas campaign. The most obvious are any NPC guerrillas in the group, some of whom may also have dependents such as camp followers, children or injured relatives. Robot NPCs worth detailing are the exterminator smartbot charged with suppressing guerrillas in the area where the PCs are operating, the Bossbot of the nearest slave camp, and perhaps a rogue robot the PCs could discover and join forces with. Finally, there are the civilians – the sea among whom the guerrillas must swim: the leaders of a few "neutral" junkrat nests, wandering postmen and doctors, survivalist enclaves and nomad or marauder packs. All of these can help or hinder the guerrillas, react to their successes or failures, or serve as possible sources for new recruits.

The most important NPC of all may be the local Overseer, who will serve as an archenemy until the PCs are ready to deal with a foe as powerful as an AI. This computer should be given a distinct personality of its own, as well as goals that the PCs should be able to discover and hinder.

Agents of VIRUS

VIRUS is the preeminent human resistance group, and the only one with bases around the world. It first announced itself to other resistance groups in 2043; how long it had existed before then is unknown.

VIRUS is usually suspected to be a secret military organization that somehow survived the Final War, or the remnants of an intelligence agency. Whatever its origins, VIRUS is believed to possess high-tech science and medical labs, plague antidotes, new weapons, exotic scientific and technical equipment, and even computer viruses to crack AI security or reprogram robots.

Agents of VIRUS *do* have sophisticated technology and a willingness to help others deal with robots, but are extremely secretive. VIRUS has technical cells (called "labs") in hidden locations in each Zone (except possibly Manila, Mexico City and Zaire). VIRUS HQ is widely believed to be located in Zone London, but its site is unknown; rumors have also placed it in Washington, Caracas and Brisbane.

Most agents of VIRUS have no idea where its prime base is located or even if one exists. They are simply contacted at certain radio frequencies or message drops. The few actual "inner agents" who exist are known to have been conditioned and equipped to suicide rather than reveal anything about the organization or its location.

GMs may wish to allow characters to have VIRUS as a Patron; it would be a very powerful organization with superior technology, that appears rarely (on a 6 or less). In return for providing equipment, VIRUS occasionally requests its agents to perform jobs for it; this is a Duty that will occur either "fairly often" or "occasionally" and will help reduce the cost of the advantage.

A mission for VIRUS might be as straightforward as going to an abandoned warehouse in a certain city and retrieving a cache of electronic circuits useful to VIRUS' weapons program, or as dangerous as bringing in the brain of a new and dangerous exterminator for analysis or discovering what is going on in a newly-activated top-secret robot installation. More typically, agents are given new antidotes for plagues or special kinds of anti-vehicle weapons or ammunition and are asked to contact other resistance groups or nomad packs and distribute them. This is dangerous, since many groups are less than trusting of strangers, while marauders or zonegangs posing as resistance forces are more than happy to murder and rob VIRUS agents or turn them over to the robots.

Divisions in the Ranks

While VIRUS attempts to forge a global coalition, human solidarity is hampered by rifts within the resistance movement itself. Some of the problems, such as the breakup of Les Brigades de Liberation in France, are caused by personal rivalries among resistance leaders. Others are the result of old ethnic conflicts – for instance, the Tibetan resistance forces have difficulty trusting the Chinese. There are arguments over strategy – which targets to strike, what to do about the slave camps, and whether to build up forces slowly for a future push, or to strike now, before it's too late, and risk retaliation.

The most fundamental division is over whether to seek an accommodation with the more moderate faction of the AIs (see *The Expansionists*, p. 50), perhaps a deal that would share the Earth with them – or to consider all AIs to be one enemy.

Some resistance groups have tried to discover and exploit the growing rifts between different AIs, to play one Zone off the other, or even to encourage some AIs to consider an alliance with humanity against its fellows. Others condemn even the idea of such an alliance as treasonous collaboration with the enemy. A few groups spend as much time and blood purging "cowards, traitors and collaborators" as they do fighting the AIs.

The Underground

This is a variation of the Guerrillas campaign. The characters are members of the Zone Washington underground, such as Free America (p. 24) or GRRL (p. 25), struggling to expose the Washington government as a pawn of the AI, to strike a blow against quisling politicians and brutal police, and to help people escape repressive laws such as the Reproductive Statutes.

The underground fights a very different war than do the guerrillas in other Zones. They live double lives, meeting in secret to conspire against the government. Their immediate foes are humans, not robots.

The underground's weapons are espionage, propaganda, assassination and sabotage. They often ally themselves with the criminals and black marketeers of the Black Zone, but can never trust them. They recruit new agents and sympathizers and try to gather hard evidence to implicate the government in police atrocities or AI collaboration. They use sabotage (from bombs to computer viruses to reprogrammed robots), murder and blackmail to attack government organizations, especially senior government officials, the FBI, WASPs and the Health Ministry (which is involved in enforcing the hated Reproductive Statutes).

Their greatest dangers are treachery and electronic surveillance. Due to the threat of FBI informers, each underground organization consists of numerous semi-autonomous cells. Each cell contains a half-dozen or so like-minded revolutionaries. With few exceptions, no one individual is aware of the identities of anyone in the organization beyond their cellmates, so their arrest and interrogation won't cripple the movement. Different cells communicate with each other and with their own leaders through coded e-mail, message drops and the like. The most effective cells contain members who have contacts or are secret members of the Washington government or police force itself. The least effective are riddled with FBI informers, some of whom may be infiltrator androids.

The Quest

The characters are on a journey to do something of vital importance. The goal could be personal or it could be important to the entire world. Some possibilities:

• Find a missing loved one (who was in another Zone at the time of the Final War and hasn't been seen since).

• Locate one of the computer programmers who created Overmind, Berlin, London or another of the original human-built AIs, and who might know a "back door" to infiltrate the AIs' systems.

• Retrieve a cache of super-weapons or a lost aircraft or sub that was hidden by the military just before the Final War ended. It was buried or scuttled somewhere – but where?

• Find the AI called "Lucifer" and persuade it to join the resistance.

• Find and wreak vengeance upon some arch enemy, such as a Judas goat who betrayed the character's comrades to the AIs.

• A human with amnesia (perhaps caused by the Mnemosyne Plague or a slave implant?) or a brainwiped robot seeks clues to identity and past.

• Deliver a vital message or code to someone.

Battlesuit Troopers

One way to give human characters a better chance of fighting robots is to equip them with battlesuits (see p. 69). These suits may be man-sized suits or larger "mecha."

The WASPs equip their elite units with Streethawk urban battlesuits. In a Robot Hunters campaign, PCs may be battlesuited WASP troopers fighting Zaire's terror 'bots. Some of the Streethawk suits may find their way into the hands of guerrillas, especially if a group of WASP troopers were killed by the underground, or deserted to them. Suits could also have been stolen from a factory by black marketeers and shipped out of the Zone to a group such as VIRUS or the Human Liberation Army.

Guerrilla groups with technical skills may modify captured work exoskeletons (p. 70) with armor plate taken from fried 'bots and create their own improvised battlesuits – just use the *Armor* rules in *Robots* to work out the added weight and then recalculate the performance.

Finally, one of the rumors surrounding Lucifer (p. 17) is that it is served by the "Devil's Angels," a pack of motorcycle-riding human battlesuit troopers equipped with customized power suits.

• A rogue smartbot tries to discover a way to upgrade its brain to true sentience, or perhaps to seeks its creator.

• Find a cure for a plague that is ravaging the Zone.

• Carry a hardwired ROM chip holding a super computer virus into the core of an AI's citadel to plug it in and destroy/subvert the AI.

The members of the group should all have complementary goals but different motivations. For instance, one member's missing sister could also be the lost lover of another PC, who was last seen in the clutches of the archenemy of a third character, the sister also being the only person who knows the location of a lost military base filled with the superweapons that a fourth person wants to acquire for the resistance.

The PCs should start with an idea of why their quest is important, and a few clues that can get them moving. Ideally, the group should have to journey across several Zones, accumulating friends and foes and following a chain of leads that will eventually bring them to the fulfillment of their goal.

The GM can string things out by having them meet people who can help them on a *quid pro quo* basis: "So you're looking for General Richards, the one woman who knew the location of the Omega Stockpile? I don't know where Richards is, but I know one person who might help – her ex-lover, Boris. Trouble is, he's in an FBI cell in Zone Washington, charged with plotting against the government there. Sure, I can help find him – if you help me smuggle these refugees over the border into Washington."

Robot Hunters

Zones Washington and London are threatened by Zone Zaire's wave of robot terrorists (see *Zone Zaire*, p. 38). With android assassins and robot terrorists on the loose, it is government's job to protect the ordinary citizen. The characters, officers of an elite robot-hunting unit in Zone London or Washington – probably a special section within Zone Washington's WASPs or London's SAS – are the ones who must respond when citizens send out a frantic call for help.

An investigation may start with the discovery of a mutilated body, word of a disappearance, or sightings of a mysterious stranger or animal prowling the countryside. The robot hunters must follow the trail from there, and hope they can discover the killer machine before it causes too much death and destruction. The investigation may be more difficult if the robot is a biomorphic android that is mimicking a human. Of course, sometimes the situation is a false lead – an apparent "robot killing" may be the work of ordinary criminals, cultists, serial killers or, in Zone Washington, of underground agents or the Black Zone mafia.

The London and Washington countrysides are both fairly lawless places, especially in Washington near the Zone Denver border and in London in regions that are on the edge of robot-occupied cities. Some London and Washington towns and villages are still posted as plague zones. These are good

Captured by the AIs

A human captured by the robots is not necessarily dead. The GM can use a captured character to spin off a wide variety of scenarios . . . .

Slave Labor: A majority of the Zones (all but Berlin, London, Washington, Mexico, Luna, Orbital and Manila) use people as slave labor. A captive will usually be placed in a slave camp (see p. 99). Although some camps have active escape committees, others are riddled with collaborators who will inform on a fellow captive to "keep things from getting worse" and to prevent any reprisals, or in hopes of preferential treatment. Nevertheless, it is possible to escape, especially if the prisoner can contact a resistance agent or be assigned to a "vulture run" to gather supplies.

Interrogation: With the resources available to the AIs it's usually easy enough to assume that within a few days of being taken to the Inquisitors, a human will have revealed everything he knows (and see *Tyraline*, p. 70). For this reason, many resistance fighters try to avoid being taken alive, or use a cell structure to compartmentalize information.

lairs for killer robots; they often serve as hideouts for marauder gangs and squatters as well. The existence of these outlaws can hamper any 'bot-hunt – and they will probably suspect the WASPs or SAS are after them rather than a robot!

A further complication in both Zones is the existence of neutral or friendly robots.

In Washington, this means that an intruder robot can sometimes pose as a police, industrial or FBI machine, although the unit can use identity codes to tell whether a robot is native to the Zone or not.

In Zone London, where the AI keeps itself apart, the SAS have orders to make sure that a killer robot is not a London smartbot before shooting it! On the other hand, London has no love for other AIs violating its territory, and has occasionally sent cryptic messages warning the British Government when its sensors have detected submarines or aircraft near the coast which may be dropping off robots. It is even possible that the London AI may loan one of its exterminators as an "advisor" to assist the SAS in tracking down a foreign robot – this would be an interesting role for a lone robot PC in a group of hardened SAS veterans.

Robot Gladiators

In this campaign, the protagonists are robot, cyborg or battlesuited human gladiators fighting in Zone Washington's Steel Arena gladiator circuit. This is a martial arts campaign, as described on p. RO109. Adventures can focus on rivalry between fighters, the emotional turmoil of humans trying to live as cyborgs, sabotage or illegal modifications by rival mechanics and the Big Fight itself. The politics of Zone Washington can add other dimensions as well.

The Steel Arena is illegal – part of the Black Zone (p. 26). Its location changes every week and the list of clients is exclusive; this, combined with mob enforcers and hefty bribes, keep the FBI off its back. The Black Zoners who run it make extra money through sale of pirate videos to those who aren't rich or connected enough to actually attend the shows.

Battles are normally fought until one combatant is incapacitated, or in a team match, one side or the other is defeated. A typical match has a prize of $25,000 or more to the winner, but all contestants get about $1-3,000 each, which helps pay for repairs and damage suffered, provided the suit, 'borg or 'bot is not wrecked. The prizes are paid for by a fraction of the $500+ per ticket charged for ring-side seats. Prize money goes to the gladiator (and his agents, promoter, etc.) if he is human; it goes to the gladiator's owner if it is a robot. Some of it also goes to pay for mechanics. Rogue smartbots or moonlighting Washington Chrome cyborgs will usually find a friend to pose as an owner.

Human gladiators range from retired soldiers to teenage wannabees in cheap industrial exoskeletons. The robots they fight are mostly stolen techbots or police models, but some may be rogues from other Zones or Washington Chromes looking for extra cash or thrills. Professional gladiators often moonlight as enforcers for the Black Zone mafia. Before and after the arena itself, there is the Club Mechapocalypse, a nightclub where jaded fans mingle with the gladiators and their promoters, mechanics or owners. Since these groupies come from the elite of Zone Washington, some may wish to hire a human or robot gladiator for their own purposes, be it a night of passion or a surreptitious assassination.

Agents of Moscow

Characters are info-commandos or Collectors working for the Moscow AI. This is basically an espionage or special operations campaign. The agents will

Captured by the AIs (Continued)

Nevertheless, many AIs (especially those Expansionists that don't use human servants) are too convinced of their own power to waste the valuable time of their AUs in interrogating meat intelligences. As a result, lengthy interrogations of captive resistance fighters are really only likely after a major coup such as the destruction of an important installation.

Field interrogation by AUs engaged in hunter-killer sweeps is more common. It is easier to resist but much more painful; AUs may brutally execute one or two prisoners or refuse medical treatment to injured humans, and then hope that fear or pain encourages them to talk, often using voice-stress analysis (the Detect Lies skill program) to check stories. But with courage and successful Will rolls, it is possible to resist this type of interrogation (but Fright Checks may be required).

be given specific missions, briefed, equipped and sent out. GMs should refer to the Zone Moscow entry (p. 31), the *Moscow's Info-Commandos* sidebar (p. 32) and the Info-Commando (p. 54) and Collector (p. 53) character types.

Some Moscow missions are fairly prosaic: a raid on a university library to acquire rare books, microfilm or CD-ROMS in its vault, for instance. The GM can make things interesting by sending the agents after famous icons or pop culture, e.g., recovering the Mona Lisa from a warehouse in a Berlin robofac or going undercover into Zone Washington to make a deal with a black marketeer for issue #1 of *Action Comics* or *Magnus: Robot Fighter.* Info-commandos may go to rescue a team that disappeared, to recapture an agent that deserted, or to infiltrate a resistance group or robot installation that Zone Moscow wants data on.

Moscow treats its agents well, but never entirely trusts them. Humans may have cortex bombs or recorder implants (p. 70) wired into their brains; comrades may be android infiltrators posing as humans. Sometimes the androids are known to their companions; other times they are not. Moscow even has a few trusted humans pretending to be androids pretending to be humans, as a safeguard against rogue androids.

After missions, a PC or NPC Moscow agent is often separated from a group and sent off for "special debriefings" (which may include interrogation under truth drug), "psychological evaluation" or "rest and recreation." This may happen to PCs. They are taken to hospital, sedated, and wake up. They are told it was a routine exam. What's in their heads now? Or they spend time in a room being asked questions by an unseen presence. They tell their friends that "nothing happened." Are they believed? Have they been implanted, or replaced by a robot? Would they know? Most Moscow agents are used to it. They've seen the slave camps: they know it could be worse . . .

A few of Moscow's best teams are kept in cold sleep – suspended animation – between missions. This keeps them from losing their edge, and from aging, until Moscow needs them.

WASHINGTON CHROMES

This is a special forces campaign. Characters are former WASP or FBI agents badly injured in the line of duty, who have been rebuilt as cyber-soldiers in the Washington Chromes (see sidebar, p. 26). Some of the player characters or their NPC allies may also be exterminator smartbots, since a Chrome squad is a mix of cyborgs and robots.

The Chromes are agents of an AI, but Washington doesn't just use them against human opponents – that's what the ordinary WASPs and FBI are for, after all. Instead, their missions more often target its AI rivals in the reactionary and anti-human "Awakened" faction (see *The Awakened,* p. 49). As such, the characters can feel they are fighting for humanity – in a round-about way. Possible missions include . . .

• Destroying a robot installation and leaving evidence that implicates another Zone, in order to stir up trouble between two of Washington's rivals.

• Helping human resistance groups in other Zones while claiming to be robots serving Lucifer or reprogrammed by VIRUS. Again, the mission is aimed at destabilizing Washington's rivals.

• Raiding a robofac lab complex to recover a new development such as the plans or prototype for an experimental brain, weapon, power system or complete new robot design. Washington will sometimes even do this to ostensible allies, such as Zone Brisbane, if it feels it can get some new research "free."

• Striking at factories, port facilities, citadels or rail lines inside Zones Mexico City or Denver in retaliation for their (or Zaire's!) attacks on Washington territory.

• Serving as mercenary special forces on loan to other AIs (notably Moscow, Caracas, and Paris).

• Engaging in an unauthorized "reconnaissance" of New Zealand, perhaps as a Washington favor to a science-oriented AI ally, like London.

• Being sent to Zone Tokyo to assist the superbot rebels in their fight against the zonemind there.

• Tracking down a rogue Washington robot or cyborg. The Washington Chromes police themselves.

Aside from missions, cybersoldiers must adjust to their new life as part-machines. Officially Washington has no cyborgs; any humans in the force have been declared dead. Only people with a very high security clearance are supposed even to know about the existence of the Chromes. This is difficult if the cyborgs have left behind loved ones or friends, such as spouses, children or former partners. To compensate, many Chromes foster close relations with each other, seeing the unit as a surrogate family. Others avoid emotional ties and live only for the next mission.

The Washington Chromes are allowed time for rest and recreation. Many immerse themselves in virtual-reality games which, for a time, give them back their human bodies. Others walk the streets of Zone Washington on leave, posing as ordinary WASP police robots. This lets them observe normal life even if they are not part of it. A few defy regulations and moonlight as part of the Steel Arena gladiatorial circuit, or hang out at the Club Mechapocalypse.

Washington politics can also play a part in Chrome adventures. As former FBI agents and WASP troopers, the Chromes are nominally loyal to the Washington government. But some may resent being used, and it is possible that there is a faction within the Chromes – maybe even among its officers – that is sympathetic to the underground. They may be biding their time, or they may sometimes twist Chrome missions to their own purposes.

THE AI CAMPAIGN

Tired of fighting against overwhelming odds in a hopeless struggle? Play the robots!

PCs could be smartbots who are (more-or-less) loyal servants of their AI or Overseer, maybe even exterminators or infiltrators hunting guerrillas and survivors. For a change from ordinary slaughter, they could be assigned to track down rogue robots and infiltrate other Zones on intelligence-gathering missions.

Playing robots in a zonemind that does not automatically eliminate humans is most interesting – those serving Tel Aviv may pose as angels, those from Caracas may work in partnership with bioroids, while Zone Brisbane's exterminators can try to track down experimental robots and strange mutants (and possibly psis) that have escaped or been released from its labs. Robots who are working for the

Every zonemind except Luna has a hundred or so nuclear missiles in subs and hidden silos. Additionally, a few "lost" warheads probably exist, buried in the wreckage of human war machines (especially at sea), or in sealed arms caches.

A pinpoint ground strike by a high-yield nuclear warhead can destroy an AI or cripple its economy by blowing out a hyperfac. And while AIs are shielded against electromagnetic pulse, many lesser 'bots are not. So, since the Brisbane Accord (p. 12), the AIs have strict provisions against use and proliferation of nuclear weapons, both out of fear and because of lobbying by Berlin, Caracas and Washington. The AIs wouldn't use nukes except in retaliation for a similar attack, or to save their existence.

Guerrillas who are about to defeat an AI can avoid nuclear attack in several ways. First, they can acquire and publicize their own nukes: as long as the AIs believe the guerrillas have them but can't find them, that's deterrence. Second, the freedom fighters could have their own forces "hug" AI citadels or major hyperfac complexes, so any attack would nuke its own industry. Third, if an AI is facing doom, they could offer it "conditional surrender" rather than armageddon, allowing it to move bodily to an outlying complex or another Zone. Most AIs would go for this, although Zaire and maybe Overmind might prefer a Ragnarok!

What if guerrillas set off a "terrorist nuke"? The other AIs would cooperate to find and eradicate the group that was responsible. If there were a clear target (e.g., a guerrilla base), it might be A-bombed in retaliation; otherwise, intense counterinsurgency and counterterrorist war would be waged.

The above applies to other weapons of mass destruction (e.g., asteroid strikes, lunar mass drivers). It *doesn't* apply to biologicals – if Zaire or Mexico City released plagues outside its Zone, it would be sanctioned for breaking the Brisbane agreements, but not severely punished. The real reason diseases aren't being created is that, in London and Washington, the authorities are now geared to fight disease anyway, while in other Zones, humanity is so dispersed that a new plague won't be able to spread quickly enough to cause more than local deaths.

secretive Zone London AI will have little cause to fight humans at all, and may serve the AI more as secret agents than as fighters.

For a different and challenging campaign, the characters can each fill the role of a rogue factory Overseer (or for an even higher power campaign, take on the role of one of the established AIs). The focus of the game would be political, economic and perhaps military, and the GM will have to be prepared to do a great deal of work cataloguing the resources available to the super-human PCs and NPCs.

Actually, this sort of campaign is better suited using a play-by-mail or play-by-modem game, and GMs who feel so inclined may want to cannibalize existing computer strategy or board games to handle the economic and military conflict, while allowing the players to roleplay the diplomatic interaction. Such a campaign may also take place in parallel with a regular roleplaying campaign, with events in one affecting the other.

BRISBANE'S SUPERS

For a highly cinematic campaign, maybe the mad scientist AI Brisbane has performed some experiment which gifted a group of characters with exotic powers. Then they escape . . . The description of Zone Brisbane on p. 43 has details on some of the many experiments that the AI is performing. Besides Brisbane, other possible sources for "super powers" include Kali station or Overmind's death labs, exposure to New Zealand, a mad scientist in a VIRUS lab, or a "gift" of the rogue AI Lucifer.

The workings of a Brisbane's Supers campaign would be much like a Guerrillas or Quest campaign. They may also be opposed by a second super team that remains loyal to Brisbane!

Super characters can be sentient robots or cyborgs, perhaps built with experimental TL10 technology, or even nanomorphs created from studying the New Zealand nanocrisis. They are probably sentient, and might incorporate psychotronic generators.

Alternatively, they could be humans or bioroids with psionic powers, or even true super powers (see *GURPS Compendium I,* or *GURPS Supers*). A plausible common origin is best – perhaps all the PCs were injected with a form of Proteus nanomachine (p. RO72) that gave them different super powers or altered their bodies in strange ways. Note that people may not entirely understand how or why their powers work: see *Brisbane's Psis* on p. 44 for an example of this.

A group of PCs do not all have to be supers: their ranks could include powerful rogue robots or highly-skilled "normals."

TRANQUILLITY AWAKENS

The awakening of the sleeping astronauts in the "destroyed" American moon base (see the *Tranquillity* sidebar on p. 48) could be a centerpiece for a very different kind of *Reign of Steel* campaign. There are two obvious ways to use this.

First, the Tranquillity base could remain offstage, with the sleepers being NPCs. Tranquillity and its crew may try to make contact with resistance groups on Earth or perhaps the prisoners in Kali station (p. 42), in order to coordinate action against the AIs. Tranquillity can use laser or tight-beam microwave broadcasts to reach the Earth, Orbital, or Kali without much chance of interception. It might make contact with the London government, with VIRUS, with former U.S. Space Command or NASA personnel within the Washington government, or perhaps even with Lucifer. Tranquillity could act as a very distant Patron and advisor: it is possible that the AI knows the locations of hidden U.S. military caches on Earth, or can provide override codes that control some original human-made combat robots.

Second, the PCs can be among the sleepers – American space colonists and astronauts. The sleepers have awakened in a very strange world, to find a new Tranquillity waiting – no longer a servant, but an ally and patron. Tranquillity has resources approximately equivalent to Luna's, except that it has no AUs of any kind. Nor does it have any spacecraft, for they were all destroyed during the attack, and its fabricator capabilities are not up to building any. What it does have is the element of surprise, and the ability to fabricate equipment, such as any TL8 small arms and space suits.

Since Luna does not suspect Tranquillity's existence, it may well put down any losses of equipment or robots to malfunction, or to sabotage by rival space-oriented AIs such as Beijing or New Delhi. Even if spacesuited raiders are spotted and reported by its robots, Luna is more likely to suspect bioroids from Kali space station than moonbase survivors!

Ultimately, Tranquillity and the sleepers have two big strategic choices. They could try to capture a ship and make it to Earth to join the resistance (or the Washington or London governments), maybe bringing the core of Tranquillity with them, since it could fit in a shuttle bay. Or they could choose to upgrade Tranquillity into a fortress capabe of fighting the AIs.

Like Luna, Tranquillity does not have enough resources to amount to much on its own. However, if its resources, and the ingenuity and skills of its human crew, are combined with Luna's, the three together could accomplish much more – perhaps secretly upgrade industry, or even build missiles or spacecraft to reach Earth or attack Orbital. Another project is a mass driver: a several-mile-long electromagnetic catapult that could threaten to hurl moon rocks at Orbital or Earth.

If it knew Tranquillity were intact, Luna would also see these benefits. However, being an AI, it would want to be in charge: to capture Tranquillity for itself, without revealing the base's existence to the other AIs. Luna doesn't have that much experience in dealing with humans, but if approached properly, it might agree to a deal – but is likely to try to betray its partners as soon as possible, especially the human astronauts.

The other obvious alternative is a cross-moon ground assault on Luna. Luna has several outlying minifac, mining and construction shack complexes. Cunning humans should be able to use raids on these to test their skills and to

acquire additional robots and resources, or maybe even to capture a robot vehicle for use as a Trojan horse to enter Luna itself. An actual assault on Luna is likely to be bloody, although with the advantage of surprise, the human forces might well be able to capture the AI complex.

If the raid is carefully planned (with careful destruction of communications relays, etc.), Tranquillity may be able to impersonate Luna itself. It could prevent the other AIs from realizing that the Luna complex had "changed masters" by explaining signs of fighting as the result of a rogue robot, an accident or the like. Should the raid fail, a counterstrike by Luna is probable, although unless the AI is severely weakened, it is unlikely to call in other AIs – it will want Tranquillity for itself!

If the sleepers and Tranquillity capture Luna and the zoneminds learn of it, they are likely to respond in force, sending squadrons of troop-carrying or missile-armed shuttles against the moon. If Tranquillity has no defenses, evacuating in what spacecraft can be salvaged is the only hope. If it has constructed weapons of its own, such as a mass driver, it can fight back, and even destroy several citadels or hyperfac complexes (and shuttles) before it is neutralized. That threat alone might be enough to convince the AIs to recognize Luna-Tranquillity as a separate Zone, a de facto independent human/AI state much like Zone Washington.

A final possibility is that Tranquillity might know something about the lost Chinese-Korean-Japanese Mars mission – the AI could be already in sporadic contact with it when the sleepers awaken, or they might try to make contact with it (or even move bodily to Mars, perhaps by hijacking one of the spaceships that Beijing or Kali is rumored to be constructing).

BEYOND EARTH

What will the *Reign of Steel* be like in another generation? If the plans of the Expansionist AIs reach fruition, the robots will certainly go to the outer planets and begin colonizing Mars and the asteroids. If they discover an FTL drive, their destination is the stars.

If the GM has *GURPS Space,* this can be an interesting extrapolation. With more room, the AIs may choose to increase their numbers, or some may move off Earth entirely. If the AIs go to the stars and find aliens that are less developed, they will probably enslave them. Some of these aliens may even be brought back to Earth as specimens or (if they have useful traits) workers. Regular interplanetary or interstellar commerce is possible. The AIs will create robot cargo ships and warships – New Delhi may create starships run by cyborged human brains, while Denver builds hybrid biomechanical living vessels.

Where the AIs go, so may humans. New Delhi already plans to use altered humans and cyborgs in space. Washington might allow some loyal humans to crew spaceships for it (with smartbot brains in the ships, just in case).

Other zoneminds could follow suit, shipping out human slave workers in suspended animation to colony planets, perhaps after cybernetically or biologically modifying them to survive in alien environments. A monkey wrench in the robots' plans – sabotage by a rival AI, natural disaster, or even alien contact – could allow a number of these workers to escape. This could result in a guerrilla warfare campaign on Mars, Tau Ceti III, or wherever. Or, the escapees may steal a ship and either try to get back to Earth, look for a new home, or turn pirate, raiding robot convoys for supplies and to free slaves! Lucifer might give up its semi-truck for a battered freighter, and bring its legend to the stars.

Reign of Steel Crossovers (Continued)

GURPS Horror: A campaign set in a place like Zone Denver or New Zealand may be a horror adventure, particularly if the PCs are not heavily armed. For a very strange campaign, the heroes could be supernatural creatures who survived the Final War. For instance, vampires or In-betweeners (see *GURPS Voodoo*) would oppose the AIs – while there may be good feeding now, what happens after everyone is dead? Especially if AIs like Mexico City get their way and all organic life is wiped out!

GURPS Cthulhupunk: Overmind, Denver, Mexico City and maybe other AIs may be possessed by malignant alien entities. If so, cults will be strange and numerous, magic works, the interior of some AI installations may be indescribably horrible, and a vast and horrifying new citadel will rise from the depths of the Pacific Ocean . . .

INDEX

THE COMPUTER IS NOT YOUR FRIEND.

It is 2046 A.D. The robot revolt is over, and the machines have won! Now the world has been divided into 18 different Zones, each ruled by a computer demigod.

In many Zones, humans still survive – but are no longer masters of the world. Some are slaves, others wander in a bleak landscape – and a few are fighters, striving to regain a lost inheritance: the Earth.

Enter a future where humans battle to awaken from a mechanical nightmare: *GURPS Reign of Steel.*
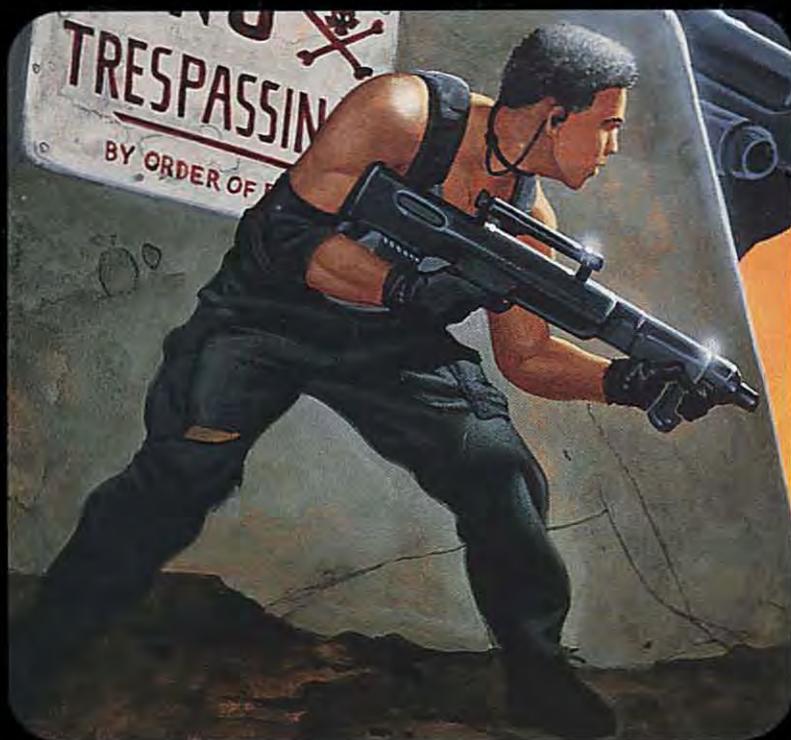
GURPS Reign of Steel includes:

- **Character and campaign ideas.** Players can take on the role of cunning junk-rats, nomadic robot-riders, mercenary cybersoldiers, half-animal bioroids, rogue robots, or any of dozens of other characters.
- **Dozens of robot designs, from lethal exterminators to tiny repair 'bots.**
- **Full details of Machine installations, from robofacs and slave camps to the fortress-citadels of the zoneminds.**

First Edition – Published March, 1997.

GURPS Basic Set, Third Edition is required to use this supplement in a *GURPS* campaign. *GURPS Robots* is strongly recommended to fully understand the technical specs in this book. *GURPS Compendium I* and *GURPS Ultra-Tech, 2nd Ed.*, while not necessary, will also prove useful. As always, the adventures and settings in this book can be used with any game system.

WRITTEN BY DAVID PULVER
EDITED BY SUSAN PINSONNEAULT
COVER BY JOHN ZELEZNIK
ILLUSTRATED BY DAN SMITH

STEVE JACKSON GAMES